## COLLEGE OF ARTS AND SCIENCES

## ADMINISTRATION

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## PROGRAM OF STUDY

## Introduction

The College of Arts and Sciences is a community of about 4,100 undergraduates and 600 faculty members. It is also a graduate school and research center. Altogether it attracts faculty members whose research and scholarly and creative work require first-rate academic facilities and who bring to all their students the profound questioning and exciting ideas of current scholarship. Finally, the college exists within a university of other colleges at Cornell—about 20,270 undergraduate and graduate students and faculty members. This wider community provides depth and diversity of applied and professional studies beyond what a college of the liberal arts and sciences alone can offer. Students studying the liberal arts and sciences may draw upon the knowledge and facilities of the other colleges at Cornell to complement their studies. Abundant variety and outstanding quality in many fields, including interdisciplinary fields, and emphasis on individual academic freedom and responsibility give the college and the university their distinctive character.
The richness of the college's undergraduate curriculum is extraordinary; there is no course that all students must take, and there are over 2,000 from which they may choose. By choosing courses each semester, students design their own education. They develop known interests and explore new subjects. An education in the liberal arts and sciences means honing one's critical and imaginative capacities, learning about oneself in nature and culture, and gaining experience with views of the world radically unlike one's own. All this is highly individual, and the college relies on each student and faculty advisor to design a sensible, challenging, and appropriate course of study.
The faculty of the College of Arts and Sciences believes that each student's education should have certain common qualities. These include familiarity with several different ways of knowing that are reflected in the various disciplines and fields of study. In addition to these general areas of knowledge, students acquire effective writing and quantitative skills,
study foreign languages, achieve cultural breadth, and concentrate on one particular field through which they deepen their imaginative and critical thinking as fully as possible. To accomplish these objectives, the college has certain requirements for graduation.

## The College of Arts and Sciences awards one undergraduate degree, the Bachelor of Arts degree.

## Summary of Requirements

1. First-year writing seminars: two courses. (See "John S. Knight Institute for Writing in the Disciplines," p. 605.)
2. Foreign language: completion of one course taught in the language at the nonintroductory level or above (Option 1) or at least 11 credits in one language (Option 2).
3. Distribution: nine courses (may overlap with courses counting toward a major).
4. Breadth: two courses (may overlap with courses for distribution, major, or electives).
5. Major (see individual department listings for major requirements).
6. Electives: four or five courses (at least 15 credits) not used to fulfill other requirements (other than the breadth requirements) and not in the major field.
7. Residence: eight full-time semesters, unless a student can successfully complete all other requirements in fewer than eight semesters and meet the additional criteria to accelerate graduation. (See "Acceleration" below.)
8. 34 courses: a 3- or 4-credit course counts as one course. A 2 -credit course counts as half a course; a 1-credit course does not normally count toward the requirement; a 6 -credit language course counts as one and one-half courses. (See "Courses and Credits" for some 1-credit courses in music, dance, and theatre performance that can be cumulated to count as one-half course.)
9. Credits: a total minimum of 120 academic credits, of which a minimum of 100 must be taken in the College of Arts and Sciences at Cornell. (See "Noncredit Courses" below for courses that do not count as academic credits or courses.)
10. Physical education: completion of the university requirement (passing a swim test and two 1 -credit nonacademic courses). Note: Physical education credit does not count toward the 120 credits needed to graduate or toward the 12 -credit minimum required for good academic standing each semester.
11. Application to graduate (see "Graduation," p. 464).

Undergraduates are responsible for knowing and fulfilling the requirements for graduation and for alerting the college to any problems with their records. To check on their progress toward the degree, students are urged to consult their advising deans in 55 or 172

Goldwin Smith Hall and to check their DUST (Distributed Undergraduate Student Tracking) reports at http://data.arts.cornell.edu/as-stus. The DUST report is updated after each semester to reflect the student's progress in college requirements. To check on their progress in the major, students should consult their major advisors.

## Explanation of Requirements

## Foreign Language Requirement

The faculty considers competence in a foreign language essential for an educated person. Studying a language other than one's own helps students understand the dynamics of language, our fundamental intellectual tool, and enables students to understand another culture. The sooner a student acquires competence, the sooner it will be useful. Hence, work toward the foreign language requirement should be undertaken in the first two years. Students postponing the language requirement for junior and senior years risk not being graduated in time. Courses in foreign languages and/or literature are taught in the College of Arts and Sciences by the following departments: Africana Studies and Research Center, Asian Studies, China and Asia-Pacific Studies, Classics, German Studies, Linguistics, Near Eastern Studies, Romance Studies, and Russian.
The language requirement may be satisfied in one of the following ways:

Option 1: Passing (a) a nonintroductory foreign language course of 3 or more credits at Cornell at the 2000 level or above or (b) any other nonintroductory course at the 2000 level or above conducted in a foreign language at Cornell. OR
Option 2: Passing at least 11 credits of study in a single foreign language (taken in the appropriate sequence) at Cornell.
Any exceptions to these rules will be noted elsewhere in individual department descriptions.
Students whose speaking, reading, and writing competence in a language other than English is at the same level we would expect our entering freshmen to have in English (as shown by completing high school in that language or by special examination during their first year here at Cornell) are exempt from the college's language requirement.

## Placement

Entering students who have completed two or more years of high school study in a language, who have been awarded credit for language work at another college or university, or who are native speakers, bilingual, or have spoken the language at home, may enroll in a course in the same language only after being placed by examination. The placement exam may have been taken in high school (SAT II, taken after the last course, or AP, if the score was 4 or 5) or at Cornell (LP test). Being placed by examination into the first course at a nonintroductory level does not earn credit

toward the degree. Degree credit is earned only for demonstrated mastery of work equivalent to the first course at an intermediate level at Cornell and placement into the second intermediate course. Students should seek to satisfy the language requirement in their first years at Cornell.
Those with test scores one or more years old may be required to take a Cornell Advanced Standing Examination (CASE) if the instructor deems the student is insufficiently prepared for the level in which he or she has enrolled.

## Placement Tests and Advanced Placement

 Credit1. The following language placement and advanced standing tests are scheduled at the beginning of each semester:

- Chinese (Cantonese and Mandarin), Hindi, Japanese, and Korean (schedule available from Department of Asian Studies, 350 Rockefeller Hall);
- French, Italian, and Spanish (schedule available from Department of Romance Studies, 303 Morrill Hall) [These placement tests are also offered online during the summer.];
- German (schedule available from Department of German Studies, 183 Goldwin Smith Hall);
- Russian (schedule available from Department of Russian, 226 Morrill Hall).
The advanced standing examination in French, German, Italian, Russian, and Spanish, is called the CASE (Cornell Advanced Standing
Examination). Eligibility for the CASE may be determined from the placement tables. In Russian only, all students seeking placement take the CASE.
Native speakers of Spanish who have completed their secondary education in a Spanish-speaking country do not take the CASE. For these students, the Spanish program offers a walk-in service, the Native Language Accreditation for Spanish, in the third week of September and the first week of February. Students interested in this service should contact David Cruz de Jesus in 305 Morrill Hall, dc36@cornell.edu. Speakers of Spanish who completed their secondary education in a non-Spanish-speaking country are required to present either SAT II or AP or LPS scores for placement, or for eligibility to take the CASE exam.

2. Arabic: departmental examination, Department of Near Eastern Studies, 409 White Hall.
3. Greek: departmental examination, Department of Classics, 120 Goldwin Smith Hall.
4. Hebrew: departmental examination, Department of Near Eastern Studies, 409 White Hall.
5. Latin: departmental examination, Department of Classics, 120 Goldwin Smith Hall.
6. Persian: departmental examination, Department of Near Eastern Studies, 409 White Hall.
7. Turkish: departmental examination, Department of Near Eastern Studies, 409 White Hall.

## Distribution Requirements

In satisfying the distribution requirements, students become acquainted with a broad range of subject matter and points of view among disciplines in the college and explore areas that may be entirely new to them. Or, to look at it the other way, as first-year students explore subjects that interest them, they begin to satisfy distribution requirements. Consequently, first-year students should take courses to prepare for possible majors and to explore subjects new to them and take no course only in order to satisfy a distribution requirement. Although students may complete distribution requirements over eight semesters they can take advanced courses in subjects they (perhaps unexpectedly) find intriguing only if they have completed the introductory prerequisites. Consequently, students should not postpone satisfying distribution requirements until the last semesters. Once sure of a major, students should consider which distribution requirements are yet unfulfilled and how to fulfill them with courses that complement their overall program. Courses in the major may be applied to the distribution requirements (unless prohibited by one of the restrictions noted under restrictions on applying AP credit, transfer credit, and Cornell courses to distribution requirements).
Students must complete four courses in science and quantitative reasoning, identified below under the categories Physical and Biological Sciences (PBS) and Mathematics and Quantitative Reasoning (MQR). In addition, they must complete five courses of 3 or more credits each from four of the five categories of courses in the humanities and social sciences with no more than three in the same department. The five categories of courses fulfilling the distribution requirements in humanities and social sciences are: Cultural Analysis (CA-AS), Historical Analysis (HA-AS), Knowledge Cognition and Moral Reasoning (KCM-AS), Literature and the Arts (LA-AS), and Social and Behavioral Analysis (SBA-AS). How an individual course is categorized is indicated with the appropriate abbreviation in its description under its department.

## It is important to recognize that only courses with the proper designation in

 the Arts and Sciences section of the catalog can be used toward fulfilling the distribution requirements in Arts and Sciences. Some topics courses and courses offered through the Society for the Humanities, among others, do not count toward distribution.Students wishing to take an Arts and Sciences course that does not have a rubric assigned to it in this volume should consult their advising dean to ascertain the status of the course and see if it has, in fact, been assigned any distribution rubric after the publication of this volume. Students may not petition to change the rubric of any given course, nor may any faculty member change the rubric of a course for an individual student. Faculty members wishing to change the rubric for a course they teach must petition the Educational Policy

Committee for a change in rubric, and that rubric must then be applied to the course for all students in the course.

## - Cultural Analysis (CA-AS)

Courses in this area study human life in particular cultural contexts through interpretive analysis of individual behavior, discourse, and social practice. Topics include belief systems (science, medicine, religion), expressive arts and symbolic behavior (visual arts, performance, poetry, myth, narrative, ritual), identity (nationality, race, ethnicity, gender, sexuality), social groups and institutions (family, market, community), power and politics (states, colonialism, inequality).

- Historical Analysis (HA-AS)

Courses in this group interpret continuities and changes-political, social, economic, diplomatic, religious, intellectual, artistic, scientific-through time. The focus may be on groups of people, dominant or subordinate, a specific country or region, an event, a process, or a time period.

- Knowledge, Cognition, and Moral Reasoning (KCM-AS)
Offerings in this area investigate the bases of human knowledge in its broadest sense, ranging from cognitive faculties shared by humans and animals such as perception, to abstract reasoning, to the ability to form and justify moral judgments. Courses investigating the sources, structure, and limits of cognition may use the methodologies of science, cognitive psychology, linguistics, or philosophy. Courses focusing on moral reasoning explore ways of reflecting on ethical questions that concern the nature of justice, the good life, or human values in general.
- Literature and the Arts (LA-AS) Offerings in this area explore literature and the arts in two different but related ways. Some courses focus on the critical study of artworks and on their history, aesthetics, and theory. These courses develop skills of reading, observing, and hearing and encourage reflection on such experiences; many investigate the interplay among individual achievement, artistic tradition, and historical context. Other courses are devoted to the production and performance of artworks (in creative writing, performing arts, and media such as film and video). These courses emphasize the interaction among technical mastery, cognitive knowledge, and creative imagination.
- Social and Behavioral Analysis (SBAAS)
Courses in this area examine human life in its social context through the use of social scientific methods, often including hypothesis testing, scientific sampling techniques, and statistical analysis. Topics studied range from the thoughts, feelings, beliefs, and attitudes of individuals to interpersonal relations between individuals (e.g., in friendship, love, conflict) to larger social organizations (e.g., the family, society, religious or educational or civic institutions, the economy, government) to the relationships and conflicts among groups or individuals (e.g., discrimination, inequality, prejudice, stigmas, conflict
resolution). Please note that CRP 1100 (The American City) and CRP 1101 (Global City) satisfy SBA-AS.
- Physical and Biological Sciences (PBS)
In fulfilling the four courses in science and quantitative reasoning, students must take at least two science courses. At least one of these must be from the primary list of courses in science departments in the College of Arts and Sciences:


## Primary list:

(The courses listed individually are all crosslisted in an A\&S science department.)
Animal Science
4270 Fundamentals of Endocrinology
Anthropology
3710 Human Paleontology
Applied and Engineering Physics
3300 Modern Experimental Optics
3630 Electronic Circuits
4500 Introduction to Solid-State Physics 4700 Biophysical Methods
Astronomy: all 3- or 4-credit courses except ASTRO 1109, 1110, and 1700
Biological Sciences: all 3- or 4-credit courses except BIOG 1115, 2990, 4980; BIOEE 3620; BIOBM 1320, 3990; BIOMG 1320; BIOMI 1720; BIONB 3210, 4200, 4230, 4350, and BIOSM 2040, 2250, 3620, 3710. BIOG 2000 and 4990 require permission from the Office of Undergraduate Biology.
Biological and Environmental Engineering 4710 Introduction to Groundwater
4800 Our Changing Atmosphere
Biology and Society
2141 Biological Basis of Sex Differences
4471 Seminar in the History of Biology
4611 Environmental Policy
4612 Environmental Policy
Biomedical Engineering
4910 Principles of Neurophysiology
Chemistry and Chemical Biology
all 3- or 4-credit courses
Cognitive Science
1110 Brain, Mind, and Behavior
3300 Introduction to Computational
Neuroscience

## Computer Science

4812 Quantum Information Processing
Crop and Soil Sciences
3970 Environmental Microbiology
4830 Land, Water, Agriculture, and
Environment
Earth and Atmospheric Sciences
all 3- or 4 -credit courses except 1400, 1420,
2500, 2900, 3750, 4350, 4940
Electrical and Computer Engineering
4870 Intro to Radar Remote Sensing
Engineering
1220 Earthquake!
Entomology
3250 Insect Behavior
3690 Chemical Ecology
4400 Phylogenetic Systems
4550 Insect Ecology
4700 Ecological Genetics
Feminist, Gender, \& Sexuality Studies
2140 Biological Basis of Sex Differences

Food Science
3940 Applied and Food Microbiology

## History

2870 Evolution
4150 Seminar in the History of Biology
Horticulture
2430 Taxonomy of Cultivated Plants
4730 Ecology of Agricultural Systems
Music
1466 Physics of Musical Sound
Natural Resources
3030 Introduction to Biogeochemistry
4560 Stream Ecology
Nutritional Sciences
4750 Mammalian Developmental Defects
Physics
all 3- or 4-credit courses
Plant Pathology
4090 Principles of Virology
4480 Symbiotic Association: Evolution and Ecology
Psychology
1110 Brain, Mind, and Behavior
3220 Hormones and Behavior
3240 Biopsychology Laboratory
3300 Introduction to Computational Neuroscience
3320 Biopsychology of Learning and Memory
4240 Neuroethology
4310 Effects of Aging on Sensory and
Perception Systems
4440 Neural Computation
4920 Sensory Function
Science and Technology Studies
2871 Evolution
4471 Seminar in the History of Biology
Toxicology
4370 Cell Proliferation and Senescence (3 cr)
Students may select additional science courses
from the following supplementary list:
Animal Science
1100 Domestic Animal Biology I
1150 Domestic Animal Biology II
2120 Animal Nutrition
Antbropology
1300 Human Evolution: Genes, Behavior, and the Fossil Record
2310 Chimpanzees and Politics
3270 Environmental Archaeology
3390 Primate Behavior and Ecology
4263 Zooarchaeological Method
4264 Zooarchaeological Interpretation
Applied and Engineering Physics
1100 Lasers and Photonics
Archaeology
3270 Environmental Archaeology
4011 Ceramic Analysis for Archaeology
4263 Zooarchaeological Method
4264 Zooarchaeological Interpretation

## Dance

3120 The Moving Body: Form and Function
Electrical and Computer Engineering
4300 Lasers and Optical Electronics
Engineering (Intro course)
1100 Lasers and Photonics
Entomology
2011 Alien Empire: Bizarre Biology of Bugs 2100 Plagues and People (3 cr.)

2120 Insect Biology
3150 Spider Biology
Food
2000 Intro to Physio \& Bio Aspects of Food
Natural Resources
2010 Environmental Conservation
2100 Introductory Field Biology
3110 Fish Ecology, Conservation, and Management
4200 Forest Ecology
Nutritional Sciences
1150 Nutrition and Health
3450 Introduction to Physiological and
Biological Aspects of Food
3610 Biology of Normal and Abnormal Behavior

## Plant Pathology

2013 Magic Mushrooms, Molds, and More
2015 Mushrooms, Molds, and Molecules

## Psychology

2230 Introduction to Biopsychology
3260 Evolution of Human Behavior
3610 Biology of Normal and Abnormal Behavior

- Mathematics and quantitative reasoning (MQR)
In completing four courses in science and quantitative reasoning, students must take at least one of the following courses (note that EDUC 1150 Introductory College Mathematics counts neither toward the college degree nor toward distribution):
Applied Economics and Management
2100 Introductory Statistics


## Biometry

3010 Biological Statistics I
City and Regional Planning
3210 Introduction to Quantitative Methods
3280 Quantitative Methods in Policy Planning
Cognitive Science
4240 Computational Linguistics
Computer Science
1110, 1112, 1113, 1114 Introduction to Computing
2110 Object-Oriented Programming and Data Structures
2800 Discrete Structures
3110 Data Structures and Functional Programming
3740 Computational Linguistics
4210 Numerical Analysis and Differential Equations
4220 Numerical Analysis: Linear and Nonlinear Equations
4860 Applied Logic
Earth and Atmospheric Sciences
4350 Statistical Methods in Meteorology and Climatology
Ecology and Evolutionary Biology
3620 Dynamic Models in Biology

## Economics

3190 Introduction to Statistics and Probability
3200 Introduction to Econometrics
3210 Applied Econometrics
3680 Game Theory
4760/4770 Decision Theory I and II

## Engineering

1101 Engineering Applications of ORIE
1700 Computation, Information, and Intelligence
2110 Object-Oriented Programming and Data Structures

Industrial and Labor Relations
2100 Introductory Statistics
2120 Statistical Reasoning

## Information Science

1700 Computation, Information, and Intelligence

## Linguistics

4424 Computational Linguistics
4485 Topics in Computational Linguistics

## Mathematics

all 3- or 4-credit courses except 1000 and 1009
Natural Resources

$$
3130 \text { Biological Statistics I }
$$

## Philosophy

2310 Introduction to Deductive Logic
3300 Foundations of Mathematics
3310 Deductive Logic
4310 Mathematical Logic
4311 Topics in Logic
Policy Analysis and Management 2100 Introduction to Statistics

## Psychology

 3500 Statistics and Research Design
## Sociology

3010 Evaluating Statistical Evidence

## Statistical Science

2100 Introductory Statistics
2200 Biological Statistics I
If students choose two courses from this list to satisfy part of the distribution requirement, those two courses may not have significant overlap. For example, students may not choose two beginning courses in statistics. Nor may they earn credit toward the degree for overlapping courses: AEM 2100 Introductory Statistics, ILRST 2100 Introduction to Statistics, ILRST 2120 Statistical Reasoning, MATH 1710 Statistical Theory and Application in the Real World, PAM 2100 Introduction to Statistics, PSYCH 3500 Statistics Research and Design, SOC 3010 Evaluating Statistical Evidence,
STSCI 2100 Introduction to Statistics.

## Breadth Requirements

Students must include in their undergraduate program at least one Arts and Sciences course that focuses on an area or a people other than those of the United States, Canada, or Europe and one course that focuses on an historical period before the 20th century. Courses that satisfy the geographic breadth requirement are marked with an @ when described in this catalog. Courses that satisfy the historical breadth requirement are marked with a \#. Many courses satisfy both requirements, and students may in fact use the same course to satisfy both. Students may use courses satisfying distribution, major, or elective-but not writing-requirements in satisfaction of either of the breadth requirements. They may also apply Cornell courses (not credit from an examination) conferring proficiency in a nonWestern language toward the geographical breadth requirement.

## Restrictions on Applying AP Courses and Credit from Other Institutions to the Distribution Requirements

Students may not apply AP credit or transfer credit from another institution to the breadth requirements or to any distribution requirement.

Students who transfer to the college from another institution are under the above rules for advanced placement credit, but are eligible to have credit for post-high school course work taken during regular semesters (not summer school) at their previous institution count toward all distribution requirements. Transfer students receive a detailed credit evaluation when they are accepted for admission.

## Restrictions on Applying Cornell Courses to the Distribution and Breadth Requirements

1. First-year writing seminars may not count toward any other college requirement.
2. No single course may satisfy more than one distribution requirement.
3. Students may count courses in their major toward distribution and breadth.
4. Only courses with the proper designation in the Arts and Sciences section of the catalog can be used toward fulfilling the distribution requirements in Arts and Sciences
5. A student may not petition for alteration of a particular course's distribution rubric, nor may a faculty member change a course rubric for an individual student. The rubric for a course may be changed only if the Educational Policy Committee grants a petition by the course's instructor to change the rubric. If the rubric changes, it does so for the class as a whole and never for an individual student.

## The Major

In their last two years, students devote roughly one-half of their time to acquiring depth and competence in a major subject. The major does not necessarily define a student's intellect or character or lead directly to a lifetime occupation, although it sometimes does some of each. Through the major, students focus and develop their imaginative and intellectual capacities through a subject they find especially interesting.
Most departments and programs specify certain prerequisites for admission to the major; they are found on the following pages in the descriptions of each department and program.
Students may apply for acceptance into the major as soon as they have completed the prerequisites and are confident of their choice This may be as early as the second semester of freshman year, and must be no later than second semester of sophomore year. To apply, they take a copy of their official transcript to an appointment with the director of undergraduate studies in their prospective major. A department or program may refuse admission into the major if the applicant's performance does not meet established standards. A student without a major at the beginning of the junior year is not making satisfactory progress toward the degree and risks not being allowed to continue in the college. That student must meet with an advising dean and may be placed on a leave of absence as early as the first semester of the junior year if he or she has not declared a major.

## Available majors

Majors are offered by each of the departments. There are also majors in American Studies, Archaeology, Biology \& Society, China and Asia-Pacific Studies, Feminist, Gender, \& Sexuality Studies, Information Science, Religious Studies, and Science of Earth Systems.
Some students want to pursue a subject that cannot be met within an established major. They may plan, with the help of their faculty advisor, an independent major that includes courses from several departments and even colleges. See "Independent Major and College Scholar Program," under "Special Academic Options." Whatever the major-chemistry, math, philosophy, or music-graduates from the College of Arts and Sciences earn the one degree the college awards, a Bachelor of Arts.

## Double majors

Only one major is required for graduation. Some students choose to complete two or more majors. No special permission or procedure is required; students simply become accepted into multiple majors and find an advisor in each department. All completed majors are posted on the official transcript. However, even though courses in a second major count among the required 15 credits of electives (see immediately below), double majoring can constrict the variety of electives that might be valuable for an education in the liberal arts and sciences. Students should "double major" only if their intellects and deep interests direct them to do so. If a student majoring in more than one subject decides $s /$ he does not wish to complete the second major, $\mathrm{s} /$ he must go to the department and formally withdraw from that major.

## Minors

Students may pursue minors in any department in any college that offers them, subject to limitations placed by the department offering the minor or by the students' major. Completed minors will appear on the student's transcript. Not all departments offer minors. Consult the appropriate department or program listing in this Courses of Study or contact the appropriate department for information on minors offered and how to pursue a minor.

## Electives

Of the 34 courses and 120 credits required for graduation, almost one-third are free electives. How students use these electives frequently makes the difference between an ordinary and a truly interesting course of study. Students must complete at least four courses and at least 15 credits offered outside the major field and not used to fill another requirement except breadth. AP credits not otherwise used may fulfill elective requirements. Students may group electives to complete one of the established interdisciplinary minors. Students may also group electives into a second major. Since only one major is required, students may count courses in a second major as electives. Some students choose to explore a variety of subjects; some develop a concentration in a department or subject outside Arts and Sciences to gain applied training or specialized knowledge.

## Residence

The College of Arts and Sciences is a residential community for students who devote their energy and spirit to full-time study. The faculty believes that integrated, fulltime study for a defined period best promotes intellectual and creative development and best prepares people for citizenship and careers.
Consequently, eight semesters of full-time study in the College of Arts and Sciences are integral to earning the B.A. degree. Even if the minimum requirements can be met in fewer semesters, the faculty of the college expects students to take advantage of the resources of the university for eight full semesters and obtain as rich and advanced an education in the liberal arts and sciences as possible. Students may complete their undergraduate degrees with credits earned at other institutions or as part-time or summer students at Cornell only if they have completed their eight full-time semesters of residence or satisfied the criteria listed below under "Parttime study in final semester."
For transfer students from other institutions, each full semester of study at their previous institution counts as one of the eight semesters of residence. However, even if transfer students have completed more than four full semesters at their previous institution, they must spend a minimum of four semesters on the Cornell campus in Ithaca enrolled in the College of Arts and Sciences. Internal transfers from other colleges at Cornell must spend four semesters on campus in Ithaca as students in the college. Only if a transfer student spends at least four semesters in the College of Arts and Sciences can he or she accelerate (see "Acceleration," below).
Approved study abroad, SEA Semester, Urban Semester, FALCON, and Cornell in Washington are considered semesters of residence but not semesters on the Cornell campus. Students may spend no more than two semesters on such programs and must be on campus during their last semester. Dual-degree students spending 10 semesters at Cornell who feel they need three semesters abroad may petition the Academic Records Committee for permission but must demonstrate the academic necessity of the extended time away. Semesters of extramural study in Cornell's School of Continuing Education, semesters of study at other institutions, and summer sessions anywhere do not count as semesters of residence.

## Acceleration

The faculty of the college desires that each student achieve depth, as well as breadth, from his or her undergraduate education. Indeed, benefiting from opportunities for advanced, seminar, and independent (sometimes honors) work is what best characterizes undergraduate education in the college. When a student feels he or she does not need eight semesters in order to achieve this depth, the student can apply to be able to accelerate by a term (and in rare cases, two terms), compressing the first four semesters into three (or two), and completing the prerequisites for the major in time to spend four full semesters in the major.

A student desiring to accelerate should meet with an advising dean in the first month of the desired penultimate semester so that he or she may have time to submit the online application to graduate by the deadline. The advising dean will determine the student's eligibility to accelerate. Accelerants must fulfill the following requirements:

1. All graduation requirements except for the residency requirement ( 120 total credits, 100 Arts and Sciences credits, 34 courses, all college requirements, and the university's physical education requirement).
2. Either condition $a$ or $b$ :
a. 60 credits before beginning their last four semesters in the college and the prerequisites for admission to the major in time to spend four semesters in the major.
b. 48 credits in College of Arts and Sciences courses numbered 3000 and above and prerequisites for admission to the major in time to spend four semesters in the major. No more than three upper-level courses taken in other colleges at Cornell University may count toward the 48 credits and then only if approved as part of the major.
3. 100 credits at Cornell at " C " (not $\mathrm{C}-$ ) or above. Courses completed with a grade of " S " will count toward the 100 credits. Advanced placement and transfer credits do not count toward this requirement.
4. Students may not use credits earned while on leave of absence to reduce their terms of residence. In other words, they must be eligible to accelerate without applying any credit toward the degree that they earned while on leave.
5. Accelerants may not finish the degree with credits earned through part-time study (unless they meet the guidelines for part-time study), or at an off-campus program, including Cornell in Washington, SEA Semester, Urban Semester, or study abroad. That is, they may not exit through any program other than a regular, fulltime Cornell semester in Ithaca.

Students matriculating as first-year students may not compress their undergraduate education into fewer than six semesters of residence. Transfer students, both from other institutions and from other colleges at Cornell, must spend at least four semesters in the college on campus in Ithaca. Acceleration is thus limited to transfer students who enter as sophomores. If a student does not meet the requirements for acceleration, that student may not petition for an exception
Acceleration is, in itself, an exception to the normal rules of the college, and the Academic Records Committee does not grant exceptions to exceptions.

## Ninth semester

Students who can graduate in eight semesters should do so. If a worthy academic plan for a full ninth or tenth semester is approved, the student enrolls in the college as a special student for the additional work. Such a status allows enrollment in a full schedule of courses and full access to campus resources for full tuition, but allows financial aid only from loans or outside agencies, not from Cornell
funds. Students who need fewer than 12 credits in a ninth or tenth semester to graduate should complete the outstanding courses and pay prorated tuition. Students may spend a ninth semester with Cornell aid only with permission of the Committee on Academic Records. Such permission is normally granted only to the following:

1. Students who have been ill or experienced other untoward circumstances beyond their control.
2. Students who were academically underprepared for the curriculum at Cornell and needed to begin with a lighter schedule of courses than normal. (See your advising dean about this option.)

## Extramural study

Students in good academic standing may take a personal leave of absence and enroll in the School of Continuing Education, but such semesters of extramural study do not count as terms of residence and credits from such semesters may not be used to reduce the terms of residence.

Part-time study in special circumstances
The college and university support students (with financial aid and services) as best they can to make full-time study possible. Occasionally, however, extraordinary but nonfinancial medical circumstances make studying part-time temporarily necessary and appropriate. Students in good academic standing who face extraordinary situations may petition the Committee on Academic Records for a part-time schedule and proration of tuition in the college.

## Prorated tuition in the final semester

Students may complete their degrees by taking fewer than 12 credits and pay prorated tuition at Cornell after fewer than eight semesters of full-time residence only if:

1. They have completed all requirements by the end of the sixth or seventh semester, met the criteria for accelerated graduation, and are remaining to complete study beyond what is required for the degree.
2. They are writing an honors thesis in the eighth semester and can complete all degree requirements by taking exactly two courses, one of which is the thesis itself. They must register for the thesis and one additional course.
A student must see an advising dean to confirm his or her eligibility for prorated tuition and receive a petition to be approved by his or her faculty advisor. The student must specify the number of credits to be taken in the final term, and the faculty advisor must be able to certify that those credits will allow the student to complete his or her graduation requirements. Once the student's petition has been approved, he or she must see college registrar Sally O'Hanlon in 55 Goldwin Smith Hall to complete the prorated tuition form necessary for the Office of the Bursar. Both the petition form and prorated tuition form must be completed and approved before the end of the second week of the semester.

## Courses and Credits

Students must complete at least 34 full courses (which may include courses students place out of with AP credit) to be graduated-that is, an average of four full courses during each
of six semesters and five courses during each of two semesters. Not all courses are full courses. Course equivalencies are as follows:

## Counting courses:

1-credit courses: Certain 1-credit courses in Music, and in Theatre, Film, and Dance, may aggregate so that each two can count as a half course, and four can count as a full course. Otherwise, single-credit courses do not count as part of the 34 .
2 -credit course $=$ one-half course
3- or 4-credit course $=$ one full course
5-credit BIOMG 2810 (Genetics) $=$ one and one-half course
Other 5-credit courses $=$ one full course each
6 -credit language course $=$ one and one-half course

Other 6-credit courses $=$ one full course each
8 -credit FALCON courses $=2$ full courses each
16 -credit FALCON semester $=4$ full courses
16-credit Intensive Arabic semester $=4$ full courses
Counting credits: Students must complete a minimum of 120 credits (which may include AP credits). Of the 120 , a minimum of 100 must be from courses taken in the College of Arts and Sciences at Cornell.

Courses that do not count toward the 120 credits required for the degree or toward good standing: The College of Arts and Sciences does not grant credit toward the degree for every course offered by the university. Courses in military training, training as an emergency medical technician, service as a teaching assistant, physical education, remedial or developmental training, precalculus mathematics (including EDUC 1150), supplemental science and mathematics offered by the Learning Strategies Center, English as a second language, and keyboarding are among those for which degree credit and credit toward the 12 credits required each semester for good academic standing are not given. Students should consult http://as.cornell.edu/ academics/advising/coursesdonotcount.cfm for more information and a list of courses.
Other cases in which a course may not receive credit or count toward good standing include the following:

- A course identified as a prerequisite for a subsequent course may not be taken for credit once a student completes that subsequent course.
- A repeated course. (For more information, see "Repeating courses," below.)
- A course with material that significantly overlaps with material in a course a student has already taken, for example, SOC 1101 Introduction to Sociology, and DSOC 1101 Introduction to Sociology; or any of the following statistics courses: AEM 2100 Introductory Statistics, ILRST 2100 Introduction to Statistics, ILRST 2120 Statistical Reasoning, MATH 1710 Statistical Theory and Application in the Real World, PAM 2100 Introduction to Statistics, PSYCH 3500 Statistics Research and Design, SOC 3010 Evaluating Statistical Evidence, STSCI 2010 Introduction to Statistics.
Courses that count toward the 100 required Arts and Sciences credits may include liberal
arts courses approved for study abroad during a semester or academic year of full-time study (not summer study), courses taken in certain off-campus Cornell residential programs, courses (usually no more than three) that certain departments accept from other colleges at Cornell as fulfilling major requirements (and substituting for A\&S courses), and courses (up to two) that an advisor accepts as part of a completed and formally established crosscollege, interdisciplinary minor. In addition, all courses that appear on the Supplementary Science and Mathematics and Quantitative Reasoning lists, count toward the 100 credits required in the College of Arts and Sciences.
Courses that do not count toward the 100 required Arts and Sciences credits include credits earned in other colleges at Cornell (except in the cases noted above), credits earned in any subject at institutions other than Cornell, and advanced placement credits. AP credits count as part of the 120 credits and 34 courses required for the degree but not as part of the 100 Arts and Sciences credits and may not be applied to distribution or breadth. AP credits are posted on the transcript. If, subsequently, a student takes the course out of which s/he had placed, the AP credit will be removed because of the overlap in content (for more information on AP credits, please see pages 452-454).


## Repeating courses

Students occasionally need to repeat courses. If the instructor certifies that the course content is significantly different, credit is granted a second time. If the content is the same, both grades nonetheless appear on the transcript and are included in any GPA that is calculated, but the course and credit count toward the degree only once. Repeated courses do not count toward the 12 credits required for good standing. Students considering repeating a course under this circumstance should discuss the matter with their advisor and an advising dean. Students who plan to repeat a course must submit a petition to the college registrar, Sally O'Hanlon, 55 Goldwin Smith Hall. If the original course grade was F or U , no petition is necessary.

## Using courses to fulfill more than one requirement:

A course may fulfill more than one college requirement in any of the following situations:

1. A course may be used to fulfill distribution, breadth, and a major requirement (except as noted in earlier sections on restrictions on applying AP credits, transfer credits, and Cornell courses to distribution requirements).
2. A one-semester course in foreign literature (not language) or culture that is acceptable for certifying option 1 in that language may also be applied to the relevant distribution requirement and, if appropriate, to the breadth requirement.
3. Courses may count toward breadth requirements and toward any other requirement except first-year writing seminars.
4. Courses in a second major may count as electives.

## Summer session credit

A student may earn credit toward the degree by completing courses in Cornell's summer
session or by successfully petitioning for transfer credit for summer courses at other colleges. Students should consult their advisors regarding summer study plans.
Credit for summer courses not taken at Cornell must be approved by the appropriate Cornell department. Approval forms and information are available online, www.as. cornell.edu, and in the Office of
Undergraduate Admissions and Advising, 55 or 172 Goldwin Smith Hall. Students are advised to submit course descriptions, syllabi, and approval forms to the director of undergraduate studies in the relevant Cornell department for prior approval of each course. Transcripts for completed work at other institutions must be sent to Robin Perry, 172 Goldwin Smith Hall. Credit approved for summer courses away from Cornell (including summer courses abroad) counts toward the 120 credits and 34 courses required for the degree, but not toward the 100 credits required in the college at Cornell. It may not be applied to distribution or breadth requirements but may be applied to elective requirements and to major requirements (with the approval of the department).
Summer session at Cornell or elsewhere does not count toward the eight-semester residence requirement. Students are permitted to earn up to 12 credits in one summer.

## Transferring credit earned away from

 Cornell while on leave of absence
## See "Leaves of Absence."

Transferring credit (for transfer students from another institution or from another Cornell college)
Transfer students must satisfy all normal requirements for the degree, including eight semesters of full-time study. They must always complete at least 60 credits and 18 courses at Cornell and be in residence on campus in the college for at least four regular semesters (summer session does not count toward the residence requirement). The college evaluates credit and residence earned either at another school or college at Cornell University or at another accredited institution of collegiate rank and determines the number of credits and courses the student may apply toward the various requirements for the bachelor of arts degree at Cornell. In addition, it reevaluates advanced placement credit allowed by another institution, including another college at Cornell. Evaluations of transfer credits are normally provided when students are notified of their admission. Once matriculated in Arts and Sciences at Cornell, transfer students must adhere to the same rules for transferring credit earned on leave as all other students.

## SPECIAL ACADEMIC OPTIONS

## Degree Programs

The following four programs allow students to alter the regular college or major requirements or to work toward more than one degree.

## College Scholar Program

The College Scholar Program is meant to serve students whose interests and talents would benefit from a little more academic freedom than other students have, who demonstrate exceptional promise, and who
show the maturity to plan and carry out, with the help of their advisor, a well-designed program of study. College Scholars design idiosyncratic programs: some pursue diverse interests; others integrate a variety of courses into a coherent subject. Up to 40 students in each class are accepted into the program.
College Scholars must complete 120 credits of course work (100 in the college), 34 courses, the university's physical education requirement, and, unless they receive permission from the program to accelerate, eight full terms of undergraduate study but are not required to fulfill the other usual college requirements for the degree. All college scholars must complete a senior project. Although they are not required to complete or fulfill the general education requirements, members of the College Scholar Advisory Board believe that the spirit of those requirements is good.
Each applicant to the College Scholar Program is asked to write an essay, which is due the last Wednesday of classes in the spring of the freshman year. Students should contact Dean Ken Gabard, Office of Undergraduate Admissions and Advising, 55 Goldwin Smith Hall, for further information.

## Dual-Degree Program with Other Colleges

The Dual-Degree Program enables especially ambitious undergraduate students to pursue programs of study in two colleges. Dualdegree candidates may earn both a Bachelor of Arts degree from the College of Arts and Sciences and: (1) a bachelor of science degree from the College of Engineering; or (2) a bachelor of fine arts degree from the Department of Art in the College of Architecture, Art, and Planning; or (3) a bachelor of science degree in urban and regional studies from the Department of City and Regional Planning in the College of Architecture, Art, and Planning; or (4) a bachelor of science degree in architectural history from the Department of Architecture in the College of Architecture, Art, and Planning. Students enter one of these colleges as freshmen or sophomores and begin the DualDegree Program with the second college in the second or, in some cases, the third year. The Dual-Degree Program ordinarily takes five years to complete, and students are eligible for 10 semesters with financial aid. For further information contact Dean Tammy Shapiro in the Office of Undergraduate Admissions and Advising, 172 Goldwin Smith Hall.

## Independent Major Program

The Independent Major Program allows students to design their own interdisciplinary majors and pursue a subject that cannot be found in an established major. Proposals for an independent major must be equivalent in coherence, breadth, and depth to a departmental major, well suited to the student's academic preparation, and consistent with a liberal education. Proposals must also be supported by a faculty advisor and are assessed by a board of faculty members. Independent majors substitute for established majors, but students must still satisfy all the other requirements for the bachelor's degree. Students should contact Dean James Finlay, Office of Undergraduate Admissions and Advising, 55 Goldwin Smith Hall, for further information. Deadlines for submitting independent major proposals are listed on the
calendar supplement for the College of Arts and Sciences.

## Double Registration with and Early Admission to Professional Schools

Registration in the senior year of the College of Arts and Sciences and the first year of Cornell Law School or the Johnson Graduate School of Management is occasionally possible. A very few exceptionally well-
prepared students who have earned 105 credits before the start of the senior year and have been accepted by one of the abovenamed professional schools may be permitted to register simultaneously in the college and in one or another of these professional schools during the seventh and eighth terms. They earn the B.A. degree after the first year of professional school.
Students with 8 or fewer credits and two or fewer courses to complete may apply to enter the Master's of Engineering program during (but no earlier than) their eighth semester; dual-degree students may enter this program no earlier than the ninth semester. They earn the bachelor degree(s) after one semester of graduate school.
Students interested in the joint program with the Law School, the Cornell Institute for Public Affairs (CIPA), or the Graduate School of Management, or in early admission to the master's of engineering program should apply to the relevant program. All candidates should confirm their eligibility with an advising dean, Office of Undergraduate Admissions and Advising, 172 Goldwin Smith Hall.
Double-registered students must, of course, complete all requirements for the B.A. degree, including 100 credits in Arts and Sciences courses.

## Teacher Education

Students at Cornell may pursue teaching credentials in agriculture, biology, chemistry, earth science, general science, and physics. Cornell students from any college are encouraged to apply for admission to the Cornell Teacher Education Program during their sophomore or junior year. Those who are admitted complete their undergraduate major in an agricultural science or physical science and a minor (concentration) in education. They are then able to complete a master of arts in teaching (MAT) in one year and earn certification in New York State. Students in agricultural science may be able to complete all certification requirements as undergraduates, although this option is not recommended.
For more information, contact the program director, Deborah Trumbull, at 255-3108 or djt2@cornell.edu.

## Special-Interest Options

The following options enable students to pursue special interests within the usual degree programs.

## Independent Study

Independent study affords students the opportunity to pursue special interests or research not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the independent course, must approve the proposed study and agree to provide continuing supervision of the
work. Students must prepare a proposal for independent study (proposal forms are available in the Office of Undergraduate Admissions and Advising, 55 and 172 Goldwin Smith Hall). In one semester students may earn up to 6 credits with one instructor or up to 8 credits with more than one instructor. Students who are being paid for assisting faculty in research cannot earn course credit for that work.

## Undergraduate Research

An excellent way to benefit from being an undergraduate at a research university, at Cornell in particular, is to become an apprentice in ongoing faculty research. About 400 students participate each year in creating new knowledge and earn independent study credit for what they learn and contribute. They sharpen their critical and creative abilities and test their interest in pursuing a research career. Sometimes they publish their work.
The Cornell Undergraduate Research Board, an undergraduate organization, conducts an annual open house to help students get started in research and an annual forum at which undergraduates present their work. See www.rso.cornell.edu/curb.
Students interested in research should consult the director of undergraduate studies in the department of interest to find out about available opportunities. For more general information on the process of research or on petitioning for independent study credit for research, students should consult Dean Maria Davidis or Dean David DeVries, in the Office of Undergraduate Admissions and Advising, or consult www.research.cornell.edu/undergrad.

## Language Study

FALCON (Full-Year Asian Language
Concentration). FALCON allows students who are interested in the Far East to study Chinese or Japanese exclusively for one year. They gain proficiency in the language and familiarity with the culture. Students who are interested in the Far East should be aware of the opportunities to pursue rapid and thorough beginning studies on campus with the objective of studying abroad in China or Japan. Students interested in this program should contact the Department of Asian Studies, 388 Rockefeller Hall; e-mail: falcon@ cornell.edu.

## Prelaw Study

Law schools seek students with sound training in the liberal arts and sciences; they neither require nor prefer any particular program of study. Students should therefore study what they love and do well. While doing that, they should also develop their powers of precise, analytical thinking and proficiency in writing and speaking. Students in the College of Arts and Sciences who are applying to law school may consult Dean Heather Struck in the Office of Undergraduate Admissions and Advising, 172 Goldwin Smith Hall.
The college offers a minor in law and society. This program offers a broad scope, complements almost any major, and attracts many students not intending to become lawyers as well as a subset of those intending to.

## Premedical Study

The breadth and depth afforded by a liberal arts education are invaluable for students planning medical careers, whether they intend to practice or go into research. Such education has a profound effect on the doctor's understanding of the world and hence usefulness to patients, and it affords the flexibility of mind that is needed for major research undertakings. Medical and dental schools do not prescribe or even prefer a particular major; they do, however, require particular undergraduate courses, and most students are well advised to begin chemistry in their freshman year. Students who are interested in medical careers are urged to visit the Health Careers Office, 203 Barnes Hall.
Students in the College of Arts and Sciences who are planning careers in medicine should meet with their advising dean, http://as. cornell.edu/academics/advising/index.cfm.

## Off-Campus Programs

Many students find it important to their majors or to their overall academic programs to study off campus or abroad for one or two
semesters. When it makes academic sense, the college encourages its students to pursue such studies and grants credit toward the degree for work satisfactorily completed. Students wishing to participate in any off-campus program must petition their advising dean with a list of courses they wish to take during the program and a well-reasoned explanation of why the proposed semester is crucial for their course of study.

## Study Abroad

The College of Arts and Sciences encourages study, both on campus and abroad, that provides a greater understanding of the world's peoples, cultures, economies, and environments, and prepares graduates for the challenges of international citizenship in the 21 st century. Study abroad is open to students in any major who meet the college requirements and have a strong academic goal. Well-chosen and well-planned study abroad contributes a global or comparative dimension to your chosen field, enhances critical thinking and communication skills, and provides firsthand immersion in and appreciation of another culture. Focused academic work in the right institution abroad can be excellent preparation for advanced study or honors work in your final semesters at Cornell, and can lead to a career with a global component.

## Requirements

- GPA of 3.0 or higher and good academic standing
- language study at the required level
- area studies course work
- fulfillment of the College of Arts and Sciences residence requirement
- meet requirements set by the foreign university or program
All students requesting to study abroad during the academic year must be approved by the College of Arts and Sciences and apply through Cornell Abroad. For more information, see Dean Patricia Wasyliw, 55 Goldwin Smith Hall. The full A\&S study abroad policy can be found on the Arts and Sciences advising website http://as.cornell.
edu/academics/opportunities/study-abroad/ index.cfm. Information on program choice and the application process can be found on the Cornell Abroad website https://www. cuabroad.cornell.edu.
The college advocates study abroad that enables students to become competent in another language, so that they can engage fully in daily life in another culture, develop social relationships, and complete formal course work in that language. To study abroad in a country where the host language is not English, the student must demonstrate competence in the language as a prerequisite.
For study abroad in Europe and Latin America, students must complete at least two
semesters of the appropriate foreign language at the 2000 level at Cornell; additional course work is strongly encouraged and will increase students' chances for acceptance into the most highly competitive programs. Consult this catalog for the required level of course work in specific languages. For study abroad in Asia, the Middle East, and parts of Africa, course work entirely in the host language is not always practical, even after several semesters of language preparation at Cornell. Students should still plan to complete as much language preparation as possible within the Cornell curriculum, at least one to two years of study, and may be approved for language-intensive programs (at least half of the permitted 15 credits) with appropriate course work in English.
For study abroad in English-speaking countries, direct university enrollment is approved and expected. Cornell students will engage in a full course of study, generally in their major field, alongside regular degree candidates in the host country. In general, the college requires that at least 50 percent of the classes the student enrolls in be advancedlevel course work in their major field.
Students will need to acquire background knowledge of the country or region where they intend to study. At least one area-studies course or one course in the history, culture, economics, politics, or social relations of the country of destination (3 or more credits) in addition to language study should be part of every student's preparation for study abroad. Some especially competitive programs require substantial prior course work in the proposed course of study as a prerequisite to acceptance. Students who intend to enhance their major with study abroad may need advanced course work in that field. As with language study, area-studies preparation beyond the minimum is highly recommended.
All A\&S students must be formally accepted into a major before going abroad, and should ideally be accepted into a major before beginning the application process. Most students plan a significant amount of academic work toward the major while abroad. Whether or not students intend to earn major credit, the college requires that time spent abroad will not impede their progress toward the degree. The student's faculty advisor and departmental director of undergraduate studies must review and approve the study-abroad plans before the application is submitted to the college.
Study abroad can earn up to 15 A\&S credits/ four courses per semester of full-time course work as long as the curriculum abroad is
consistent with that of the college. Completion of one trimester of study earns a maximum of 10 credits. Two terms at Oxford or Cambridge may earn up to 20 credits. You must carry a full course load as defined by the host institution, which should be equivalent to at least 15 credits at Cornell, and all courses must be taken for a letter grade. Any course that falls outside the scope of the liberal arts and sciences may only be taken with the prior approval of Dean Wasyliw, and will earn non-A\&S credits. Students are limited to one such course per semester. Some foreign universities offer courses for visiting students that do not carry any academic credit. Students may not earn additional credit for enrolling in extra courses during the semester or year abroad.
Credit for study abroad will be awarded only after completion of the semester abroad, and after the college receives your official transcript. To receive credit, students must fill out a Request for Credit from Study Abroad form and submit it to the advising office. All courses taken abroad will appear on the Cornell transcript and grades earned are reported in the system of the host institution. Grades earned through course work abroad do not become part of the Cornell GPA, since grades at other institutions are rarely equivalent to grades at Cornell. Students must save all written work from all courses until their grades are received and recorded on their Cornell transcript.
The maximum length of study abroad that can count toward A\&S degree requirements is two semesters, which is also the amount of time recommended for true immersion in another culture and language. Approved semesters away from campus include Cornell in Washington, Urban Semester, and SEA Semester as well as all Cornell Abroad destinations. Students who transfer to Cornell must complete a minimum of four semesters of residence on campus in Ithaca and may not study abroad during any of those four semesters. Internal transfers must complete four semesters of residence on campus in the or in the Internal Transfer Program. College of Arts and Sciences. Students interested in the Cornell in Rome Program should contact Dean Wasyliw.


## Summer Residential Programs in Archaeology

During the summer months students may participate in a Cornell-sponsored archaeological project. In recent years the program has organized archaeological projects in Central America, Greece, Israel, Italy, Turkey, and New York State. Students should contact the Archaeology Program for information about the sites currently available. Students planning on attending field schools organized by other institutions should contact Professor Lauren Monroe, 417 White Hall, or LM283@cornell.edu.

## Marine Science

Shoals Marine Laboratory is a seasonal field station that offers more than 30 college courses that award Cornell credit and paid internships, a variety of courses and experiences designed to introduce undergraduates to marine science. The laboratory is located on Appledore Island, six miles off the Maine/New Hampshire coasts. Students should contact the Shoals Marine

Laboratory Office, G14 Stimson Hall, or e-mail shoals-lab@cornell.edu, for further information.

## Cornell in Washington

The Cornell in Washington program offers students from all colleges in the university an opportunity to earn full academic credit for a semester in Washington, D.C. Students take courses from Cornell faculty members, conduct individual research projects, and work as externs. The Cornell in Washington program offers two study options: (1) studies in public policy, and (2) studies in the American experience. The program also offers unique externship opportunities: students serve as externs in a federal agency, congressional office, or nongovernmental organization and take part in a public policy or humanities seminar. They define and carry out individual research projects under the supervision of Cornell faculty members. Potential externships are arranged through, and approved by, the Cornell in Washington program. For further information, see p. 23 or inquire at M101 McGraw Hall, 255-4090.

Off-campus Programs Offered by Other Colleges
Students wishing to participate in the Urban Semester program, Capital Semester in Albany program, or the Earth and Environmental Systems (EES) semester in Hawaii must petition their advising dean with a list of the courses they wish to take during the program and a well-reasoned explanation of why the proposed semester is crucial for their major course of study. Students interested in the Cornell in Rome program should consult Dean Patricia Wasyliw in 55 Goldwin Smith Hall.

## ACADEMIC INTEGRITY

Academic integrity is the heart of intellectual life-both in learning and in research. All members of the university community simply must support each other's efforts to master new material and discover new knowledge by sharing ideas and resources, by respecting each other's contributions, and by being honest about their own work. Otherwise the university will fail to accomplish its most central and important goals.
Cornell's Code of Academic Integrity and policy about acknowledging the work of others are among the documents new students receive. Students should read them carefully and not assume they understand what integrity and cheating are and are not. Academic integrity implies more here at the university than it usually did in high school. The standards of integrity are those that prevail in professional life. This means that students must acknowledge and cite ideas they adopt from others (not just direct quotations) and help they receive from colleagues or parents. With productive emphases on collaborative learning and writing, students must understand the general standards and policies about academic integrity and be sure they understand the expectations in individual courses as well. When in doubt, ask the instructor. For more information, consult cuinfo.cornell.edu/ Academic/AIC.html.

## Forgery or Fraud on Forms

Forging signatures or credentials on college forms is an academic offense and constitutes
academic fraud. In all cases of forgery on academic forms, the effect of the forged documents shall be negated; such incidents will be recorded in the Academic Integrity Hearing Board's confidential file for forgeries. If the student forges more than once, or if the forgery would advance the student's academic standing unfairly or fraudulently, or if for any reason the situation requires some response in addition to the uniform penalty, the Academic Integrity Hearing Board might recommend further action, such as a notation on the student's transcript, suspension, or dismissal.

## ADVIIING

The following advisors and offices provide academic advising, help with problems, and information on college procedures and regulations.

## Pre-Major Advisors

Each new student is assigned a faculty advisor. Advisors help students plan programs of study and advise them about ways to achieve their academic goals. Advisors may also help students with study or personal problems or may direct them to other offices on campus where help is available. Academic difficulties may frequently be solved or avoided if students and advisors recognize and address problems early.

Advisors and new advisees meet first during orientation week to discuss course selection. New students are encouraged to see their advisors again early in the semester, before it is too late to drop courses, to discuss their academic progress and to become better acquainted. Advisors and advisees should meet at least once each semester to discuss courses for the following semester, and more often if advisees wish to discuss academic or personal issues or to petition for an exception to college rules.

## Major Advisors

After acceptance into a major, each student is assigned a faculty advisor in his or her department, with whom the student shapes and directs the course of study. The advisor eventually certifies the completion of the major. Students should consult their major advisor about all academic plans, including honors, study abroad, acceleration, and graduate study. The advisor's support is especially important if a student petitions for an exception to the normal procedures or requirements

## Student Advisors

Student advisors pass on lore about the college and life at Cornell and help new students become oriented to the university.

## Office of Undergraduate Admissions and Advising

This office, located in 55 Goldwin Smith Hall, 255-5004, and 172 Goldwin Smith Hall, 2554833 , is a resource for faculty and student advisors and for individual students and their parents. Advising deans are available to help students define their academic and career goals, to help with special academic options and exceptions to college rules, and to help when problems arise:

David DeVries, associate dean for undergraduate admissions and advising and undergraduate research, 255-3386
Juliette Corazón, minority students and liaison to Latino Studies Program, 255-4833

Maria Davidis, juniors, seniors, Tanner Dean's Scholars, Rawlings Cornell Presidential Research Scholars, Mellon Mays Fellows, undergraduate research, and postgraduate fellowships, 255-4833
Christa Downey, career services, 255-4166
James Finlay, first- and second-year students, external transfers, Independent Major Program, and peer advisors, 255-5004
Ken Gabard, first- and second-year students and College Scholar Program, 255-5004
Ray Kim, juniors, seniors, internal transfers, student ambassadors, 255-4833

Irene Komor, career counseling, 255-4166
Clare McMillan, first- and second-year students, students with disabilities, Tanner Dean's Scholars, 255-5004
Diane J. Miller, career services, 255-4166
Sally O'Hanlon, registrar, 255-5794
Myra Sabir, juniors, seniors, Mellon Mays Fellows, and minority students, 255-4833

Tammy Shapiro, juniors, seniors, dual-degree students, 255-4833

Arthur Smith, first- and second-year students, 255-4833
Heather Struck, juniors, seniors, prelaw students, 255-4833

Patricia Wasyliw, first- and second-year students, academic integrity, study abroad, 255-5004

## Committee on Academic Records

The college faculty's standing Committee on Academic Records has two main tasks: (1) to decide on students' petitions for exceptions to college requirements or rules and (2) to review the records of students who fail to maintain good academic standing and to take appropriate action. It accomplishes both those tasks without formulae and with attention to each individual situation. Its overriding goal is to help students achieve the best undergraduate education possible.

## Petitions

The college faculty takes graduation requirements seriously, and the faculty's Committee on Academic Records virtually never waives a requirement outright. However, some students, with the support of their advisors, propose structuring their educations or fulfilling the spirit of college requirements in ways other than the specified norms. The Committee on Academic Records decides on such requests. Students who find that their undergraduate education would be better realized by satisfying requirements or proceeding in a way that requires an exception to normal rules, for example, a substitution for the language requirement, should meet with an advising dean in the Office of Undergraduate Admissions and Advising. The deans are expert in the college's expectations and procedures and can help the student formulate a petition, if appropriate. The committee decides petitions on the basis of their educational merit

## Actions

The College of Arts and Sciences has no minimum grade requirement for graduation beyond the guideline that at least 100 Cornell credits of the 120 total required for graduation be passed with grades of $C$ (not $\mathrm{C}-$ ) or above. Consequently, only through actions of the Committee on Academic Records, described below under "Academic Standing," does the college maintain the quality of the degree and attend to individual situations when things academic are not going well.

## REGISTRATION AND COURSE SCHEDULING

## Enrollment in Courses in the College of Arts and Sciences

## New Students

During orientation week, new students attend briefings and other information sessions, and meet with faculty advisors.

## Continuing Students

Continuing students select and schedule up to 22 credits during the semester before the one in which the courses will be taken. Students who do not "pre-enroll" during the designated period must wait until the beginning of the semester and may have difficulty securing places in the courses they most want. Before enrolling in courses, students plan their programs and discuss long-range goals with their faculty advisors. In addition, all students are welcome to discuss programs and plans with an advising dean in the Office of Undergraduate Admissions and Advising, 55 or 172 Goldwin Smith Hall.
At the beginning of each semester, students find their schedules on Student Center at www.studentcenter.cornell.edu. Periodically during the semester, and particularly just before the 3 -, 7 -, and 12 -week deadlines, they should confirm the accuracy of their records.

## Limits on Numbers of Courses and Credits

To meet the 34 -course requirement, students must normally take four courses during each of six semesters and five courses during each of two semesters. To meet the 120 -credit requirement, students must average 15 credits per semester. (Note: AP credit and/or summer credits may reduce the average numbers of courses and credits required each semester.)
Minimum number of credits per semester
To maintain good academic standing as a fulltime student, students must complete at least 12 degree credits per semester; if for compelling personal or academic reasons students need to carry fewer than 12 credits, they should consult their faculty advisor and an advising dean. Permission is by petition only, and after the first semester, such permission is given only in extraordinary circumstances.

## Maximum number of credits per semester

First-year students must petition to enroll in more than 18 credits; other students may enroll in up to 22 credits if their previous semester's average was 3.0 or higher and they are in good academic standing. No more than 22 credits may be taken in a regular semester without permission of the college faculty's

Committee on Academic Records. Students who fail to receive approval for excess credits from the committee may count only 18 or 22 credits, depending on their previous
semester's average, toward the degree for that semester. Students taking summer courses may earn no more than 12 credits in any one summer.

## Attendance

Attendance in classes is expected. Absences are a matter between students and their instructors. If a student cannot attend classes because of illness or family crisis, the Office of Undergraduate Admissions and Advising will notify instructors at the request of the student or the family. Nonetheless, the student must arrange to make up examinations or other work with each instructor. A student who will be absent because of religious holidays or athletic competitions must discuss arrangements for making up work with his or her instructors well in advance of the absence A student who must miss an examination must also consult with the professor in advance. Alternative arrangements are at the discretion of the instructor.
Student athletes should discuss scheduled absences with their instructors at the beginning of the semester. Courses vary in their tolerance of absences. Instructors are not obligated to approve absences for purposes of participating in extracurricular activities, although most will be as flexible as is sensible for a student's academic program.

## Adding and Dropping Courses

After course enrollment (also known as preenrollment), students may not adjust their schedules until just before the new semester begins. During the first three weeks of the semester, students may change courses without petitioning. (Note: the add period for first-year writing seminars is only two weeks.)

After the third week of classes, students must petition to add courses and may add them only for a letter grade. They may drop courses through the seventh week of the semester if no issue of academic integrity is at stake. Between the seventh and 12th weeks students may petition to withdraw from courses, if (1) the instructor approves; (2) the advisor approves; (3) an advising dean approves; (4) the drop does not result in fewer than 12 credits; and (5) no issue of academic integrity is at stake. Students must meet with an advising dean to obtain petition forms.
Courses officially dropped after the seventh week will be noted on the transcript by a "W" where the grade would normally appear. This
is a matter of record and cannot be petitioned. Petitions to withdraw from courses may not be submitted after the end of the 12 th week in the semester. Deadlines for short courses will be adjusted according to the length of the courses.
The effective date of all course changes will be the day the student submits all completed paperwork to the Office of Undergraduate Admissions and Advising.

## GRADES

## Letter Grades

See "Grading Guidelines," pages 15-16.

## S-U Grades

The S-U (satisfactory-unsatisfactory) option allows students to explore unfamiliar subjects or take advanced courses in subjects relatively new to them without being under pressure to compete with better-prepared students for high grades. Students are expected to devote full effort and commitment to a course and complete all work in a course they take for an $\mathrm{S}-\mathrm{U}$ grade. The $\mathrm{S}-\mathrm{U}$ option is contingent upon the instructor's willingness to assign such grades. Students must select their grading option and obtain the instructor's approval for the $S-U$ option during the first three weeks of the semester. No exceptions to this deadline are permitted, and consequently students adding courses after the third week of the semester must add them for a letter grade. After the third week of the semester, students may not petition for a grade option change, unless the course in question has been taken for S-U and is now part of the student's major. Students should note that a grade of $S$ is equivalent to a grade of C - or higher; a grade of U , which is equivalent to any grade below C-, is a failing grade equal to an F. S means the student receives the credit specified for the course. U means no credit is given. A few courses in the college are graded exclusively $\mathrm{S}-\mathrm{U}$; in that case, the final grade appears on the transcript as SX or UX.
Prerequisite courses for graduate school and courses counting toward the major should not be taken for an S-U grade unless the department grants permission. Students may elect the S-U option in courses used to satisfy distribution and elective requirements, provided that such courses do not also count toward major requirements or serve as prerequisites for admission to the major. Firstyear writing seminars and most language courses disallow the S-U option. In any case, students are advised to use the S-U option sparingly, if they intend to apply to graduate school or for transfer to another college. In addition, second-semester seniors in particular are advised to use the S-U option carefully: A student receiving a D in a nonmajor course he or she needs for graduation will still be graduated if that course has been taken for a letter grade. If, however, the student has taken the course $\mathrm{S}-\mathrm{U}$, the D will be recorded as a U and the student will be unable to be graduated on the desired degree date. There is no limit on the number of courses each semester for which students may elect the S-U grade, but within the 120 credits required for the degree, a minimum of 80 credits must be in courses for which a letter grade was received.

## Note of Incomplete

An incomplete (INC) signifies that a course was not completed before the end of the semester for reasons beyond the student's control and acceptable to the instructor. Students must have substantial (normally at least 50 percent) equity in the course, be able to complete the remaining work, and have a passing grade for the completed portion. When a grade of incomplete is reported, the instructor submits a form stating what work must be completed, when it must be
completed, and the grade (or permanent-"frozen"-incomplete) earned if the work is not completed by that date. When a final grade is determined, it is recorded on the official transcript with an asterisk and a footnote explaining that this grade was formerly an incomplete.

Students should be aware that INCs are interpreted as credits not passed during a given semester. If a student's INC takes his or her record below 12 credits in a given semester, the student risks being placed on warning or on leave by the Academic Records Committee. If placed on leave, the student must complete the INC before being allowed to return, and readmission will be permitted only at the beginning of a given semester. If the INC is not completed by the beginning of a regular academic term, the student may not register for that term. Students must resolve (make up or "freeze") any incompletes with their instructors before graduation

## Note of R (Yearlong Courses)

R is recorded for satisfactory progress at the end of the first semester of a two-semester course. Students enroll in such courses both semesters. The grade recorded at the end of the second semester evaluates the student's performance in the course for the entire year and will also replace the grade of " $R$ " for the first semester of the course.

Students enrolled in an R course for the thesis may occasionally wish or feel compelled not to complete that thesis. In order to drop the thesis but continue with an independent study, the student should see Sue Downes in 172 Goldwin Smith Hall for the appropriate forms.

## Grade Reports

Grade reports are available online on Student Center at www.StudentCenter.cornell.edu; they are not mailed to students. Students should periodically check their courses and grades to be sure that they are recorded correctly.

## Class Rank

The college does not compute class rank.

## Dean's List

Inclusion on the Dean's List is an academic honor bestowed by the dean of the college semester by semester. Based on grades, the criteria include about the top 30 percent of students and vary with the number of credits the student completes. The criteria are subject to slight changes from semester to semester and are available at http://as.cornell.edu/ academics/advising/deans-list-req.cfm and in the Office of Undergraduate Admissions and Advising, 55 Goldwin Smith Hall.

## ACADEMIC STANDING

Students are in good academic standing for the semester if they successfully complete at least 12 degree credits by the end of the semester and earn no more than one D and no F or U grades. If a student completes only three courses, all grades must be above D. In addition, students are expected to make satisfactory progress toward satisfying requirements for the degree and to earn grades of C (not $\mathrm{C}-$ ) or better in at least 100 of the 120 credits for the degree. Courses
listed under "courses that do not count toward the degree" do not count toward good academic standing in a semester. http://as. cornell.edu/academics/advising/ coursesdonotcount.cfm

## Academic Actions

Students who are not in good academic standing will be considered for academic action by the college faculty's Committee on Academic Records or by one of the advising deans of the college. Students are urged to explain their poor academic performance and submit corroborating documentation. Students may appeal a decision or action of the committee if they have new relevant information and documentation. They must consult an advising dean about appealing.

## Warning

Any student who fails to maintain good academic standing will, at a minimum, be warned. A warning is posted on a student's college record but is not reported to the university registrar and does not appear on official transcripts.

## Required leave of absence

A student in serious academic difficulty may be required by the faculty Committee on Academic Records to take a leave of absence, normally for a full year. Usually, but not always or necessarily, the Committee on Academic Records warns students before suspending them. Before being allowed to return and reregister in the college, students must document what they did on leave and how they resolved their problems, and they must submit a plan for completing the degree. In some cases students will be required to furnish evidence that they are ready to return or satisfy other conditions before being allowed to reregister in the college. Students who request to return in less than a year must present to the committee extraordinarily convincing evidence of their readiness to return. "Leave" is posted on the student's official transcript

## Required withdrawal

The faculty Committee on Academic Records may dismiss a student from the college because of a highly unsatisfactory record for one semester or for failure to make satisfactory overall progress in grades, credits, or degree requirements. This action expels the student permanently from the college. "Withdrawal" is posted on the student's official transcript.

## Leaves of absence (LOAs)

Most leaves of absence are not required. Taking time off from college to gain experience or funds, or to find direction, is sometimes useful. In general, students arrange in advance for leaves to take effect the following semester. Students in good academic standing must see an advising dean to obtain and submit a leave of absence statement, to be approved by the advising dean. Students may take a personal leave of absence up to the beginning of the semester (defined as the first day of classes). Students not in good academic standing may pursue a conditional leave of absence from the college up to the first day of classes. If medical issues are involved, students must consult Gannett: Cornell University Health Services about the advisability of a medical leave of absence. Any student who wishes to take a leave of
absence must consult with an advising dean in the Office of Undergraduate Admissions and Advising, 55 or 172 Goldwin Smith Hall.

Students sometimes find it necessary to take a leave of absence at some point during the semester. In addition to the serious financial consequence of taking leaves after the semester has begun (see the Proration Schedule for Withdrawals and Leaves of Absence in the General Information section of this catalog), all leaves taken during the semester are granted at the discretion of the college and must, if granted, be conditional leaves of absence. Students must discuss their need for a LOA with an advising dean.

## Leaves of Absence are of four types:

1. Personal leaves impose no conditions concerning reentering the college except for the five-year limit (see "Return from Leave," below). Readmission is automatic upon written request made by the student to his or her advising dean by August 1 for a fall semester, or January 1 for a spring semester. The college is not obliged to re-admit any student who does not meet the deadline for a given semester.
2. Conditional leaves are granted by the college for students who wish to take a leave but are not in good academic standing, or for students who wish to take a leave during the current semester. In consultation with the student, an advising dean and the Committee on Academic Records set the conditions for the student's return. Students may not return from conditional leaves for at least two semesters and/or until specific and individual conditions, such as completing unfinished work, have been met, and permission to return must be granted by the Committee on Academic Records Students may be granted conditional leaves after the 12th week of a semester only under extraordinary circumstances and with the approval of the faculty's Committee on Academic Records.
3. Medical leaves are granted by the college only upon the recommendation of Gannett Health Services, and are usually issued for at least six months. The college may attach additional conditions appropriate to the individual situation. The student's academic standing is also subject to review at the time of the leave and on return. Students must then receive clearance from both Gannett and the college to be readmitted to study. Students wishing to return from a medical leave should contact Gannett several months in advance to initiate the return process, and only then contact the college.
4. Required leaves. The Committee on Academic Records may require a leave of absence if a student is not making satisfactory progress toward the degree. See "Academic Actions."

Students on conditional or required leaves of absence (LOA) may not attend any classes at Cornell through the School of Continuing Education and Summer Sessions. Students on a medical LOA may not register for classes at Cornell unless they obtain the permission of the college and a recommendation from Gannett. Courses taken without college permission will not count toward degree requirements.

## Return from Leave

Students wishing to return from leave must contact the college and, where appropriate, provide documentation that all conditions for readmission have been satisfied. All requests for readmission must be received by the college by August 1 for the fall semester and January 1 for the spring semester. In the case of conditional and/or medical leaves, students must consult well in advance of those dates with both the college and Gannett. On readmission, the student's graduation date will be recalculated to account for the time spent away. Five years is the maximum length of time a student may be on leave before being withdrawn from the college.

## Transferring Credits Earned While on

 LeaveStudents who take courses elsewhere in the United States while on leave may petition to have credits transferred. Petitions are available in 55 and 172 Goldwin Smith Hall and at http://as.cornell.edu. Approval depends on acceptable grades and the judgment of the relevant departments about the quality of the courses. If approved, these credits may be applied toward the 120 credits and 34 courses needed for graduation, but not toward the 100 credits required in the college. They may be applied to elective requirements or to the major, as allowed by the department, but not to any of the breadth or distribution
requirements. Credits earned during a leave do not count toward the eight semesters of residence and may not be used to reduce the terms of residence below the required eight. See "Residence."

## Study Abroad and International Students on Leave of Absence

Study abroad undertaken during a leave of absence will not receive academic credit. International students on leave of absence from the College of Arts and Sciences may enroll in courses at a college or university in their home country only, as such enrollment is not defined as study abroad. They may petition for transfer of credit upon return to Cornell. If approved, the credit will count as described in the previous paragraph.

## Withdrawals

A withdrawal is a permanent severance from the university and from candidacy for the degree. Students planning to withdraw should consult an advising dean. Students not requesting a leave and failing to register for a semester will be withdrawn from the college. The college faculty's Committee on Academic Records may require a student to withdraw because of a highly unsatisfactory academic record, and the college may require a student to withdraw because of failure to register in a timely fashion.

## Transferring within Cornell (Internal Transfer)

Internal transfer from one college or school at Cornell into another is attractive for students whose intellectual interests change (or become more focused). Students who wish to transfer should discuss their eligibility with a counselor in the new school or college.

In some cases, students who want to transfer into the College of Arts and Sciences may transfer directly. In other cases, they may be conditionally admitted. During the semester immediately preceding transfer into the

College of Arts and Sciences, students must complete at least 12 credits of courses in the College of Arts and Sciences with a 3.0 average and with no grades of Incomplete, S-U grades (unless only S-U grades are offered for that particular course), or grade below C (C- is below C). Satisfying this minimum requirement does not, however, guarantee admission. Admission to the college is based on consideration of the student's entire record at Cornell and the high school record, not just the work of one semester. It is also based on ability to complete the B.A. degree within a reasonable time. Internal transfers are required to spend four semesters in Arts and Sciences and thus should initiate the transfer process no later than the second semester of sophomore year. They also must complete at least 100 credits at Cornell with grades of C (not C-) or above. Interested students should see Dean Ray Kim, 172 Goldwin Smith Hall.

## GRADUATION

## The Degree

The College of Arts and Sciences grants only one degree (no matter the student's major): the A.B. (or B.A.). A.B. is the abbreviation of the Latin name for the degree, "artium baccalarius," or translated into English, B.A., "Bachelor of Arts."

## Application to Graduate

In the first semester of their senior year, students will receive an e-mail instructing them to complete an online application to graduate. The application is intended to help seniors identify problems early enough in the final year to make any necessary changes in course selection to satisfy those requirements. Nonetheless, meeting graduation requirements is the student's responsibility; problems that are discovered, even late in the final semester, must be resolved by the student before the degree can be granted. Students are responsible for checking their DUST reports and transcripts and alerting their advising deans of any problems with the academic record.

## Degree Dates

There are three degree dates in the year: May, August, and January. Students who plan to graduate in August may attend graduation ceremonies in the preceding May. Students graduating in January are invited to a special recognition ceremony in December; they may also attend graduation ceremonies the following May.

## Honors

## Bachelor of Arts with Honors

Almost all departments offer honors programs for students who have demonstrated exceptional accomplishment in the major and succeeded in research. The honors programs are described by individual departments. The degree of Bachelor of Arts cum laude, magna cum laude, or summa cum laude will be conferred upon a student who, in addition to having completed the requirements for the degree of Bachelor of Arts, has been recommended for a level of honors by the major department, the Independent Major

Program, or the College Scholar Program. Minors do not offer honors programs.

## Bachelor of Arts with Distinction

The degree of Bachelor of Arts with distinction in all subjects will be conferred on students who have completed the requirements for the degree of Bachelor of Arts, if they have met the following requirements by the end of their final semester:

1. completed at least 60 credits while registered in regular sessions at Cornell;
2. achieved a GPA in the upper 30 percent of their class at the end of the seventh semester, or next-to-last semester for transfers and accelerants;
3. received a grade below C - in no more than one course;
4. received no failing grade;
5. have no frozen Incompletes on their records; and
6. maintained good academic standing, including completing a full schedule of at least 12 credits, in each of their last four semesters. (Students who have been approved to be prorated for the final semester in order to complete an honors thesis are considered to be in good academic standing and therefore eligible to receive distinction.)

## CALENDAR SUPPLEMENT

All of the dates in the university calendar at the front of this volume apply to all Cornell students. Listed below are additional dates that are of importance for students in the College of Arts and Sciences.

$$
\begin{array}{ll}
\text { Fall } & \text { Spring } \\
2010 & 2011
\end{array}
$$

Last day for adding courses without petition
Last day for adding a
Sept. 17 Feb. 11
first-year writing seminar
Last day for changing grade option to $\mathrm{S}-\mathrm{U}$ or letter

First deadline for submitting independent major requests. Go to 55 Goldwin Smith Hall for further information.
Last day for dropping courses without petition
Last day to petition to withdraw from a course

Second deadline for
Sept. 10 Feb. 4
Sept. 17 Feb. 11

Sept. 27 Feb. 28 submitting independent major requests. Go to the Office of Undergraduate Admissions and Advising,
55 Goldwin Smith Hall,
for further information.
Deadline for requesting Dec. 3 May 5 internal transfer to the
College of Arts and
Sciences for the following semester.

Deadline for applying to the College Scholar Program.
Deadline for applying to study abroad

## May 4

See Cornell Abroad Office, 474 Uris Hall

## Departments, Programs, and Courses

## AFRICANA STUDIES AND RESEARCH CENTER

S. Hassan, director; A. Ademoyo, N. AssiéLumumba, C. Boyce Davies, J. Byfield, director of graduate studies; L. Edmondson, G. Farred, T. Gosa, R. Harris, A. Mazrui, S. Mhkonza, A. Nanji, R. Richardson, director of undergraduate studies; J. Turner, M. Younas, director of African languages. Offices: 310 Triphammer Road, 255-4625.
The Africana Studies and Research Center (ASRC) is concerned with the examination of the history, culture, intellectual development, and social organization of Black people and cultures in the Americas, Africa, Caribbean, and the entire African Diaspora. Its program is structured from an interdisciplinary and comparative perspective and presents a variety of subjects in focal areas of history, literature, social sciences, and African languages. African languages are consistently offered fall and spring semesters and some are also taught during summer/winter session.
ASRC offers a unique and specialized program of study that leads to an undergraduate degree through the College of Arts and Sciences and a graduate degree, the Master of Professional Studies (African and African American), through the university's Graduate School. A student may also minor in Africana Studies. The Africana Studies minor program enables the student to complete a major in other disciplines while at the same time fulfilling requirements for the minor. This pursuit of a minor requires only a few more credits than is usually the case when one completes a single major course of study. ASRC courses are open to the Cornell community and may be used to meet a number of college distribution requirements such as first-year writing seminars, languages, expressive arts, humanities, social sciences, and history.
ASRC brings distinguished visitors to the campus, sponsors a Black Authors/New Books series, a colloquium series, and houses our own Africana library, the John Henrik Clarke Library. The ASRC supports faculty and student research, promotes intellectual pursuit, and sponsors vibrant and relevant academic programming.

## The Africana Major

The undergraduate major offers
interdisciplinary study of the fundamental dimensions of the African American, African, Caribbean, and African Diaspora experiences. Because of the comprehensive nature of the program, it is to the students' advantage to declare themselves Africana majors as early as possible. The following are prerequisites for admission to the major.
Students should submit:

1. a statement of why they want to be an Africana Studies major;
2. a tentative outline of the area of study they are considering (African, African American, Caribbean or African Diaspora) for the major; and
3. a full transcript of courses taken and grades received.
The director of undergraduate studies will review the applications and notify students within two weeks of the status of their request.
The Africana major must complete 36 credits in courses offered with African American, African, Caribbean, and African Diaspora content of 50 percent or more and that meet the distribution requirements of the College of Arts and Sciences. The student must take 8 credits of courses numbered 2000 or above and 15 credits numbered 3000 or above. The program of an undergraduate major may have a specifically African American, African or Caribbean, or African Diaspora focus. Please visit http://asrc.cornell.edu for up-to-date listings of courses and the requirements they meet.

## The Africana Minor

ASRC offers minors in Africana Studies. The director of undergraduate studies will assist students in the design and coordination of minor programs. For the minor the center will require that at least 16 credits be taken courses with at least 50 percent African American, African, Caribbean, and African Diaspora content.

## Double Majors

In the case of double majors, students undertake to carry the full load of stipulated requirements for a major in each of the two departments they have selected.

## Honors

The honors program offers students the opportunity to complete a library research thesis, a field project in conjunction with a report on the field experience, or a project or experiment designed by the student. The requirements for admission to the honors program for all students-regular majors, joint majors, and double majors-are a Bcumulative average in all courses and a B+ cumulative average in their Africana courses. Each student accepted into the honors program will have an honors faculty committee consisting of the student's advisor and one additional faculty member, which is responsible for final evaluation of the student's work. The honors committee must approve the thesis or project before May 1 of the student's junior year. The completed thesis or project should be filed with the student's faculty committee by May 10 of the senior year.

## Language Requirement

African language courses in Arabic, Swahili, Yoruba, and Zulu may be used to satisfy the language requirements of the College of Agricultural and Life Sciences and College of Arts and Sciences. ASRC majors are required to take a language, and the study of an African language is recommended.

## First-Year Writing Seminars

See John S. Knight Institute brochure for times, instructor, and descriptions of the five courses offered each semester by ASRC.

## Arabic

ASRC 1201/1 202 Elementary Arabic I and II (also NES 1201-1202)
Fall, spring, summer. 4 credits. M. Younes. For description, see NES 1201-1202.

## ASRC 1203/2200 Intermediate Arabic I

 and II (also NES 1203-2200)Fall, spring, summer. 4 credits. ASRC 2200
@ satisfies Option 1. M. Younes.
For description, see NES 1203-2200.
ASRC 3100/3101 Advanced Intermediate Arabic I and II (also NES 32013202) @

Fall/spring. 4 credits. ASRC 3100
satisfies Option 1. M. Younes.
For description, see NES 3201-3202.

## Swahili

## ASRC 1100 Elementary Swahili I

Fall, winter, summer. 4 credits. Language lab times TBA. A. Nanji.
Beginner's Swahili. Part 1-Grammar for speaking, reading, and writing. Requires no knowledge of language. Swahili is spoken in the East and Central parts of Africa.

## ASRC 1101 Elementary Swahili II

Spring, summer, winter. 4 credits.
Prerequisite: ASRC 1100. A. Nanji.
Continued study of the basic grammatical
formation of the language and the introduction of reading material ranging from songs to short stories. A great many drills are used in this course to help develop the student's comprehension of the language. Swahili tapes are used during all of these sequences.
ASRC 2102 Intermediate Swahili I @
Fall. 4 credits. Satisfies Option 1.
Prerequisites: ASRC 1100 and 1101.
A. Nanji.

Advanced study in reading and composition.

## Yoruba

ASRC 1108/1109 Introduction to Yoruba I and II
Fall, spring. 4 credits. A. Ademoyo. A two-semester beginner's course in Yoruba language and culture. Organized to offer Yoruba language skills and proficiency in speaking, reading, listening, writing, and translation. Focus is placed on familiar informal and formal contexts, e.g., home, school, work, family, social situations, politics. Course uses Yoruba oral literature, proverbs, rhetoric, songs, popular videos, and theatre as learning tools for class comprehension. First semester focuses on conversation, speaking, and listening. Second semester focuses on writing, translation, and grammatical formation. Through the language course students gain basic background for the study of an African culture, arts, and history both on the continent and in the diaspora. Yoruba language is widely spoken along the west coast of Africa and in some African communities in diaspora. Yoruba video culture, theatre, music, and arts have strong influence along the west coast and in the diaspora.

## ASRC 2110 Intermediate Yoruba I @

Fall. 4 credits. Satisfies Option 1.
Prerequisite: ASRC 1109. A. Ademoyo.

The intermediate course extends the development of the main language skillsreading, writing, listening, and conversation. The course deepens the development of correct native pronunciation, the accuracy of grammatical and syntactic structures; and the idiomatic nuances of the language. Students who take the course are able to (1) prepare, illustrate, and present Yoruba texts such as poems, folktales, advertisements,
compositions, letters, (2) read Yoruba literature of average complexity, (3) interpret Yoruba visual texts of average difficulty, (4) comprehend Yoruba oral literature and philosophy-within the context of African oral literature and philosophy-of basic complexity. Through the Yoruba language students appreciate African oral literature and philosophy. The primary textual media are Yoruba short stories, poems, short plays, films, songs, and newspapers.

## ASRC 2111 Intermediate Yoruba II @

Spring. 4 credits. Satisfies Option 1.
Prerequisite: ASRC 1110. A. Ademoyo. Intermediate Yoruba II is a follow-up to Intermediate Yoruba I. It is a fourth-semester Yoruba language course. The course assists students to acquire advanced level proficiency in reading, speaking, writing, and listening in Yoruba language. Students are introduced to grammatical and syntactic structures in the language that will assist them in describing, presenting, and narrating information in the basic tenses. At the end of the course, students will be able to listen to, process, and understand programs produced for native speakers in media such as television, radio, and films. They will be able to read and understand short stories, novels, and plays written for native speakers of the language.

## $\overline{\text { Zulu }}$

ASRC 1114/1115 Elementary Zulu I and II Fall, spring. 4 credits. S. Mkhonza. Zulu, known by native speakers as IsiZulu, is one of the 11 official languages of South Africa. Out of the four Nguni languages (Zulu, Xhosa, Swati, and Ndebele), Zulu is the most widely spoken. The advantage of learning IsiZulu is that it forms the basis for understanding the other Nguni languages. This is a two-semester elementary course that introduces students to the basic structures of the language which are applied to rapidly develop the primary speaking, reading, and writing skills of the Zulus. The class will also explore traditional and contemporary cultures of the Zulu people.

## ASRC 2116 Intermediate Zulu I @

Fall. 4 credits. Satisfies Option 1.
Prerequisite: ASRC 1115. S. Mkhonza.
The course will help students to expand their understanding of the Zulu language through the communicative approach. We will focus on the four skills-speaking, listening, reading, and writing. Intermediate work focuses on reading and speaking spontaneously. We will introduce composing in Zulu more reading.

## ASRC 2117 Intermediate Zulu II @

Spring. 4 credits. Satisfies Option 1.
Prerequisite: ASRC 2116. S. Mkhonza.
The course will help students to expand their understanding of the Zulu language through the communicative approach. We will focus on the four skills-speaking, listening, reading, and writing. Intermediate work
focuses on reading and speaking spontaneously. We will introduce composing in Zulu more reading.

## Topics Courses

## ASRC 1300 Africa: The Continent and Its People @ (HA-AS)

Fall. 3 credits. L. Edmondson.
Introductory interdisciplinary course focusing on Africa's geographical, ecological, and demographic characteristics; indigenous institutions and values; the triple cultural heritage of Africanity, Islam, and Western civilization; main historical developments and transitions; and contemporary political, economic, social, and cultural change. Africa's ties with the United States (from trans-Atlantic slavery to the present), its impact on the emerging world order, and its contribution to world civilization are also explored.

## ASRC 1600 Black Families and the Socialization of Black Children (SBA-AS)

Fall. 3 credits. T. Gosa.
This course explores the historic and contemporary dynamics of the African American family in U.S. society. We will begin our work by focusing on the sociohistorical, -political, and -cultural contexts of black family formations and functions in the African Diaspora. Students will be challenged to consider the continuation of African heritage in black family organization. We will review Afrocentric, feminist, and sociological frameworks for understanding black families. The course proceeds to consider more contemporary topics including gender roles, divorce and marriage dissolution, sexuality and love, mate selection, parenting and fatherhood, and the well-being of black children. We will pay special attention to how black families are (re)imagined in popular culture, including representations in the news, film and television, and music.

## ASRC 1900 Research Strategies in

 Africana and Latino Studies (also LSP 1101)Spring. 1 credit. E. Acree and T. Cosgrave. For description, see LSP 1101.
ASRC 2100 Swahili Literature @ (LA-AS)
Spring. 4 credits. Satisfies Option 1.
Prerequisite: ASRC 1102. A. Nanji.
Students gain mastery over spoken Swahili and are introduced to the predominant Swahili literary forms.

## [ASRC 2106 Intro to Quranic Arabic (also NES/RELST 2204) @ (LA-AS)

Spring. 4 credits. Next offered 2011-2012. M. Younes.

For description, see NES 2204.]

## ASRC 2240 Perspectives on Caribbean

 (also LATA/SPAN 2240) (CA-AS)Fall. 4 credits. Prerequisite: SPAN 2190 or permission of instructor. G. Aching.
For description, see SPAN 2240.

## ASRC 2300 African Cultures and

 Civilizations \# @ (CA-AS)Spring, summer. 3 credits. J. Byfield. Concerned with the peoples of Africa and the development of African cultures and civilizations from the earliest times to the present day. Focuses on the near modern civilizations of Africa south of the Sahara, and the ancient civilizations of Egypt and the Nile Valley, together with their contributions to the
development of the major world civilizations. Also deals with the sociopolitical organization of African societies, their kinship systems, cross-cutting ties, rites of passage, gender relations, and arts (including music, dance, folklore, architecture, sculpture, painting, and body decoration).

## ASRC 2307 The White Image in the

 Black Mind (also HIST 2412) @
## (HA-AS)

Fall. 4 credits. S. Greene.
For description, see HIST 2412.

## [ASRC 2308 Caribbean History (also

 HIST 2308) @ (HA-AS)Fall. 3 credits. Next offered 2011-2012. J. Byfield.

This course provides an historical overview of the Caribbean beginning with a brief examination of indigenous society and the impact of European colonization. Most of our attention will focus on the development of the plantation economy, slavery, postemancipation and post-colonial society. Readings pay particular attention to the ways in which race, gender, and ethnicity shape the histories of the peoples of the region. The course uses a pan-Caribbean approach by focusing on three islands-Cuba, Haiti, Jamaica-that belonged to competing empires. Although their histories are shaped in distinct ways by their former metropoles, they share certain common features. Therefore, we examine the differences and similarities of their histories as they evolved from plantationbased colonies to independent nations.]
ASRC 2413 Monuments, Museums, and Public History (also HIST 2413) (HA-AS)
Spring. 4 credits. S. Greene.

## For description, see HIST 2413.

## [ASRC 2505 Literature, Sports, and

 Ideology (also ENGL 2751) (LA-AS)
## Fall. 3 credits. Next offered 2011-2012.

G. Farred.

This course will explore the relations amongst sport, literature, and ideology. Reading texts from a variety of genres, novels, "memoirs," social histories (that are also love letters to a particular team), and some forms that refuse easy categorization, this course seeks to understand the very distinct role, and often hard to define exactly, that sport "performs" in literature. From Don DeLillo's Underworld to Eduardo Galeano's beautiful, cryptic contemplation on football (Soccer in Sun and Shadow) to CLR James' magisterial work on cricket (Beyond a Boundary), this course will engage writings on sport from all over the world. Sport, the premise is here, opens the reader up to the world in a way that no other literary pursuit does.]
ASRC 2602 The Sociology of the AfricanAmerican Experience (SBA-AS)
Fall. 3 credits. J. Turner.
This is an introductory course to the field of Africana Studies. It assumes a historical/ sociological approach to the examination of the African-American experience. The course surveys the African beginnings of humankind and the classical role of Black people in world civilization and the making of early culture. The course treats issues in the humanities, social sciences, and history. The course is required for all undergraduate students majoring at the Africana Center.
[ASRC 3200 Politics of Global Africa @ (SBA-AS)
Fall. 4 credits. A. Mazrui.
This course will combine the study of Africa with the study of two Diasporas. The Diaspora of Enslavement concerns enslaved Africans and descendents of slaves in both the Western and Eastern Diaspora. The Diaspora of Colonization concerns demographic dispersal as a result of colonialism. African Americans are part of the Diaspora of Enslavement. Algerian immigrants into France are part of the Diaspora of Colonization. Jamaicans and Trinidadians in Briton are a double Diaspora-products of both enslavement and colonialism. This course will also examine the debate about whether the African peoples are owed reparations by either the West of the Arabs or both. This course will address the following areas of comparative Black experience: the politics of race, gender, religion, liberation, language, civil rights, and postcoloniality.]

## [ASRC 3205 Thinking Black Intellectuals

Spring. 4 credits. Next offered 2011-2012. G. Farred.
"Thinking Black Intellectuals" departs from the premise that there is always, in one form or another, a "crisis"-or, a question about the "role" of the intellectual. However, in the conception of this course, the intention is not to address this issue. Instead, the course seeks to "demonstrate" the act of, properly speaking, Black intellectual thinking. By reading a series of texts, from Black scholars in philosophy such as Valentin Mudimbe to the renowned African-American theologian and preacher, Gardner C. Taylor, from the artistic oeuvre of Fela Kuti to the interventionist work of Angela Davis, this course will engage the thought of Black intellectuals. What, the guiding question will be, does it mean to think, specifically, or not, as a Black intellectual?]

## [ASRC 3300 African History: Earliest

 Times to 1800 @\# (HA-AS)Fall. 3 credits. May be used for bistory requirement. Next offered 2011-2012. Staff.
As the second largest continent with vast and varying geographical and sociocultural conditions combined with recently established fact as an original home of human species, Africa provides a rich and diverse oral and written early history. The course covers some of the major historical signposts from the origins of human species to 1800. Among the topics for discussion are: Physical and Economic Geography of Africa, the Cradle of Humankind, the Peopling of Africa, Historical Perspectives and Sources, the Nile River Cultural Complex, Berber, Carthage and Maghreb of North Africa, Upper Guinea and Western Sudan of West Africa, cities of the East African Coast, and Great Zimbabwe and other sites of Southern Africa.]
ASRC 3302 West Africa and West: 14501850 (also HIST 3650) @ \# (HA-AS)
Spring. 3 credits. S. Greene.
For description, see HIST 3650.

## ASRC 3304 African American History:

 B. T. Washington to B. Obama (also AMST/HIST 3304) (HA-AS)Spring. 4 credits. R. Harris, Jr.
This course will examine the changing contours of the African American past from the post-Reconstruction period to the present. W.E.B. Du Bois in The Souls of Black Folk evoked the need to study Black America from
the inside out and in relation to the trajectory of American history. This course will seek to understand the challenges, triumphs and tragedies, of African Americans in the quest for racial equality in the United States It will consider, against the backdrop of the past, the extent to which the election of a Black President of the United States has signaled the end of Black history and the arrival of a postracial America

## ASRC 3500 African American Art (also ARTH 3500) (LA-AS) <br> Fall. 3 credits. C. Finley.

For description, see ARTH 3500.

## ASRC 3508 African American Literature

 1930s-Present (LA-AS)Spring. 4 credits. R. Richardson. In 1940, with the publication of his novel Native Son, Richard Wright helped to launch the protest era in African American literature This course focuses on the development of key fiction and nonfiction genres that have shaped the development of African American literature from the mid-20th-century to the contemporary era. Genres that we will consider include poetry, fiction, the essay, the speech, autobiography, and the novel. We will explore the main periods in this literature's development such as the Black Arts movement of the 1960s and the black women's literary renaissance of the 1970s, and consider the rise of science fiction writing. Authors who will be considered include Richard Wright, Ann Petry, Ralph Ellison, Gwendolyn Brooks, James Baldwin, Lorraine Hansberry, Malcolm X, Amiri Baraka, Nikki Giovanni, Maya Angelou, Toni Morrison, Alice Walker, Ishmael Reed, and August Wilson. We will also incorporate discussion of works in film and art that have been the outgrowth of writing y African American authors. The course will include screenings of scenes from the class film $A$ Raisin in the Sun, along with the films Dutchman and Beloved.

## ASRC 3510 Caribbean Literature (also ENGL/FGSS 3510) @ (LA-AS)

Fall. 4 credits. C. Boyce Davies
This course examines representative literature of the Caribbean, including work by Caribbean women writers. We will examine the writings of Caribbean communities abroad as we broaden the meanings of what is Caribbean. Traditional and contemporary oral/ folk/urban forms of creative expression and film expression will be features of our ongoing analysis. We will pursue some of the themes that have been current in Caribbean literature and the particular relationships of Caribbean literature to the construction of American and/or English literatures and the definitions of Caribbeanness. Our sub-theme focuses on the discourses of migration that have garnered substantial attention in recent years and is a fundamental feature of the construction of Caribbean identities and literatures.

## ASRC 3600 Government and Politics in Africa @ (SBA-AS)

Fall. 4 credits. A. Mazrui.
Deals with power and political participation in Africa. Topics include the colonial background and its political consequences, the precolonial continuities in the post-colonial politics; ethnicity and allegiance in the African polity; and the monarchical tendency in African political culture. Discussion covers a spectrum of topics from the warrior tradition to the
military coup in the post-colonial era; from the elder tradition to presidential
gerontocracy; from the sage tradition to intellectual meritocracy. Other major topics include class versus ethnicity in African politics; the one-party versus the multiparty state; sociocultural versus socioeconomic ideologies; the gender question in African politics; the soldier and the state; and the African political experience in a global context.

## ASRC 3604 U.S. Education, Oppression,

 Resistance (SBA-AS)Spring. 4 credits. T. Gosa.
Despite salient reductions in educational inequality over the past 30 years, the academic underachievement of Black, Latino/a, and Native American youth remains one of the most researched, yet stubborn social problems in American society. The goal of this course is to explore issues of race and ethnicity in American education. Students will be asked to consider the ways in which schools foster poor academic performance and devalue minority youth's cultural and ethnic identities. Topics include school and residential segregation, academic tracking, language isolation, teacher quality, pedagogy and curriculum, and family/peer group influences. We will pay special attention to how students resist unfair schooling conditions and persist against the odds. The course will conclude with the limits and possibilities for school reform.
ASRC 3652 African Economic History (also HIST 3652) @ \# (HA-AS)
Fall. 4 credits. S. Greene.
For description, see HIST 3652.
ASRC 4201 Islam in Africa and Its Diaspora (also ASRC 6206, DSOC 4360/6630, NES 4501) (CA-AS)
Spring. 4 credits. A. Mazrui.
It has been estimated that one-third of the Muslim population of the world is in Africa and the African Diaspora. This course addresses the historical dimension of Islam in the Black experience examining Global Africa as a whole. Within the African continent, Islam is part of the triple religious heritage, which includes rivalry with Christianity and co-existence with African indigenous religions In the Americas, Islam is up against Western secularism and Christianity. We are concerned with how Islam has affected the politics and cultures of the African peoples worldwide, issue of slavery and Islam, and the interaction between Islam and contemporary ideologies of socialism, nationalism, and race consciousness in the Black experience.

## ASRC 4272 Apartheid and Its Afterlife

 (also HIST 4272) (HA-AS)Fall. 4 credits. D. Magaziner. For description, see HIST 4272.

## ASRC 4301 African American History: Black Leaders and Movements (also HIST 4301) (HA-AS)

Spring. 4 credits. R. Harris, Jr From rebellions aboard slave ships through the quest for black self-determination, African Americans have sought to define freedom, justice, and equality for themselves and in the process have challenged the universality of the American Creed. This course will examine the dynamics of leadership, types of leaders, and the major movements that have emerged among African Americans from the early 17th century to the present. The relationship
between leaders and followers, balance between ends and means, and measures of success and failure will be major concerns of the course.

## [ASRC 4305 African Environmenta History (also HIST 4271) @ (HA-AS) Fall. 4 credits. Next offered 2011-2012.

 D. Magaziner.][ASRC 4306 To Be Enslaved Then and Now (also HIST 4421) \# (HA-AS)<br>Spring. 4 credits. Next offered 2012-2013 S. Greene.]

## [ASRC 4502 African Cinema (also ARTH

 4578) @ (LA-AS)Fall. 4 credits. Next offered 2011-2012. S. Hassan.

This course offers an overview of African cinema and filmmaking. It surveys historically the evolution of African cinema from its early days to the present. Through screening of selected African films, different trends within African cinema will be explored, such as "Return to the Sources" and the rediscovery of the pre-colonial past; the "Social Realist" narrative and critique of post-independence Africa; reconstructing the story of colonialism from the perspective of the colonized; and the entertainment genre. Techniques, styles, and aesthetics of African cinema will also be discussed. The course offers a unique opportunity of looking at African culture and society, and at issues of social change, gender, class, tradition, and modernization through African eyes.]

## ASRC 4504 Exhibiting Cultures (also ARTH 4508) (CA-AS)

Spring. 4 credits. C. Finley.
For description, see ARTH 4508
ASRC 4507 Black Women Writers: International Dimensions (also ASRC 6507, ENGL 4507, FGSS 4507/6507) (LA-AS)
Spring. 4 credits. C. Boyce Davies. An exploration of writing by representative black women writers. We will examine specific texts as well as necessary critical and theoretical ideas that have been generated through, or with which this literature is in conversation. Students will develop critical thinking and other analytical skills as they engage the meanings of the politics of black women's lives in cross-cultural contexts. We will therefore consistently broaden the definition of black women's writing so that the transnational contexts of this writing become visible. Among other ideas, the course will explore the social construction of black womanhood; social and literary hierarchies that locate black women and their writing in specific ways; aspects of black women's creativity. Moving beyond the questions of the representation of black women by others, our focus will be on the way that black women represent themselves.

## [ASRC 4508 The Harlem Renaissance

 (also ENGL 4508) (LA-AS)Fall. 4 credits. Next offered 2011-2012. R. Richardson.

In this course, we will examine the Harlem Renaissance, including works by James Weldon Johnson, Jean Toomer, Nella Larsen, Langston Hughes, Countee Cullen, George Schuyler, Wallace Thurman, and Zora Neale Hurston. The Harlem Renaissance occurred during the 1920s in the wake of the Great Migration to the urban North. It encompassed a range of other art forms and media beyond
literature, such as painting, photography, and music and coincided with the "Jazz Age." We will consider the rise of Josephine Baker as a phenomenon in Paris. We will consider overlapping literary movements that also shaped the Harlem Renaissance profoundly, from modernism to Negritude (i.e., in France and the Caribbean). Additionally, we will explore the work of noted photographers, artists, and musicians of the period.]

## [ASRC 4509 Toni Morrison's Novels (also ASRC 6513, ENGL 4509) (LA-AS)

Spring. 4 credits. Next offered 2011-2012. R. Richardson.

The course will focus on reading novels by Toni Morrison, including The Bluest Eye, Sula (1973), Song of Solomon (1977), Beloved (1987), Jazz (1992), Paradise (1998), Love (2003), and A Mercy (2008). The presentation of her novels in trilogy form and her contributions to the genre of historical writing will be given some consideration. We will explore the author's stylistic innovation and expansion of this genre. We will consider topics such as how to read novels critically. We will pursue our study with attention to major public works of Morrison, from her art project as a curator at the Louvre to the Toni Morrison Society's "Bench by the Road" project and its 2008 conference in Charleston, South Carolina and upcoming Paris meeting in summer 2010.]

## [ASRC 4600 Politics and Social Change

 in the Caribbean @ (SBA-AS)Fall. 4 credits. Next offered 2011-2012.
L. Edmondson.

Study of the historical, geostrategic, political, economic, and social (including racial and cultural) forces affecting the domestic and international experiences of Caribbean societies.]

## ASRC 4601 Education Innovation in Africa and the Diaspora (also EDUC 4590) @ (SBA-AS)

Fall. 4 credits. N. Assié-Lumumba. This course deals with educational innovations geared to promoting equal opportunity based on gender, race and class, in Africa and the African Diaspora.
ASRC 4602 Women and Gender Issues in Africa @ (SBA-AS)
Spring. 4 credits. N. Assié-Lumumba. There are two contrasting views of the status and role of women in Africa. One view portrays African women as dominated and exploited by men. According to another view, women have a favorable social position in Africa: indigenous ideologies consider women to be the foundation of society, they are economically active and independent and they have an identity independent of men. In this seminar we discuss the status and role of women in Africa historically as well as in the contemporary period. Topics include women in nonwesternized/precolonial societies; the impact of colonial policies on the status of women; gender and access to schooling, participation in the economy and politics; women and the law; women and health issues; gender issues in southern Africa; womanism and feminism; the United Nations Decade of Women; and the four World Conferences on Women (Mexico 1975, Copenhagen 1986, Nairobi 1985, and Beijing 1995).

## [ASRC 4603 Politics and Social Change

 in Southern Africa @ (SBA-AS)Spring. 4 credits. Next offered 2011-2012. L. Edmondson.

Focuses on the legacies of apartheid and the challenges of transformation toward a postapartheid society in South Africa. Topics include the rise and decline of apartheid; the historical continuity of Black resistance against racism; women under, against, and after apartheid; South Africa's relations with its neighbors; geopolitical, economic, and racial dimensions of the American connection; politics of negotiation and transition to majority rule; prospects for stability, democracy, and equality; and South Africa's new role in the African continental and global arenas. Instructor's lectures are supplemented by films and class discussions.]

## ASRC 4605 Public Policy and the AfricanAmerican Urban Community

 (SBA-AS)Spring. 4 credits. J. Turner.
The socioeconomic conditions of the AfricanAmerican urban community are the central focus of the course. Community development models are explored in relationship to the social needs of the African-American population. The changing configuration of internal organization of the African American community nationally is examined.

## ASRC 4606 The Family and Society in Africa (also SOC 4780) @ (SBA-AS)

Fall, summer. 4 credits. N. Assié-Lumumba. Concepts of the nuclear and extended family; the roles, rights, and obligations of different age groups and generations; and marriage and its related issues.
ASRC 4671 International Cultural Studies (also ENGL 4671)
Spring. 4 credits. G. Farred.
For description, see ENGL 4671.

## ASRC 4682 Healing and Medicine in

 Africa (also ANTHR 4682) (CA-AS)Spring. 4 credits. S. Langwick.
For description, see ANTHR 4682.

## ASRC 4900-4901 Honors Thesis

4900, fall; 4901, spring. Prerequisite: permission of ASRC director of undergraduate studies. Africana Center faculty.
For senior Africana Studies majors working on honors theses, with selected reading, research projects, etc., under the supervision of a member of the Africana Studies and Research Center faculty.
ASRC 4902-4903 Independent Study 4902, fall; 4903, spring. Africana Studies faculty.
For students working on special topics, with selected reading, research projects, etc., under the supervision of a member of the Africana Studies and Research Center faculty.
ASRC 4951 Photography and Decolonial Imagination (also ARTH/HIST/SHUM/ VISST 4951, COML 4067)
Spring. 4 credits. Limited to 15 students. J. Bajorek.

For description, see SHUM 4951.

## ASRC 6200 Politics of Global Africa (also

 ASRC 3200)Fall. 4 credits. A. Mazrui.
For description, see ASRC 3200.

ASRC 6201 Government and Politics in Africa
Fall. 4 credits. A. Mazrui.
For description, see ASRC 3600.

## ASRC 6206 Islam in Africa and Its Diaspora (also ASRC 4201, DSOC 4360/6630, NES 6710) <br> Spring. 4 credits. A. Mazrui.

For description, see ASRC 4201.

## ASRC 6207 Black Feminist Theories (also ENGL/FGSS 6207, COML 6465)

Fall. 4 credits. C. Boyce Davies.
This courses examines black feminist theories, placing particular emphasis on the crosscultural experiences of women as expressed both theoretically and creatively. It follows the chronologies and variations of modern black feminisms, beginning with the U.S. articulations and moving toward how particular feminist positions are constructed and theorized in other locations across the African diaspora such as Black British feminism, Caribbean feminism, African feminism. Thus we will explore the various theories and texts within their sociopolitical and geographical frames and locations, analyzing these as appropriate against or in relation to a range of feminist activisms and movements.

## ASRC 6301 African American Politics

Spring. 4 credits. J. Turner.
The central thesis of African American politics has been its movements for political change and democratic access and human rights. This development since the 17 th century is a complex political legacy. This course conducts a close study of African American political practice and theoretical analysis of the American political system. Implications of the political systems for prospects and limitations to participation by Black people are analyzed. Critical historical stages in the process of Black politics are examined. The development of electoral offices in federal and statewide politics in critical industrial centers, as well as rural hamlets, center the course. Presidential politics-the Jesse Jackson campaigns-and new political formations including Black Republications/conservatives constitute the emphasis on contemporary events. The course reviews the development of the literature in African American politics.

## ASRC 6303 Nationalism and

 Decolonization in AfricaSpring. 4 credits. J. Byfield.
This course examines the rise of nationalism as well as the process and aims of decolonization in sub-Saharan Africa. It draws on films and a variety of primary and secondary materials in order to illuminate the complex and contested arenas from which African nationalisms emerged. Throughout the course we will examine the ways in which race, ethnicity, gender, and class shaped the discourse of nationalism as well as nationalist strategies and agendas. We will also explore the ways in which the conflicts and tensions of the nationalist period continue to shape post-colonial state and society.

## [ASRC 6304 Marriage and Divorce in the

 African Context (also FGSS 6304) Fall. 4 credits. Next offered 2011-2012. J. Byfield.Marriage was the widely expected norm within African societies. The institution was an important marker of adulthood, linking individuals and lineages in a network of
mutual cooperation and support. Marriage practices and their concomitant gender expectations varied significantly between societies, and over time. As a result, marriage and divorce are especially rich terrain for exploring social history, women's agency, discursive constructions of "woman," masculinity, and gender relations of power. This course explores some of the newest scholarship on marriage by Africanist scholars. The readings demonstrate the wide cultural variety in marriage as well as the dynamic relationship between marriage and historical change. They especially highlight women's roles and expectations in marriage, masculinity, and the ways men and women negotiated the rules and boundaries of marriage.]

## ASRC 6305 Dress, Cloth, and Identity:

 Africa and the DiasporaSpring. 4 credits. J. Byfield.
This course uses a multidisciplinary approach to examine the importance of textiles in African social and economic history. It combines art history, anthropology, social and economic history to explore the role of textiles in marking status, gender, political authority, and ethnicity. In addition, we examine the production and distribution of indigenous cloth and the consequences of colonial rule on African textile industries. Our analysis also considers the principles of African dress and clothing that shaped the African diaspora in the Americas as well as the more recent popularity and use of African fabrics and dress in the United States

## ASRC 6306 Figures of Thought: Africana

 IntellectualsSpring. 4 credits. G. Farred
The process by which intellectuals come to stand as such, as figures of thought, is the consequence of an often difficult, sometimes protracted process. In this course, we will focus on a small number of Africana intellectuals, including Saint Augustine, Frantz Fanon, Jacques Derrida, and Patrice Lumumba. We will read a range of primary and secondary texts in order to grapple with the question of how intellectuals are formed. To this end, we will read about the "failed" revolution aspired to by Lumumba, as well as taking a hard look at Fanon's Wretched of the Earth as an anti-intellectual work.

## ASRC 6400 Africana Thought (also ENGL

 6401)Fall. 4 credits. G. Farred.
What kind of thinking is being and has been produced, historically by figures in Africana philosophy? Intention of course is notthough that may a collateral effect-to argue against those who naysay the existence of Africana philosophy nor is it to "define" the field, as if such a project were even possible "Africana Thought" will, instead, seek to engage those thinkers who produce this philosophy. The readings will run from the "Confessions" of St. Augustine through Alexander Crummell's musings to Valentin Mudimbe's "The Invention of Africa," from intense reflections on the condition of black subjugation that is Frantz Fanon's writing to locating Jacques Derrida as a philosopher of the Maghreb. Course about Africana philosophy as a project that persistently questions itself.

## ASRC 6401 The Politics of Theory (also ENGL 6402, FREN 6401)

Spring. 4 credits. G. Farred.
There is an old and hoary chestnut that pits theory against politics, presuming, arguing, that theory is not, has no, politics. This course is not designed to either rebut or ignore that antagonism. Instead, the intent here is simply to read a range of theorists, from John Stuart Mill ("On Liberty") to Alain Badiou, to think how the politics of theory and the theory of politics. Badiou, Mill, Carl Schmitt and Jacques Ranciere, never shy away from their sense of the political. If anything, this course will delight in how unreflectively these thinkers take the matter of politics. In fact, and here Schmitt is crucial, at issue will be: how could we not think our politics theoretically?

## ASRC 6510 Pan-Africanism and Feminism

 (also COML 6460)Fall. 4 credits. C. Boyce Davies. This course examines the particular theoretical intersections of Pan-Africanism and feminism through a study of works that address the lives of activist women and men who lived political lives that demanded an articulation of this intersection. It will examine representative texts in each of these broad fields, paying particular attention to those works that explicitly address the intersection. Students will select and study the work of one thinker in either category and examine the written life from a few angles. In particular, we will address the conflicts, disjunctures, and slippages between these positions; the possibilities and limitations as expressed by these thinkers; and the issues of collaboration, erasure articulated. Students will also have the opportunity to identify and discuss popular culture that addresses these themes

## ASRC 6511 Middle Passage: Theorizing

 the African DiasporaSpring. 4 credits. C. Boyce Davies. The Middle Passage is perhaps the most evocative and simultaneously the most painful of transitions any people have made. Whereas for many the passage to the Americas was loaded with expectation of freedom, for Africans the passage across the Atlantic was loaded with pain, loss, and separation. The Middle Passage (referred to as the Maafa) then becomes a journey of separation, dismemberment, and dislocation. But it was also on the Middle Passage, for those who survived, that the transformation into African Diaspora peoples began. This course examines a range of middle passage texts such as novels, poetry, film, drama, slave narratives, and historical texts in order to explore comparatively how artists from across the African Diaspora have approached this historically and emotionally loaded event.

## ASRC 6513 Toni Morrison's Novels (also ASRC 4509)

Spring. 4 credits. R. Richardson. For description, see ASRC 4509.

## ASRC 6520 Thinking Heidegger

## Fall. 4 credits. G. Farred.

It is, of course, a truism to suggest that Martin Heidegger, more than any 20th-century philosopher, is preoccupied with thinking. It is, again, obviously, present in Was heist Denken? However, in a work such as The Principle of Reason there is a similar preoccupation with thinking. Not, as in Was beist Denken?, for its own sake, but as an integral part of Heidegger's intellectual project. Using Heidegger as the central figure, this
course will, additionally, think thinking the work of philosophers such as Hannah Arendt and Michel Foucault.

## ASRC 6600 Education and Development

 in AfricaSpring. 4 credits. N. Assié-Lumumba. Human capital theory establishes a positive and linear relationship between formal education and individual productivity and socioeconomic attainment and economic growth and development of nations. While enjoying considerable popularity in industrial and developing countries, including African countries, education has also been perceived as a hindrance to development. The concept of human capital and paradigms of development including modernization, dependency, and Third World Forum are first introduced. Specific issues discussed include schooling and nonformal education; the role of primary, secondary, and higher education in development; and language, access, output, and outcome based on social class, ethnicity, race, and gender. Employment, migration and international brain drain, the information and communication technologies, indigenous knowledge systems, and the role of higher education in regional and international cooperation are also examined.

## ASRC 6606 Politics of the Hip-Hop

 GenerationSpring. 4 credits. T. Gosa.
This graduate seminar investigates the political dynamics of the hip-hop generation. The primary focus of this course will be the major political and economic forces that have shaped the worldview of Black and Latino/a youth born between 1965 and 1984. Students will critically address major topics surrounding hip-hop including race-ethnicity, gender and sexuality, social class, segregation/massincarceration, politics, and education. After reviewing the sociohistorical development of hip-hop, we will examine the role of hip-hop in modern black politics and activism, including its significance for mobilizing youth. Special attention will be given to the generational gap between the hip-hop generations and the Civil-Rights/Black Power parents.

## ASRC 6900-6901 Independent Study

6900, fall; 6901, spring. Variable credit. Prerequisite: graduate standing. Africana Studies faculty.

## ASRC 6902-6903 Africana Studies

 Graduate Seminar6902, fall; 6903, spring. 4 credits. Africana Studies faculty.
Designed for first-year ASRC graduate students. The seminar is coordinated and supervised by one professor but team taught by three or four faculty members per semester. Each participating faculty member is responsible for a topical segment of the course related to her or his areas of specialization or an area of interest pertaining to theory and methodology of Africana Studies.

## ASRC 6990 Studies in African American Literature: Performance and African American Literature (also ENGL 6990)

Fall. 4 credits. M. Crawford.
This seminar will explore two different registers of performance and performativity: (1) the role of performance in cultural movements; and (2) comparisons of race and
gender performativity. Race and gender are both performative and lived experiences of race and gender are often inseparable, but the performativity of gender is sometimes taken for granted in a manner that racial
performativity is not. African American performance studies exposes the connections and differences between theories of gender and race performativity. This seminar will be a deep plunge into the most pivotal work in this field of black performance studies as well as the most complicated depictions of performativity in African American literature. The poetics and drama of the 1960 s and ' 70 s Black Arts movement will be our launching pad. Although Gil Scott-Heron proclaimed, "The revolution will not be televised," the revolution was performed. The Black Arts movement also sheds light on the reasons why "race as performative" is not embraced, in everyday life and scholarship, in the same manner as "gender as performative." After our study of the role of performance in a cultural movement, we will turn to theory, cultural studies, and literature that reveal the role of the surface/depth tension in gender and race performativity. Our texts may include John Jackson's Real Black: Adventures in Racial Sincerity, Patrick Johnson's Appropriating Blackness, Kimberly Benston's Performing Blackness, Judith Butler's Bodies that Matter, and Race/Sex: Their Sameness, Difference and Interplay (ed. Naomi Zack). The literary texts may include Toni Morrison's Tar Baby, Danzy Senna's Caucasia, Nella Larsen's Passing, and James Baldwin's Tell Me How Long the Train's Been Gone.

## ASRC 8900-8901 Thesis

8900, fall; 8901, spring. Prerequisite: ASRC graduate students. Africana Studies faculty.

## AMERICAN STUDIES

M. Katzenstein, director; G. Altschuler, E. Baptist, R. Bensel, M. P. Brady, D. Chang, E. Cheyfitz, J. Cowie, J. Frank, J. E. Gainor, M. C. Garcia, F. Gleach, S. Haenni, A. Hammer, R. Harris, M. Jones-Correa, K. Jordan, K. Kassam, M. Katzenstein, J. Kirschner, R. Kline, I. Kramnick, C. Lai, F. Logevall, T. J. Lowi, B. Maxwell, K. McCullough, L. L. Meixner, R. Mize, V. Nee, M. B. Norton, J. Parmenter, R. Polenberg, S. Pond, M. Rossiter, A. Sachs, N. Salvatore, S. Samuels, M. E. Sanders, V. Santiago-Irizarry, M. Shefter, A. M. Smith, S. Villenas, M. Washington, S. Wong, M. Woods, D. Woubshet. Affiliated faculty: J. E. Bernstock, M. Hatch, J. Jennings, J. Peraino, P. Sawyer. Emeritus: S. Blumin, J. Brumberg, M. Kammen, D. E. McCall, R. L. Moore, J. Silbey

## The Major

The major in American Studies, appropriate for a wide array of future professions, began as a program of coordinated study in the history, literature, and politics of the United States. These remain the core elements, but American Studies aims to be inclusive in its subject matter. Given the nation's diverse population and cultures, the program wants its majors to examine American experience in broad terms, drawing on the materials and methods of a variety of disciplines.
Students who contemplate becoming American Studies majors are encouraged to speak with the program director as early as possible to arrange for a major advisor.

All students majoring in American Studies must take a minimum of 12 courses selected from the American Studies roster, completing them with a grade of C or better. No more than six of these courses can come from any one discipline. Of the 12 courses at least three must have a substantial focus on material before 1900, at least two must deal with American diversity (AMST 1109 and 1110 are especially recommended), and at least one must be a 4000 -level seminar, either one of the American Studies 4300 course range (4300-4399) or an appropriate substitute seminar at the 4000 level (AMST 4997/4998, taught in Washington, D.C., does not fulfill the seminar requirement though it counts as one course toward the major). Note: A single course may satisfy more than one of these requirements: e.g., a course on Native Americans in the 1800 s is both a course dealing substantially with pre-1900 material and one dealing with American diversity.
Although a good bit of freedom is encouraged in the selection of courses, American Studies majors, in consultation with their advisor, must define an area of concentration and complete six courses in that area. The area of concentration can be designed to fit the particular interests of a student, but it must include subjects in at least two disciplines. Possible areas of concentration include "visual studies," "cultural studies," "race and ethnicity," "legal and Constitutional studies," "American institutions," "class and social structure," "the American environment." (Courses taken to satisfy the concentration may be used to fulfill other requirements for the major.)
Students may find courses relevant to American experience that they wish to take but that are not on the American Studies course list. With their advisor's approval, students may count two such courses toward fulfilling the major.

## Honors

Candidates for honors must maintain an average of $\mathrm{B}+$ in courses pertinent to the major and have taken at least one course in which they wrote a research paper. Normally, at the end of the junior year students who wish to write a senior honors essay must approach a member of the American Studies faculty and discuss their ideas for a project. With approval from the faculty member students may then register in the fall of their senior year for AMST 4993, the honors essay tutorial. At the end of the fall semester, honors candidates meet with their advisor and a second member of the American Studies faculty to discuss their progress. If satisfactory, honors students complete their honors essays in the spring by enrolling in AMST 4994.
Category Key: Courses in American Studies are broken into different categories. To determine which category (ies) a course falls in, please note the reference at the end of each course description. The key is as follows: $\mathrm{ASE}=$ Anthropology, Sociology, and Economics, LT = Literature and Theatre Arts, GP = Government and Public Policy, $\mathrm{HI}=$ History, MV = Music and Visual Studies, HR $=$ Honors, Reading and Research.

## American Studies 4300 Seminars

## [AMST 4300 The Milman Seminar

Fall. 4 credits. Prerequisite: permission of instructor. Next offered 2011-2012. G. C. Altschuler.

The Milman Seminar: Baseball in American Culture. Through a reading of fiction and nonfiction, we examine the role of baseball as it has shaped and reflected the attitudes and values of Americans. (HI)]

## AMST 4301 The Rabinor Seminar (also ENGL 4301)

Spring. 4 credits. Prerequisite: permission of instructor.
The Rabinor Seminar explores the role of diversity in the formation of a distinct American tapestry. The specific topic varies each year, but the general subject is the promise and experience of pluralism. Topic for 2011: TBA.

## [AMST 4310 Topics in American Studies: American Politics and Dissent, 1945

 to 2000 (also HIST 4311)4 credits. Permission of instructor required.
Next offered 2011-2012. N. Salvatore.
This course will examine the Civil Rights movement, anti-Vietnam protests, a revitalized conservative politics, and the re-emergence of an evangelical presence in American politics, with particular focus on the electoral process after 1964. A series of papers and a term paper are required. (HI)]

## AMST 4311 Dissenting Patriots

Fall. 4 credits. N. Salvatore.
This seminar examines the complex nature of dissent in America in the post-1945 decades. Our readings will look at dissenters, their ideas, and their movements across the political spectrum, with particular attention to how they legitimize their divergent political views. Requirements include weekly discussions, some short essays evaluating the common reading, and a term paper (about 25 pages) on a topic selected in consultation with me. There are no exams. (HI)

## Courses

AMST 1101 Introduction to American Studies \# (CA-AS)
Spring. 4 credits. B. Maxwell.
This course is an introduction to interdisciplinary considerations of American culture. We will reflect on topics ranging from Native American relations to the land, to the European conquest of the Americas, to the development of American civic life and political culture and the ongoing African American struggle for freedom and equality. We will also study immigration as a (threatened) constant in national life and labor, the distinctions between mass culture and popular culture, the promise of American life, and violence as a persisting national woe. We'll examine these themes through literature, historical writing, music, art, film, architecture, and political economy in the United States. The course will also give attention to the many methods through which scholars have, over time, developed the discipline of American Studies, and to ongoing debates over the intellectual and political stakes of those methods. (LT)

## AMST 1143 Space Cowboys: The '60s

 Hero (HA-AS)Summer only. 4 credits. J. Pickett. The close of World War II marks the beginning of America's ascendancy to unrivaled prosperity and political power. But it also marks the beginning of an American selfexamination whose fiercest discontent found expression in the 1960s, in part through the youth movement. We'll look at novels by Kerouac, Kesey, and cover as well as films like Easy Rider and Fight Club to see how a
certain kind of revolution continues to rewrite American ideas and ideals while maintain and developing connections with quintessentially American ideas and ideals found in Transcendentalism and the myth of the cowboy.

## AMST 1240 Democracy and Its

 Discontents: Political Traditions in the United States (also HIST 1240) (HA-AS)Summer. 3 credits. N. Salvatore. An examination of democracy and its critics. The course explores the evolution of democracy in America, focusing on some of the dramatic and important episodes in American history. It considers the struggles over the emancipation of slaves in the 19th century and expanded rights for women and working people in the 20th century, freespeech issues, the civil-rights movement, religious-based critiques of American culture, and conservative critiques of American liberalism. The course serves as an investigation of the ways in which political expression takes forms in modern American culture. In addition to lectures, the course features several afternoon programs that include guest lecturers and hands-on instruction in how to use the modern electronic research library. (HI)
[AMST 1311 Popular Music in America: A Historical Survey (also MUSIC 1311) \# (LA-AS)
3 credits. Next offered 2011-2012. S. Pond. For description, see MUSIC 1311. (MV)]

## AMST 1312 History of Rock Music (also

 MUSIC 1312) (LA-AS)Spring. 3 credits. J. Peraino.
For description, see MUSIC 1312. (MV)

## AMST 1313 A Survey of Jazz (also

 MUSIC 1313) (LA-AS)Fall. 3 credits. S. Pond.
For description, see MUSIC 1313. (MV)
AMST 1530 Introduction to American History (also HIST 1530) \# (HA-AS)
Fall. 4 credits. J. Parmenter.
For description, see HIST 1530. (HI)
[AMST 1531 Introduction to American History: 1865-Present (also HIST 1531) (HA-AS)

4 credits. Next offered 2011-2012. (HI)]
AMST 1600 Introduction to American Indian Studies I: Indigenous North America to 1890 (also AIS 1100) \# (HA-AS)
Fall. 3 credits. P. Nadasdy.
For description, see AIS 1100. (HI)
AMST 1601 Introduction to American Indian Studies II: Contemporary Issues in Indigenous North America (also AIS 1110) (CA-AS)
Spring. 4 credits. K. Kassam.
For description, see AIS 1110. (HI)
AMST 1800 Immigration in U.S. History (also HIST/LSP 1800) (HA-AS)
Spring. 4 credits. M. C. Garcia.
For description, see HIST 1800. (HI)
AMST 2010 Popular Culture in the United States, 1900 to 1945 (HA-AS)
Fall. 4 credits. G. Altschuler.
AMST 2010 deals with American popular culture in the period between 1900 and the end of World War II. As we examine bestsellers, films, sports and television, radio, ads, newspapers, magazines, and music, the goal is to better understand the ways in which
popular culture as "contested terrain," the place where social classes, racial and ethnic groups, women and men, the powerful and the less powerful, seek to "control" images and themes. Topics include the Western; Cultural Heroes and the Cult of Individualism in the 1920s; The Hays Code and the Black Sox scandal; Mae West and the "New Women" Advertising in an Age of Consumption; Gangsters and G-Men; and Jackie Robinson and the American Dilemma. (HI)
AMST 2020 Popular Culture in the United States, 1950 to Present (HA-AS)
Spring. 4 credits. G. Altschuler.
AMST 2020 treats the period from 1950 to the present as we examine best-sellers, films, sports and television, radio, ads, newspapers, magazines, and music. We try to better understand the ways in which popular culture shapes and/or reflects American values. The course also depicts popular culture as "contested terrain," the place where social classes, racial and ethnic groups, women and men, the powerful and less powerful seek to "control" images and themes. Topics include The Honeymooners and 1950s television, soap operas; "gross-out" movies; Elvis; the Beatles, and Guns 'n Roses; gothic romances; and People Magazine and USA Today.
[AMST 2022 The Court, Crime, and the Constitution (also HIST 2020) (HA-AS)
Fall. 4 credits. Next offered 2011-2012. R. Polenberg. (HI)]

AMST 2030 Introduction to American Literature (also ENGL 2030) \# (LA-AS)
Fall. 4 credits. L. Donaldson.
For description, see ENGL 2030. (LT)
AMST 2040 Introduction to American Literature (also ENGL 2040) (LA-AS) Spring. 4 credits. J. Braddock.
For description, see ENGL 2040. (LT)
AMST 2041 Asian American Communities (also HIST 2041) (HA-AS)
Spring. 4 credits. D. Chang.
For description, see HIST 2041. (HI)
[AMST 2060 The Great American Cornell Novel (also ENGL 2060) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. M. Hite. (LT)]

AMST 2090 Seminar in Early American History (also FGSS/HIST 2090) \# (HA-AS)
4 credits. Limited to 20 students.
M. B. Norton.

For description, see HIST 2090. (HI)
[AMST 2100 Progressive Reform in America, 1900-1940
4 credits. Limited to 15 students. Priority given to sophomores. Next offered 20122013. N. Salvatore.

This course looks at progressive reform from the early 20th century to the edge of World War II. We will look at politics, the impact of world war, contesting ideologies, the role of the corporation, and the evolving meaning of liberalism through a variety of movements and individuals. Short essays and a research paper required. (HI)]

AMST 2105 The American Musical (also ENGL/THETR 2150, MUSIC 2250) (LA-AS)
Spring. 3 credits. N. Salvato.
For description, see THETR 2150. (MV)
[AMST 2110 Black Religious Traditions: Sacred and Secular (also HIST/ RELST 2110) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. M. Washington.]

AMST 2111 Black History Topics Through Film (also HIST 2111) (HA-AS)
Spring. 4 credits. M. Washington.
For description, see HIST 2111. (HI)
AMST 2150 Comparative American Literature (also COML 2150) (LA-AS)
Spring. 4 credits. B. Maxwell.
For description, see COML 2150. (LT)
AMST 2160 Television (also FGSS/FILM/ THETR/VISST 2160) (LA-AS)
Fall. 4 credits. N. Salvato.
For description, see THETR 2160. (MV)
[AMST 2200 Travel in American History and Culture (also HIST 2200) (HA-AS)
4 credits. Next offered 2012-2013. A. Sachs. (HI)]
AMST 2250 The U.S.-Mexico Border: History, Culture, Representation (also HIST/LSP 2250) (CA-AS)
Spring. 4 credits. M. C. Garcia.
For description, see HIST 2250. (HI)
[AMST 2300 Latino Communities (also DSOC/LSP 2300) (SBA-AS)
3 credits. Next offered 2011-2012. R. Mize. For description, see DSOC 2300 (ASE)]

AMST 2331 Agriculture, History, and Society: From Squanto to Biotechnology (also STS 2331) (HA-AS)
Fall. 3 credits. M. Rossiter.
For description, see STS 2331. (HI)
AMST 2350 Archaeology of North American Indians (also AIS 2350, ANTHR/ARKEO 2235) \# (HA-AS)
Spring. 4 credits. K. Jordan.
For description, see ANTHR 2235. (ASE)
[AMST 2360 Native People of the Northeast (also AIS/HIST 2360) \# (HA-AS)
4 credits. Next offered 2012-2013.
J. Parmenter. (HI)]
[AMST 2390 Seminar in Iroquois History (also HIST 2390) \# (HA-AS)
4 credits. Next offered 2011-2012.
J. Parmenter. (HI)]
[AMST 2401 Introduction to Latino/a Literature (also ENGL/LSP 2400) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. M. P. Brady. (LT)]
[AMST 2501 Race and Popular Culture (also HIST 2510) (HA-AS)
Fall. 4 credits. Next offered 2011-2012. M. Washington. (HI)]
[AMST 2510 20th-Century Women Writers (also ENGL/FGSS 2510) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. K. McCullough. (LT)]

AMST 2511 Black Women to 1900 (also FGSS/HIST 2511) \# (HA-AS)
Fall. 4 credits. M. Washington.
For description, see HIST 2511. (HI)
AMST 2512 Black Women in the 20th Century (also HIST 2512) (HA-AS)
Spring. 4 credits. M. Washington.
For description, see HIST 2512. (HI)

AMST 2515 Introduction to Women Writers (also ENGL 2511) (LA-AS)
Spring. 4 credits. K. McCullough
For description, see ENGL 2511. (LT)
[AMST 2520 Late 20th-Century Women Writers and Visual Culture (also ENGL 2520) (LA-AS)
4 credits. Next offered 2011-2012. (LT)]
AMST 2550 The Crime Film (also COML/ FILM 2550)
Spring. 4 credits. S. Haenni.
For description, see FILM 2550. (MV)
AMST 2600 Introduction to American Indian Literature in the United States (also ENGL 2600) (LA-AS)
Fall. 4 credits. E. Cheyfitz.
For description, see ENGL 2600. (LT)
[AMST 2620 Asian American Literature (also AAS/ENGL 2620) (LA-AS)
4 credits. Next offered 2011-2012. S. Wong. (LT)]

AMST 2640 Introduction to Asian American History (also AAS 2130, HIST 2640) (HA-AS)
Fall. 4 credits. D. Chang.
For description, see HIST 2640. (HI)
AMST 2650 Introduction to African American Literature (also ENGL 2650) (CA-AS)

Fall. 4 credits. D. Woubshet.
For description, see ENGL 2650. (LT)
AMST 2660 Unlearning Native American History (also AIS/HIST 2660) \# (HA-AS)
Spring. 4 credits. J. Parmenter.
For description, see HIST 2660. (HI)
AMST 2680 Culture and Politics of the 1960s (also ENGL 2680) (CA-AS)
Spring. 4 credits. P. Sawyer.
For description, see ENGL 2680. (LT)
AMST 2710 Social and Political Context of American Education (also EDUC/ SOC 2710) (SBA-AS)
Fall. 4 credits. J. Sipple.
For description, see EDUC 2710. (ASE)
[AMST 2720 The Atlantic World from Conquest to Revolution (also HIST 2720) \# (HA-AS)

4 credits. Next offered 2013-2014.
M. B. Norton. (HI)]

AMST 2721 Anthropological Representation: Ethnographies of Latino Culture (also ANTHR/LSP 2721) (CA-AS)

Fall. 3 credits. V. Santiago-Irizarry.
For description, see ANTHR 2721. (ASE)
[AMST 2730 Women in American Society, Past and Present (also FGSS/HIST 2730) \# (HA-AS)

4 credits. Next offered 2012-2013.
M. B. Norton. (HI)]
[AMST 2760 Survey of American Film (also FILM 2760, VISST 2300) (LAAS)
4 credits. Each student must enroll in a section and attend one screening per week. Next offered 2012-2013. S. Haenni. Focusing mostly on Hollywood film, this course surveys some major developments in and approaches to 20th-century American cinema. We trace changes in film aesthetics and film style, the development of the American cinema as an institution that comprises an industrial system of production,
social and aesthetic norms and codes, and particular modes of reception. The course introduces methodological issues in American film history-especially questions of narrative, genre, stardom, and authorship-and focuses on the ways film shapes gender, race, class, ethnic, and national identities. Screenings include work by D. W. Griffith, John Ford, Howard Hawks, Alfred Hitchcock, and others and are supplemented by readings in film criticism and history. (LT)]

## AMST 2765 Cinema and Migration (also

 FILM/VISST 2765) (CA-AS)Fall. 4 credits. S. Haenni.
The invention of cinema in the late 19th century coincided with major waves of migration to and within the United States. Immigrants from Eastern Europe are often said to have "invented" Hollywood; those from Southern Europe were among its first and most eager consumers. By migrating north, many African Americans simultaneously "migrated to the movies." This course will start by looking at this confluence between migration and cinema: How did European immigrants shape an emerging Hollywood? How did African American migrants negotiate the new medium? How did newly emerging issues of diversity manifest themselves in terms of representation, production, and reception of the filmic image? What in the end does that tell us about the American film industry, its hold on the nation, and its global dominance? Such questions will provide a grounding for the exploration of case studies, and different immigrant groups later in the 20th and 21st centuries. (MV)

## AMST 2820 Photography and the

 American Landscape (also LA 2820)Fall. 3 credits. A. Hammer.
For description, see LA 2820. (MV)
AMST 2980 Inventing an Information Society (also ECE/ENGRG 2980, HIST 2920, STS 2921) (HA-AS)
Spring. 3 credits. R. Kline.
For description, see ECE 2980. (HI)
[AMST 3003 Working-Class America in Mass Media and Popular Culture (also ILRCB 3030)
3 credits. Next offered 2011-2012. J. Cowie. For description, see ILRCB 3030. (HI)]

AMST 3021 Social Movements in American Politics (also GOVT 3021) (HA-AS)
Spring. 4 credits. E. Sanders.
For description, see GOVT 3021. (GP)
[AMST 3030 African American Women in Slavery and Freedom (also FGSS 3070, HIST 3030) \# (HA-AS)
4 credits. Next offered 2012-2013.
M . Washington.]
[AMST 3031 Imagining America (also GOVT 3031) (CA-AS)
4 credits. Next offered 2011-2012.
D. Rubenstein. (GP)]
[AMST 3050 Americans Abroad (also FILM 3050) (CA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Haenni.

Focuses on how fiction and film, from the 19th century to the present, have depicted Americans abroad. (LT)]

AMST 3060 History of American Workers: 1960 to 1990s (also ILRCB 3060) (HA-AS)
Spring. 3 credits. J. Cowie.
For description, see ILRCB 3060. (HI)
AMST 3102 Asian American Politics and Public Policy (also AAS 3901, CRP 3103/6103, AMST 6107) (CA-AS)
Spring. 3 credits. C. Lai.
For description, see CRP 3102. (GP)
AMST 3105 Urban Political Economy Seminar: Property and Expropriation (also CRP 3105/6105, AMST 6105)
Spring. 3 credits. C. Lai.
For description, see CRP 3105. (HI)
AMST 3111 Urban Politics (also GOVT 3111) (SBA-AS)

Spring. 4 credits. M. Shefter.
For description, see GOVT 3111. (GP)
AMST 3128 America's Changing Faces (also GOVT 3128)
Summer only. 2 credits. Offered in Cornell
in Washington Summer Program.
S. Jackson.

For description, see GOVT 3128.
AMST 3140 U.S. in the World (also HIST/ CAPS 3140) (HA-AS)
Spring. 4 credits. F. Logevall.
For description, see HIST 3140. (HI)

## AMST 3141 Prisons (also GOVT 3141)

 (SBA-AS)Fall. 4 credits. M. Katzenstein.
For description, see GOVT 3141. (GP)
[AMST 3150 Environmental History: The United States and Beyond (also HIST 3150) \# (HA-AS)

4 credits. Next offered 2012-2013. A. Sachs (HI)]
AMST 3161 The American Presidency (also GOVT 3161) (SBA-AS)
Fall. 4 credits. M. E. Sanders.
For description, see GOVT 3161. (GP)
[AMST 3170 British-French North America (also HIST 3170) \# (HA-AS)
4 credits. Next offered 2013-2014.
J. Parmenter. (HI)]
[AMST 3171 Campaigns and Elections (also GOVT 3171) (SBA-AS)
4 credits. Next offered 2011-2012. P. Enns.
For description, see GOVT 3171. (GP)]
AMST 3180 American Constitutional Development (also HIST 3180) (HA-AS)
Fall. 4 credits. R. Polenberg.
For description, see HIST 3180. (HI)

## AMST 3181 The U.S. Congress (also

 GOVT 3181) (SBA-AS)Fall. 4 credits. M. Shefter.
For description, see GOVT 3181. (GP)
AMST 3191 Racial and Ethnic Politics in the U.S. (also GOVT/LSP 3191) (SBAAS)
Fall. 4 credits. M. Jones-Correa.
For description, see GOVT 3191. (GP)
AMST 3202 The U.S. Supreme Court and Crime (also GOVT 3202)
Fall. 4 credits. D. Chutkow.
For description, see GOVT 3202. (GP)
AMST 3210 America's Multicultural Origins to 1754 (also HIST 3210) \# (HA-AS)
Fall. 4 credits. M. B. Norton.
For description, see HIST 3210. (HI)

AMST 3230 American Economic History (also ECON 3230) \# (SBA-AS)
Fall. 4 credits. T. Lyons.
For description, see ECON 3230. (ASE)
AMST 3240 Varieties of American Dissent, 1880 to 1990 (also HIST 3240) (HA-AS)

Spring. 4 credits. N. Salvatore. (HI) The idea of dissent in American society raises a variety of images. Civil rights activists, striking workers, and student radicals of the 1960s are familiar enough symbols of dissent. But might we understand a Pentecostal believer, filled with the spirit of his or her God in critiquing contemporary society, as an example of American dissent? This course explores the varieties of economic, political, and cultural dissent in American between 1880 and 1990, and examines how understanding dissent in its specific historical context illuminates major aspects of American life and culture. (HI)

AMST 3241 Inequality and American Democracy (also GOVT 3241) (SBA-AS)
Spring. 4 credits. S. Mettler.
For description, see GOVT 3241. (GP)
AMST 3248 Iroquois Archaeology (also AIS/ANTHR/ARKEO 3248) \# (HA-AS)
Spring. 4 credits. K. Jordan.
For description, see ANTHR 3248.
AMST 3250 Age of the American Revolution, 1754 to 1815 (also HIST 3250) \# (HA-AS)

Spring. 4 credits. M. B. Norton.
For description, see HIST 3250. (HI)
AMST 3281 Constitutional Politics: The U.S. Supreme Court (also GOVT 3281) (HA-AS)

Spring. 4 credits. D. Chutkow.
For description, see GOVT 3281. (GP)
AMST 3303 Discovering Hip Hop: Research and the Cornell Hip-Hop Collection (also MUSIC 3303) (CA-AS)
Spring. 3 credits. S. Pond.
For description, see MUSIC 3303. (MV)

## AMST 3304 African American History:

 From the Age of Booker T. Washington to the Age of Barack Obama (also ASRC 3304) (HA-AS)Spring. 4 credits. R. Harris.
For description, see ASRC 3304. (HI)
AMST 3330 Ways of Knowing: Indigenous and Local Ecological Knowledge (also AIS/NTRES 3330)
Fall. 3 credits. K. Kassam.
For description, see NTRES 3330.

## AMST 3360 American Drama and Theatre

 (also THETR 3360) (LA-AS)Fall. 4 credits. S. Warner.
For description, see THETR 3360. (MV)
[AMST 3370 Contemporary American Theatre (also THETR 3370) (LA-AS)
4 credits. Next offered 2011-2012.
S. Warner.

For description, see THETR 3370. (LT)]
[AMST 3400 Recent American History, 1925 to 1965 (also HIST 3400) (HA-AS)
4 credits. Next offered 2011-2012.
R. Vanderlan.]
[AMST 3410 Recent American History, 1965 to Present (also HIST 3410) (HA-AS)
4 credits. Next offered 2011-2012. Staff. (HI)]

AMST 3430 American Civil War and Reconstruction, 1860 to 1877 (also HIST 3430) \# (HA-AS)
Spring. 4 credits. E. Baptist.
For description, see HIST 3430. (HI)
[AMST 3431 Obama and Lincoln (also HIST 3431) (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
E. Baptist. (HI)]
[AMST 3450 Cultural and Intellectual Life of 19th-Century Americans (also HIST 3450) \# (HA-AS)
4 credits. Next offered 2012-2013. A. Sachs. (HI)]
[AMST 3470 Asian American Women's History (also AAS/FGSS/HIST 3470) (CA-AS)
4 credits. Next offered 2012-2013.
D. Chang. (HI)]
[AMST 3480 Film Noir (also FILM 3460, VISST 3146) (LA-AS)
4 credits. Recommended: some course
work in film. Next offered 2011-2012.
S. Haenni.

Focuses on Hollywood films of the 1940s-1950s known for their stylishness and commentary on the dark side of American life, and on "neo-noir" from the 1970s to the present. (LT)]
AMST 3500 African American Art (also ARTH/ASRC/VISST 3500) (LA-AS)
Fall. 4 credits. C. Finley.
For description, see ARTH 3500. (MV)
AMST 3550 Latinos, Law, and Identity (also DSOC/LSP 3550) (SBA-AS)
Fall. 3 credits. R. Mize.
For description, see DSOC 3550. (ASE)
AMST 3605 U.S. Art from FDR to Reagan (also ARTH 3605) (LA-AS)
Fall. 4 credits. J. E. Bernstock.
For description, see ARTH 3605. (MV)
[AMST 3610 Studies in the Formation of U.S. Literature: Emerson to Melville (also ENGL 3610) \# (LA-AS)
4 credits. Next offered 2011-2012. D. Fried. (LT)]
AMST 3620 Studies in U.S. Literature After 1850: Literature of the American South (also ENGL 3620) (LA-AS)
Fall. 4 credits. M. Pryse.
For description, see ENGL 3620. (LT)
AMST 3622 Appalachian Literature (also ENGL/FGSS 3622) (LA-AS)
Spring. 4 credits. M. Pryse.
For description, see ENGL 3622. (LT)
[AMST 3630 Studies in U.S. Literature: The Age of Realism and Naturalism (also ENGL/FGSS 3620) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
K. McCullough. (LT)]

AMST 3635 Human Rights and Global Justice (also GOVT 3635) \# (SBA-AS)
Spring. 4 credits. A. M. Smith.
For description, see GOVT 3635. (GP)
[AMST 3640 Studies in U.S. Literature After 1950: American Literature, the 1980s (also ENGL 3640) (LA-AS)
Spring. 4 credits. Next offered 2012-2013. D. Woubshet.

For description, see ENGL 3460. (LT)]
[AMST 3655 Politics and Literature (also GOVT 3655) (LA-AS)
4 credits. Next offered 2011-2012. J. Frank. For description, see GOVT 3655. (GP)]
[AMST 3665 American Political Thought from Madison to Malcolm X (also GOVT 3665, HIST 3160) \# (HA-AS)
4 credits. Next offered 2011-2012.
I. Kramnick. (GP)]

AMST 3670 Studies in U.S. Fiction (also ENGL 3670) (LA-AS)
Fall. 4 credits. J. Braddock.
For description, see ENGL 3670. (LT)
[AMST 3708 Topics in U.S. Women's History (also HIST 3780)
4 credits. Next offered 2012-2013.
M. B. Norton. (HI)]
[AMST 3711 American Poetry to 1950 (also ENGL 3711) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
R. Gilbert. (LT)]
[AMST 3712 American Poetry Since 1950 (also ENGL 3712) (LA-AS)
Spring. 4 credits. Next offered 2011-2012.
R. Gilbert. (LT)]

AMST 3720 Food, Gender, and Culture (also FGSS 3720, ENGL 3721) (LA-AS)
Fall. 4 credits. K. McCullough.
For description, see FGSS 3720. (LT)
[AMST 3735 Political Freedom (also GOVT 3735) \# (KCM-AS)
4 credits. Next offered 2011-2012. J. Frank. (GP)]
[AMST 3740 Painting in 19th-Century America (also ARTH/VISST 3740) \# (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
L. L. Meixner. (MV)]

AMST 3750 Comparative U.S. Racial and Ethnic Relations (also DSOC/LSP 3750) (SBA-AS)

Spring. 3 credits. R. Mize.
For description, see DSOC 3750. (ASE)
AMST 3773 The Harlem Renaissance and the Black Arts Movement (also ENGL 3773) (CA-AS)

Fall. 4 credits. M. Crawford.
For description, see ENGL 3773. (LT)
[AMST 3777 The United States (also ANTHR/LSP 3777) (CA-AS)
4 credits. Next offered 2011-2012.
V. Santiago-Irizarry. (ASE)]

AMST 3801 Asian American Urban Experience (also AAS/CRP 3801/6801, AMST 6801)
Fall. 3 credits. C. Lai.
For description, see AAS 3801. (HI)
[AMST 3810 American Architecture and Building I (also ARCH 3810)
Fall. 3 credits. Prerequisites: ARCH 1801-
1802 or permission of instructor. Next
offered 2011-2012. M. Woods.
For description, see ARCH 3810. (MV)]
[AMST 3811 American Architecture and Building II (also ARCH 3811)
Spring. 3 credits. Prerequisites: ARCH
1801-1802 or permission of instructor. Next offered 2011-2012. M. Woods.
For description, see ARCH 3811. (MV)]
AMST 3812 Edge Cities: Celluloid New York and Los Angeles (also ARCH/ FILM/VISST 3812) (CA-AS)
Spring. 4 credits. S. Haenni and M. Woods. Anchoring the east and west coasts, New York and Los Angeles have been celebrated and excoriated in films. On the edge literally and metaphorically, these cities seem to be about competing visions of urban form, culture, and modernity. And the iconic forms of New York (tenements and skyscrapers) and of Los Angeles (highways and suburban homes) have fascinated film makers from the 19th century to the present day. We will both evoke and complicate the contrast between New York and Los Angeles by mapping the intersections of each city with cinema. We explore how the urban experience has been said to give rise to particular cinematic forms and the ways in which cinematic styles may be translated into urban design. Topics may include density and sprawl; place and creativity; class and
ethnicity; race and gender; culture and commercialism; industrial and media economies; and insularism and cosmopolitanism. Screenings will include documentary, experimental, and commercial films and cover such genres as early actualities, city symphonies, film noir, science fiction, etc. Readings will be drawn from theories and histories of film, urbanism, and architecture. Possible field trips.
[AMST 3818 Special Topics in the History of Architecture and Urbanism (also ARCH 3818)
3 credits. Prerequisites: ARCH 1801-1802 or permission of instructor. Next offered 2011-2012. M. Woods. (MV)]

AMST 3820 Poetry and Poetics of Americas (also COML/LATA/SPAN 3800, ENGL 3801) (LA-AS)
Fall. 4 credits. J. Monroe.
For description, see COML 3800. (LT)
AMST 3830 Latino America (also HIST/ LSP 3800)
Fall. 4 credits. M. C. Garcia.
For description, see HIST 3800. (HI)
[AMST 3911 Science in the American Polity, 1960 to Now (also GOVT 3091, STS 3911) (SBA-AS)
4 credits. Next offered 2011-2012. J. Reppy. For description, see STS 3911. (GP)]
[AMST 3930 International Film of the 1970s (also COML/FILM/VISST 3930) (LA-AS)
4 credits. Next offered 2011-2012.
S. Haenni.

For description, see FILM 3930. (LT)]
AMST 3950 Race, Space, and Place (also AAS 3950, CRP 3101/6101, AMST 6950) (CA-AS)

Fall. 3 credits. C. Lai.
For description, see CRP 3101. (HI)
AMST 3981 Latino/a Popular Cultural Practices (also ENGL/LSP 3980) (CA-AS)
Fall. 4 credits. M. P. Brady.
For description, see ENGL 3980. (LT)
[AMST 4030 Studies in American Poetry: A. R. Ammons, John Asbury, and Adrienne Rich (also ENGL 4030) (LA-AS)
Fall. 4 credits. Next offered 2012-2013. R. Gilbert. (LT)]
[AMST 4032 Immigration and Politics Research Seminar (also GOVT/LSP 4032) (SBA-AS)

4 credits. Next offered 2011-2012.
M. Jones-Correa. (GP)]

AMST 4039 Reconstruction and the New South (also HIST 4390/6391) \# (HA-AS)
Fall. 4 credits. M. Washington.
For description, see HIST 4390. (HI)
[AMST 4041 American Political Development in the 20th Century (also AMST 6121, GOVT 4041/6121) (HA-AS)
4 credits. Next offered 2011-2012.
M. E. Sanders. (GP)]
[AMST 4050 U.S.-Cuba Relations (also AMST 6050, HIST/LATA/LSP 4050/6050) (HA-AS)
4 credits. Next offered 2012-2013.
M. C. Garcia. (HI)]

AMST 4061 Politics of Slow-Moving Crises (also AMST/GOVT 6161, GOVT 4061) (SBA-AS)

Spring. 4 credits. M. Jones-Correa.
For description, see GOVT 4061. (GP)
[AMST 4142 Causes and Consequences of U.S. Foreign Policy (also GOVT 4142/6142, AMST 6142) (SBA-AS)
4 credits. Next offered 2011-2012.
E. Sanders.

For description, see GOVT 4142. (GP)]
[AMST 4180 Audio Documentary: Stories from the Land (also LA 4180) (CA-AS)
Fall. 3 credits. Next offered 2011-2012.
A. Hammer.

For description, see LA 4180. (MV)]
[AMST 4200 Asian American Communities (also HIST 4200, AAS 4240) (HA-AS)

4 credits. Limited to 15 students. Next
offered 2011-2012. D. Chang. (HI)]
[AMST 4222 Political Culture (also GOVT 4222)

4 credits. Next offered 2011-2012.
R. Bensel. (GP)]
[AMST 4231 The 1960s: Conceptualizing the Future from the Past (also GOVT 4231) (CA-AS)

4 credits. Next offered 2012-2013.
J. Kirshner and T. Lowi. (GP)]
[AMST 4241 Contemporary American Politics (also AMST 6291, GOVT 4241/6291) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. M. Shefter.

For description, see GOVT 4241. (GP)]
[AMST 4260 The West and Beyond: Frontiers and Borders in American History and Culture (also HIST 4260) (HA-AS)
4 credits. Next offered 2012-2013. A. Sachs. (HI)]
[AMST 4261 Commodification and Consumerism in Historical Perspective: Sex, Rugs, Salt, and Coal (also HIST 4261) @ \# (HA-AS) 4 credits. Next offered 2011-2012. A. Sachs. (HI)]
[AMST 4272 Historical Archaeology of Indigenous Peoples (also AIS 4270/7720, AMST 6272, ANTHR/ ARKEO 4272/7272) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. K. Jordan. (ASE)]

AMST 4281 Government and Public Policy: An Introduction to Analysis and Criticism (also AMST 6281, GOVT 4281/7281) (SBA-AS)
Fall. 4 credits. T. Lowi.
For description, see GOVT 4281. (GP)
[AMST 4400 Seminar in Recent American History (also HIST 4400) (HA-AS)
4 credits. Next offered 2011-2012.
R. Polenberg. (HI)]

AMST 4508 Exhibiting Cultures (also AMST 6508, ARTH 4508/6508, ASRC 4504/6508) (CA-AS)
4 credits. C. Finley.
For description, see ARTH 4508. (MV)
AMST 4509 Black Arts Movement (also ARTH 4509, ASRC 4505) (CA-AS)
Summer. 4 credits. C. Finley.
For description, see ARTH 4509. (MV)
AMST 4510 Multiculturalism and Education (also EDUC/LSP 4510) (SBA-AS)
Spring. 3 credits. S. Villenas.
For description, see EDUC 4510. (ASE)
[AMST 4530 20th-Century Women Writers of Color (also AAS/ENGL/FGSS 4530) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Wong.

For description, see ENGL 4530. (LT)]
[AMST 4585 American Political Thought (also AMST 6585, GOVT 4585/6585) \# (HA-AS)
4 credits. Next offered 2011-2012. J. Frank. (GP)]

AMST 4600 Melville (also ENGL 4600) \# (LA-AS)
Fall. 4 credits. B. Maxwell.
For description, see ENGL 4600. (LT)
AMST 4610 Studies in Modern Art: U.S.
Art of the 1960s (also ARTH 4600)
Spring. 4 credits. J. Bernstock.
For description, see ARTH 4600. (MV)
[AMST 4616 Interpreting Race and Racism: DuBois (also GOVT 4616) (HA-AS)
4 credits. Next offered 2011-2012.
A. M. Smith.

For description, see GOVT 4616. (GP)]
AMST 4620 The American Enlightenment (also ENGL 4620)
Spring. 4 credits. M. Jonik.
For description, see ENGL 4620. (LT)
[AMST 4625 Sexuality and the Law (also AMST 6625, FGSS 4610/7620, GOVT 4625/7625) (KCM-AS)
4 credits. Next offered 2011-2012.
A. M. Smith. (GP)]

AMST 4631 Entering History, Entering Fiction: Gender, Race, and Nation in 19th-Century U.S. Fiction (also ENGL/FGSS 4631) (LA-AS)
Fall. 4 credits. K. McCullough.
For description, see ENGL 4631. (LT)
[AMST 4635 Feminist Theory/Law and Society (also GOVT 4635) (CA-AS)
4 credits. Next offered 2011-2012.
A. M. Smith.

For description, see GOVT 4635. (GP)]
[AMST 4662 Contemporary American Indian Poets (also ENGL 4662) (LA-AS)
4 credits. Next offered 2011-2012.
E. Cheyfitz. (LT)]
[AMST 4690 The Paranoid Style in Contemporary American Fiction and Film (also ENGL 4690) (LA-AS)
4 credits. Next offered 2011-2012. K. Attell. (LT)]

AMST 4750 Seminar in Cinema I (also FILM 4750) (LA-AS)
4 credits. D. Fredericksen.
For description, see FILM 4750. (LT)
[AMST 4755 Advanced Seminar in the 20th Century: AIDS Literature (also ENGL 4750)
Spring. 4 credits. Next offered 2012-2013.
D. Woubshet.]

AMST 4809 Politics of '70s Film (also GOVT 4809) (SBA-AS)
Spring. 4 credits. J. Kirshner.
For description, see GOVT 4809. (GP)
AMST 4850 Immigration Since 1965 (also HIST/LSP 4850) (HA-AS)
Fall. 4 credits. M. C. Garcia.
For description, see HIST 4850. (HI)
[AMST 4851 Refugees (also HIST/LSP 4851) (HA-AS)

4 credits. Next offered 2011-2012.
M. C. Garcia. (HI)]
[AMST 4900 New World Encounters, 1500 to 1800 (also AIS/HIST 4900) (HA-AS)
4 credits. Next offered 2012-2013.
J. Parmenter. (HI)]

AMST 4955 Sensation and Indigenous Intent (also SHUM/ARTH/VISST 4995)
Spring. 4 credits. J. Rickard.
For description, see SHUM 4955.
[AMST 4970 Jim Crow and Exclusion-Era America (also AAS/HIST 4970, AMST/ HIST 6970) (HA-AS)
4 credits. Next offered 2011-2012.
D. Chang. (HI)]

AMST 4997 Research Seminar in American Studies (also CAPS/HIST 4997)

Fall or spring. Offered in Cornell in Washington Program only. S. Jackson. For description, see HIST 4997. (HI)

AMST 4998 Politics and Policy: Theory, Research, and Practice (also ALS/ CAPS/GOVT 4998, PAM 4060)
Fall and spring. 8 credits each semester. S. Jackson.

Offered in Cornell in Washington Program.
This course, taught in Washington, D.C., forms the core of the public policy option of the Cornell in Washington Program. (GP)

AMST 5710 Social and Political Context of American Education (also AMST 6710, EDUC/SOC 2710/5710)
Fall. 4 credits. J. Sipple.
For description, see EDUC 2710. (ASE)
[AMST 6050 U.S.-Cuba Relations (also AMST/HIST/LSP 4050/6050)
4 credits. Next offered 2012-2013.
M. C. Garcia. (HI)]

AMST 6102 Asian American Politics and Public Policy (also AMST 3102, CRP 3102/6107, AAS 3901)
Spring. 3 credits. C. Lai.
For description, see CRP 3102.
AMST 6105 Urban Political Economy Seminar: Property and Expropriation (also CRP 3105/6105, AMST 3105)
Spring. 3 credits. C. Lai.
For description, see CRP 3105. (HI)
[AMST 6121 American Political Development in the 20th Century (also AMST 4041, GOVT 4041/6121)
4 credits. Next offered 2011-2012.
E. Sanders.

For description, see GOVT 4041. (GP)]
[AMST 6142 Causes and Consequences of U.S. Foreign Policy (also AMST/ GOVT 4142/6142)
4 credits. Next offered 2011-2012.
E. Sanders. (GP)]

AMST 6161 Politics of Slow-Moving Crises (also AMST/GOVT 4061, GOVT 6161)

Spring. 4 credits. M. Jones-Correa.
For description, see GOVT 4061. (GP)
[AMST 6202 Political Culture (also GOVT 6202)

4 credits. Next offered 2011-2012.
R. Bensel. (GP)]
[AMST 6248 Iroquois Archaeology (also AIS/ANTHR/ARKEO 6248)
4 credits. Next offered 2011-2012.
K. Jordan. (ASE)]
[AMST 6272 Historical Archaeology (also AMST 4272, ANTHR/ARKEO 4272/7272)
Fall. 4 credits. Next offered 2011-2012.
K. Jordan.

For description, see ANTHR 4272. (ASE)]
AMST 6281 Government and Public Policy: An Introduction to Analysis and Criticism (also AMST 4281, GOVT 4281/7281)
Fall. 4 credits. T. Lowi.
For description, see GOVT 4281. (GP)
[AMST 6291 Contemporary American Politics (also AMST 4241, GOVT 4241/6291)
Spring. 4 credits. Next offered 2011-2012
M. Shefter.

For description, see GOVT 4241. (GP)]
[AMST 6301 Institutions (also GOVT 6301)

4 credits. Next offered 2011-2012.
R. Bensel. (GP)]
[AMST 6424 Ethnoracial Identity in Anthropology, Language, and Law (also ANTHR/LSP 6424, LAW 7231)
4 credits. Next offered 2011-2012.
V. Santiago-Irizarry. (ASE)]
[AMST 6585 American Political Thought (also GOVT 4585/6585, AMST 4585)
4 credits. Next offered 2011-2012. J. Frank.]
[AMST 6611 What Is a Just Society?: Nature American Philosophies and the Limits of Capitalism's Imagination (also ENGL 6611)
4 credits. Next offered 2011-2012.
E. Cheyfitz.]

AMST 6612 Colonial American Literature (also ENGL 6612)
Spring. 4 credits. E. Cheyfitz.
For description, see ENGL 6612. (LT)
[AMST 6625 Sexuality and the Law (also AMST 4625, FGSS 4610/7620, GOVT 4625/7625)
4 credits. Next offered 2011-2012.
A. M. Smith. (GP)]
[AMST 6631 American Poetry, 1955-1980 (also ENGL 6631)
4 credits. Next offered 2011-2012.
R. Gilbert. (LT)]

AMST 6632 Modern American Poetry (also ENGL 6632)
Fall. 4 credits. R. Gilbert.
For description, see ENGL 6632. (LT)
AMST 6635 Education, Social Justice, and the Law (also GOVT 6635)
Spring. 4 credits. A. M. Smith.
For description, see GOVT 6635. (GP)
[AMST 6645 Democratic Theory (also GOVT 6645)
4 credits. Next offered 2011-2012. J. Frank. (GP)]
[AMST 6690 Gift and Contract in the 19th-Century United States: Social and Sexual Constructions of Whiteness, Race, and Ethnicity (also ENGL 6690)
4 credits. Next offered 2011-2012.
S. Samuels. (LT)]

AMST 6801 Asian American Urban Experience (also AAS/CRP 3801/6801, AMST 3801)
Fall. 3 credits. C. Lai.
For description, see AAS 3801. (HI)
AMST 6811 James Baldwin (also ENGL/ FGSS 6811)
Spring. 4 credits. D. Woubshet.
For description, see ENGL 6811. (LT)
AMST 6950 Race, Space, and Place (also AMST/AAS 3950. CRP 3101/6101)
Fall. 3 credits. C. Lai.
For description, see CRP 3101.
[AMST 6970 Jim Crow and Exclusion Era America (also AMST 4970, HIST 4970/6970)
4 credits. Next offered 2011-2012.
D. Chang. (HI)].

AMST 6999 Studies in African American Literature: Performance and African American Literature (also ENGL 6999)

Fall. 4 credits. M. Crawford.
For description, see ENGL 6999. (LT)

## Honors

Please see description of major for information about registration in these courses.
AMST 4993-4994 Honors Essay Tutorial 4993, fall; 4994, spring. 4 credits. See director of American Studies for appropriate advisors. (HR)

## ANTHROPOLOGY

A. Willford, chair; H. Miyazaki and N. Russell, directors of graduate studies; S. Langwick, director of undergraduate studies; A. Clark Arcadi, J. Fajans, M. Fiskesjo, F. Gleach, D. Greenwood, J. Henderson, D. Holmberg, K. Jordan, K. March, H. Miyazaki,
V. Munasinghe, P. Nadasdy, A. Riles, N. Russell, S. Sangren, V. Santiago-Irizarry, M. Small, T. Volman, M. Welker. Emeritus: R. Ascher, B. J. Isbell, B. Lambert, J. Siegel, R. Smith.

Anthropology is one of the most diverse disciplines in the university. Spanning human evolution, the development and heterogeneity of language and culture, human history, and the diversity of cultures past and present, the field has broad scope, uses a variety of methods, addresses basic issues about human origins and human life, and maintains commitment to understanding social life and using this understanding to improve society. Anthropology is an ideal "liberal arts" major. It also serves as a major that, when well designed by the student with his or her advisor, prepares students for a wide range of professional careers, e.g., law, medicine, foreign service, human rights, social services, international development, and business, among others.
Courses for nonmajors: Anthropology welcomes nonmajors into many of its courses. Unless prerequisites are explicitly stated, 2000and 3000 -level courses do not have formal prerequisites and students without prior experience in anthropology are welcome in these classes. For additional information, see the anthropology department web page (falcon.arts.cornell.edu/Anthro).

## The Major

The major is structured to provide both general grounding in three subfields of anthropology (sociocultural anthropology, anthropological archaeology, and biological anthropology) and detailed focus on a particular area of concentration. Areas of concentration include a wide variety of subjects within and between these three subfields. Topics ranging from identity politics and globalization to prehistory and human evolution can be pursued in classes focused on every major geographical region in the world. Upper-level courses span a range of topical and theoretical issues related to religion, gender, economics, colonialism, democratization, prehistoric cultures, race, behavioral evolution, and conservation, to name a few.

No prerequisites are required to enter the anthropology major. Students should see the director of undergraduate studies to apply to the major and obtain an advisor. Majors prepare a short statement about their interests and goals for the major, and then meet with their advisor. Majors and advisors
collaboratively build a program of study that reflects the student's individual interests and the intellectual breadth of the field. Our goal is to provide a close and supportive advising relationship and a strong and coherent structure for the student's major.
A minimum of 37 credits are necessary to complete the major. To complete the major, students must take:

- One course of 3 or more credits in each of the three subfields (sociocultural,
archaeological, biological) at the 1000 or 2000 level.
- ANTHR 3000: Introduction to Anthropological Theory
- Two other courses of at least 4 credits at the 3000 level that are designated "comparative survey" courses in the catalog.
- Two 4000-level courses, one of which must be a seminar course in your senior year (4000, 4258, 4260, and 4263 are not seminar courses and do not fill the requirements).
- An additional 8 credits in elective courses which may be in cognate disciplines with the approval of your advisor.
Exceptions to these requirements may be granted if a written petition is approved by the director of undergraduate studies
No S-U credits or First-Year Writing Seminars may count toward the major. A letter grade of C - or better is required in all courses counted toward the major.
Study abroad and off-campus study programs: The Department of Anthropology encourages students to consider a semester of study abroad or off-campus study developed as an integral part of the student's major concentration. The director of undergraduate studies serves as the anthropology study abroad advisor.

The Cornell-Nepal Study Program: The Cornell-Nepal Study Program is a joint program of Cornell University and Tribhuvan University, the national university of Nepal. Qualified juniors, seniors, and first- or secondyear graduate students work with faculty from both universities to prepare for and undertake field research projects in Nepal. Students receive 15 credits per semester; students may enroll for either fall or spring semester or for the entire year; application is through Cornell Abroad. For further information, consult David Holmberg or Kathryn March in the Department of Anthropology.
Other anthropologically relevant study abroad options, using existing Cornell Abroad and off-campus options, can be worked out in consultation with the major advisor, the anthropology study abroad advisor, and Cornell Abroad.

## Honors

Honors in anthropology are awarded for excellence in the major, which includes overall GPA and completion of an honors thesis. Undergraduate students interested in working for an honors degree should apply to the chair of the Honors Committee in the second semester of their junior year (requests for late admission may be considered, but not later than the second week of the first semester of the senior year). It is the student's responsibility to identify an appropriate topic for a thesis and to find a faculty member willing to sponsor and supervise the research; the advisor and at least the general subject of the thesis must be identified at the time of application for admission to the Honors Program. Note that clearance from the University Committee on Human Subjects usually is required before research involving living people may begin; students
contemplating such research should begin to work with their thesis advisors to design their
investigations and obtain the clearance well in advance of the date when the involvement with research subjects is to begin.
Admission to the Honors Program requires an overall GPA of 3.3 or greater and a 3.5 GPA in the major. In addition, the student should have no outstanding Incompletes in courses that will be used toward the major (provisional admission with Incompletes is possible at the discretion of the chair of the Honors Committee on evidence that a good faith effort to finish them is under way). Under special circumstances, a student with an overall GPA of 3.0 may petition for admittance to the program.
Writing an honors thesis typically is a twosemester project involving 8 credits of course work; most students do this work during their senior year. During their first semester of honors work, students typically register for (1) ANTHR 4983 Honors Thesis Research (3 credits); and (2) ANTHR 4991 Honors Workshop I (1 credit). During their second semester of honors work, students typically register for (1) ANTHR 4984 Honors Thesis Write-up (2 credits); and (2) ANTHR 4992 Honors Workshop II (2 credits). The twocourse/term arrangement reflects the division of supervision over the thesis between the thesis advisor and the chair of the Honors Committee. The thesis advisor is ultimately responsible for guiding the scholarly development of the thesis; the chair of the Honors Committee is mainly responsible for assuring timely progress toward completion of the thesis, and providing a context for students in the Honors Program to share ideas (both editorial and substantive) as their theses progress.

## Special Programs and Facilities

Collections: The department has an extensive collection of archaeological and ethnological materials housed in the Anthropology Collections. A limited number of students can make arrangements to serve as interns in the Anthropology Collections. Olin Library houses some of the most extensive collections of materials on the ethnology of Southeast Asia, South Asia, East Asia, and Latin America to be found anywhere in the United States. The biological anthropology laboratory (B65 McGraw Hall) houses an extensive collection of materials for teaching purposes, including (1) human skeletal remains, (2) articulated skeletons and cranial casts of primates, and (3) casts of important fossils in the human lineage.
Independent Study: Specialized individual study programs are offered in ANTHR 4910 Topics in Anthropology, a course open to a limited number of juniors and seniors who have obtained permission and supervision of a faculty member. Undergraduates should note that many 6000 -level courses are open to them by permission of the instructor.

Colloquia: The Department of Anthropology holds colloquia almost every week of the semester on Friday at 3:30 p.m. in 215 McGraw Hall. Faculty members from Cornell and other universities participate in discussions of current research and problems in anthropology. Students are encouraged to attend.
For more complete information about the anthropology major, see the director of undergraduate studies or visit the Department
of Anthropology web page (falcon.arts.cornell. edu/Anthro)

## I. Introductory Courses

Each of these introductory courses provides an introduction to one of the subfields of anthropology. They do not form a sequence; students can take them in any order and at any point during their time at Cornell

## ANTHR 1200 Ancient Peoples and Places

 (also ARKEO 1200) @ \# (HA-AS)Spring. 3 credits. J. Henderson
A broad introduction to archaeology-the study of material remains to answer questions about the human past. Case studies highlight the variability of ancient societies and illustrate the varied methods and interpretive frameworks archaeologists use to reconstruct them. This course can serve as a platform for both archaeology and anthropology undergraduate majors.

## ANTHR 1300 Human Evolution: Genes, Behavior, and the Fossil Record (PBS Supplementary List)

Spring. 3 credits. Fee for lab usage and maintenance: $\$ 5$. M. Small.
The evolution of humankind is explored through the fossil record, studies of the biological differences among current human populations, and a comparison with our closest relatives, the primates. This course investigates the roots of human biology and behavior with an evolutionary framework.

## ANTHR 1400 The Comparison of Cultures

 @ (CA-AS)Fall. 3 credits. D. Holmberg. An introduction to cultural anthropology through ethnographies, or the descriptive accounts of anthropologists. Through readings and lectures, students acquaint themselves with a number of cultures from several parts of the world. The cultures range in form from those of small-scale tribal societies to those of state societies. Throughout the course, we attempt to make sense of exotic cultures in their own terms. Attention is focused on variation in cultural patterns as they are expressed in social, economic, and ritual practices. In this encounter, the principles of anthropology, as a comparative enterprise that poses distinct cultural systems in relief, will be developed. Fiction, films, and exercises supplement the formal anthropological materials.

ANTHR 1401 The Scope of Anthropology
Fall. 1 credit. Does not satisfy major requirement to take two broad introductory courses. Pre- or corequisite: ANTHR 1300 or 1400 . S-U grades only. D. Holmberg.

This course is intended for majors in anthropology, prospective majors. Each week a different member of the faculty in anthropology at Cornell will make a presentation on the nature of their work within the field and discuss their interests with students. The course is meant to introduce the range of approaches found within anthropology and help students in planning future course work.

## ANTHR 2400 Cultural Diversity and

 Contemporary Issues @ (SBA-AS)Spring. 3 credits. B. Perley.
This course will introduce students to the meaning and significance of forms of cultural diversity for the understanding of
contemporary issues. Drawing from films, videos, and selected readings, students will be confronted with different representational forms that portray cultures in various parts of the world, and they will be asked to examine critically their own prejudices as they influence the perception and evaluation of cultural differences. We shall approach cultures holistically, assuming the inseparability of economies, kinship, religion, and politics, as well as interconnections and dependencies between world areas (e.g., Africa, Latin America, the West). Among the issues considered: "political correctness" and truth; nativism and ecological diversity; race, ethnicity, and sexuality; sin, religion, and war; global process and cultural integrity

## II. Sociocultural Anthropology

Sociocultural anthropology is rooted in the precise observation and rigorous analysis of human cultural capacities and human social practices, relations, and institutions. All sociocultural anthropology involves both inquiry into the diversity of human cultures (ethnography) and comparative analysis of human social dynamics (social theory). Historically, sociocultural anthropology specialized in the study of nonwestern peoples, but today there are few places and domains of human activity that sociocultural anthropologists do not study. To give a few examples, sociocultural anthropologists study nuclear weapons scientists in California, the transformation of state power in Russia, and the politics of development in India. They study how television producers in Egypt contribute to nationalism, the social effects of truth commissions in Guatemala and South Africa, and the emergence of new religious and social movements in Latin America. What distinguishes sociocultural anthropology as a field is its engagement with the full abundance of human lived experience and its integrated, comparative effort to make sense of the key processes shaping this experience As such, sociocultural anthropology is an excellent, flexible choice of major. It teaches core critical, analytical, and expressive skills and important perspectives on human cultural creativity and social life that are widely applicable. Recently, our majors have gone into careers as diverse as academic scholarship, activism, advertising, consulting, design, film, journalism, marketing, medicine, NGO-work, and politics and government

## ANTHR 1400 The Comparison of Cultures @ (CA-AS)

Fall. 3 credits. D. Holmberg.
For description, see Introductory Courses
ANTHR 1401 The Scope of Anthropology Fall. 1 credit. D. Holmberg
For description, see Introductory Courses.

## ANTHR 2400 Cultural Diversity and Contemporary Issues @ (SBA-AS) <br> Spring. 3 credits. B. Perley.

For description, see Introductory Courses.

## ANTHR 2410 South Asian Diasporic Location (also AAS 2100) (CA-AS)

Spring. 3 credits. V. Munasinghe.
For description, see AAS 2100.

## ANTHR 2428 Slavery and Human <br> Trafficking \# (CA-AS)

Fall. 4 credits. M. Fiskesjo
In this course we will study slavery and trafficking in human slaves in the world today,
as well as its roots and history in Asia, Africa, as well as in medieval Scandinavia, and in America and Europe today. We will make use of anthropological perspectives to look at influential historical and Classical definitions of slavery, such as Aristotle's idea of the "natural slave," and ask how ownership and domination over fellow humans have been justified in different societies. While introducing themes of gender, race, ethnicity, etc., and basic philosophical issues regarding autonomy and dependence, we also examine the economic forces of exploitation in the floating world of economic migration, people smuggling, and human trafficking

## ANTHR 2450 The Anthropology of Food and Cuisine @ (CA-AS)

Spring. 4 credits. J. Fajans.
You are what you eat! This course examines the way food is produced, prepared, exchanged, presented, and given meaning in cultures around the world. It examines the symbolism of specific foodstuffs. Who prepares food and how is it done? Who feeds whom and how these relations are expressed and valued? In addition to looking at these questions we analyze ideas about commensality; how food is used in public contexts for presentation or exchange, and how food is a marker of gender, class, status, ethnicity, and identity. In addition to looking specifically at food, we analyze cultural ideas about gender, the body, and identity in terms of how these cultural patterns are produced and expressed through concrete activities like eating, fasting, and special diets. In this class we stress critical and comparative thinking about subjects we tend to take for granted.

## ANTHR 2468 Medicine, Culture, and

 Society (also BSOC/STS 2468) (CA-AS)Fall. 3 credits. S. Langwick.
Medicine has become the language and practice through which we address a broad range of both individual and societal complaints. Interest in this "medicalization of life" may be one of the reasons that medical anthropology is currently the fastest-growing subfield in anthropology. This course encourages students to examine concepts of disease, suffering, health, and well-being in their immediate experience and beyond. In the process, students will gain a working knowledge of ecological, critical, phenomenological, and applied approaches used by medical anthropologists. We will investigate what is involved in becoming a doctor, the sociality of medicines, controversies over new medical technologies and the politics of medical knowledge. The universality of biomedicine (or hospital medicine) will not be taken for granted, but rather we will examine the plurality generated by the various political, economic, social, and ethical demands under which biomedicine has developed in different places and at different times. In addition, biomedical healing and expertise will be viewed in relation to other kinds of healing and expertise. Our readings will address medicine in North America as well as other parts of the world. In class, our discussions will return regularly to consider the broad diversity of kinds of medicine throughout the world, as well as the specific historical and local contexts of biomedicine.

## ANTHR 2520 Indonesia Today

Spring. 3 credits. M. Welker.
Comprised of over 10,000 islands, Indonesia is the world's fourth most populous country and has the world's largest Muslim population. This culturally diverse country has a colorful history and a complex political and religious life. This course will draw together faculty from the fields of Anthropology, History, Government, Linguistics, Ethnomusicology, and History of Art to introduce students to scholarship and debates over Indonesia's past, present, and future.

## ANTHR 2546 South Asian Religions in Practice @ (CA-AS)

Spring. 3 credits. A. Willford.
This course offers an anthropological approach to the study of religious traditions and practices in South Asia (India, Pakistan, Sri Lanka, and Nepal). The course begins with a short survey of the major religious traditions of South Asia: Hinduism, Buddhism, Jainism, Sikhism, and Islam. We look to the development of these traditions through historical and cultural perspectives. The course then turns to the modern period, considering the impact of colonialism, nationalism, and globalization upon religious ideologies and practices. The primary focus of the course will be the ethnographic study of contemporary religious practices in the region. We examine phenomena such as ritual, pilgrimage, possession, devotionalism, monasticism, asceticism, and revivalism through a series of ethnographic case studies. In so doing, we also seek to understand the impact of politics, modernity, diasporic movement, social inequality, changing gender roles, and mass mediation upon these traditions and practices.

## [ANTHR 2560 Japanese Society Through Film @ (CA-AS)

Fall. 3 credits. Next offered 2012-2013.
H. Miyazaki.]

## ANTHR 2721 Anthropological

 Representation: Ethnographies on Latino Culture (also AMST/LSP 2721) (CA-AS)Fall. 3 credits. V. Santiago-Irizarry. Representation is basic to anthropology. In translating cultures, anthropologists produce authoritative representations of and about other people's lives. In this course, we will examine, with a critical eye, the production of representations about U.S. Latino cultures as these are embodied in anthropological texts. Issues to be explored include the relation between the ethnographer and the people s/ he is studying, the contexts in which ethnographic texts are produced, and the way they may position different cultural groups within the larger national context.

## ANTHR 3000 Introduction to

 Anthropological Theory (CA-AS)Spring. 4 credits. P. Nadasdy.
This seminar course is designed to give anthropology majors an introduction to classical and contemporary social and anthropological theory and to help prepare them for upper-level seminars in anthropology. The seminar format emphasizes close reading and active discussion of key texts and theorists. The reading list will vary from year to year but will include consideration of influential texts and debates in 19th-, 20th-, and 21st-century anthropological theory especially as they have sought to offer conceptual and analytical tools
for making sense of human social experience and cultural capacities.

## ANTHR 3130 Latin American Forms of Colonial Possession @ \# (CA-AS)

Fall. 4 credits. C. Garces.
The persistence of colonial relationships in Latin America will be interrogated in this course using methods drawn from ethnography, psychoanalysis, historiography, political theory, and experimental literature. Key to this line of inquiry is the anthropological problematization of metaphors and practices of possession. Our course readings will explore the psychological internalization of colonial domination; the political ceremonies of territorial sovereignty; the everyday rituals of personal enchantment and disenchantment; the occult applications of magic, witchcraft, and sorcery; and the
historical processes of de- and re-colonization that mark notions of "possession" with such longstanding and fraught cross-cultural implications. This class will demonstrate how commonplace understandings of race, class, ethnicity, labor, gender, sexuality, subjectivity, personhood, religion, and the state gain shape and meaning through discourses of possession.

## [ANTHR 3406 Gifts and Exchange (SBA-AS)

Spring. 4 credits. Comparative survey. Next offered 2012-2013. H. Miyazaki.]

## [ANTHR 3410 Nationalism and

Revivalism (CA-AS)
Spring. 4 credits. Comparative survey. Next offered 2011-2012. Staff.]

## ANTHR 3420 Myth, Ritual, and Symbol

 (also RELST 3230) @ (CA-AS)Spring. 4 credits. Comparative survey. D. Holmberg.

Examines how systems of thought, symbolic forms, and ritual practice are formulated and expressed in primarily non-Western societies. Focuses on anthropological interpretations of space, time, cosmology, myth, classificatory systems (e.g., color, totems, food, dress, kinship), taboos, sacrifice, witchcraft, sorcery, and rites of passage (birth, initiation, marriage, death). Examines both the roles of specialists (e.g., spirit mediums, curers, priests, ascetics) and nonspecialists in producing these cultural forms.
ANTHR 3421 Sex and Gender in CrossCultural Perspective (also FGSS 3210) @ (SBA-AS)

Fall. 4 credits. Comparative survey. K. March.

Introduction to the study of sex roles crossculturally and to anthropological theories of sex and gender. Examines various aspects of the place of the sexes in social, political, economic, ideological, and biological systems to emphasize the diversity in gender and sexrole definitions around the world.
[ANTHR 3422 Culture, Politics, and Environment in the Circumpolar North (also ANTHR 6422) (CA-AS) Spring. 4 credits. Next offered 2011-2012. P. Nadasdy.]

## ANTHR 3425 Anthropology of the

 University (SBA-AS)Spring. 4 credits. D. Greenwood.
Turning an anthropological gaze on the contemporary university as a social and cultural system, this seminar involves an examination of the convergences and
divergences between the trajectories of the sciences and engineering, the humanities, and the social sciences in contemporary universities and some international comparisons with the trajectories of universities around the world. The overall aim is to link an ethnographic analysis of the microstructures of departmental differentiation, professional hegemonies, and local financing with the larger-scale processes of transformation of universities' place in society under the pressures of corporativization, globalization, and competition from a host of alternative higher education institutions.

## [ANTHR 3428 Conflict, Dispute Resolution, and Law in Cultural Context (SBA-AS)

Fall. 4 credits. Comparative survey. Next offered 2011-2012. V. Santiago-Irizarry.]

## ANTHR 3447 Sport @ (CA-AS)

Spring. 4 credits. S. Sangren.
Long overlooked by anthropologists, sport and recreation are increasingly recognized as important windows into culture. Sport can be approached from a number of directionsinterpreted as a ritual; viewed as a spectacle of ethnic, regional, or national identity; seen as a metaphor for life; understood as a major industry. This course will consider these and other approaches to sport, encouraging students to bring their own involvements in sport to reflect not only upon sport itself, but also upon how such reflection can illuminate cultural, psychological, and political dimensions of social life. Why, for example, do we take sport (and other forms of recreation) so seriously? Why do many of us apparently invest more passion in such pursuits than to life's allegedly more serious activities? How is sport integrated into people's identities? Readings will draw from popular literature and media as well as academic writing from a variety of disciplines (psychology, sociology, history) in addition to anthropology.

## [ANTHR 3451 Global Movements of

 Cultural Heritage @ (CA-AS)Spring. 4 credits. Comparative survey. Next offered 2012-2013. M. Fiskesjo.]

## [ANTHR 3461 Anthropology of

 Organizations (also ANTHR 6461) (SBA-AS)Spring. 4 credits. Next offered 2012-2013. D. Greenwood.]

## ANTHR 3462 Democratizing Research (also ANTHR 6462) (SBA-AS)

Fall. 4 credits. D. Greenwood.
This course centers on a family of research approaches variously known as activist research, engaged research, community-based research, public scholarship, and action research. These are both alternatives to and critiques of the common forms of universitycentered research that separate "expert" researchers from the subjects of research and claim that the quality of research can be determined only by trained academics. Participants in engaged research view research as a means of social learning. Most importantly, they are guided by democratic ideals and values, in pursuit of public purposes and interests. No course can cover the full range of approaches and so this course brings the different approaches to the attention of the students, shows what the strengths and weaknesses of each are, and exhibits the various strategies and methods
that typify them. A subset of the students will be participating in an ongoing community service activity of their own creation. The internships/community projects will be supported and overseen by the course supervisor, a faculty board, and the director of the Cornell University Public Service Center.

## ANTHR 3465 Anthropology of the Body (also ANTHR 6465) @ (CA-AS)

Fall. 4 credits. S. Langwick.
This course examines a range of texts that treat the body as the subject and object of cultural, technological, political, and ethical processes. Students investigate the cultivation of physical and social bodies through ethnographic and historical materials concerning healing and medicine, discipline and labor, governance and religion, aesthetics and desire. The production and reproduction of bodies and embodied practices have long been central to the way that power works. In this class, we will read and discuss a range of approach to the body. There is much contention over how work, politics, environment, technologies, and violence shape the body and the senses. We will debate how histories of the body are intertwined with histories of gender, race, class, sexuality, (post)coloniality, modernization, science, transnationalism, and the webs of institution, ideas, and capital that comprise these phenomena. Some readings will investigate the complex mediations that account for the body as icon, text, metaphor, commodity, and raw material. Others will contend that serious attention to the production and reproduction of the body across different times and spaces challenge traditional notions of materiality and physicality. Because every examination of the body rests-implicitly or explicitly-in a theoretical and methodological approach to experience, we will also explore the histories of bodily senses, appetites, and capabilities. Ultimately, our inquiry into contests over and reflections on "the body," as well as specific bodies, aims to open up broader anthropological questions about authority, agency, sovereignties, and material life.

## ANTHR 3479 Culture, Language, and Thought (CA-AS)

Spring. 4 credits. Comparative survey. V. Santiago-Irizarry.

The relationship among culture, language, and thought has been a core concern in anthropology. Language and culture are commonly defined as processes that are public and shared yet they also operate within and upon subliminal experiential realms. In this course we shall examine how anthropologists have explored this relationship, which is engendered in the interaction between culture and language as parallel mediating devices for the constitution, interpretation, and expression of human experience.

## [ANTHR 3514 Learning in Japan @ (SBA-AS)

Spring. 4 credits. Next offered 2011-2012. H. Miyazaki.]
[ANTHR 3516 Power, Society, and Culture in Southeast Asia @ (CA-AS) Fall. 4 credits. Next offered 2011-2012.
M. Welker.]

## ANTHR 3545 Peoples and Cultures of the Himalayas (also ANTHR 7545) @ (CA-AS)

Fall. 4 credits. K. March
A comprehensive exploration of the peoples and cultures of the Himalayas. Ethnographic materials draw on the lifeways of populations living in the Himalayan regions of Bhutan, India, Nepal, and Tibet. Some of the cultural issues to be examined through these sources include images of the Himalayas in the West, forms of social life, ethnic diversity, political and economic history, and religious

## complexity.

## ANTHR 3546 Asian Minorities (also ASIAN 3345) @ (CA-AS)

Fall. 4 credits. M. Fiskesjo.
This course will survey the situation of ethnic minorities in several Asian countries. We will learn about their culture and history, their recognition, identity and political status, as well as various forms of discrimination. We will adopt a comparative perspective that enables us to understand minorities in different Asian countries such as China, Japan, Burma, Thailand and others, and also compare with the United States and elsewhere, as well as enabling a discussion of identity production, race, power, and ethnicity on the global arena. We'll use a relational approach that includes understanding the majorities against whom the minorities are defined, as well as the political and historical background that will help explain the sometimes very different current situation for ethnic minorities in Asian countries.

## [ANTHR 3554 Male and Female in

 Chinese Culture and Society (also FGSS 3440) @ (SBA-AS)Fall. 4 credits. Next offered 2012-2013. S. Sangren.]

ANTHR 3703 Asians in the Americas: A Comparative Perspective (also AAS 3030) (CA-AS)

Fall. 4 credits. V. Munasinghe.
The common perception of ethnicity is that it is a "natural" and an inevitable consequence of cultural difference. "Asians" overseas, in particular, have won repute as a people who cling tenaciously to their culture and refuse to assimilate into their host societies and cultures. But, who are the "Asians"? On what basis can we label "Asians" an ethnic group? Although there is a significant Asian presence in the Caribbean, the category "Asian" itself does not exist in the Caribbean. What does this say about the nature of categories that label and demarcate groups of people on the basis of alleged cultural and phenotypical characteristics? This course will examine the dynamics behind group identity, namely ethnicity, by comparing and contrasting the multicultural experience of Asian populations in the Caribbean and the United States. Ethnographic case studies will focus on the East Indian and Chinese experiences in the Caribbean and the Chinese, Korean, Japanese, Filipino, and Indian experiences in the United States.

## ANTHR 3734 Brazil: Many Cultures, One

 Nation @ (CA-AS)Spring. 4 credits. J. Fajans.
From the streets of Rio to the shores of the Amazon, anthropology studies the lives, communities, beliefs, practices, and politics of the diverse region known as Brazil. This course will look at issues of race, gender, ethnicity, religion, ritual, environment,
development, and human rights across Brazil. We will examine rural and urban cultures, discuss African and European Influences, and explore the relations between indigenous and national cultures. In this context, we will look at the roles that religion, food, dress, soccer, samba, and carnival all play in producing this vibrant culture.

## [ANTHR 3777 The United States (also AMST/LSP 3777) (CA-AS)

Fall. 4 credits. Next offered 2011-2012. V. Santiago-Irizarry.]

## ANTHR 3820 Anthropology of Spain:

 Cultural Politics and Ethnogenesis (also ANTHR 6820)Spring. 4 credits. D. Greenwood. Spain is undergoing extraordinary processes of decentralization and ethnic regionalism since its transition to democracy. The current 17 home-rule communities in Spain are engaged in processes of identity formation, political activism, and resource acquisition that significantly decentralize the Spanish state. At the same time the European Community imposes ever-more homogeneous processes and norms on European countries. Social scientists and historians have played an active role in the creation of Spain's new or renewed regional cultural identities and cultural imaginaries in Spain in a complex interplay with Spanish history and geography. The course examines these processes anthropologically and compares the ethnic regionalism and identity politics in Spain with multiculturalism and identity politics in the United States.

## ANTHR 4000 Development of

 Anthropological Thought (also ANTHR 7000) (SBA-AS)Fall. 4 credits. Prerequisite: for
undergraduates, two prior anthropology courses or permission of instructor. J. Fajans.

Examination of the history and development of anthropological theory and practice. Focuses on the differences and continuities among the various national and historical approaches that have come to be regarded as the schools of anthropology.

## ANTHR 4165 Anthropology of Humanitarianism

Spring. 4 credits. C. Garces. It is commonplace to hear that we live in a humanitarian age, but to what extent is humanitarianism coextensive with global and cultural politics today? This seminar will explore how institutions and governments identify "states of emergency" in order to safeguard populations and political alliances. Our readings will problematize gift exchange and the logic of sacrifice across charitable, philanthropic, and peacekeeping efforts. Key topics include the gendered dynamics of aid distribution; the impact of philanthropy on private-public balances of power; the role of displaced populations as biopolitical communities; and the democratic applications of charity to mask imperial resemblances. We will together challenge the ethical knot of using "voluntary actions" as the basis of normative political systems, highlighting contingencies and exploring paradoxes in humanitarian endeavors.
ANTHR 4403 Ethnographic Field Methods (also ANTHR 6403) (SBA-AS)
Fall. 4 credits. V. Santiago-Irizarry.

This course will provide students with practical understanding about what anthropologists actually do in the field. We will examine problems that emerge in conducting fieldwork that raise ethical, methodological, theoretical, and practical issues in the observation, participation in, recording, and representation of culture(s). Students will be expected to develop a semester-long, local research project that will allow them to experience fieldwork situations.
[ANTHR 4406 The Culture of Lives (also FGSS 4060) @ (CA-AS)
Spring. 4 credits. Next offered 2012-2013. K. March.]

## ANTHR 4410 Indigenous Peoples,

 Ecological Sciences, and Environmentalism (also ANTHR 7410)Spring. 4 credits. P. Nadasdy.
This course examines the long, complex, and ambivalent relationship among indigenous peoples (with an emphasis on the North American context), scientific ecology, and environmentalism. It begins by looking at the key role played by images of the "ecologically noble savage" in the historical development of the ecological sciences and the environmental movement. It then turns to an in-depth examination of several historical and ethnographic case studies in an effort to understand how the entanglement of indigenous peoples, environmental activists, and ecological scientists have shaped-and continue to shape-environmental politics and struggles over indigenous rights.

## ANTHR 4415 Creolization, Syncretism, and Hybridity <br> Spring. 4 credits. V. Munasinghe

 The concepts of Creolization, Syncretism, and Hybridity all convey a state of "mixture" that assumes a diasporic situation. This course explores theories and empirical case studies of processes of racial, cultural, and religious mixture from an interdisciplinary perspective. The course explores the interconnections among concepts denoting "mixture" that have diverse originary points. The overarching line of inquiry is to explore the geneaologies of the three concepts as a necessary precursor to understanding how these terminologies may, in concert, illuminate different aspects of the dynamics structuring processes of mixture in different historical and ethnographic settings.
## [ANTHR 4419 Anthropology of

 Corporations (also ANTHR 7419) (SBA-AS)Spring. 4 credits. Next offered 2011-2012. M. Welker.]

## ANTHR 4426 Ideology and Social Production (also ANTHR 7426) @ (SBA-AS)

Spring. 4 credits. S. Sangren.
This course is premised on the notion that understanding social life requires understanding how social institutions are produced and sustained through time-that is to say, one must understand "society" as a process of production. By the same token, all cultures produce ideas or "representation" (e.g., about reality, nature, society, gender, authority) that serve to legitimize or validate each society's particular social arrangements. These ideologies play an important role in social production, on the one hand, and are also products of social processes, on the other. This course focuses on the linkages
between ideology and social production in readings drawn from social theory and ethnographic case studies. We discuss strongly diverging views (psychoanalytic, postmodernist, poststructuralist, practicetheory, neo-Marxist) on how best to conceive social processes. An integrating theme is that understanding ideology and its alienating operations is essential in developing a coherent understanding of what culture, in the last analysis, is.
ANTHR 4429 Anthropology and Psychoanalysis (also ANTHR 7429) @ (SBA-AS)
Fall. 4 credits. S. Sangren
Psychoanalysis holds that desire emerges from the clash between individuals' predisposition and the need to accommodate to others in society. Yes anthropology has been resistant to the role that psychoanalytic theory might play in linking individual desire to culture. Does psychoanalysis have anything to offer cultural anthropology? Can understanding of collective institutions be advanced with reference to theories of individual motivation and desire? Conversely, can collective life be understood without reference to individual motivation and desire? Is desire best understood as sexual in nature, or is it better understood in more abstract and existential terms? With such questions in mind, this course surveys anthropology's engagements with psychoanalysis. We read theoretical works as well as ethnographically grounded case studies on topics ranging from religious experience, mythic narratives, the cultural construction of gender and desire, and modern popular culture.

## ANTHR 4435 Postcolonial Science (also ANTHR 7435) @ (CA-AS)

Spring. 4 credits. S. Langwick.
This course examines science and technology in so-called "non-Western" countries as well as the ways that science and technology are shaping new "transnational" or "global" relations. We will explore the post-colonial as a dynamic space that both plays off of and refigures the complicated dynamics of colonialism. The postcolonial challenges the dichotomies through which colonial power moved: western/indigenous, white/black, modern/traditional, global/local, developed/ underdeveloped, and science/non-science. At the same time, it confronts the ways in which colonial histories are still embodied in institutions, identities, environments, and landscapes. Techno-scientific knowledge and practice have both enacted colonial divisions and been called on in post-colonial struggles How them might we understand the work of scientific knowledge and practice in the kinds of hegemonies and struggles that shape our world today? We will explore this question by examining the way that technoscience is performed-by scientists, development workers, activists, government officials, and others. The class will pay particular attention to the located processes through which claims to the universal or global emerge. In addition by considering controversies over the environment, medicine, and indigenous knowledge, we will consider the effects of such claims.

[^0]This course provides an anthropological perspective on international development. After reading orthodox theories of development and considering them in historical context, we will examine ethnographic accounts of postcolonial development that draw on political economy and poststructuralist traditions. The final portion of the course looks critically at the emergence of discourses such as participation, empowerment, social capital, civil society, and sustainability in mainstream development.

## [ANTHR 4439 Sovereignty and Biopolitics @ \# (CA-AS)

Spring. 4 credits. Next offered 2012-2013. M. Fiskesjo.]

ANTHR 4444 God(s) and the Market (also ANTHR 7444) @ (CA-AS)
Fall. 4 credits. H. Miyazaki. One of the oldest and most powerful insights of anthropology is that different domains of society such as religion and economy shape and condition each other. We will discuss a variety of old and new anthropological explorations into the intersections of religion and economy, from Max Weber's classical study of the relationship between Protestantism and the rise of capitalism to recent studies of the work of faith in financial markets. This seminar is intended to bring together students interested in religion and students interested in business and economy.

## ANTHR 4455 Anthropology in the Real World (SBA-AS)

Spring. 4 credits. Staff.
This course is designed to expose students to the range of ways and fields within which practitioners employ anthropological theory, methods, and perspectives. Class format will include both seminar discussions and workshop sessions with invited speakers. Both the invited speakers and the discussion topics will represent different broadly defined fields in which anthropologists practice. Through class discussion and writing, students will be expected to critically consider such issues as research ethics, professional responsibility, the academic versus activist role, methodological practices, and the relationship between individual practitioners and the national, international, and organization contexts within which they work. Students will produce a major research paper examining a particular field of "practical" anthropology of their interest.
[ANTHR 4478 Taboo and Pollution (CA-AS)
Spring. 4 credits. Next offered 2012-2013. M. Fiskesjo.]

## ANTHR 4479 Ethnicity and Identity Politics: An Anthropological Perspective (also AAS 4790) (SBA-

 AS)Fall. 4 credits. V. Munasinghe. The most baffling aspect of ethnicity is that while ethnic sentiments and movements gain ground rapidly within the international arena, the claim that ethnicity does not exist in any objective sense is also receiving increasing credence within the academic community. How can something thought "not to exist" have such profound consequences in the real world? In lay understandings, ethnicity is believed to be a "natural" disposition of humanity. If so, why does ethnicity mean different "things" in different places? Anthropology has much to contribute to a
greater understanding of this perplexing phenomenon. After all, the defining criterion for ethnic groups is that of cultural distinctiveness. Through ethnographic case studies, this course will examine some of the key anthropological approaches to ethnicity. We will explore the relationship of ethnicity to culture, ethnicity to nation, and ethnicity to state to better understand the role ethnicity plays in the identity politics of today.

## [ANTHR 4480 Anthropology and

 Globalization (also ANTHR 6480) (CA-AS)Fall. 4 credits. Next offered 2011-2012. Staff.]

## [ANTHR 4513 Religion and Politics in Southeast Asia (also ASIAN 4413) @ (CA-AS)

Spring. 4 credits. Next offered 2012-2013. A. Willford.]

[ANTHR 4523 Making History on the Margins: The China-SE Asia Borderlands (also ANTHR 7523) \# @ (HA-AS)<br>Fall. 4 credits. Next offered 2012-2013. M. Fiskesjo.]

[ANTHR 4542 Violence, Symbolic Violence, Terror, and Trauma in South Asia and the Himalayas (also ANTHR 6542) @ (CA-AS)
Fall. 4 credits. Next offered 2011-2012. D. Holmberg.]

## ANTHR 4682 Healing and Medicine in

 Africa (also ASRC 4682) (CA-AS) Spring. 4 credits. S. Langwick.The most baffling aspect of ethnicity is that while ethnic sentiments and movements gain ground rapidly within the international arena, the claim that ethnicity does not exist in any objective sense is also receiving increasing credence within the academic community. How can something thought "not to exist" have such profound consequences in the real world? In lay understandings, ethnicity is believed to be a "natural" disposition of humanity. If so, why does ethnicity mean different "things" in different places? Anthropology has much to contribute to a greater understanding of this perplexing phenomenon. After all, the defining criterion for ethnic groups is that of cultural distinctiveness. Through ethnographic case studies, this course will examine some of the key anthropological approaches to ethnicity. We will explore the relation ship of ethnicity to culture, ethnicity to nation, and ethnicity to state to better understand the role ethnicity plays in the identity politics of today.

## III. Anthropological Archaeology

Anthropological archaeology studies the diverse societies of the past using the material traces they left behind in the archaeological record. In addition to studying artifacts, archaeologists use unique methods to study the settings in which artifacts were produced and used by examining regional settlement patterns, the structure of sites and communities, the organization of activities, and ancient symbolism and social relations. The concerns of anthropological archaeology range from basic questions about continuity and change in the past, to application of hard science methods to date sites and determine the sources of artifacts, criticism of the uses to which the past is put in contemporary society,
and protection of the archaeological record. Anthropological archaeology can be distinguished from other forms of archaeology (such as Classical or Art Historical archaeology) based on its emphasis on holistically studying past cultural systems, and by the theories and approaches it shares with sociocultural and biological anthropology. There are numerous career opportunities for anthropological archaeologists, including work with museums, government agencies, and historic preservation groups in addition to academic employment. Private companies engaged in federally mandated cultural resource management (or CRM) archaeology employ thousands of archaeologists in the United States, and similar management programs exist in many other countries.
ANTHR 1200 Ancient Peoples and Places (also ARKEO 1200) \# @ (HA-AS)
Spring. 3 credits. J. Henderson.
For description, see Introductory Courses.

## ANTHR 1401 The Scope of Anthropology <br> Fall. 1 credit. D. Holmberg.

For description, see Introductory Courses.

## ANTHR 2015 Archaeology of Empires (also ARKEO 2015) @ \# (HA-AS)

Fall. 3 credits. L. Khatchadourian. The word "empire" today evokes modern, capitalist, European, even American experiments in expansion and asymmetrical relations of power. This course considers the precursors of these modern imperialisms. It offers a comparative study of early empires of the Old and New Worlds, approached from an archaeological perspective. We confront broad theoretical problems of empire-what they are, what they do, why they fail-and address these problems through archaeological interventions into such topics as conquest, colonialism, kingship and ideology, identity and inequality, tolerance and domination, and the everyday workings of empire. Is the very concept of empire as a construct of political, social, or historical analysis useful across time and space? What is archaeology's contribution to the study of these complex, expansive, and messy sociopolitical phenomena?

## ANTHR 2200 Early People: The Archaeological and Fossil Record (also ARKEO 2200) \# (HA-AS)

Spring. 3 credits. T. Volman.
A survey of the archaeological and fossil record of human evolution. Contributions by researchers from a variety of disciplines are highlighted, as are the discoveries that have enlivened the study of human evolution for more than a century. Critical evaluation of evidence and interpretation will be stressed. Demonstrations and films supplement the lectures.

## ANTHR 2201 Early Agriculture (also ARKEO 2201) @ \# (HA-AS)

Spring. 3 credits. N. Russell.
Throughout most of the human career, people survived by hunting and gathering wild foods. The advent of food production is one of the most profound changes in (pre)history. This course examines the current evidence for the appearance and spread of agriculture (plant and animal domestication) around the world. We will consider definitions of agriculture and domestication, the conditions under which it arises, the consequences for those who adopt it, and why it has spread over most of the world.

## ANTHR 2215 Stone Age Art (also ARKEO

 2215) \# (CA-AS)Fall. 3 credits. T. Volman.
When did "art," however defined, appear during the human career, how was it produced and for what purposes? These are some of the questions we will investigate through a survey of the discovery, validation, analysis, and interpretation of the earliest art. The course will cover a variety of finds from the Old World, including the well-known cave art of southwestern France and northern Spain, and also consider portable art and decoration. The contributions of new analytical techniques and interpretive approaches are highlighted.

## ANTHR 2220 Field Course in Iroquois Archaeology (also ARKEO 2220) \# (SBA-AS)

Summer only. 3 credits. K. Jordan. This course offers hands-on training in archaeological field methods through survey and excavation at historic-period Iroquois sites in the Finger Lakes region. The majority of class time will be spent engaging in supervised fieldwork, supplemented by lectures introducing archaeological methods and Iroquois history and material culture. Excavations will gather data on Iroquois residential architecture and domestic activities. Students will master field procedures, recordkeeping, and interpretation of field data; study Iroquois material culture; and write a short research paper ( $7-10$ pages) that uses data generated by the project to evaluate a topic of anthropological interest. Most class time will be spent off campus; transportation will be arranged by the instructor.

## ANTHR 2235 Archaeology of North

 American Indians (also AIS/AMST 2350, ARKEO 2235) \# (HA-AS)Spring. 3 credits. K. Jordan.
This introductory course surveys archaeology's contributions to the study of American Indian cultural diversity and change in North America north of Mexico. Lectures and readings will examine topics ranging from the debate over when the continent was first inhabited to present-day conflicts between Native Americans and archaeologists over excavation and the interpretation of the past. We will review important archaeological sites such as Chaco Canyon, Cahokia, Lamoka Lake, and the Little Bighorn battlefield. A principal focus will be on major transformations in lifeways such as the adoption of agriculture, the development of political-economic hierarchies, and the disruptions that accompanied the arrival of Europeans to the continent.

## ANTHR 3000 Introduction to

 Anthropological Theory (CA-AS)Fall. 4 credits. P. Nadasdy.
For description, see Sociocultural Anthropology.

## ANTHR 3217 Stone Age Archaeology

 (also ARKEO 3217) (HA-AS)Fall. 4 credits. Comparative survey. T. Volman. A survey of current approaches to the archaeological record of Stone Age peoples, from the earliest sites to those of recent times Case studies are used to illustrate the nature of archaeological occurrences, excavation procedures, and analytical methods. Multidisciplinary efforts to expand our knowledge of prehistoric lifeways and behaviors are a major concern of the course.

ANTHR 3230 Humans and Animals (also ARKEO 3230) @ \# (CA-AS)
Spring. 4 credits. Comparative survey. N. Russell.

Human-animal relationships are often seen in utilitarian, especially nutritional terms. This is especially true of the analysis of animal remains from archaeological sites. It is clear, however, that animals and meat have significance far beyond their economic value. This course focuses on these non-dietary roles of animals in human societies, past and present. We will explore a broad range of issues to gain a fuller view of human relations to animals. Domestication involves not only the technical process of controlling animal movements and breeding but more crucially requires a fundamental shift in the human perception of animals and their relationship to them. Are pets domestic animals in the same sense as animals that are eaten, or does their owners' relationship with them more closely resemble that of hunters with their prey? Do wild animals mean the same thing to huntergatherers and farmers who hunt? We will also consider the importance of animals as wealth, as objects of sacrifice, as totems (metaphors for humans), and as symbols in art. Meat has undeniable dietary value, but the social aspect of consumption is also important. Meat can be used in the context of such behaviors as feasting and meat sharing to create, cement, and manipulate social relationships. In this seminar, we will examine these issues primarily (but not exclusively) in the context of the ethnography and archaeology of the Old World with which the instructor is most familiar, but students are encouraged to offer examples from their own areas of expertise. This course is open to students of archaeology, cultural anthropology, and other disciplines with an interest in human-animal relations.
[ANTHR 3232 Politics of the Past (also ARKEO 3232) @ \# (HA-AS)
Fall. 4 credits. Comparative survey. Next offered 2012-2013. N. Russell.]

## ANTHR 3248 Iroquois Archaeology (also AIS/AMST/ARKEO 3248/6248, ANTHR 6248) \# (HA-AS)

Spring. 4 credits. K. Jordan.
This course surveys the long-term development of Iroquois (Haudenosaunee) culture from an archaeological perspective. Issues examined will include the geographic origins of the Iroquois; material culture, settlement, and subsistence; the founding of the Iroquois Confederacy; Iroquois responses to European-borne diseases, the fur trade, and territorial encroachment; the practicalities of doing Indian archaeology in New York State; and contemporary Haudenosaunee perspectives on archaeology. The Six Nations Iroquois will be emphasized, with some material drawn from surrounding Northern Iroquoian groups. Visits to local archaeological sites and museum collections will supplement classroom instruction.
ANTHR 3255 Ancient Mexico and Central America (also ARKEO 3255, LATA 3550) @ \# (HA-AS)

Fall. 4 credits. J. Henderson.
A survey of the cultural history of ancient Mexico and Central America, emphasizing Aztec and Maya civilizations. The use of ethnographic and historical information to enrich archaeological interpretation is a general theme. Specific topics include the emergence of settled farming life, the rise of
civilization and the state, and the development of mechanisms that linked the many societies in the region into a single sphere of interaction.
[ANTHR 3256 Archaeology of the Andes (also ARKEO 3256) @ \# (HA-AS)
Fall. 4 credits. Next offered 2012-2013.
J. Henderson.]
[ANTHR 3269 Gender and Age in Archaeology (also ANTHR 6269, ARKEO 3269/6269, FGSS 3700/6700) (SBA-AS)
Fall. 4 credits. Comparative survey. Next offered 2012-2013. N. Russell.]

## [ANTHR 3270 Environmental

 Archaeology (also ANTHR 6270, ARKEO 3270/6270) (PBS Supplementary List)Fall. 4 credits. Comparative survey. Next offered 2011-2012. T. Volman.]

## [ANTHR 3272 Hunters and Gatherers

 (also ANTHR 6272, ARKEO 3272/6272) @ \# (SBA-AS)Fall. 4 credits. Comparative survey. Next offered 2011-2012. T. Volman.]

## [ANTHR 4209 Approaches to Archaeology \# (SBA-AS)

Spring. 4 credits. Next offered 2011-2012. K. Jordan.]

ANTHR 4256 Mesoamerican Religion, Science, and History (also ARKEO 4256, LATA 4250) @ \# (CA-AS)
Spring. 4 credits. J. Henderson.
An introduction to belief systems in ancient Mexico and Central America, emphasizing the blending of religion, astrology, myth, history, and prophecy. Interpreting text and image in pre-Columbian books and inscriptions is a major focus.

## [ANTHR 4258 Archaeological Analysis

 (also ANTHR/ARKEO 6258, ARKEO 4258) (SBA-AS)Spring. 4 credits. Limited to 15 students. Prerequisite: archaeology course or permission of instructor. Next offered 2011-2012. J. Henderson.]
[ANTHR 4260 Field and Analytical Methods in Archaeology (also ARKEO 4260) \# (SBA-AS)
Spring. 4 or 6 credits. Next offered 20112012. K. Jordan.]

## [ANTHR 4262 Catalhoyuk and

 Archaeological Practice (also ANTHR/ARKEO 7262, ARKEO 4262) @ \# (HA-AS)Spring. 4 credits. Next offered 2011-2012. N. Russell.]
[ANTHR 4263 Zooarchaeological Method (also ARKEO 4263) (PBS Supplementary List)
Fall. 5 credits. Next offered 2012-2013. N. Russell.]
[ANTHR 4264 Zooarchaeological Interpretation (also ARKEO 4264) (PBS Supplementary List)
Spring. 4 credits. Prerequisite: permission of instructor. Next offered 2012-2013. N. Russell.]

ANTHR 4267 Origins of Agriculture (also ARKEO 4267) \# (HA-AS)
Fall. 4 credits. N. Russell.
This course will examine the origins of plant and animal domestication and the profound social transformations that accompanied this
innovation in several areas of the world. While we will consider the evidence for domestication, the focus will be on critical analysis of the models offered to explain the origins of agriculture. A comparative perspective will help us to evaluate whether there is a single universal explanation for agricultural origins.
ANTHR 4268 Myth, History, and Politics: The Aztecs and Their Empire (also ARKEO 4268, ANTHR/ARKEO 7268) @ \# (HA-AS)
Fall. 4 credits. J. Henderson.
Examines the structure and history of the largest polity in ancient Mexico, the "empire" of the Aztecs, using descriptions left by Spanish invaders, accounts written by Aztecs under Colonial rule, and archaeological evidence. Explores Aztec visions of the past, emphasizing the roles of myth, religion, and identity in Aztec statecraft and the construction of history

## [ANTHR 4270 Political Economy in

 Archaeology (also ANTHR/ARKEO 7270, ARKEO 4270) \# (SBA-AS)Fall. 4 credits. Next offered 2012-2013.
K. Jordan.]
[ANTHR 4272 Historical Archaeology of Indigenous Peoples (also AMST 6272, AIS 4720/7720, ANTHR/ARKEO 7272, ARKEO/AMST 4272) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. K. Jordan.]

ANTHR 4294 Seminar in Archaeology: The Archaeology of Human Origins (also ARKEO 4294) (HA-AS)
Spring. 4 credits. T. Volman.
An exploration of the archaeological record associated with early modern and nearmodern humans as well as their nonmodern contemporaries, such as the Neanderthals. Major issues include what behaviors and capabilities are indicated for various populations, and how and why did these change over the course of the later Pleistocene? To what extent does the archaeological record support the "Out-ofAfrica" hypothesis of a recent, African origin for all modern humans?

## IV. Biological Anthropology

Biological anthropology is the subfield of anthropology that explores the physical diversity, evolutionary history, and behavioral potential of our species. Consistent with anthropology more generally, biological anthropology is concerned with human variation. The distinctive perspective of this subfield is that it examines human variation within the framework of evolutionary theory. Analyses of both biology and culture, and of the interaction between the two, mark the broad boundaries of this discipline. Within that wide scope, specific areas of inquiry are diverse, including fossil studies, primate behavior, nutrition and development, sexual behavior, parental investment, molecular and population genetics, adaptation to environmental stress, disease evolution, life history analysis, and more. Some of the most pressing social issues of our time fall within the domain of biological anthropology as well as a range of professions: the controversy over evolution and intelligent design; race, gender, and genetic determinism; the control of disease; the roots of aggression; and conservation and the role of humans in ecological systems. Although the number of
anthropology courses offered in this subfield are limited, students can pursue their interests through a variety of related courses in other departments and by constructing independent study courses with specific faculty members.

## ANTHR 1300 Human Evolution: Genes, Behavior, and the Fossil Record (PBS Supplementary List)

Spring. 3 credits. Lab usage and
maintenance fee: $\$ 5$. M. Small.
For description, see Introductory Courses.
ANTHR 1401 The Scope of Anthropology Fall. 1 credit. D. Holmberg.
For description, see Introductory Courses.

## ANTHR 2310 The Natural History of Chimpanzees and the Origins of Politics (PBS Supplementary List)

Fall. 3 credits. A. Clark Arcadi.
This course will examine the natural history of wild chimpanzees with an eye toward better understanding the changes that would have been necessary in human evolutionary history to promote the emergence of human culture and political life. After an overview of early research and preliminary attempts to apply our knowledge of chimpanzee life to social and political theory, the class will focus on our now extensive knowledge of chimpanzees derived from many ongoing, long-term field studies. Topics of particular interest include socialization, alliance formation and cooperation, aggression within and between the sexes, reconciliation, the maintenance of traditions, tool use, nutritional ecology and social organization, territorial behavior, and the importance of kin networks. The question of whether apes should have rights will also be explored.

## [ANTHR 2750 Human Biology and Evolution (also NS 2750)

Fall. 3 credits. Next offered 2011-2012. J. D. Haas.]

## ANTHR 3000 Introduction to

 Anthropological Theory (CA-AS)Fall. 4 credits. P. Nadasdy.
For description, see Sociocultural
Anthropology.

## [ANTHR 3302 Anthropology of Everyday

 Life @ (SBA-AS)Fall. 4 credits. Next offered 2012-2013. M. Small.]

## ANTHR 3305 Anthropology of Parenting

 @ (SBA-AS)Spring. 4 credits. M. Small.
Human children are packets of genes that represent individual reproductive success. Like all animals, humans are selected by evolution to care for their offspring, but human infants and children require more intense parental investment than the offspring of most other species. Why is this so? Human parents are also influenced by cultural belief systems and ideology that play out in parenting styles. How do various belief systems influence parent-offspring interaction? In this course we will examine the human infant as a biologically designed organism that has co-evolved with caretakers, and then look at the various parenting styles across cultures that also mold our young.

## [ANTHR 3390 Primate Behavior and Ecology (PBS Supplementary List)

 Spring. 4 credits. Comparative survey. Prerequisite: ANTHR 1300 or permission of instructor. Next offered 2011-2012. A. Clark Arcadi.]
## ANTHR 4390 Topics in Biological

 AnthropologyFall. 4 credits. Prerequisites: ANTHR 1300, 3390, or permission of instructor. A. Clark Arcadi.
Current topics in biological anthropology are explored. Topics change each semester. For further information, contact the professor or department office.

## V. Honors, Field Research, and Independent Study

## ANTHR 4910 Independent Study:

 Undergrad IFall or spring. Credit TBA. Prerequisite: undergraduate standing. Staff.
Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

## ANTHR 4920 Independent Study:

 Undergrad IIFall or spring. Credit and times TBA.
Prerequisite: undergraduate standing. Staff. For description, see ANTHR 4910, section II, "Honors and Independent Study."

## ANTHR 4983 Honors Thesis Research

Fall. 3 credits. Prerequisite: permission of Honors Committee. Staff.
Research work supervised by the thesis advisor, concentrating on determination of the major issues to be addressed by the thesis, preparation of literature reviews, analysis of data, and the like. The thesis advisor will assign the grade for this course.

## ANTHR 4984 Honors Thesis Write-Up

Spring. 2 credits. Staff.
Final write-up of the thesis under the direct supervision of the thesis advisor, who will assign the grade for this course.

## ANTHR 4991 Honors Workshop I

 Write-UpFall. 1 credit. Staff.
Course will consist of several mandatory meetings of all thesis writers with the honors chair. These sessions will inform students about the standard thesis production timetable, format and content expectations, and deadlines; expose students to standard reference sources; and introduce students to each other's projects. The chair of the Honors Committee will assign the grade for this course.

## ANTHR 4992 Honors Workshop II

Spring. 2 credits. Staff.
Course will consist of weekly, seminar-style meetings of all thesis writers until midsemester, under the direction of the honors chair. This second semester concentrates on preparation of a full draft of the thesis by mid-semester, with ample time left for revisions prior to submission. Group meetings will concentrate on collective reviewing of the work of other students, presentation of research, and the like.

## Relevant courses in other departments

MUSIC 1302 Introduction to World Music
II: Asia
Spring 3 credits. M.

Spring. 3 credits. M. Hatch.

MUSIC 1341 Gamelan in Indonesian History and Cultures
Fall and spring. 3 credits. Prerequisite: permission of instructor. M. Hatch.

## BSOC/HD/NS 3470 Human Growth and

 Development: Biological and Behavioral InteractionsSpring. 3 credits. J. Haas and S. Robertson.

## NS 6300 Anthropometric Assessment

 Spring. 1 credit. J. Haas.
## VI. Graduate Seminars

The graduate program in anthropology is described in much greater detail on the anthropology department web page at falcon. arts.cornell.edu/Anthro. The seminars described immediately below pertain to the program in sociocultural anthropology. For information about graduate study in archaeology and biological anthropology, see the anthropology department web page.
A core set of seminars is required of all graduate students in sociocultural
anthropology: ANTHR 6000 and 6010. ANTHR 6403 is strongly recommended. These courses are open to graduate students from other related fields. This sequence, and the graduate curriculum in general, is premised on the idea that anthropology is best defined as the comparative study of human social life. This definition resists institutional pressures in the academy to distinguish social science from humanistic or cultural studies and scholarly from more worldly applications. Our most important method, ethnography, is at once scientific and humanistic; disciplinary aspirations refuse to view cultural interpretation and analytic explanation as separable values. Furthermore, theory in anthropology is directly related to practice in the world whether in relation to research or more action-oriented pursuits. Consequently, the core sequences as well as most other courses for graduate students are oriented explicitly toward subverting an ideological construction of social life as separable into cultural and social (or political-economic) domains.

## ANTHR 6000 Proseminar: Culture and

 SymbolFall. 6 credits. H. Miyazaki.
Focuses on an appreciation of symbolic, expressive, and representational forms and processes both as producers and products of social activities. Through the study of symbolic anthropology, structuralism, exchange, myth and ritual, religion, gender, personhood, linguistics, semiology, etc., the course investigates how identity and meaning are linked to the practical exigencies of social life. While emphasizing aspects of the discipline generally associated with cultural anthropology, the course endeavors to set the stage for a dialectical understanding of social, political, economic, and symbolic activities as interrelated phenomena. The works of de Saussure, LeviStrauss, Dumont, Geertz, Victor Turner, Sahlins, among others, as well as contemporary theories are given careful attention.

## ANTHR 6010 Proseminar: Social

 OrganizationSpring. 6 credits. M. Welker. Focuses on linkages between culture and social institutions, representations, and practices. The nature of these linkages is debated from strongly contesting points of view in social theory (structuralist,
poststructuralist, utilitarian, hermeneutic, Marxist). Unlike debates in critical theory where the form of contestation has been mainly philosophical, in anthropology these issues have developed in ethnographic analyses. The course briefly surveys kinship theory and economic anthropology with a focus on implications for general issues in social theory. Discussion of attempts to develop dialectical syntheses around the motion of "practice" follows. The issues addressed in this section carry over into the next, colonialism and post-colonialism, in which poststructuralist readings of history are counterposed to Marxist ones. Finally, Lacanian and Marxist visions of ideology as they relate to anthropological theory and ethnographic analysis are examined with particular emphasis on the cultural and social production of persons.

ANTHR 6248 Iroquois Archaeology (also ANTHR 3248, ARKEO/AIS 3248/6248)
Fall. 4 credits. K. Jordan.
For description, see ANTHR 3248.

## [ANTHR 6256 Maya History (also ARKEO 6256)

Fall. 4 credits. Next offered 2012-2013.
J. Henderson.]
[ANTHR 6258 Archaeological Analysis (also ANTHR 4258, ARKEO 4258/6258)
Spring. 4 credits. Next offered 2011-2012 J. Henderson.]
[ANTHR 6269 Gender and Age in Archaeology (also ANTHR/ARKEO 3269, ARKEO 6269, FGSS 6700)
Fall. 4 credits. Next offered 2012-2013.
N. Russell.]
[ANTHR 6270 Environmental Archaeology (also ANTHR 3720, ARKEO 3270/6720)
Fall. 4 credits. Next offered 2011-2012. T. Volman.]
[ANTHR 6272 Hunters/Gatherers Past/ Present (also ANTHR 3272, ARKEO 3272/6272)
Fall. 4 credits. Next offered 2011-2012. T. Volman.]

## ANTHR 6403 Ethnographic Field Methods

 (also ANTHR 4403)Fall. 4 credits. V. Santiago-Irizarry.
For description, see ANTHR 4403.

## ANTHR 6420 Ritual and Myth

Spring. 4 credits. D. Holmberg.
This seminar focuses on theories of ritual and myth, engaging first classic formulations as found in Durkheim, Weber, and EvansPritchard, then the contributions to what converged as symbolic anthropology and structuralism including Levi-Strauss, Geertz, and Victor Turner. In the second part of the semester we engage new directions in anthropology of ritual and myth considering psychoanalytic approaches, practice theory, and deconstruction. Everyone in the seminar is expected to write a term paper on a topic of their choice.

## [ANTHR 6421 Gender and Culture (also

 FGSS 6310)Fall. 4 credits. Next offered 2012-2013. K. March.]
[ANTHR 6422 Culture, Politics, and Environment in the Circumpolar North (also ANTHR 3422)
Spring. 4 credits. Next offered 2011-2012. P. Nadasdy.]
[ANTHR 6424 Ethnoracial Identity in Anthropology, Language, and Law (also AMST/LSP 6424, LAW 7231)
Spring. 4 credits. Next offered 2011-2012. V. Santiago-Irizarry.]
[ANTHR 6430 Concepts and Categories in Theory and Practice
Fall. 4 credits. Next offered 2012-2013. P. Nadasdy.]

## ANTHR 6440 Research Design

 Spring. 4 credits. Staff. This seminar focuses on preparing a full-scale proposal for anthropological fieldwork for a dissertation. Topics include identifying appropriate funding sources; defining a researchable problem; selecting and justifying a particular fieldwork site; situating the ethnographic case within appropriate theoretical contexts; selecting and justifying appropriate research methodologies; developing a feasible timetable for field research; ethical considerations and human subjects protection procedures; and preparing appropriate budgets. This is a writing seminar, and students will complete a proposal suitable for submission to a major funding agency in the social sciences.
## [ANTHR 6450 Social Studies of Economics and Finance

Fall. 4 credits. Next offered 2011-2012. H. Miyazaki.]
[ANTHR 6452 Evidence: Ethnography and Historical Method
Fall. 4 credits. Next offered 2012-2013. H. Miyazaki.]

## ANTHR 6460 Language Ideologies and

 PracticesSpring. 4 credits. V. Santiago-Irizarry. Cultural identity and citizenship in the United States have often been organized around linguistic difference and the issues this raises in an English-dominant society. Drawing from anthropological theories on language, this course will look at the place of language as a signifying practice in the United States by focusing on the experience of Latino communities. Topics to be explored include linguistic diversity and change, accommodation and resistance, language maintenance and shift, linguistic ideologies, the production of language hierarchies, and institutional applications of language.

## [ANTHR 6461 Anthropology of

 Organizations (also ANTHR 3461)Spring. 4 credits. D. Greenwood. Next
offered 2012-2013.]
ANTHR 6462 Democratizing Research (also ANTHR 3462)
Fall. 4 credits. D. Greenwood.
For description, see ANTHR 3462.
ANTHR 6465 Anthropology of the Body (also ANTHR 3465)
Fall. 4 credits. S. Langwick.
For description, see ANTHR 3465.

## [ANTHR 6479 Technocracy:

 Anthropological ApproachesSpring. 4 credits. Next offered 2011-2012. A. Riles.]

## [ANTHR 6480 Anthropology and

 Globalization (also ANTHR 4480)Fall. 4 credits. Next offered 2011-2012.
Staff.]
[ANTHR 6482 Perspectives on the Nation Spring. 4 credits. Next offered 2011-2012. V. Munasinghe.]
[ANTHR 6542 Violence, Symbolic Violence, Terror, and Trauma in South Asia and the Himalayas (also ANTHR 4542)
Fall. 4 credits. Next offered 2011-2012.
D. Holmberg.]
[ANTHR 6543 Chinese Ethnology Fall. 4 credits. Next offered 2012-2013. S. Sangren and M. Fiskesjo.]

ANTHR 6820 Anthropology of Spain: Cultural Politics and Ethnogenesis (also ANTHR 3820)
Spring. 4 credits. D. Greenwood.
For description, see ANTHR 3820
ANTHR 7000 Development of Anthropological Thought (also ANTHR 4000)
Fall. 4 credits. J. Fajans
For description, see ANTHR 4000.
[ANTHR 7262 Catalhoyuk and Archaeological Practice (also ANTHR 4262, ARKEO 4262/7262) Spring. 4 credits. Next offered 2011-2012. N. Russell.]

ANTHR 7268 Myth, History, and Politics: The Aztecs and Their Empire (also ANTHR/ARKEO 4268, ARKEO 7268)
Fall. 4 credits. J. Henderson.
For description, see ANTHR 4268.
[ANTHR 7270 Political Economy in Archaeology (also ANTHR 4270, ARKEO 4270/7270)
Fall. 4 credits. Next offered 2012-2013. K. Jordan.]
[ANTHR 7272 Historical Archaeology of Indigenous Peoples (also AMST 6272, AMST/ARKEO 4272, ARKEO 7272, AIS 4720/7720)
Fall. 4 credits. Next offered 2011-2012.
K. Jordan.]

ANTHR 7410 Indigenous Peoples, Ecological Sciences, and Environmentalism (also ANTHR 4410)

Spring. 4 credits. P. Nadasdy.
For description, see ANTHR 4410
[ANTHR 7419 Anthropology of Corporations (also ANTHR 4419) Spring. 4 credits. Next offered 2011-2012. M. Welker.]

ANTHR 7426 Ideology and Social Production (also ANTHR 4426)
Spring. 4 credits. S. Sangren.
For description, see ANTHR 4426
ANTHR 7429 Anthropology and Psychoanalysis (also ANTHR 4429)
Fall. 4 credits. S. Sangren.
For description, see ANTHR 4429.
ANTHR 7435 Postcolonial Science (also ANTHR 4435)
Spring. 4 credits. S. Langwick.
For description, see ANTHR 4435

## ANTHR 7437 Anthropology of

 Development (also ANTHR 4437)Fall. 4 credits. M. Welker.
For description, see ANTHR 4437.

## ANTHR 7444 God(s) and the Market (also

 ANTHR 4444)Fall. 4 credits. H. Miyazaki.
For description, see ANTHR 4444.

## ANTHR 7520 Southeast Asia: Readings in Special Problems

Fall or spring. Credit TBA. Staff. Independent reading course on topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

## [ANTHR 7523 Making History on the Margins: The China-SE Asia Borderlands (also ANTHR 4523) <br> Fall. 4 credits. Next offered 2012-2013.

M. Fiskesjo.]

## ANTHR 7530 South Asia: Readings in Special Problems

Fall or spring. Credit TBA. Staff. Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

## ANTHR 7545 Peoples and Cultures of the

 Himalayas (also ANTHR 3545)Fall. 4 credits. K. March.
For description, see ANTHR 3545.

## ANTHR 7550 East Asia: Readings in Special Problems

Fall or spring. Credit TBA. Staff. Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

## ANTHR 7910 Independent Study: Grad I

Fall or spring. Credit TBA. Prerequisite: graduate standing. Staff.
Independent reading course in topics not covered in regularly scheduled courses. Students select a topic in consultation with the faculty member who has agreed to supervise the course work.

ANTHR 7920 Independent Study: Grad II
Fall or spring. Credit TBA. Prerequisite: graduate standing. Staff.
For description, see ANTHR 7910.
ANTHR 7930 Independent Study: Grad III
Fall or spring. Credit TBA. Prerequisite:
graduate standing. Staff.
For description, see ANTHR 7910.

ARABIC AND ARAMAIC
See "Department of Near Eastern Studies."

## ARCHAEOLOGY

S. Baugher, director (Landscape Architecture), K. M. Clinton (Classics), A. Alexandridis (History of Art), K. Bowes (Classics), J. E. Coleman (Classics), M. Fiskesjo (Anthropology), F. Gleach (Anthropology), K. L. Gleason (Landscape Architecture), J. S. Henderson (Anthropology), K. Jordan (Anthropology), K.A.R. Kennedy (Ecology and Evolutionary Biology), S. Manning (Classics), R. McNeal (Asian Studies), C. Monroe (Near Eastern Studies), L. Monroe (Near Eastern Studies), D. I. Owen (Near Eastern Studies), A. Ramage (History of Art), E. Rebillard (Classics), N. Russell (Anthropology),
B. S. Strauss (History), M. A. Tomlan (City and Regional Planning), T. P. Volman
(Anthropology), J. R. Zorn (Near Eastern Studies).
Archaeology is an interdisciplinary field at Cornell, which is one of the few universities in the United States to offer a separate archaeology major and a master's degree. Program faculty members, affiliated with several departments, coordinate course offerings and help students identify opportunities for fieldwork, graduate study, and professional positions.

## The Major

Prospective majors must complete ARKEO 1200 or one of the basic courses as defined below before they will be admitted to the major.
Because the major draws on the teaching and research interests of faculty from many departments to present a broad view of the archaeological process, interested students should discuss their course of study with a participating faculty member as early as possible. In some areas of specialization, intensive language training should be coordinated with other studies as early as the freshman year.
Once admitted to the major, students must take at least 32 additional credits from the courses listed below, or from related fields selected in consultation with a major advisor of their choosing. The courses chosen should provide exposure to a broad range of cultures known through archaeology and the methods of uncovering and interpreting them. Sixteen of the credit hours should be at the 3000 level or above. At least two courses must be taken from each of the following categories: II.
Anthropological Archaeology; III. Classical, Near Eastern, and Medieval Archaeology; and IV. Methodology and Technology. Only 4 credits of ARKEO 3000 Individual Study or other supervised study can count toward the major.
Courses basic to the discipline of archaeology are marked with the word "Basic" after the number of credit hours. It is recommended that majors who are planning to pursue graduate studies in archaeology take at least two of the basic courses in each category. Further courses in languages and geology are also recommended.
Honors. Honors in archaeology are awarded on the basis of the quality of an honors essay and the student's overall academic record. Prospective honors students should have at least a 3.5 GPA in the major and a 3.0 grade point average overall. They should consult with the director of undergraduate studies by the beginning of the senior year. The honors essay is normally prepared over two semesters
in consultation with a faculty advisor during the senior year. Students may enroll in ARKEO 4981 Honors Thesis Research, and to complete the thesis, they may enroll in ARKEO 4982 Honors Thesis Write-Up. Both courses are offered in the fall and spring. Only ARKEO 4981 may count toward hours for completion of the archaeology major requirements. The credit hours for these courses are variable.
Fieldwork. Every student should gain some practical experience in archaeological fieldwork on a project authorized by his or her advisor. This requirement may be waived in exceptional circumstances. The Jacob and Hedwig Hirsch bequest provides support for a limited number of students to work at excavations sponsored by Cornell and other approved institutions.

## The Minor

Students in Cornell schools and colleges other than Arts and Sciences may elect a minor in archaeology. To minor in archaeology, the student must complete five courses, all with a grade of C or better. The five courses must consist of either (1) ARKEO 1200 and four other courses from categories II-IV (described above), at least three of which must be basic courses, or (2) five courses from categories IIIV, at least four of which must be basic courses. Minors are encouraged to gain some fieldwork experience. They are eligible for Hirsch Scholarships in support of fieldwork on the same basis as majors.

## First-Year Writing Seminars

For course descriptions, see the First-Year Writing Program brochure.

## I. Introductory Courses and Independent Study Courses

ARKEO 1200 Ancient Peoples and Places (also ANTHR 1200) @ \# (HA-AS)
Spring. 3 credits. Basic. J. Henderson. Broad introduction to archaeology: the study of material remains to answer questions about the human past. Case studies highlight the variability of ancient societies and illustrate the varied methods and interpretive frameworks archaeologists use to reconstruct them. This course can serve as a platform for both archaeology and anthropology undergraduate majors.

## ARKEO 3000 Individual Study in

 Archaeology and Related FieldsFall and spring. Credit TBA. Prerequisite: ARKEO 1200 or permission of instructor. Undergraduate students pursue topics of particular interest under the guidance of a faculty member.

## ARKEO 4981 Honors Thesis Research

Fall or spring. 4 credits, variable.
Prerequisite: admission to honors program. Independent work under the close guidance of a faculty member.

## ARKEO 4982 Honors Thesis Write-Up

Fall or spring. 4 credits, variable.

## ARKEO 6000 Special Topics in Archaeology

Fall and spring. 4 credits, variable. Graduate students pursue advanced topics of particular interest under the guidance of a faculty member(s).

ARKEO 8901-8902 Master's Thesis
8901, fall; 8902, spring. 4 credits, variable.
Prerequisite: master's students in
archaeology. S-U grades only.
Students, working individually with faculty member(s), prepare a master's thesis in archaeology.

## II. Anthropological Archaeology

ARKEO 2015 Archaeology of Empires (also ANTHR 2015) @ \# (HA-AS)
Fall. 3 credits. L. Khatchadourian. For description, see ANTHR 2015.

ARKEO 2200 Early People: The Archaeological and Fossil Record (also ANTHR 2200) \# (HA-AS)
Spring. 3 credits. Basic. T. P. Volman. For description, see ANTHR 2200.
ARKEO 2201 Early Agriculture (also ANTHR 2201) @ \# (HA-AS)
Spring. 3 credits. Basic. N. Russell.
For description, see ANTHR 2201.
ARKEO 2215 Stone Age Art (also ANTHR 2215) \# (CA-AS)

Fall. 3 credits. Basic. T. P. Volman. For description, see ANTHR 2215.

ARKEO 2235 Archaeology of North American Indians (also AIS/AMST 2350, ANTHR 2235) \# (HA-AS)
Spring. 3 credits. Basic. K. Jordan.
For description, see ANTHR 2235.
ARKEO 3217 Stone Age Archaeology (also ANTHR 3217) (HA-AS)
Fall. 4 credits. Basic. T. P. Volman.
For description, see ANTHR 3217.
ARKEO 3230 Humans and Animals (also ANTHR 3230) @ \# (CA-AS)
Spring. 4 credits. N. Russell.
For description, see ANTHR 3230.
[ARKEO 3232 Politics of the Past (also ANTHR 3232) @ \# (HA-AS)
Fall. 4 credits. Next offered 2012-2013. N. Russell.]

ARKEO 3248 Iroquois Archaeology (also AIS 3428/6428, AMST/ANTHR/ARKEO 6248) \# (HA-AS)

Spring. 4 credits. K. Jordan.
For description, see ANTHR 3248.
ARKEO 3255 Ancient Mexico and Central America (also ANTHR 3255, LATA 3550) @ \# (HA-AS)

Fall. 4 credits. Basic. J. Henderson.
For description, see ANTHR 3255.
[ARKEO 3256 Archaeology of the Andes (also ANTHR/LATA 3256) @ \# (HA-AS)
Fall. 4 credits. Basic. Next offered 2012-
2013. J. Henderson.]
[ARKEO 3269 Gender and Age in Archaeology (also ANTHR 3269/6269, FGSS 3700/6700) (SBA-AS)
Fall. 4 credits. Next offered 2012-2013.
N. Russell.]
[ARKEO 3272 Hunters and Gatherers (also ANTHR 3272/6272, ARKEO 6272) @ \# (SBA-AS)

Fall. 4 credits. Next offered 2011-2012. T. Volman.]

ARKEO 3600 Preindustrial Cities and Towns in North America (also LA 3600, CRP 3600)
Spring. 3 credits. S. Baugher.
For description, see LA 3600.
ARKEO 4256 Mesoamerican Religion, Science, and History (also ANTHR 4256) @ \# (CA-AS)

Spring. 4 credits. J. Henderson.
For description, see ANTHR 4256.
[ARKEO 4262 Cataloyuk and Archaeological Practice (also ANTHR 4262, ARKEO/ANTHR 7262) @ \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012. N. Russell.]

ARKEO 4268 Myth, History, and Politics: the Aztecs and their Empire (also ANTHR 4268, ARKEO/ANTHR 7268) @ \# (HA-AS)
Fall. 4 credits. J. Henderson.
For description, see ANTHR 4268.
[ARKEO 4270 Political Economy in Archaeology (also ANTHR 4270, ARKEO/ANTHR 7270) \# (SBA-AS)
Fall. 4 credits. Next offered 2012-2013. K. Jordan.]
[ARKEO 4272 Historical Archaeology of Indigenous Peoples (also AIS 4270/7720, AMST 4272/6272, ANTHR/ ARKEO 4272/7272) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
K. Jordan.]

ARKEO 4294 Seminar in Archaeology: The Archaeology of Human Origins (also ANTHR 4294) (HA-AS)
Spring. 4 credits. T. P. Volman.
For description, see ANTHR 4294.
ARKEO 6248 Iroquois Archaeology (also AIS 3480/6480, AMST 6248, ANTHR 3248/6248, ARKEO 3248)
Fall. 4 credits. K. Jordan.
For description, see ANTHR 3428.
[ARKEO 6256 Maya History (also ANTHR 6256)

Fall. 4 credits. Next offered 2012-2013.
J. Henderson.]
[ARKEO 6269 Gender and Age in Archaeology (also ANTHR 3269/6269, ARKEO 3269, FGSS 3700/6700)
Fall. 4 credits. Next offered 2012-2013. N. Russell.]

ARKEO 7268 Myth, History, and Politics: The Aztecs and their Empire (also ANTHR 7268, ARKEO/ANTHR 4268)
Fall. 4 credits. J. Henderson.
For description, see ANTHR 4268.
[ARKEO 7270 Political Economy in Archaeology (also ANTHR 4270/7270, ARKEO 4270)
Fall. 4 credits. Next offered 2011-2012. K. Jordan.]
[ARKEO 7272 Historical Archaeology of Indigenous Peoples (also AIS 7720, AMST 4272/6272, ANTHR 4272/7272, ARKEO 4272)
Fall. 4 credits. Next offered 2011-2012. K. Jordan.]
III. Classical, Near Eastern, and Medieval Archaeology

ARKEO 2567 Daily Life in Ancient Egypt and Mesopotamia (also NES/JWST 2567) @ \# (CA-AS)

Fall. 4 credits. A. Kleinerman.
For description, see NES 2567.
ARKEO 2650 Ancient Iraq (also NES/ JWST 2650)
Spring. 4 credits. D. Owen.
For description, see NES 2650.
ARKEO 2661 Ships and Seafaring-Intro to Nautical Archaeology (also JWST/ NES 2661) @ \# (HA-AS)
Fall. 3 credits. Basic. C. Monroe.
For description, see NES 2661.
ARKEO 2668 Ancient Egyptian Civilization (also JWST/NES 2668) @ \# (HA-AS)
Spring. 3 credits. Basic. C. Monroe.
For description, see NES 2668.
ARKEO 2677 The Jewish Galilee in Late Antiquity (also CLASS 2637, NES/ JWST/RELST 2677)
Fall. 3 credits. G. Herman.
For description, see NES 2677
ARKEO 2700 Introduction to Art History: The Classical World (also ARTH 2200, CLASS 2700) \# (HA-AS)
Fall. 4 credits. Basic. A. Alexandridis.
For description, see ARTH 2200.
[ARKEO 2728 Art and Archeology of the Ancient Mediterranean World (also ARTH 2227, CLASS 2727) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Manning.]

ARKEO 3505 By the Rivers of Babylon (also NES/JWST/RELST 3505)
Spring. 4 credits. G. Herman.
For description, see NES 3505.
ARKEO 3588 Biblical Archaeology (also NES/JWST/RELST 3588) @ \# (CA-AS)
Spring. 4 credits. L. Monroe.
For description, see NES 3588.
ARKEO 3661 Sumerian Language and
Culture I (also JWST/NES 3661) @ \# (HA-AS)
Fall. 4 credits. D. Owen.
For description, see NES 3661.
[ARKEO 3665 Ancient Iraq II: 2000-331 bce (also NES 3665) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Owen.]
[ARKEO 3666 History and Archaeology of the Ancient Near East (also ARKEO/ JWST/NES 3666/6666) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Owen.

For description, see NES 3666.]
ARKEO 3690 History and Culture of Ur (also NES/JWST 3690)
Fall. 4 credits. D. Owen.
For description, see NES 3690.
[ARKEO 3800 Introduction to the Arts of China (also ARTH 3800) @ \# (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
A. Pan.

For description, see ARTH 3800.]
[ARKEO 4644 Late Bronze Age World of Ugarit (also JWST/NES 4644, CLASS 4744) @ \# (HA-AS)

Spring. 4 credits. Next offered 2011-2012. C. Monroe.]

## [ARKEO 7729 Emergence of Greek

 Civilization (also CLASS 7729)Spring. 4 credits. Next offered 2012-2013.
S. Manning.

For description, see CLASS 7729.]

## LA 5450 The Parks and Fora of Imperial

 RomeSpring. 3 credits. Prerequisites: advanced standing in design field, classics, or history of art, or permission of instructor.
K. Gleason.

## IV. Methodology and Technology

ARKEO 2220 Field Course in Iroquois Archaeology (also ANTHR 2220) \# (SBA-AS)
Summer only. 3 credits. K. Jordan. For description, see ANTHR 2220.

## ARKEO 2610 Urban Archaeology (also

 CRP/LA 2610)Fall. 3 credits. Basic. S. Baugher.
For description, see LA 2610.

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ARKEO 2620 Laboratory in Landscape Archaeology (also LA 2620)
Spring. 3 credits. Basic. S. Baugher.
For description, see LA 2620.
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[ARKEO 2728 Art and Archaeology in the Ancient Mediterranean World (also ARTH 2227, CLASS 2727) \# (HA-AS)
Fall. 4 credits. Basic. Next offered 20112012. S. Manning.]

## ARKEO 3002 Archaeology Underwater

Summer only. 2 credits. Off campus at
Shoals Marine Lab. N. Brady.
This course focuses on the archaeology of the Isles of Shoals within the Gulf of Maine. Students participate in fieldwork, including foreshore study and underwater exploration.

## ARKEO 3003 Island Archaeology

Summer only. 2 credits. Off campus at
Shoals Marine Lab. N. Hamilton.
This course trains students in standardized and innovative methods and technology used in archaeological surveys, excavations, assessments, research, and compliance work. Includes field logistics, scheduling, ethics, and personnel management training.

## ARKEO 3090 Introduction to

 Dendrochronology (also ARTH 3250, CLASS 3750) \# (HA-AS)Fall. 4 credits. Limited to 10 students.
Prerequisite: permission of instructor. Letter
grades only. S. Manning.
For description, see CLASS 3750.
[ARKEO 3270 Environmental Archaeology (also ANTHR 3270/6270, ARKEO 6270) (PBS Supplementary List)
Fall. 4 credits. Next offered 2011-2012.
T. P. Volman.]

ARKEO 4020 Designing Archaeological Exhibits (also ARKEO 6020, LA 4050/6050)
Fall. Variable credit. Letter grades only. S. Baugher.

Students will learn method and theory on museum design and curation. The course also provides hands-on experience in designing and building exhibits for State Parks in the

Finger Lakes. For the outreach component, students will work with staff from State Parks and Friends of the Parks.
[ARKEO 4258 Archaeological Analysis (also ANTHR 4258/6258, ARKEO 6258) (SBA-AS)

Spring. 4 credits. Limited to 15 students. Prerequisite: archaeology course or permission of instructor. Next offered 2011-2012. J. S. Henderson.]
[ARKEO 4260 Field and Analytical Methods in Archaeology (also ANTHR 4260) \# (SBA-AS)
Spring. 4 or 6 credits. Next offered 20112012. K. Jordan.]
[ARKEO 4263 Zooarchaeological Method (also ANTHR 4263) (PBS Supplementary List)
Fall. 5 credits. Next offered 2012-2013. N. Russell.]
[ARKEO 4264 Zooarchaeological Interpretation (also ANTHR 4264) (PBS Supplementary List)
Spring. 4 credits. Prerequisites: ANTHR/ ARKEO 4263; permission of instructor. Next offered 2012-2013. N. Russell.]

## ARKEO 4267 Origins of Agriculture (also

 ANTHR 4267) \# (HA-AS)Spring. 4 credits. N. Russell.
For description, see ANTHR 4267.
[ARKEO 4370 Geophysical Field Methods (also EAS 4370) (PBS)
Fall. 3 credits. Prerequisite: PHYS 2213 or 2208 or permission of instructor. Offered alternate years; next offered 2011-2012.
L. D. Brown.

For description, see EAS 4370.]

## ARKEO 4600 Late Quaternary

 Paleoecology (also EAS 4600) (PBS) Fall. 4 credits. Offered alternate years. M. Goman.For description, see EAS 4600.
ARKEO 6000 Special Topics in Archaeology
Fall and spring. 4 credits. Staff.
ARKEO 6020 Designing Archaeological Exhibits (also ARKEO 4020, LA 4050/6050)
Fall. Variable credit. Letter grades only. S. Baugher.
For description, see ARKEO 4020.

## [ARKEO 6270 Environmental

 Archaeology (also ANTHR 3270/6270, ARKEO 3270)Fall. 4 credits. Next offered 2011-2012. T. P. Volman.]

## [ARKEO 6510 Advanced Fieldwork in

 Historical Archaeology][ARKEO 6520 Advanced Laboratory in Historical Archaeology (also ARKEO 4520)

Spring. 3 credits. S. Baugher.
This is a course for archaeology majors and minors who want to obtain more in-depth skills in laboratory work, identification, and cataloguing of historic period ceramics, glass, and metal. The course will provide the students with skills to undertake laboratory analysis of artifacts. Students will undertake independent research projects on specific artifacts (in lieu of a term paper).]

ARKEO 7742 Research Methods in Archaeology (also CLASS 7742)
Spring. 4 credits. S. Manning.
For description, see CLASS 7742.

## $\overline{\text { V. Relevant Courses at Ithaca College }}$

Contact Sherene Baugher in Landscape
Architecture at sbb8@cornell.edu or the Ithaca College Anthropology Department at 274-1331 for further information or visit their web site at www.ithaca.edu/hs/anthro.
Prehistory of South America. M. Malpass. Every other year.
New World Complex Societies. M. Malpass. Irregular offering.
Archaeological Methods and Techniques. M. Malpass.

Archaeology of Colonial America. S. Stull.
World Prehistory. J. Rossen. Every semester.
North American Prehistory. J. Rossen. Every year.
People, Plants, and Culture: Archaeobotany and Ethnobotany. J. Rossen. Every other year.
Seminar: Hunter-Gatherers. J. Rossen. Every other year.
Seminar: Origins of Agriculture. J. Rossen.
Every other year.
Ethnoarchaeology. J. Rossen. Every other year.
Archaeological Field School.

## ASIAN STUDIES

R. McNeal, chair ( 350 Rockefeller Hall, 2555095); A. Blackburn, B. Bledsoe, D. Boucher, B. de Bary, S. Divo, W. George, D. Gold,
G. Green, E. Gunn, B. Herath, H. Huang, S. Ichikawa, N. Jagacinski, J. Kanemitsu,
Y. Katagiri, N. Larson, J. M. Law, Y. Lee, Y. LeeMehta, L. McCrea, D. McKee, S. Mukherjee,
S. Oja, J. Pandin, K. Park, L. Paterson, H. Phan, B. Rusk, N. Sakai, T. Savella, S. Singh, M. Song, R. Sukle, M. Suzuki, K. Taylor, Q. Teng, T. Tranviet, S. Tun, D. X. Warner, L. Zheng; Emeritus: K. Brazell, T. L. Mei, J. Wolff; Associated Faculty: A. Carlson, J. Chen, Z. Chen, S. Cochran, A. Cohn, M. Fiskesjo, M. Hatch, R. Herring, T. J. Hinrichs, K. Hirano, D. Holmberg, M. Katzenstein, V. Koschmann, T. Loos, T. Lyons, K. March, S. Martin,
K. McGowan, H. Miyazaki, S. Mohanty,
V. Munasinghe, V. Nee, A. Nussbaum, A. Pan, P. Sangren, J. Siegel, E. Tagliacozzo, N. Uphoff, J. Whitman, A. Willford

The Department of Asian Studies and associated faculty members in other departments encompass the study of East Asia, South Asia, and Southeast Asia and offer courses in most of the disciplines of the social sciences and the humanities. Over 40 faculty members specialize in topics arranged under our rubrics of "Literature and Linguistics," "Religion," and "Society and Culture," as well as offering more broad courses under our "General Education" heading. Asian Studies courses through the 4400 level (ASIAN is the prefix) are taught in English and are open to all students in the university. Some of these courses may be counted toward majors in other departments; others fulfill various distribution requirements.

## The Major

To become an Asian Studies major, applicants must first successfully receive a minimum grade of B in at least two Asia content courses. These may include one language course, but writing seminars do not fulfill the requirement. Applications to major in Asian Studies must be approved by the director of undergraduate studies.
Completion of the major requires 30 credits at the 2200 level and beyond with a minimum grade of $B$ (S-U grades not accepted), including:

- one course at the 3300 level
- one course at the 4400 level
- a maximum of 6 credits of language study beyond those required for proficiency may be used
- at least one course from two of the Asian Studies course categories (RL, SC, LL)
- demonstration of two-year proficiency in an Asian language:
- testing into and completing the second semester of the second year of that language
- obtaining a two-year proficiency test result
- testing into a language course beyond the 2200 level
Certain courses about Asia offered in other departments at the 1100 level may fulfill requirements with approvals from the major advisor and director of undergraduate study, e.g., HIST/ASIAN 1191, 1192.

Category Key: Courses in Asian Studies are broken into different categories. To determine which category a course falls in, please note the reference at the end of each course description. The key is as follows: $\mathrm{GE}=$ General Education, LL = Literature and Linguistics, RL $=$ Religion, and $\mathrm{SC}=$ Society and Culture.

## Honors

To be eligible for honors in Asian Studies, a student must have a cumulative GPA of 3.7 in all Asian Studies area courses and must successfully complete an honors essay during the senior year. Students who wish to be considered for honors should apply to the director of undergraduate studies during the second semester of their junior year. The application must include an outline of the proposed project and the endorsement of a supervisor chosen from the Asian Studies advising faculty. During the first term of the senior year, the student does research for the essay in conjunction with an appropriate Asian Studies course or ASIAN 4401. By the end of the first term, the student must present a detailed outline of the honors essay and have it approved by the project supervisor and the director of undergraduate studies. The student is then eligible for ASIAN 4402, the honors course, which entails the writing of the essay. At the end of the senior year, the student has an oral examination (with at least two faculty members) covering both the honors essay and the student's area of concentration.

## Minor in East Asia Studies

A candidate for the bachelor of arts or science degree at Cornell may take a minor in East

Asian studies by completing at least 18 units of course work in East Asian studies.
Students normally take five courses in East Asian Studies from those East Asian courses listed (China, Japan, Korea) either under Asian Studies or Asian-related courses taught outside of the Asian Studies department. Of these, nonlanguage courses should be selected at the 2200 level or above. Two courses in an East Asian language at the 1100 level or above may be counted toward the minor. Language study is strongly encouraged. East Asian graduate courses may also be taken for the minor, as well as East Asia-related courses with a research paper on an East Asian topic. Appropriate courses taken through Cornell Abroad in East Asia may also be counted toward the minor. A minimum grade of $B$ must be received for all courses counted toward the minor. S-U courses are ineligible. Students minoring in East Asian studies should select an advisor from the East Asia Program faculty for consultation on their course of study. For more information, contact the Department of Asian Studies, 350 Rockefeller Hall, 255-5095, or lrc.cornell.edu/asian.

## Minor in South Asia Studies

A candidate for the bachelor of arts or science degree at Cornell may achieve a minor in South Asia studies by completing at least 18 units of course work (typically five courses) in South Asian studies. A recommended plan would include ASIAN 2215 and four additional courses. These courses are selected from South Asia courses listed under the Department of Asian Studies, or from other Asia-related courses offered by other departments. Of these, nonlanguage courses should be selected at the 2200 level or above. Two courses in an South Asian language at the 1100 level or above may be counted toward the minor. Language study is strongly encouraged. Appropriate South Asia graduate course work may be included in the minor with consent of the instructor and the advisor. One South Asia-related course with a research paper on a South Asia subject may be included with the consent of the advisor and the director of undergraduate studies. A minimum grade of $B$ must be received for all courses toward the minor. S-U courses are ineligible. Students minoring in South Asian studies are considered members of the South Asia Program and will have an advisor from the program faculty. (This advisor will supervise a student's minor and does not substitute for a student's major advisor.) For more information, contact the Department of Asian Studies, 350 Rockefeller Hall, 255-5095, or lrc.cornell.edu/asian.

## Minor in Southeast Asia Studies

A candidate for the bachelor of arts or science degree at Cornell may take a minor in Southeast Asian studies by completing 18 units of course work, including a history course and three courses or seminars at the intermediate or advanced level. Up to two Southeast Asian language courses at the 1100 level or above may be included in the minor courses. A recommended plan would include ASIAN 2208 and four additional courses. A minimum grade of B must be received for all courses counted toward the minor. S-U courses are ineligible. Students taking a minor in Southeast Asian studies are members of the Southeast Asia Program and will have an advisor from the Southeast Asia program
faculty. Such students are encouraged to commence work on a Southeast Asian language either at the 10 -week intensive courses offered by the Southeast Asia Studies Summer Institute (SEASSI) or by studying for a semester at IKIP Malang, Indonesia; Khon Kaen University, Thailand; or Hanoi University, Vietnam. Fellowships are available for undergraduates through the Cornell Abroad Program. For more information, contact the Department of Asian Studies, 350 Rockefeller Hall, 255-5095, or lrc.cornell.edu/asian.

## Intensive Language Program (FALCON)

The FALCON Program offers intensive instruction in either Japanese or Mandarin Chinese. Aside from the exclusive language schools of some government agencies, FALCON is the only program in the world that offers a full year of intensive instruction beginning at the elementary level and continuing through the advanced level. FALCON is a full-time program; the degree of intensity does not allow students to enroll simultaneously in other courses or to work, except perhaps on weekends. Students typically take the entire sequence of 1160 , 2260 , and 3360 , but they may take any portion of the program if they have the necessary background as determined by a placement interview. Some students do choose to apply only to the summer portion. The spring semester of the Chinese program will be offered in Beijing at the School of International Studies at Peking University. Students must formally apply to the program. To guarantee course availability and scholarship eligibility, applications must be received by March 1. After that, applicants are reviewed on a rolling basis and acceptance is contingent on the availability of spaces. The 1160-2260-3360 sequence fulfills the language requirement for the M.A. in Asian Studies and the joint M.B.A./ M.A. in Asian Studies. Applications are available in 388 Rockefeller Hall or on the FALCON web site at lrc.cornell.edu/falcon/apply.

## Study Abroad

There are many strong options for study abroad in Asia. Cornell Abroad helps students plan a year or semester abroad as part of their Cornell undergraduate degree. Cornell has affiliations with several programs and institutions in Asia and sends students to those and others.
Cornell is affiliated with IUP, the InterUniversity Program for Chinese Language Studies in Beijing (at Tsinghua University) and is a member of CIEE and IES, organizations sponsoring study abroad programs offering Chinese language instruction at several levels as well as courses in Chinese studies in the humanities and social sciences. Students may also study at other programs in China, Hong Kong, and Taiwan. The Chinese FALCON program includes a spring semester in Beijing at Peking University.
Cornell is a member of the consortium of the Kyoto Center for Japanese Studies, an undergraduate semester or year program in Japanese language and Japanese studies. An agreement with International Christian University (ICU), outside Tokyo, permits Cornell students to attend that institution. Cornell students have attended CIEE and IES programs as well as other programs and institutions in Japan.

Cornell is a member of the American Association of Indian Studies, which offers fellowships for intensive study in India or Hindi, Bengali, and Tamil. There are study abroad options in universities or other organizations in various regions of India. In cooperation with Tribhuvan National University of Nepal, Cornell organizes the Cornell-Nepal Study Program for undergraduate and graduate students wishing to spend a semester or year studying and conducting research in Nepal.

Students may spend a semester or year in Mongolia, Korea, Vietnam, Indonesia,
Thailand, Singapore, or the Philippines or choose to study about Asia at such institutions as the School of Oriental and African Studies in London or the Faculty of Asian Studies at the Australian National University. Undergraduates should consult Cornell Abroad; graduate students should inquire at the East Asia Program, Southeast Asia Program, or South Asia Program offices. Students may apply up to 15 credits from abroad to the major.

## First-Year Writing Seminars

See John S. Knight Institute brochure for times, instructor, and descriptions.

## Asia-General Education Courses

## ASIAN 1190 East Asia to 1800 (also HIST 1900) @ \# (HA-AS)

Spring. 4 credits. K. Hirano and
T. J. Hinrichs.

For description, see HIST 1900. (GE)

## ASIAN 1191 Introduction to Modern

 Asian History (also CAPS/HIST 1910) @ (HA-AS)Fall. 4 credits. D. Ghosh and S. Cochran. For description, see HIST 1910. (GE)

## [ASIAN 1192 Introduction to World Music

 II: Asia (also MUSIC 1302) @ (CA-AS)Fall. 3 credits. Next offered 2011-2012.
M. Hatch.

For description, see MUSIC 1302. (GE)]

## ASIAN 2208 Introduction to Southeast

 Asia @ (CA-AS)Fall. 3 credits. L. Paterson.
For anyone curious about the most diverse part of Asia; defines Southeast Asia both as the nation-states that have emerged since 1945 (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam) and as a larger cultural world extending from southern China to Madagascar and Polynesia. Students find a serious, organized introduction to a variety of disciplinary and topical approaches to this region, including geography, linguistics, history, religion and ideology, anthropology, marriage and family systems, music, literacy and literature, art and architecture, agriculture, industrialization and urbanization, politics and government, warfare and diplomacy, ecological and human degradation, and business and marketing. The course teaches both basic information and different ways of interpreting that information. (GE)

## ASIAN 2209 Script and Culture in East Asia (also ARTH 2801, HIST 2891) @ \# (LA-AS)

Fall. 3 credits. B. Rusk.
Introduction to the history and cultures of writing systems in East Asia, from the invention of writing to text messaging. (GE)

## ASIAN 2211 Introduction to Japan @ \#

 (CA-AS)Fall; may be offered during winter session. 3 credits. J. M. Law.
This course surveys major disciplinary approaches in the social sciences and humanities to the study of Japan by focusing on different historical formulations of Japanese native and national identity: Japan the sacred nation, Japan the aesthetic, Japan the warrior nation, Japan the peaceful (victim) nation, Japan the industrious economic superpower and Japan the hyper-modern. We introduce Japanese performance traditions, read fiction, poetry and plays, see classical films and recent anime, and study historical cases relating to each of these formulations. (GE)

## ASIAN 2212 Introduction to China @ \#

 (CA-AS)Spring. 3 credits. B. Rusk.
Interdisciplinary introduction to Chinese culture especially designed for students not majoring in Asian Studies. Explores literature, history, religion, art and archaeology, and other aspects of China's rich and diverse heritage, from earliest times to the present. (GE)

## [ASIAN 2215 Introduction to South Asia

 @ (HA-AS)Fall. 3 credits. Next offered 2011-2012. L. McCrea. (GE)]

## ASIAN 2218 Introduction to Korea @

## (CA-AS)

Fall. 3 credits. Y. Lee.
Multidisciplinary introduction to Korean history, society, and culture. The first part of the course will examine sources of Korean tradition in their historical contexts. The second part, on the transition to a modern society, will cover the mid-19th century to the Korean War. The last part will be devoted to contemporary society. (GE)

## ASIAN 2244 Asia in World History @ \#

 (HA-AS)Fall. 3 credits. K. Taylor.
This course presents Asia in the context of world history. It will introduce students to how Asian religions, ideologies, societies, economies, and political systems have developed from prehistoric times to the present as a part of the larger human experience on earth. It will show the distinctive characteristics of, and the interconnectedness among, the various regions of Asia: East Asia, Southeast Asia, Central Asia, South Asia, and West Asia. (GE)

## ASIAN 2250 Introduction to Asian

 Religions (also RELST 2250) @ \# (HA-AS)Spring. 3 credits. D. Boucher.
Explores religious traditions in South Asia (Pakistan, India, and Sri Lanka) and East Asia (China and Japan) including Hinduism, Buddhism (South Asian and East Asian), Sikhism, Confucianism, Daoism, and Shinto. Encounters a wide range of religious expressions as well, including myth, ritual, pilgrimage, mysticism, meditation, and other spiritual technologies. (GE)

## Asia-Literature and Linguistics Courses

The following courses are taught entirely in English and are open to any Cornell student.

## ASIAN 2261 Cinema and Anime in Japan

 @ (LA-AS)Fall. 3 credits. B. de Bary.
An introduction to Japanese film that traces its evolution from the early 20th century. We will consider topics such as the impact on film of kabuki, shimpa, and shingeki theatrical traditions; the relation of politics and melodrama in early film; surrealism and silent film; social realist films of the early 1930s; film and national imperialism; war films and the emergence of anime; postwar humanism; New Wave cinema; the anti-Ampo movement in documentary and New Wave films. A final section of the course will deal with the extent to which anime builds on or diverges from established film traditions, and the abundant new literature addresses the social and aesthetic significance of anime. (LL)

## ASIAN 2270 Love, War, and the

Supernatural in Pre-Modern Japan @ \# (LA-AS)
Fall. 3 credits. J. Kanemitsu.
In this course, students will meet some of the most memorable characters depicted in Japanese literature, from the 8th through 18th centuries. In addition to each work's historical and cultural contexts, we will consider its literary conventions and think about how genres have been defined. A survey of representative works in Japan's literary history, this course examines changing representations of idealized male and female protagonists as they pursue desire, conquest, and occasionally both. (LL)

## ASIAN 2271 China's Literary Heritage:

 An Introduction in Translation @ \# (LA-AS)Fall. 3 credits. D. X. Warner.
This is a survey course designed for, though not limited to, nonmajors with or without any knowledge of Chinese language, history, or culture. Students read a broad selection in translation of poems, prose, and narrative writings from the pre-modern period on a variety of themes. (LL)

## ASIAN 2279 Chinese Mythology @ \#

 (LA-AS)Summer. 3 credits. R. McNeal. Students will study Chinese myths from the earliest times down to the late imperial era. Focus will be on understanding the form Chinese myths take, how they are related to religion, literature, historical accounts and intellectual trends. (LL)
[ASIAN 3318 Literature and Media in Japan (also COML 3150, VISST 3318) @ (CA-AS)
Spring. 3 credits. Next offered 2011-2012. B. de Bary.

Dissolving the conventional distinction between literary studies and media studies, the course will first consider the formation of a modern national literature within the environment of rapidly transforming media in late 19th-century Japan. The primary focus, however, will be on dynamic relays and reciprocal influences among contemporary novels, films, anime, comics, video games, and digital arts. The course will use materials with translations or subtitles in English. (LL)]

## [ASIAN 3365 Traditional Japanese

Theatre (also ASIAN 6665)
Spring. 4 credits. Next offered 2011-2012.
J. Kanemitsu. (LL)]

ASIAN 3370 Global Martial Arts, Film, and Literature (also COML/FILM 3701) @ (LA-AS)

Fall. 4 credits. P. Liu
For description, see COML 3701. (LL)

## ASIAN 3373 20th-Century Chinese Literature @ (LA-AS)

Fall. 4 credits. E. Gunn.
A survey of the principal works in English translation, the course introduces fiction, drama, essays, and poetry of China beginning with the Republican era and continuing up to the present in the People's Republic and Taiwan, with attention to social and political issues and literary theory. (LL)

## ASIAN 3374 Chinese Narrative Literature @ \# (LA-AS)

Spring. 4 credits. E. Gunn.
Selected works in classical Chinese fiction are read in translation. Major novels, such as The Dream of the Red Chamber and Water Margin, are emphasized. (LL)

## ASIAN 3379 Southeast Asian Literature

 in Translation (also ASIAN 6679) @ (LA-AS)Spring. 4 credits. L. Paterson.
This course is an introduction to modern Southeast Asian literature in translation, concentrating on contemporary short stories and novels from the mainland. The course will explore the literature thematically with reference to such issues as modernization, decolonization, changing gender roles and relationships, and the urban-rural dichotomy (LL)
[ASIAN 3380 Vietnamese Literature in Translation (also ASIAN 6680) @ \# (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
L. Paterson. (LL)]
[ASIAN 3387 Literature and Film of South Asia (also COML 3860, VISST 3870) @ (LA-AS)

Spring. 4 credits. Next offered 2011-2012. A. Banerjee. (LL)]
[ASIAN 3389 Partition/Fiction and Film (also COML 3850) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
A. Banerjee. (LL)]
[ASIAN 4411 History of the Japanese Language (also LING 4411, JAPAN 4410) @ \# (HA-AS)

Fall. 4 credits. Next offered 2011-2012.
J. Whitman.

For description, see LING 4411. (LL)]
[ASIAN 4412 Linguistic Structure of Japanese (also LING 4412) (KCM-AS)
Spring. 4 credits. Next offered 2011-2012.
J. Whitman.

For description, see LING 4412. (LL)]
ASIAN 4424 Asia Memoirs: Trauma and Social Upheaval in East and Southeast Asia (also ASIAN 6627) © (CA-AS)
Fall. 4 credits. L. Paterson.
From the Chinese Cultural Revolution to Khmer Rouge Cambodia, social upheaval in Asia has given rise to a genre of trauma memoir. In this course we will discuss how periods of societal terror are represented and remembered within these personal narratives. Through reading such accounts in conjunction with secondary scholarship, we will examine various issues of representation such as intended audience, construction of memory, and framing of individual experience. We will
also examine to what extent these accounts contribute to, or contradict, national narratives of the respective countries. (LL)
[ASIAN 4430 Structure of Korean (also LING/KOREA 4430) (KCM-AS)
Spring. 4 credits. Next offered 2011-2012. J. Whitman.

For description, see LING 4430. (LL)]
[ASIAN 4437 Research Methods in PreModern China (also ASIAN 6611) @ \# (LA-AS)
Fall. 4 credits. Next offered 2011-2012. B. Rusk. (LL)]

ASIAN 4446 Classical Indian Poetry and Comparative Poetics (also SHUM 4846)

Fall. 4 credits. L. McCrea.
For description, see SHUM 4846. (LL)
[ASIAN 4481 Translation and Cultural Difference (also COML 4700) @ (KCM-AS)
Spring. 4 credits. Next offered 2011-2012. N. Sakai. (LL)]

## ASIAN 5505 Methodology of Asian

Language Learning and Teaching
Spring. 2 credits. Limited enrollment.
Priority given to graduate students in Asian Studies and Linguistics. R. Sukle
This is a course for anyone interested in the pedagogy of Asian languages; required for graduate students seeking appointment as teaching assistants and those seeking as continuing appointments as teaching associates in the Department of Asian Studies for Chinese, Hindi and Urdu, Japanese, and Korean. The course presents theories of language teaching and learning, provides classroom observation and practice teaching, and outlines the basics of phonology, morphology, grammar, sociolinguistics, pragmatics, and discourse structure and other features of language use. (LL)

## Asia-Religion Courses

[ASIAN 2277 Meditation in Indian Culture (also RELST 2277) @ \# (CA-AS)
Spring. 3 credits. Next offered 2011-2012. D. Gold. (RL)]

ASIAN 2299 Buddhism (also RELST 2299) @ \# (CA-AS)
Fall. 3 credits. D. Boucher.
This course will explore the Buddhist tradition from its origins in ancient India to its migrations throughout Asia and eventually to the West. The first part of the course will deal with Indian Buddhism: the Buddha, the principal teachings and practices of his early followers, and new developments in spiritual orientation. We will then turn to the transmission of Buddhism to Sri Lanka and Southeast Asia, where at least one of the early schools has been preserved. Next we will look at Mahayana Buddhism as it moves north and east, encompassing China, Japan, and Tibet. While much of the course will be devoted to developments in traditional times, we will also look at some of the ways Buddhist cultures have responded to modernity. (RL)

## ASIAN 3309 Temple in the World:

Buddhism in Contemporary South
and Southeast Asia (also RELST 3309) @ (CA-AS)

Spring. 3 credits. A. Blackburn Buddhism is often thought of as a meditative and philosophical tradition, remote from the concerns and pleasures of everyday life,
practical ethics, and politics. This course explores the unfolding of Buddhist life in contemporary South and Southeast Asia, in locations such as Burma, Thailand, India, Sri Lanka, Malaysia, and Cambodia. We will see how the practices of meditation and philosophical reflection enter the lives of Buddhists, along with other expressions of devotion, aesthetic fascination, political action, and sociability. Our goal will be to recognize the sensual, emotional, and social qualities of Buddhist practice, and the ways in which life unfolds in a Buddhist idiom. (RL)

## ASIAN 3310 Heavens, Hells, and

 Purgatories: Buddhist and Christian Notions of the Afterlife (also RELST 3310) @ \# (CA-AS)Fall. 4 credits. D. Boucher.
Buddhists and Christians have envisioned and prepared for the afterlife. We will focus on ways different communities within these traditions have described states of supreme bliss, have warned followers of the perils of perdition, and have guided them through states in between. We will be particularly interested in how the promise and threat of these post-mortem states offer insight into forms of social and political coercion via religious sanction. (RL)

## [ASIAN 3344 Introduction to Indian

 Philosophy \# @ (KCM-AS)Spring. 4 credits. Next offered 2011-2012.
L. McCrea. (RL)]
[ASIAN 3347 Tantric Traditions (also RELST 3347) @ \# (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Gold. (RL)]
[ASIAN 3351 Indian Religious Worlds (also RELST 3351) @ (CA-AS)
Spring. 4 credits. Next offered 2012-2013. D. Gold. (RL)]

## [ASIAN 3355 Japanese Religions (also

 RELST 3355) @ (CA-AS)Spring. 4 credits. Next offered 2011-2012. J. M. Law. (RL)]
[ASIAN 3359 Japanese Buddhism: Texts in Context (also RELST 3359) @ \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. J. M. Law. (RL)]
[ASIAN 4405 Zen Buddhism: Experience and Ideology (also RELST 4405) @ \# (CA-AS)
Spring. 4 credits. Next offered 2011-2012. J. M. Law. (RL)]
[ASIAN 4438 Monks, Texts, and Relics: Transnational Buddhism in South and Southeast Asia (also ASIAN 6638, RELST 4438/6638) (CA-AS)
Spring. 4 credits. Next offered 2011-2012. A. Blackburn. (RL)]

ASIAN 4444 Ritual Puppetry in a Global Context (also RELST/THETR 4444, DANCE 4377) @ \# (CA-AS)
Fall. 4 credits. J. M. Law. (RL)
Following a review of critical literature in puppetry studies as it relates to ritual and a discussion of the ritual uses of human body effigies and puppets in other cultural contexts, this course surveys the major traditions of ritual puppetry in Japan, including the uses of puppets and effigies in appeasement rites developed at the Usa shrine and spread throughout the Inland Sea from the seventh century, the use of hitogata as human substitutes, shamanistic uses of puppets in the

Tohoku region of Japan by blind shamanesses, the use of infant body substitutes, and the practice of epidemic spirit appeasement using puppets. This course will focus on discerning the patterns of the ritual decision to use a human body substitute, a puppet or effigy, to broaden our understanding of the ritual and theatrical power of puppets. Students will be asked to pursue a research topic and write short responses to cases and readings throughout the term. (RL)

## ASIAN 4449 History and Methods of the

 Academic Study of Religion (also RELST 4449) \# (KCM-AS)Spring. 4 credits. Prerequisite: two courses in religious studies major or permission of instructor. D. Boucher.
Provides advanced students in religious studies or the humanities familiarity with important methodological issues in the academic study of religion. (RL)
[ASIAN 4460 Indian Meditation Texts (also RELST 4460) @ \# (KCM-AS) Fall. 4 credits. No knowledge of Indian languages required. Next offered 20122013. D. Gold.

Draws on approaches from literary criticism, anthropology, and religious studies to explore texts that record religious experience. (RL)]
[ASIAN 4462 Religion, Colonialism, and Nationalism in South and Southeast Asia (also ASIAN 6662, RELST 4462) @ (CA-AS)
Fall. 4 credits. Prerequisites: one course in ANTHR, ASIAN, HIST, RELST at 3000 level or above or permission of instructor. Next offered 2011-2012. A. Blackburn. (RL)]
[ASIAN 4489 Religion and Sustainability: Traditionalist Discourses in the 21 st Century (also RELST 4489) @ (CA-AS) Fall. 4 credits. Prerequisite: permission of instructor. Next offered 2012-2013.
J. M. Law. (RL)]

## $\overline{\text { Asia-Society and Culture Courses }}$

ASIAN 2206 The Occidental Tourist: Travel Writing and Orientalism in Southeast Asia (also ASIAN 5507, HIST 2070/5070) @ (CA-AS)
Fall. 4 credits. T. Loos.
For description, see HIST 2070. (SC)

## ASIAN 2210 Pop Culture in China (also HIST 2210) @ (HA-AS)

Fall. 4 credits. T. J. Hinrichs.
For description, see HIST 2210. (SC)

## ASIAN 2225 Literature, Politics, and

 Genocide in Cambodia (also ASIAN 4422) @ (CA-AS)Summer. 3 credits. G. Chigas.
This course will examine various literary, historical, and political responses to the Cambodian genocide, particularly literary testimony by survivors and governmental efforts to bring the perpetrators to justice. The course considers the limited effectiveness of these responses for addressing the causes and effects of genocide despite the vow of "never again." To pursue these questions, students will read selections from novels and poetry written by Cambodian survivors, along with historical accounts of the genocide and analysis attempts by the Cambodian government and the international community to bring the perpetrators to justice. (SC)

ASIAN 2228 Indian Ocean World (also HIST 2280) @ \# (HA-AS)
Fall. 4 credits. Limited to 15 students. E. Tagliacozzo.

For description, see HIST 2280. (SC)
[ASIAN 2238 Families in China Since the 17th Century (also HIST 2380) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012. S. Cochran. (SC)]

## ASIAN 2245 Gamelan in Indonesian

 History and Cultures (also MUSIC 1341, VISST 2744) @ (LA-AS)Fall or spring. 3 credits. Prerequisite: permission of instructor. C. Miller.
For description, see MUSIC 1341. (SC)
ASIAN 2257 China Encounters the World (also CAPS 2570, HIST 2571) @ (HA-AS)
Fall. 3 credits. J. Chen.
For description, see HIST 2571. (SC)
[ASIAN 2259 The Vietnam Wars in Film (CA-AS)
Spring. 3 credits. Next offered 2011-2012. L. Paterson. (SC)]

ASIAN 2260 Popular Culture of Japan @ \# (CA-AS)
Spring. 3 credits. J. Kanemitsu.
Writing-intensive course that examines and analyzes the emergence of and transitions in particular forms of popular culture in Japan. Materials range from the Tokugawa period, Japan's early modern era (1603-1868) to the present. Course focuses on overarching themes: media and information technology; entertainment and gender; fashion; commodified romance; fiction; and television dramas.

## ASIAN 2275 History of Modern South

Asia (also HIST 2750) @ \# (HA-AS)
Spring. 4 credits. D. Ghosh.
For description, see HIST 2750. (SC)
[ASIAN 2281 Antiquity and Modernity in Contemporary China (also CAPS 2281) @ \# (CA-AS)

Spring. 3 credits. Next offered 2012-2013.
R. McNeal (SC)]

ASIAN 2283 Introduction to Art History: Approaches to Asian Art (also ARTH 2800)

Spring. 3 credits. K. McGowan.
For description, see ARTH 2800. (SC)
ASIAN 2290 East Asian Martial Arts (also HIST 2960) @ (HA-AS)
Fall. 4 credits. T. J. Hinrichs.
For description, see HIST 2960. (SC)
ASIAN 2292 Europe's Asia: Modern European Discourse on History and Subjectivity (also HIST 2492) (HA-AS)
Spring. 4 credits. J. V. Koschmann.
For description, see HIST 2492 (SC).
[ASIAN 2294 History of China in Modern Times (also HIST 2940) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Cochran. (SC)]
[ASIAN 2295 Power, Culture, and Heterogene in Premodern Japan (also HIST 2981) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. K. Hirano. (SC)]

ASIAN 2296 From Slow Boats to CEOs?: The Chinese of Southeast Asia @ (CA-AS)
Spring. 4 credits. L. Paterson.
From a Thai king's pamphlet on the "Jews of the East," to the 1998 anti-Chinese riots in Indonesia, the ethnic Chinese of Southeast Asia have long been positioned as a privileged and wealthy elite who wield disproportionate power and influence. But what lies behind these stereotypes? Beginning with the history of Chinese migration to Southeast Asia, this interdisciplinary course will examine the changing relationship between China and its Southeast Asian sojourners, as well as Chinese cultural and social impact in the region. Through a series of case studies, the course will interrogate issues of how Chinese ethnicity is constructed within this transnational Chinese Diaspora, and how it impacts contemporary issues in Southeast Asia. Countries emphasized will include the city-state of Singapore, Indonesia, Malaysia, Thailand, Vietnam, and Burma. (SC)

## ASIAN 2298 The U.S.-Vietnam War (also

 HIST 2890) @ (HA-AS)Spring. 4 credits. K. Taylor.
Covers politics and warfare among Vietnamese during the era of direct U.S. involvement (1950-1975). Evaluates the policies of the United States and also of other countries involved in Vietnamese events, particularly the PRC and the USSR. Analyzes how civil war affected Vietnamese society, politics, and culture and also how U.S. intervention affected American society, politics, and culture. (SC)
[ASIAN 3302 Art of War in Ancient China @ \# (HA-AS)
Fall. 4 credits. Next offered 2012-2013.
R. McNeal. (SC)]

ASIAN 3305 Seminar on American Relations with China (also CAPS 3000, HIST 3391) (HA-AS)
Fall. 4 credits. Taught in Washington, D.C. R. Bush.

For description, see CAPS 3000. (SC)
ASIAN 3334 Southeast Asian Politics (also GOVT 3443) @ (HA-AS)
Spring. 4 credits. T. Pepinsky.
For description, see GOVT 3443. (SC)
ASIAN 3335 Japan from War to Prosperity (also HIST 3300) @ (HA-AS)
Fall. 3 credits. J. V. Koschmann.
For description, see HIST 3300. (SC)
ASIAN 3345 Asian Minorities (also ANTHR 3546) @ (CA-AS)
Fall. 4 credits. M. Fiskesjo.
For description, see ANTHR 3546. (SC)
ASIAN 3346 Modern Japanese Politics
(also FGSS/GOVT 3463) @ (SBA-AS)
Spring. 4 credits. S. Martin.
For description, see GOVT 3463. (SC)
ASIAN 3350 The Arts of Southeast Asia (also ARTH 3850, VISST 3696) @ \# (CA-AS)
Spring. 4 credits. K. McGowan.
For description, see ARTH 3850. (SC)
ASIAN 3361 Bakumatsu-ISHIN: Conflicts and Transformation in Early Modern Japan, 1700-1890 (also HIST 3611) @ (HA-AS)
Spring. 4 credits. K. Hirano.
For description, see HIST 3611. (SC)

ASIAN 3381 Introduction to the Arts of Japan (also ARTH 3820) @ \# (LA-AS)
Spring. 4 credits. A. Pan.
For description, see ARTH 3820. (SC)
[ASIAN 3382 Art of South Asia, 1500Present (also ARTH 3611) @ \# (CA-AS)
Spring. 4 credits. Next offered 2011-2012 I. Dadi. (SC)]
[ASIAN 3383 Introduction to the Arts of China (also ARTH 3800) @ \# (LA-AS) Fall. 4 credits. Next offered 2011-2012.
A. Pan.

For description, see ARTH 3800. (SC)]
ASIAN 3385 Vietnamese History @ \# (HA-AS)
Fall. 4 credits. K. Taylor.
Survey of Vietnamese history and culture from earliest times to the present. (SC)
[ASIAN 3386 Southeast Asia Through Film @ (CA-AS)
Spring. 4 credits. Next offered 2011-2012.
L. Paterson. (SC)]

ASIAN 3388 Theorizing Gender and Race in Asian Histories and Literatures (also ASIAN 6688, COML 3980/6680, FGSS 3580/6580) @ (CA-AS)
Fall. 4 credits. N. Sakai. (SC)
For a long time area studies have overlooked the questions of gender, race/ethnicity, and social class in fields related to East Asia and the trans-Pacific regions. Little attention has been paid to how to conceptualize gender and race/ethnicity; how to analyze the mutual implication of sexism, racism, and class essentialism (some call it "class racism"), and how to understand the relationships of these topics to the broader contexts of colonialism, imperialism, and nationalism. This course is designed to offer a series of discussions about the following problems: (1) the historically specific modes of sexism and racism in social spaces related to Japan and other places in the trans-Pacific; (2) the mutual implication of sexism, racism, and social class in various contexts including those of colonialism, imperialism, and nationalism; (3) the roles of gender, race, and social class in the United States' knowledge production about East Asia in general; and (4) the conceptions of gender and race in the social formations particular to East Asia. The assigned readings include both English and Japanese materials. However, those who register in ASIAN 3388 are exempt from reading the materials in Japanese. (SC)

ASIAN 3394 The House and the World: Architecture of Asia (also ARTH 3855, VISST 3655) @\# (HA-AS)
Fall. 4 credits. K. McGowan.
For description, see ARTH 3855. (SC)
ASIAN 3396 Southeast Asian History from the 18th Century (also HIST 3960) @ (HA-AS)

Spring. 4 credits. E. Tagliacozzo and T. Loos.

For description, see HIST 3960. (SC)
ASIAN 3397 Premodern Southeast Asia (also ASIAN 6697, HIST 3950/6950) @ \# (HA-AS)
Fall. 4 credits. E. Tagliacozzo.
For description, see HIST 3950. (SC)
[ASIAN 4409 Archipelago: The Worlds of Indonesia (also ASIAN 6617, HIST 4100/6100) @ (HA-AS)
Spring. 4 credits. Next offered 2012-2013. E. Tagliacozzo. (SC)]

ASIAN 4410 Chinese Film @ (LA-AS)
Fall. 4 credits. E. Gunn.
Additional film viewing hours TBA. The course surveys Chinese films from the 1920s to the present and various responses to them. Films from mainland China, Hong Kong, and Taiwan are included, together with critical studies employing a variety of different critical methods. (SC)
[ASIAN 4413 Religion and Politics in Southeast Asia (also ANTHR 4513) @ (CA-AS)
Fall. 4 credits. Next offered 2012-2013.
A. Willford.

For description, see ANTHR 4513. (SC)]

## ASIAN 4417 Themes and Problems in

 Asian Studies \# (CA-AS)Spring. 4 credits. A. Blackburn. Strongly recommended for Asian Studies majors and prospective majors, this course provides an overview of themes and problems central to work in Asian Studies. We will see how Asian Studies developed as a field of academic inquiry, and explore central themes in the present discipline of Asian Studies. How are Asian traditions invented and transmitted? How do we study the histories of Asian literatures and aesthetics? How have mixed media and technologies shaped Asian worlds from the age of manuscripts and block prints to the digital era? What is the place of ritual and performance in Asian contexts? Is "popular culture" a new phenomenon in Asia? This course is intended for juniors and seniors. Open to first- and second-year students only with permission of instructor. (SC)
ASIAN 4428 Formation of the Field (also HIST 4428) @ (HA-AS)
Spring. 4 credits. Prerequisite: permission of instructor. N. Sakai.
This course will provide both a historical introduction to and critical analysis of the constitution of Japanese Studies as a "field" of postwar academic inquiry. While reading texts particularly influential in the early and contemporary formation of the field, we will consider such questions as the domestic and international contexts in which Japanese studies has been institutionalized and maintained, and the relationship between "Japan" as an object of area studies discourse and "Japan" as represented in American journalism, popular culture, and politics. The course will examine the historical origins of area studies and various critiques conducted about area studies as a model of academic discipline. Possibilities for cross-disciplinary research (along lines recently undertaken in fields such as feminist criticism and cultural studies) will also be explored. (SC)
ASIAN 4435 Theatre and Society: A Comparative Study of Asian Dramatic Cultures (also ASIAN 6632, THETR 4320/6320) @ (CA-AS)
Fall. 4 credits. H. Yan.
For description, see THETR 4320. (SC)
[ASIAN 4436 Topics in Indian Film (also VISST 4436) @ (LA-AS)
Spring. 4 credits. No knowledge of an Indian language required. Next offered 2011-2012. D. Gold.(SC)]
[ASIAN 4456 Dancing the Stone: Body and Memory (also ARTH 4858)
Spring. 4 credits. Next offered 2011-2012. K. McGowan. (SC)]

ASIAN 4465 Cold War Aesthetics in East Asia (also COML 4430) @ (LA-AS)
Spring. 4 credits. P. Liu.
For description, see COML 4430. (SC)
[ASIAN 4469 History of Medicine and Healing in China (also ASIAN 6692, BSOC/HIST/STS 4961, HIST 6961) @ \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012.
T. J. Hinrichs. (SC)]

## ASIAN 4470 Modernity in East Asia @

 (CA-AS)Fall. 4 credits. N. Sakai.
An introduction to the comparative study of social, political, and intellectual modernity in East Asia and the North Atlantic. The course will examine the characteristics of East Asian modernity with much emphasis on the relationship between colonialism and modernity. We will focus on the problems of historical time and language, and read the philosophical and sociological works of the 20th century in order to understand the ways in which cultural activities and the modalities of identification were transformed during the 18th, 19th, and 20th centuries. The questions of the civilizing mission and national subjectivity will play central roles in this course. (SC)
ASIAN 4487 Threads of Consequence (also ARTH 4855)
Spring. 4 credits. K. McGowan.
For description, see ARTH 4855. (SC)
[ASIAN 4490 China's Economy Under Mao and Deng (also ECON/CAPS 4690) @ (SBA-AS)

Spring. 4 credits. Next offered 2011-2012. T. Lyons.

For description, see ECON 4690. (SC)]
ASIAN 4493 Problems in Modern Chinese History (also ASIAN 6693, HIST 4930/6930) @ (HA-AS)
Fall. 4 credits. Prerequisite: ASIAN 2294/ HIST 2940 or permission of instructor. S. Cochran.
For description, see HIST 4930. (SC)
ASIAN 4495 Exotic Scents: CrossCultural Aesthetics of Smell (also SHUM 4952)
Spring. 4 credits. J. McHugh.
For description, see SHUM 4952. (SC)
ASIAN 4497 India: Nation and Nationalism (also HIST 4920) @ (HA-AS)
Spring. 4 credits. D. Ghosh.
For description, see HIST 4920. (SC)
[ASIAN 4499 Problems in Modern Chinese History (also HIST 4990/6940) @ (HA-AS)
Spring. 4 credits. Prerequisite: permission of instructor. Next offered 2011-2012. S. Cochran. (SC)]

## ASIAN 5507 The Occidental Tourist:

 Travel Writing and Orientalism in Southeast Asia (also ASIAN 2206, HIST 2070/5070)Fall. 4 credits. T. Loos.
For description, see HIST 2070. (SC)

ASIAN 5599 East Asian Colloquium (also HIST 6020)
Fall and spring. 2 credits. Graduate
students only. Staff.
For description, see HIST 6020. (SC)

## Asia-Graduate Seminars

For complete descriptions of courses numbered 6000 or above, see www.lrc.cornell. edu/asian.
ASIAN 6602 Southeast Asia Seminar Spring. 4 credits. Staff. (SC)

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ASIAN 6603 Southeast Asia Field Seminar
Spring. 4 credits. Staff. (SC)
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[ASIAN 6604 Southeast Asia Topical Seminar
Spring. 3-4 credits. Next offered 20112012. Staff. (SC)]
[ASIAN 6611 Research Methods in PreModern China (also ASIAN 4437)
Fall. 4 credits. Next offered 2011-2012.
B. Rusk. (LL)]

ASIAN 6612 Japanese Bibliography and Methodology
Fall. 1 credit. Requirement for honors students and M.A. candidates. Prerequisite: permission of instructor. D. McKee. (LL)

ASIAN 6613 South East Asian Bibliography and Methodology
Spring. 1 credit. Recommended: reading knowledge of at least one SE Asian
language or other Asian language and a major European language. G. Green. (LL)
[ASIAN 6615 Histories of Tokugawa Japan (also HIST 6150)
Fall. 4 credits. Next offered 2011-2012. K. Hirano. (SC)]
[ASIAN 6617 Archipelago: The Worlds of Indonesia (also ASIAN 4409, HIST 4100/6617)
Spring. 4 credits. Next offered 2012-2013. E. Tagliacozzo. (SC)]

## ASIAN 6619 Graduate Seminar:

 Translation in Theory (also COML 6160, VISST 6619)Spring. 4 credits. B. de Bary.
The course provides an introduction to various aspects of translation theory, and emphasizes relations between translation theory and trauma theory, post-structuralism, post-colonial theory, and debates on comparative literature, "world literature," and area studies. (LL)
[ASIAN 6626 The 18th Century and the Emergence of Literary Modernity (also COML 6380)
Spring. 4 credits. Next offered 2011-2012. N. Sakai. (LL)]

ASIAN 6627 Asia Memoirs: Trauma and Social Upheaval in East and Southeast Asia (also ASIAN 4424)
Fall. 4 credits. L. Paterson.
For description, see ASIAN 4424. (LL)
[ASIAN 6629 Contemporary Studies of Japan
Spring. 4 credits. Next offered 2011-2012. N. Sakai. (SC)]

ASIAN 6632 Theatre and Society: A Comparative Study of Asian Dramatic Cultures (also ASIAN 4435, THETR 4320/6320)
Fall. 4 credits. H. Yan.
For description, see THETR 4320. (SC)

## ASIAN 6633 Borderwork (also COML

 6335, LATA/LSP/SPANL 6640)Fall. 4 credits. D. Castillo and A. Banerjee. The seminar explores a new model of SouthSouth comparison through a study of borders in Latin America and South Asia. Rather than the traditional vantage point of examining mobility, inclusion, and exclusion between West and East or North and South, we privilege theoretical insights and site-specific texts generated within the two regions and emerging out of their dialogue. Discussions will be organized around topics including indigeneity, gender, labor, and violence, and dates such as $1848,1947,1971$, and $9 / 11$ that decisively affected the concept and function of borders in Latin America and South Asia. (SC)
[ASIAN 6638 Monks, Texts, and Relics: Transnational Buddhism in South and Southeast Asia (also ASIAN 4438, RELST 4438/6638)
Spring. 4 credits. Next offered 2011-2012. A. Blackburn. (RL)]
[ASIAN 6650 Seminar in Asian Religions (also RELST 6650)
Fall. 4 credits. Limited to 10 students. Prerequisite: graduate standing. Next offered 2011-2012. Staff. (RL)]
[ASIAN 6659 Seminar in Vedic Philology (also CLASS 7459, LING 6659)
Fall. 4 credits. Next offered 2011-2012. M. Weiss.

For description, see LING 6659. (LL)]
[ASIAN 6662 Religion, Colonialism, and Nationalism in South and Southeast Asia (also ASIAN/RELST 4462)
Fall. 4 credits. Prerequisites: one course in ANTHR, ASIAN, HIST, RELST at 3000 level or above or permission of instructor. Next offered 2011-2012. A. Blackburn.
For description, see ASIAN 4462. (RL)]
[ASIAN 6665 Traditional Japanese Theatre (also ASIAN 3365)
Spring. 4 credits. Next offered 2011-2012.
J. Kanemitsu. (LL)]

ASIAN 6679 Southeast Asian Literature in Translation (also ASIAN 3379)
Spring. 4 credits. L. Paterson.
For description, see ASIAN 3379. (LL)
[ASIAN 6680 Vietnamese Literature in Translation (also ASIAN 3380)
Fall. 4 credits. Next offered 2011-2012.
L. Paterson. (LL)]
[ASIAN 6681 Intellectual History of Empire (also HIST 6810)
Fall. 4 credits. Next offered 2011-2012.
J. V. Koschmann and N. Sakai. (SC)]

ASIAN 6686 Readings in Japanese Historiography (also HIST 6861)
Fall. 4 credits. K. Hirano.
For description, see HIST 6861. (LL)
ASIAN 6688 Theorizing Gender and Race in Asian Histories and Literature (also ASIAN 3388, COML 3980/6680, FGSS 3580/6580, HIST 3880/6880)
Fall. 4 credits. Prerequisite: reading
knowledge of Japanese. N. Sakai.
For description, see ASIAN 3388. (SC)
[ASIAN 6692 History of Medicine and Healing in China (also ASIAN 4469, BSOC/HIST/STS 4961, HIST 6962)
Spring. 4 credits. Next offered 2011-2012. T. J. Hinrichs. (SC)]

ASIAN 6693 Problems in Modern Chinese History (also ASIAN 4493, HIST 4930/6930)
Fall. 4 credits. S. Cochran.
For description, see HIST 4930. (SC)
[ASIAN 6694 Problems in Modern Chinese History (also ASIAN 4499, HIST 4990/6940)
Spring. 4 credits. Next offered 2011-2012. S. Cochran. (SC)]

ASIAN 6696 Southeast Asian History from the 18th Century (also HIST 6960)

Spring. 4 credits. T. Loos.
For description, see HIST 6960. (SC)
ASIAN 6697 Premodern Southeast Asia
(also ASIAN 3397, HIST 3950/6950)
Fall. 4 credits. E. Tagliacozzo.
For description, see HIST 3950. (SC)
ASIAN 6698 Seminar in Japanese Thought (also HIST 6980)
Spring. 4 credits. Limited to 15 graduate students. Prerequisite: reading knowledge
of Japanese. J. V. Koschmann.
For description, see HIST 6980. (SC)
[ASIAN 7702 Graduate Seminar in East Asian Literature
Spring. 4 credits. Next offered 2011-2012.
B. de Bary. (LL)]

ASIAN 7703-7704 Directed Research 7703, fall or spring; 7704, fall or spring. 1-4 credits. Staff.
[ASIAN 7708 Academic Study of Religion Fall. 4 credits. Prerequisite: graduate standing and permission of instructor. Letter grades only. Next offered 2011-2012 or by demand. J. M. Law.
This course is limited to graduate students with a strong interest in the academic study of religion. (RL)]

## ASIAN 8899 Master's Thesis Research

Fall, spring. 2-4 credits. Staff.
ASIAN 9999 Doctoral Dissertation Research
Fall, spring. 2-4 credits. Staff.

## Asia-Honors and Supervised Reading <br> Courses

## ASIAN 4401 Asian Studies Honors

 CourseFall or spring. 4 credits. Prerequisite: senior standing; admission to honors program.
Staff.
Supervised reading and research on the problem selected for honors work.

## ASIAN 4402 Asian Studies Honors:

 Senior EssayFall or spring. 4 credits. Prerequisite:
admission to honors program. Staff.
The student, under faculty direction, prepares an honors essay.

## ASIAN 4403-4404 Asian Studies

 Supervised ReadingFall, spring, or both. 1-4 credits.
Prerequisite: permission of instructor;
majors and other qualified students.
Intensive reading under the direction of a member of the staff.

## $\overline{\text { Bengali }}$

## BENGL 1121-1122 Elementary Bengali I

 and II1121, fall; 1122, spring. 4 credits each
semester. Prerequisite: for BENGL 1122,
BENGL 1121 or examination. Letter grades only. S. Mukherjee.
For beginners, provides a thorough grounding in conversational, reading, and writing skills.

## BENGL 2201-2202 Intermediate Bengali I

 and II @2201, fall; 2202, spring. 4 credits each semester. BENGL 2201 satisfies Option 1. Prerequisites: for BENGL 2201, BENGL

1122 or examination; for BENGL 2202,
BENGL 2201 or examination. Letter grades only. S. Mukherjee.
Continuing focus on reading, writing and conversational skills, this course is designed to advance students' oral competence and enhance comprehension skills through reading, conversations, and listening.
BENGL 3301-3302 Advanced Bengali I and II @
3301, fall; 3302, spring. 4 credits. BENGL
3301 satisfies Option 1. Prerequisites: for BENGL 3301, BENGL 2202 or permission of instructor; for BENGL 3302,
BENGL 3301 or permission of instructor.
S. Mukherjee.

Continuing instruction in Bengali at the advanced level focusing on conversation, interview and writing skills.

## BENGL 4431-4432 Directed Study

4431, fall; 4432 , spring. $1-4$ credits, variable. Prerequisite: permission of instructor. Letter grades only. S. Mukherjee. Intended for advanced language study.

## Burmese

Note: Contact E. Knuutila in 350 Rockefeller Hall before classes begin for placement or other testing and organizational information.

## BURM 1121-1122 Elementary Burmese I and II

1121, fall; 1122, spring. 4 credits each
semester. Prerequisites: for BURM 1122,
BURM 1121. Letter grades only. Staff.
A thorough grounding is given in all language skills: listening, speaking, reading, and writing.

## [BURM 2201-2202 Intermediate Burmese

 Reading I and II @2201, fall or spring; 2202, fall or spring. 3 credits each semester. BURM 2201 satisfies Option 1. Prerequisites: for BURM 2201, BURM 1122; for BURM 2202,
BURM 2201. Letter grades only. Next
offered 2011-2012. S. Tun.
Continuing instruction in Burmese. For consolidating and extending skills acquired at the elementary level in both spoken and written Burmese, and for strengthening the understanding of literary Burmese.]
[BURM 2203-2204 Intermediate Burmese I and II @
2203, fall or spring; 2204, fall or spring. 3
credits each semester. BURM 2203 satisfies
Option 1. Prerequisites: for BURM 2203,
BURM 2202; for BURM 2204, BURM 2203 or
by examination. Letter grades only. Next
offered 2011-2012. S. Tun.
Continuing instruction in Burmese at the higher intermediate level with a focus on improving oral expression, reading and interpretation of written texts, and further development of listening skills using language learning materials based on authentic audio-video clips.]

## [BURM 3301-3302 Advanced Burmese I and II @

3301, fall or spring; 3302, fall or spring. 3 credits each semester. Prerequisites: for BURM 3301, BURM 2202 or permission of instructor; for BURM 3302, BURM 3301.
BURM 3301 satisfies Option 1. Letter grades only. Next offered 2011-2012. S. Tun.

For further development of listening skills in Burmese with emphasis on enriching vocabulary, strengthening grammatical competence, and understanding various genres and styles of written Burmese, such as articles on current events, anecdotes, short stories, etc.]

## [BURM 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits variable. Prerequisite: permission of instructor. Letter grades only. Next offered 2011-2012. S. Tun.
Intended for advanced language study.]

## $\overline{\text { Cambodian }}$

See "Khmer."

## Chinese

Note: Testing for placement, including those with near-native abilities, takes place in registration week, before classes begin. Time and place will be posted at lrc.cornell.edu/ asian/programs/placement and on the bulletin board outside 350 Rockefeller Hall.
CHIN 1101-1102 Beginning Mandarin I and II
1101, fall; 1102, spring. 6 credits each semester. Limited to 12 students per sec. Prerequisite: for CHIN 1102, grade of C+ or higher in CHIN 1101, or permission of instructor. Students must enroll in lec and one sec. Because of limited sec size, students missing first two class meetings without university excuse are dropped so others may register. No students added after second week of classes. Letter grades only. S. Divo and staff.
For beginners only, providing a thorough grounding in conversational and reading skills. Students with some facility in the spoken language (because Chinese is spoken at home) but who do not read characters should take 1109-1110. Students who read Chinese, but who speak "dialects," such as Cantonese or Amoy, should enroll in CHIN 2215.

## CHIN 1109-1110 Beginning Chinese

 Reading and Writing for Students of Chinese Heritage I and II1109, fall; 1110, spring. 4 credits each semester. Students who complete CHIN 1110 normally continue with CHIN 2209 and 2210. Because of high demand, students missing first two meetings without university excuse are dropped so others may register. Letter grades only. Y. LeeMehta and staff.

Intended primarily for students who speak some Chinese (e.g., at home), but who have had little or no formal training. The focus is on characters, reading comprehension, basic composition, standard grammar, and reading aloud with standard Chinese (Mandarin) pronunciation.
CHIN 1111-1112 Elementary Cantonese I and II
1111, fall; 1112, spring. 4 credits each semester. Prerequisite: for CHIN 1111, none; for CHIN 1112, CHIN 1111 or equivalent. Students with Mandarin background should consult with instructor for enrollment. Letter grades only. H. Huang.

CHIN 1111 is for beginners with no or very limited Chinese/Cantonese language background from heritage or previous formal training. CHIN 1111-1112 gives basic training in oral/aural Cantonese spoken and used in Guangzhou and Hong Kong. CHIN 1112 gives some basic training in reading Cantonese characters besides the training in oral/aural Cantonese. For more details, see lrc.cornell. edu/asian/courses/ch/chin111 and lrc.cornell. edu/asian/courses/ch/chin112.
CHIN 2201-2202 Intermediate Mandarin I and II @
2201, fall or summer; 2202, spring or summer. 4 credits each semester. CHIN 2201 satisfies Option 1. Prerequisites: for CHIN 2201, CHIN 1102 with grade of B- or above or CHIN 1160 with grade of B or above or equivalent as determined through placement exam; for CHIN 2202, CHIN 2201 or equivalent. Letter grades only. Q. Teng and staff.
Continuing instruction in written and spoken Chinese with particular emphasis on consolidating basic conversational skills and improving reading confidence and ability.
CHIN 2209-2210 Intermediate Chinese
Reading and Writing for Students of Chinese Heritage I and II @
2209 , fall; 2210, spring. 4 credits each
semester. CHIN 2209 satisfies Option 1.
Prerequisites: for CHIN 2209, a grade of B in CHIN 1110 or equivalent as determined through placement exam; CHIN 2210,
CHIN 2209. Letter grades only. Staff.
Continuing focus on reading and writing for students with spoken background in standard Chinese; introduction of personal letter writing and other types of composition.

## CHIN 2211-2212 Intermediate Cantonese

 I and II @2211, fall; 2212, spring. 4 credits each semester. CHIN 2211 satisfies Option 1. Prerequisites: for 2211 , CHIN 1112 or equivalent, or elementary conversational skills in Cantonese from heritage or previous formal training in Cantonese; for 2212, CHIN 2211 or equivalent. Mandarin speakers should consult with instructor for enrollment. Letter grades only. H. Huang. Gives comprehensive training in oral and written Cantonese at a higher level than CHIN 1111-1112. Oral training covers conversational Cantonese expression on daily life topics with more vocabulary and more sophisticated sentence structures. Written training includes reading with proper Cantonese pronunciation and writing Cantonese characters. For more details, see lrc.cornell.edu/asian/courses/ch/ chin211 and lrc.cornell.edu/asian/courses/ch/ chin212.

## CHIN 2215 Mandarin for Cantonese

 Speakers @Fall. 4 credits. Satisfies Option 1. Limited to 15 students. Prerequisite: for students who are fluent Cantonese speakers with intermediate literacy skills and above or for students who have completed intermediate Cantonese courses at Cornell. Letter grades only. S. George.
Works on standard Chinese pronunciation and differences in vocabulary and grammar
between Cantonese and Mandarin.

## CHIN 3301-3302 High Intermediate

 Mandarin I and II @3301, fall; 3302, spring. 4 credits each semester. CHIN 3301 satisfies Option 1. Prerequisites: for CHIN 3301, grade of B+ or higher in CHIN 2202, or equivalent as determined through placement exam; for CHIN 3302, CHIN 3301. Letter grades only. Y. Lee-Mehta.

Continuing instruction in spoken Chinese and in various genres and styles of written Chinese.

## CHIN 3309-3310 Business Chinese in Cultural Context I and II (also CHIN 5509/5510) @

3309, fall; 3310, spring. 4 credits each semester. CHIN 3309 satisfies Option 1. Prerequisite: two years of Chinese and permission of instructor only. Letter grades only. Z. Chen.
First part of a two-semester sequence for those who studied Mandarin to advanced level. Will cover first five chapters of the textbook, developed surrounding five real cases. These are multinational companies, successfully operated in China by adapting their strategies to special needs of the Chinese market. By reading, discussing, and performing communicative tasks related to those cases, students will learn how to use Chinese as a "carrier of culture," acquiring a better understanding of China in economic and cultural terms. To expand students' knowledge on various business-related issues, in addition to business case analysis, supplementary reading, writing, and listening exercises as well as clips of TV shows and interviews will also be provided. Highlights are: Listening comprehension of business news reports; translation of business terms and documents; discussion of Chinese business laws, commercial language and word processing. Class will be in Chinese.

## CHIN 3311-3312 Advanced Cantonese I

 and II @3311, fall; 3312, spring. 4 credits each semester. CHIN 3311 satisfies Option 1. Prerequisites: for CHIN 3311, CHIN 2212 or equivalent; CHIN 3312, CHIN 3311 or equivalent. Letter grades only. H. Huang. CHIN 3311 will give comprehensive training in oral and written Cantonese to enable the students to conduct discussions or narrations to express both concrete and abstract ideas on simple academic or special topics about society, culture, or technology. It will also strengthen the skill to read articles and write short essays in Cantonese characters. CHIN 3312 will give comprehensive training in oral and written Cantonese to enable the students to acquire the skills to understand without major difficulties, conduct discussions on common academic topics and public broadcast news, as well as the skills to read articles on public publishings and write essays on academic or special topics in Cantonese characters.

CHIN 3341 High Intermediate Mandarin: CAPS in D.C. @
Fall. 4 credits. Satisfies Option 1. Letter grades only. Staff.
For description, see CHIN 3301.

## CHIN 4406 Readings in Chinese History

 and Business Culture (also CAPS 4406) @Fall. 4 credits. Satisfies Option 1.
Z. Chen.

This course is especially designed for those who are majoring in China and Asian Pacific Studies (CAPS) and have studied Mandarin to the advanced level (or equivalent). The main goal of the course is to continuously enhance the students' Chinese proficiency while, at the same time, preparing them for studying in a Chinese-language learning setting in China. In recent years, along with the rapid growth of Chinese economy, issues on Chinese business and economy became a hot topic. Following this trend, the course is aimed to enhance students' Chinese skills in the business context and promote their understanding of the macro and micro business environment and culture in China. In addition, texts selected from a variety of sources and introducing the history of the most famous historical sites in different places in China will be used as required readings for the course to help students prepare for their travels in China.

## CHIN 4411-4412 Advanced Mandarin I and II @

4411, fall; 4412 , spring. 4 credits each semester. CHIN 4411 satisfies Option 1. Prerequisites: for CHIN 4411, grade of B+ or higher in CHIN 3302, or equivalent as determined through placement exam; for
CHIN 4412, grade of B+ or higher in CHIN 4411 or permission of instructor. Letter grades only. Q. Teng.
Reading, discussion, and composition at advanced levels.

## [CHIN 4425 Special Topics (also CHIN

 6625) @Spring. 4 credits. Satisfies Option 1.
Prerequisite: permission of instructor. Letter grades only. Next offered 2011-2012. Staff.]

CHIN 4426 Reading and Viewing Modern China (also CAPS 4450, CHIN 6626, HIST 4650/6650) @
Spring. 4 credits. Satisfies Option 1.
Prerequisite: permission of instructor. Z. Chen.

For description, see HIST 4650.

## CHIN 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits, variable. Prerequisite: permission of instructor. Staff.
Intended for advanced language study.
CHIN 4441 Advanced Mandarin: CAPS in D.C. @

Fall. 4 credits. Satisfies Option 1. Letter grades only. Staff.
For description, see CHIN 4411.
CHIN 4445 Directed Study: CAPS in D.C. Fall. 1-4 credits. Letter grades only. Staff. For description, see CHIN 4431-4432.
CHIN 4451 Advanced Mandarin: CAPS in Beijing @
Fall. 4 credits. Satisfies Option 1. Letter grades only. Staff.
For description, see CHIN 4411.

CHIN 4455 Directed Study: CAPS in Beijing
Fall. 1-4 credits. Letter grades only. Staff. For description, see CHIN 4431-4432.

## CHIN 4457 High Advanced Mandarin:

 CAPS in Beijing @Fall. 3 credits. Satisfies Option 1. Letter grades only. Staff.
For description, see CHIN 4427.

## CHIN 5509-5510 Business Chinese in Cultural Context I and II (also CHIN 3309-3310)

5509, fall; 5510, spring. 4 credits each
semester. Letter grades only. Z. Chen. For description, see CHIN 3309-3310.

## [CHIN 6625 Special Topics (also CHIN 4425)

Fall. 4 credits. Prerequisite: permission of instructor. Letter grades only. Next offered 2011-2012. Staff.]

## CHIN 6626 Historical Documents on

 Modern China (also CHIN 4426, HIST 4650/6650)Spring. 4 credits. Prerequisite: permission
of instructor. Z. Chen.
For description, see HIST 4650.

## Chinese FALCON (Full-Year Asian Language CONcentration)

For full information, brochures, etc., see the FALCON Program coordinator in 388
Rockefeller Hall or e-mail: falcon@cornell.edu or lrc.cornell.edu/falcon
FALCON is designed to help students develop "copability" in Mandarin Chinese by bringing them to the level where they can make progress on their own even with no further instruction. The full-year program provides over 1,800 hours of language exposurewhich exceeds even the exposure that students living in China typically receive. This allows students to develop levels of fluency, accuracy, and control that are not achieved in other academic settings. By taking the entire full-year sequence, students can complete as much Chinese in one calendar year as they would complete in three or more years of regular study at most academic institutions. The full-year sequence is CHIN 1159 or 1160 (summer), 2260 (fall), and 3360 (spring). Students typically take the entire sequence, but they may take any portion of the program if they have the necessary background as determined by a placement interview. This course sequence also serves to fulfill the language requirement for the M.A. in Asian Studies and the joint M.B.A./M.A. in Asian Studies. For more information and application forms, please contact the FALCON program office. Some students do choose to apply only to the summer portion. The spring semester of the Chinese program will be offered in Beijing at the School of International Studies at Peking University. In the summer and fall, three small interactive classes per day are conducted entirely in Chinese, and one lecture is conducted in both Chinese and English. In the spring semester, all four classes are conducted entirely in Chinese. In the summer and fall, students are also required to spend at least two one-hour sessions per day in the language lab. Additional preparation time in the language lab of up to three hours is necessary in the evenings. The demands of this 16-credit program do not normally permit students to take other courses simultaneously.

Students must formally apply to the program. To guarantee course availability and scholarship eligibility, applications must be received by March 1. After that, applicants are reviewed on a rolling basis and acceptance is contingent on the availability of spaces. Applications are available in 388 Rockefeller Hall or at lrc.cornell.edu/falcon/apply.

## CHIN 1159 Summer Intensive Chinese

 (FALCON)Summer only. 1-7 credits. Prerequisite some previous language study in Chinese; permission of program director. S. Divo and staff.
This course is for students with significant prior background in Chinese who take CHIN 1160 for fewer than 8 credits. Formal application and a placement interview are required.

## CHIN 1160 Introductory Intensive Mandarin (FALCON)

Summer only. 8 credits. Students who complete this course with grade of at least B are normally eligible to enroll in CHIN 2201. S. Divo and staff.

This is a nine-week intensive, 8 -credit course that meets only in the summer, Monday through Friday from 8:30 a.m. to 4:30 p.m., beginning from an absolutely introductory level introducing the spoken and written language. Lectures on linguistics and cultural matters, intensive practice with native speakers, and laboratory work prepare students for an intermediate level of study. This course involves work on all four skills: speaking, listening comprehension, reading, and writing. Students who complete this course with a grade of B or higher are normally eligible to enroll in CHIN 2201, if they choose not to continue to CHIN 2260

## CHIN 2260 Intermediate Intensive Mandarin (FALCON) @

Fall. 16 credits. Satisfies Option 1. Prerequisites: grade of B+ in CHIN 1160 or equivalent with permission of instructor. Students must apply formally to FALCON program; open to all Cornell students and students from other institutions. S. Divo and staff.
Students work on spoken and written Chinese at the intermediate level, developing fluency, accuracy, and control that are not achieved in other academic settings. This is a full-time academic program that meets Monday through Friday from 9:05 a.m. to 4:30 p.m., with 1-3 hours per day of self-directed practice in Cornell's Language Resource Center.

## CHIN 3360 Advanced Intensive Mandarin (FALCON) @

Spring. 16 credits. Satisfies Option 1. Prerequisite: grade of B+ or higher in CHIN 2260 or permission of instructor CHIN 3360 is scheduled to be held in Beijing, People's Republic of China. S. Divo and staff.
After finishing the summer and fall terms at Cornell, students have the language skills to benefit fully from a Chinese linguistic and cultural environment. FALCON's full-year students spend their last semester in Beijing, where they continue to improve their skills and put them to effective use in daily life. In Beijing, students continue to attend four smallgroup classes with FALCON-trained Chinese language teachers; these classes include comprehensive training to develop reading, writing, and speaking proficiency, a course in newspaper reading and translation, as well as a course in advanced listening skills. In
addition, a variety of activities outside the classroom, including field trips and guest lectures, are provided. Spring FALCON is scheduled at the School of International Studies at Peking University.

## Literature in Chinese

## CHLIT 2213-2214 Introduction to

 Classical Chinese @ \# (LA-AS)2213 , fall; 2214, spring. 3 credits each semester. CHLIT 2213-2214 does NOT satisfy Option 1. Prerequisite: for 2213, qualification in Chinese or permission of instructor; for 2214, 2213 or permission of instructor. May be taken concurrently with CHIN 1101-1102, 2201-2202, 3301-3302. Open to students who have studied at least two years of any language that employs Chinese writing system (e.g. Mandarin, Cantonese, Japanese). R. McNeal and B. Rusk.
Two-part introductory course. Students learn the fundamental grammar and vocabulary of classical Chinese by analyzing and translating short passages. (LL)

## CHLIT 3307 Readings in Classical Chinese Literature @ \# (LA-AS)

Spring. 4 credits. Prerequisite: CHLIT 2214
or permission of instructor. D. X. Warner. This course surveys selected texts-primarily in prose-from the ancient and medieval periods. (LL)

## CHLIT 4418 Medieval Chinese Narrative

 Tales @ \# (LA-AS)Spring. 4 credits. Prerequisite: at least three years of Chinese language training and preferably one year classical Chinese.
D. X. Warner.

This course introduces students to medieval Chinese narrative literature. (LL)
[CHLIT 4420 T'ang Poetry: Themes and
Contexts (also CHLIT 6620) @ Contexts (also CHLIT 6620) @ \# (LA-AS)
Spring. 4 credits. Prerequisite: minimum three years of Chinese and/or one year of Classical Chinese or permission of instructor. Next offered 2012-2013. D. X. Warner. (LL)]

## CHLIT 4421-4422 Directed Study

Fall or spring. 2-4 credits each semester.
Prerequisite: permission of instructor. Staff. Students choose a faculty member to oversee this independent study. The student and the faculty member work together to develop course content. (LL)

## [CHLIT 4435 Chinese Buddhist Texts @ \# (LA-AS)

Fall. 4 credits. Prerequisite: one year of classical Chinese or permission of instructor. Open to students in any area of East Asia with an interest in developing skills in Buddhist texts. Next offered 20112012. D. Boucher. (LL)]

## CHLIT 4466 Later Chinese Literary Prose

 (also CHLIT 6666) @ \# (LA-AS)Fall. 4 credits. Prerequisite: CHLIT 2213-
2214 or permission of instructor. B. Rusk This seminar introduces the prose writing styles of the last millennium of Literary Chinese (roughly the years 1000 through 1900) through close reading of a selection of original documents. Students will learn work on skills to enable them to read further texts on their own, including the identification of styles and linguistic registers, use of relevant reference books, punctuation of unpunctuated
documents, and techniques for translation into English. Readings will be mainly in Literary/ Classical Chinese, with additional secondary readings in Modern Chinese and/or English. (LL)

## CHLIT 6603 Seminar in Chinese Fiction and Drama

Spring. 4 credits. Prerequisite: permission of instructor. E. Gunn. (LL)

## [CHLIT 6605 Seminar in Chinese Fiction

 and DramaFall. 4 credits. Prerequisite: permission of instructor. Next offered 2011-2012. E. Gunn. (LL)]
[CHLIT 6610 Chinese Cultural Criticism Spring. 4 credits. Next offered 2011-2012. E. Gunn. (SC)]

CHLIT 6613 Early Chinese Text Studies Fall. 4 credits. Prerequisite: permission of instructor only. R. McNeal.
Students will explore theoretical issues related to methods of textual analysis of early Chinese sources and develop practical experience employing various text critical approaches to reading specific texts. (LL)

## [CHLIT 6620 T'ang Poetry: Themes and

 Contexts (also CHLIT 4420)Fall. 4 credits. Prerequisite: minimum three years of Chinese and/or one year of
Classical Chinese or permission of instructor.
Next offered 2012-2013. D. X. Warner. (LL)]
CHLIT 6621-6622 Advanced Directed Reading: Chinese Historical Syntax
6621, fall; 6622, spring. 2-4 credits.
Prerequisite: permission of instructor. Staff. Students choose a faculty member to oversee this independent study. The student and the faculty member work together to develop class readings. (LL)

## CHLIT 6666 Later Chinese Literary Prose

 (also CHLIT 4466)Fall. 4 credits. B. Rusk.
For description, see CHLIT 4466. (LL)

## Hindi

HINDI 1101-1102 Elementary Hindi I and II
1101, fall; 1102, spring. 6 credits each semester. Students may not receive credit for both HINDI 1101 and 1109. Students may not receive credit for both HINDI 1102 and 1110.
Prerequisite: for HINDI 1102, HINDI 1101 or equivalent. Letter grades only. S. Singh and staff.
This is a course designed for a complete beginner in Hindi. Students are not expected to have any prior knowledge in Hindi before taking this course. In this course, they will learn how to read and write Hindi script and how to speak survival Hindi in different social settings. While reading, writing, and listening are very important components of this course, much emphasis is put on spoken Hindi.

HINDI 1109-1110 Accelerated Hindi I and II
1109 , fall; 1110, spring. 4 credits each semester. Students may not receive credit for both HINDI 1101 and 1109. Students may not receive credit for both HINDI 1102 and 1110.
Prerequisite: for HINDI 1109, background in Hindi or permission of instructor; for HINDI 1110, HINDI 1109 or equivalent. Check with instructor regarding placement. Letter grades only. S. Singh and staff. Accelerated Hindi is a course designed for heritage students. Students develop fluency and accuracy in all four language skills: reading, writing, listening, and speaking. It is a parallel course of HINDI 1101, except it moves faster and the focus is on fluency and accuracy in the target language.

## HINDI 2201-2202 Intermediate Hindi I and II @

2201, fall; 2202, spring. 4 credits each semester. HINDI 2201 satisfies Option 1. Prerequisites: for HINDI 2201, HINDI 1102 or HINDI 1110; for HINDI 2202,
HINDI 2201 or permission of instructor.
Letter grades only. S. Singh and staff.
This is an intermediate-level course in Hindi. Students' competence in all four language areas will become very strong and solid. This course will work on building up their confidence in describing complicated situations and ideas in the target language, reading and writing speed, and clarity in listening comprehension such as news, complicated descriptions, and other media contents.

## HINDI 3301-3302 Advanced Hindi I and II @

3301, fall; 3302, spring. 3 credits each semester. HINDI 3301 satisfies Option

1. Prerequisites: for HINDI 3301, HINDI 2202; for HINDI 3302, HINDI 3301; or permission of instructor. Letter grades only. S. Singh and staff.

Selected readings in modern Hindi literature. Continued work on fluency in speaking Hindi on an advanced level. There will be a combination of different reading materials from literature, journals, newspapers and many social, entertainment, and political magazines in Hindi. Discussions will be based on those readings and articles, hence giving opportunities to express views and opinions in a fluent and effective manner.

## HINDI 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits,
variable. Prerequisite: permission of
instructor. Letter grades only. S. Singh.
Intended for advanced language study.

## Indonesian

INDO 1121-1122 Elementary Indonesian I and II
1121, fall; 1122, spring. 4 credits each
semester. Prerequisite: for INDO 1122,
INDO 1121. Letter grades only. J. Pandin.
Gives a thorough grounding in basic speaking,
listening, and writing skills with an
introduction to reading.

## INDO 2201-2202 Intermediate

 Indonesian I and II @2201, fall; 2202, spring. 3 credits each semester. INDO 2201 satisfies Option 1. Prerequisites: for INDO 2201, INDO 1122 or equivalent; for INDO 2202, INDO 2201 or equivalent. Letter grades only. J. Pandin. Develops all four skills: reading, writing,
speaking, and comprehension.

## INDO 3301-3302 Advanced Indonesian I

 and II @3301, fall; 3302, spring. 3 credits each semester. INDO 3301 satisfies Option 1. Prerequisite: INDO 2206 or equivalent.
Letter grades only. J. Pandin.
Practical language course on an advanced level in which students read selected materials on current issues, write reports, and make oral presentations.

## INDO 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits,
variable. Prerequisite: permission of
instructor. Letter grades only. J. Pandin. Intended for advanced language study.

## Japanese

## JAPAN 1101-1102 Elementary Japanese I and II

1101, fall; 1102, spring. 6 credits each semester. Prerequisite for 1102: JAPAN 1101 or placement by instructor during registration period. Intended for beginners or those who have been placed in the course by examination. Students must enroll in one lec and one sec. Letter grades only. M. Suzuki and staff. Gives a thorough grounding in all four language skills-speaking, listening, reading, and writing-at the beginning level. The lecture provides explanation, analysis, and cultural background. Sections are conducted entirely in Japanese.

## JAPAN 2201-2202 Intermediate

Japanese I and II @
2201, fall; 2202, spring. 4 credits each semester. JAPAN 2201 satisfies Option

1. Prerequisites: for JAPAN 2201, JAPAN

1102 or placement by instructor during registration; for JAPAN 2202, JAPAN 2201 or placement by instructor during registration. Students must enroll in lec and one sec. Letter grades only. Y. Katagiri. This course provides widely applicable language proficiency as an integrated Japanese course, which develops all four language skills (speaking, listening, reading, and writing) at the post-elementary level. Discussion sections are conducted entirely in Japanese to give opportunities to practice socioculturally appropriate language performances while enhancing listening comprehension and speaking ability through realistic situational practices, in addition to training in practical reading and writing skills. Lectures systematically demonstrate versatile knowledge of essential structural patterns with audio-visual aides and explain cultural background and customs useful for effective oral and written communication.

## JAPAN 3301-3302 Continuing

Intermediate Japanese I and II @ 3301, fall; 3302, spring. 4 credits each semester. JAPAN 3301 satisfies Option 1. Prerequisites: for JAPAN 3301, JAPAN 2202 or placement by instructor during registration; for JAPAN 3302, JAPAN 3301 or placement by instructor during
registration. Letter grades only. S. Ichikawa.

For students who have learned basic Japanese skills and would like to develop higher skills in listening, speaking, reading, and writing.

## JAPAN 4401-4402 Advanced Japanese I

 and II4401, fall; 4402, spring. 4 credits each semester. JAPAN 4401 satisfies Option 1. Prerequisites: for JAPAN 4401, JAPAN 3302 or placement by instructor during registration; for JAPAN 4402, JAPAN 4401 or placement by instructor during
registration. Letter grades only. N. Larson. Develops all four language skills (speaking, listening, reading, and writing) at the advanced level.

## [JAPAN 4410 History of the Japanese Language (also ASIAN/LING 4411) @ \# (HA-AS)

4 credits. Prerequisite: permission of instructor. Next offered 2011-2012.
J. Whitman.

For description, see LING 4411.]

## JAPAN 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits each semester. Prerequisite: permission of instructor. Letter grades only. Staff.
Intended for advanced language study.

## Japanese FALCON (Full-Year Asian Language Concentration)

## Web site: lrc.cornell.edu/falcon

Director: R. Sukle, 388 Rockefeller Hall, 2550734 or rjs19@cornell.edu.
Program coordinator: 388 Rockefeller Hall, 255-6457 or falcon@cornell.edu.
FALCON is designed to develop "copability" in students by bringing them to the level where they can make further progress on their own even with no further instruction. The full-year program provides over 1,800 hours of language exposure-which exceeds even the exposure that students living in Japan typically receive. This intensive work in Japanese allows students to develop levels of fluency, accuracy, and control of the language that is not achieved in any other type of academic setting. The full-year FALCON sequence is Japanese 1160 (summer), 2260 (fall), and 3360 (spring). By taking this entire sequence, students can complete as much Japanese in one calendar year as they would complete in three or more years of regular study at most academic institutions. This course sequence also serves to fulfill the language requirement for the M.A. in Asian Studies and the joint M.B.A./M.A. in Asian Studies. For more information and application forms, please contact the FALCON program office. Because of FALCON's intensive nature, graduate students can complete their language work in minimal time. Undergraduates, including freshmen, achieve levels of competency that far exceed what is normally achieved in a four-year program, provided that they continue studying Japanese after FALCON. Three small interactive classes per day are conducted entirely in Japanese, and one lecture is conducted in both Japanese and English. The interactive classes are conducted by experienced and highly trained teachers, and the lecture is taught by an expert in the structure of the Japanese language. In addition to time spent in these classes, students are required to spend at least two one-hour sessions per day in the language lab. Additional preparation time in the language lab of up to three hours is necessary in the
evenings. One must formally apply to the program to take the courses. The deadline for application is March 1 in a given year, but applications will be considered after that date if space is still available. The degree of intensity of this program makes it impossible to simultaneously take other courses or work except possibly on weekends.

## JAPAN 1159 Summer Intensive Japanese

 (FALCON)Summer only. 1-7 credits. Prerequisite permission of program director; some previous language study in Japanese. Applications must be received by March 1. After the deadline, applications are considered provided that space is available. R. Sukle and staff.
This course is for students with significant prior background in Japanese who take JAPAN 1160 for fewer than 8 credits. Formal application and a placement interview are required.

## JAPAN 1160 Introductory Intensive Japanese (FALCON)

Summer only. 8 credits. Formal application to FALCON is required. Admission is open to all students, not just those planning to take the full year. Students from other institutions are also welcome to apply Applications must be received by March 1. After the deadline, applications are considered provided that space is available R. Sukle and staff.

This is a nine-week intensive, 8 -credit course that meets only in the summer, Monday through Friday from 8:30 a.m. to 4:30 p.m., beginning from an absolute introductory level introducing the spoken and written language. Lectures on linguistics and cultural matters, intensive practice with native speakers, and laboratory work prepare students for an intermediate level of study. This course involves work on all four skills: speaking, listening comprehension, reading, and writing. Students who successfully complete this course and plan to continue at Cornell may take the fall and spring FALCON courses (JAPAN 2260 and 3360). Students interested in other options for continuing after FALCON should consult the FALCON director, Robert Sukle, at ris19@ cornell.edu or 255-0734.

## JAPAN 2260 Intermediate Intensive Japanese (FALCON) @

## Fall. 16 credits. Satisfies Option 1 or

Option 2. Prerequisites: JAPAN 1160,
JAPAN 1102 at Cornell, or placement by
FALCON staff before beginning of fall semester. Formal application to FALCON is required. Admission is open to all students, including those from other institutions.
Applications must be received by March 1.
After the deadline, applications are considered provided that space is available. R. Sukle and staff.
Students work on spoken and written Japanese at the intermediate level, allowing students to develop fluency, accuracy, and control that are not achieved in other academic settings. This is a full-time academic program that meets Monday through Friday from 9:05 a.m. to 4:30 p.m., with one to three hours per day of self-directed practice in Cornell's Language Resource Center.

## JAPAN 3360 Advanced Intensive Japanese (FALCON) @

## Spring. 16 credits. Satisfies Option 1.

 Prerequisite: JAPAN 2201 at Cornell or placement by FALCON staff. R. Sukle and staff.Students work on spoken and written Japanese from an intermediate to an advanced level, allowing students to develop fluency, accuracy, and control. The material is more complicated with practice on switching levels of politeness (formal to informal). There is great emphasis on eliciting from students complex explanations and narratives rather than one-sentence answers. By the end of the term students are able to speak in paragraphlength utterances. More emphasis is placed on application and vocabulary acquisition, allowing students to deal with natural, social interactions and to begin explaining ideas. After the texts are finished, students begin reading authentic publications from Japan aimed at a native Japanese reader, learning to discuss the contents of what they have read in Japanese.

## Literature in Japanese

JPLIT 4406 Introduction to Classical Japanese @ \#
Fall. 4 credits. Satisfies Option 1.
Prerequisite: JAPAN 3302 or permission of
instructor. J. Kanemitsu.
This is the first of two courses that focus on the reading and translation of texts composed in bungo (literary Japanese), the official written form of the Japanese language until the mid-20th century. JPLIT 4406 introduces the fundamental grammar and vocabulary of literary Japanese. As such, this course is the prerequisite for JPLIT 4408 Readings in Classical Japanese. (LL)

## JPLIT 4408 Readings in Classical

 Japanese @ \#Spring. 4 credits. Satisfies Option 1.
Prerequisite: JPLIT 4406. J. Kanemitsu Readings of excerpts or complete works written in classical Japanese, that is, in bungo (literary Japanese). The selection of texts will vary with the semester, ranging from the Heian (794-1185 cE) to Meiji (1868-1912) periods. This course may be repeated for credit. (LL)

## [JPLIT 6617 Modern Japanese

 PhilosophyFall. 4 credits. Next offered 2011-2012. N. Sakai.

Seminar on modern Japanese philosophy. Students are expected to read texts in Japanese and discuss epistemic, historical, and practical issues involved in them.
Supplementary reading of European and U.S. philosophical texts is also required. (LL)]

## JPLIT 6618 Japanese Philosophical

 Discourse IISpring. 4 credits. Prerequisite: reading knowledge of Japanese. N. Sakai. In this course we will investigate the concepts of race, ethnicity, nationality, and culture in modern Japanese philosophy and social and human sciences. In recent years, an increasing number of the students of Asian studies have engaged in new developments in the humanities that consider the close relationships between the production of desires in popular cultures and political aspects of social formations. Yet, what has been overlooked is the elementary need to investigate the emotive and fantastic elements in identity politics for the critical comprehension of the national community. We will investigate how the concept of culture serves in ethnic nationalism and racism, minority positions in the politics of multiethnic
nationalism, and how racism is coterminous with nationalism? In order to meet this demand, this course is designed to offer students the opportunity to read, analyze, and evaluate the philosophical and social and human scientific discourse of modern East Asia in conjunction with European and American texts. This seminar will be organized neither as a search for the national (or oriental) character of Japanese philosophy nor as a project of explaining philosophical arguments in terms of the traits of national culture, but rather as an attempt to comprehend how philosophy participates in the construction and transformation of given social formations.

JPLIT 6624 Advanced Readings in Modern Japanese Literature
Fall. 2-4 credits. B. de Bary.
The course will consider representations of the body and eroticism in fiction, poetry, film, and theoretical writings from the Taisho through early Showa periods (1912 to the late 1930s). Special attention will be given to writings about the "New Woman" and
"Modern Girl," to sexuality in modernist cinematic and literary experiments, and to reciprocal relations between colonial and metropolitan culture. All readings will be done in Japanese. (LL)

## JPLIT 6625 Directed Readings

Fall or spring. 4 credits. Staff
Students choose a faculty member to oversee this independent study. The student and the faculty member work together to develop class readings. (LL)

JPLIT 6627-6628 Advanced Directed Readings
6627, fall; 6628, spring. 1-4 credits.
Prerequisite: permission of instructor. Staff.

## Khmer (Cambodian)

KHMER 1121-1122 Elementary Khmer I and II
1121, fall; 1122, spring. 4 credits each semester. Prerequisite: for KHMER 1122, KHMER 1121; for beginners or those placed in course by examination. Letter grades only. H. Phan.
Gives a thorough grounding in speaking and reading.

## KHMER 2201-2202 Intermediate Khmer

 Reading I and II @2201, fall; 2202, spring. 3 credits each semester. KHMER 2201 satisfies Option

1. Prerequisites: for KHMER 2201, KHMER

1122; for KHMER 2202, 2201. Letter grades only. H. Phan.
Continuing instruction in spoken and written Khmer. Intermediate level of reading Khmer.

## KHMER 2203-2204 Intermediate

 Composition and Conversation I and II @2203, fall; 2204, spring. 3 credits each semester. KHMER 2203 satisfies Option

1. Prerequisites: for KHMER 2203, KHMER 1122; for KHMER 2204, 2203. Letter grades only. H. Phan.
Intermediate Composition and Conversation will give a thorough grounding in language skills in two main areas: writing and speaking The writing section introduces students to upper-level complex sentence structures and rigorously engages students in upper-level conversation.

KHMER 3301-3302 Advanced Khmer I and II @
3301, 3302, fall. 4 credits each semester. KHMER 3301 satisfies Option 1.
Prerequisites: for KHMER 3301, KHMER
2202 or equivalent; for KHMER 3302, 3301. Letter grades only. H. Phan.
Continuing instruction in spoken and written Khmer; emphasis on enlarging vocabulary, increasing reading speed, and reading various genres and styles of prose.

## KHMER 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits variable. Prerequisite: permission of instructor. Letter grades only. H. Phan.
Intended for advanced language study.

## Korean

## KOREA 1101-1102 Elementary Korean I

 and II1101, fall; 1102, spring. 6 credits each semester. Prerequisites: for KOREA 1101, none; for KOREA 1102, KOREA 1101 or placement by instructor. Students may not receive credit for both KOREA 1101 and KOREA 1109. Students may not receive credit for both KOREA
1102 and 1110. Letter grades only. M. Song.

Covers basics of speaking, reading, and writing. Introduces Hangul writing system and grammar.

## KOREA 1109-1110 Elementary Korean

 Reading and Writing I and II 1109, fall; 1110, spring. 4 credits each semester. Prerequisites: for KOREA 1109, placement by instructor; for KOREA 1110, KOREA 1109 or placement by instructor. If in doubt about eligibility, see instructor.Students may not receive credit for both KOREA 1101 and KOREA 1109. Students may not receive credit for both KOREA 1102 and 1110. Letter grades only. M. Song.
For students who have spoken some Korean in the home, but whose reading and writing skills are limited or nonexistent.

## KOREA 2201-2202 Intermediate Korean I and II @

2201, fall; 2202, spring. 4 credits each semester. KOREA 2201 satisfies Option

1. Prerequisites: for KOREA 2201, KOREA 1102 or placement by instructor; for KOREA 2202, 2201. Letter grades only. K. Park.

Continuing instruction in written and spoken Korean with emphasis on consolidating basic conversational skills and improving reading ability and confidence.

## KOREA 2209-2210 Intermediate Korean

Reading and Writing I and II @ 2209, fall; 2210, spring. 4 credits each semester. KOREA 2209 satisfies Option

1. Prerequisites: for KOREA 2209, KOREA 1110 or placement by instructor; for KOREA 2210, 2209 or placement by instructor. If in doubt about eligibility, see instructor. Letter grades only. K. Park. Intermediate level of reading comprehension and writing course for students who have acquired basic written proficiency. Introduces some reading and writing with Chinese characters.

KOREA 3301-3302 High Intermediate Korean I and II @
3301, fall; 3302, spring. 4 credits each semester. KOREA 3301 satisfies Option 1. Prerequisites: for KOREA 3301, KOREA 2202 or KOREA 2210, or placement by instructor; for KOREA 3302, 3301 or placement by instructor. Letter grades only. K. Park.

Continuing instruction in Korean with
emphasis upon spoken fluency and reading
various materials including newspapers.
KOREA 4401-4402 Advanced Korean I and II @
4401, fall; 4402, spring. 4 credits. KOREA 4401 satisfies Option 1. Prerequisite: for KOREA 4401, KOREA 2210 or KOREA 3302 or placement by instructor; for KOREA 4402, KOREA 4401 or placement by instructor. Letter grades only. M. Song. Develops all four language skills (speaking, listening, reading, and writing) through discussion and composition at the advanced level.

## [KOREA 4430 Structure of Korean (also

 ASIAN/LING 4430) (KCM-AS)Spring. 4 credits. Next offered 2011-2012. J. Whitman.

For description, see LING 4430.]
KOREA 4431-4432 Directed Study
4431, fall; 4432, spring. $1-4$ credits, variable. Prerequisite: permission of instructor. Letter grades only. Staff. Intended for advanced language study.

## Literature in Korean

## [KRLIT 4432 Middle Korean (also LING

 4432) @ \# (LA-AS)Spring. 4 credits. Prerequisite: KOREA 3301 or equivalent. Next offered 2011-2012.
J. Whitman.

For description, see LING 4432. (LL)]

## Nepali

## The Cornell Nepal Study Program

Cornell and the central campus of Tribhuvan National University (in Kirtipur, Kathmandu) cosponsor a semester or year in Nepal at the Cornell Nepal Study Program for both undergraduate and graduate students. North American students live and study with Nepali students at the Cornell program houses near the university, taking courses taught in English by faculty from Tribhuvan University. After an intensive orientation, semester courses include intensive spoken and written Nepali language, Contemporary Issues in Nepal, and Research Design and Methods in a wide variety of fields in the social and natural sciences and the humanities. (Language instruction in Tibetan and Newari may also be arranged.) There is a 10-day study tour and field trip during the semester, and students execute their research proposal during four weeks of guided field research, writing up their findings for presentation at the end of the semester.
Juniors, seniors, and graduate students from any field may apply. Students should have a desire to participate in a program featuring relatively intense cultural immersion and to undertake rigorous field research. Instruction is in English, but prior study of Nepali language is strongly recommended for Cornell students. Those interested in the program should consult Cornell Abroad (cuabroad@ cornell.edu).

NEPAL 1101-1102 Elementary Nepali I and II
1101, fall; 1102, spring. 6 credits each semester. Prerequisite: for NEPAL 1102, NEPAL 1101 or examination. Letter grades only. S. Oja.
Intended for beginners. The emphasis is on basic grammar, speaking, and comprehension skills, using culturally appropriate materials and texts. Devanagari script for reading and writing is also introduced.

## NEPAL 2201-2202 Intermediate Nepali

 Conversation I and II @2201, fall; 2202, spring; 2201-2202,
summer. 3 credits each semester. NEPAL
2201 satisfies Option 1. Prerequisites: for NEPAL 2201, NEPAL 1102 or
examination; for NEPAL 2202, 2201 or
examination. Letter grades only. S. Oja.
Intermediate instruction in spoken grammar and verbal comprehension skills, with special attention to developing technical vocabularies and other verbal skills appropriate to students' professional fields.

## NEPAL 2203-2204 Intermediate Nepali Composition I and II @

2203, fall; 2204, spring; 2203-2204, summer. 3 credits each semester. NEPAL 2203 satisfies Option 1. Prerequisites: for NEPAL 2203, NEPAL 1102 or examination; for NEPAL 2204, 2203 or
examination. Letter grades only. S. Oja. Systematic review of written grammar and reading comprehension, with special attention to the technical vocabularies, necessary writing skills, and published materials typical of advanced students' professional fields.

## NEPAL 3301-3302 Advanced Nepali I and II @

3301, fall; 3302, spring; 3301-3302,
summer. 3 credits each semester. NEPAL
3301 satisfies Option 1. Prerequisite:
NEPAL 2204 or permission of instructor.
Letter grades only. S. Oja.
Reading of advanced texts, together with advanced drill on the spoken language.

## NEPAL 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits, variable. Letter grades only. S. Oja. Permission of instructor needed. Intended for advanced language study.

## Intensive Nepali

Nepali, the official language of Nepal, will be offered in the Summer Session at both beginning and continuing levels. Taught by faculty from Cornell University and the Cornell-Nepal Study Program at Tribhuvan University, this summer program provides an unusual opportunity to develop competence in Nepali. Emphasis will be on the spoken colloquial language, in dialogues, exercises, and conversational practice. In addition, special attention is given to assisting students in developing vocabularies and skills appropriate to their unique professional needs. Reading and writing practice use both popular and scholarly materials in the Nepali (Devanagari) script. Students will spend five hours per day in class and two further hours working with recorded materials in addition to the time required for daily preparation. Films and guest lecturers complement the summer program. The program lasts six weeks and meets five days a week. Students must formally apply to the program. Applications are available at http://lrc.cornell.edu/asian/
programs/summer/nepali during the spring semester. For more information, please see Kim Scott in 350 Rockefeller Hall or e-mail: kp16@cornell.edu.

NEPAL 1159 Summer Intensive Nepali Summer only. $1-5$ credits. Prerequisite: permission only. Students must formally apply. S. Oja and B. Oja.
For students who take NEPAL 1160 for fewer than 6 credits. It is a six-week intensive language course beginning at the absolute beginning level and going up to intermediate level. It includes work on all four language skills: speaking, listening comprehension, reading, and writing.

## NEPAL 1160 Intensive Nepali

Summer only. 6 credits. Prerequisite: permission only. Students must formally apply. S. Oja and B. Oja.
This intensive study of Nepali provides an unusual opportunity to obtain basic competence in the language in one summer. Emphasis is upon the spoken (colloquial) language; although attention will also be given to assisting the students develop vocabularies appropriate to their professional fields as well. Reading and writing practice will use both colloquial and scholarly materials in the Nepali (Devanagari) script.

## NEPAL 2260 Intermediate Intensive Nepali @

Summer only. 6 credits. Satisfies Option

1. Prerequisite: NEPAL 1160 or placement
by Nepali instructors. Students must
formally apply. S. Oja and B. Oja.
Intermediate instruction in spoken grammar and verbal comprehension skills, with special attention to developing technical vocabularies and other verbal skills appropriate to students' professional fields.
NEPAL 3360 Advanced Intensive Nepali Summer only. 6 credits. Satisfies Option 1. Prerequisite: NEPAL 2260 or placement
by Nepali instructors. Students must
formally apply. S. Oja and B. Oja.
Reading of advanced texts, together with advanced drills on the spoken language.

## Pali

## [PALI 4450 Readings in Pali @

Fall and spring. 3 credits. Satisfies
Option 1. Prerequisite: permission of
instructor. Letter grades only. Next offered 2011-2012. A. Blackburn.
Readings in Pali selected in relation to student and instructor interests. This course may be repeated for credit with different topics and readings.]

## Sanskrit

SANSK 1131-1132 Elementary Sanskrit I and II (also CLASS 1331-1332, LING 1131-1132)
1131, fall; 1132, spring. 4 credits each
semester. Prerequisite: for 1131, none; for
1132, 1131 or perission of instructor. Letter grades only. A. Ruppel and A. Nussbaum. An introduction to the essentials of Sanskrit grammar. Designed to enable the student to read classical and epic Sanskrit as quickly as possible.

SANSK 2251-2252 Intermediate Sanskrit I and II (also CLASS 2351-2352, LING 2251-2252) @ \#
2251, fall; 2252, spring. 3 credits each semester. SANSK 2251 satisfies Option 1. Prerequisite: at least one year study of Sanskrit or equivalent or permission of instructor. Offered alternate years. Letter grades only. A. Nussbaum and staff.
Review of grammar and reading of selections
from Sanskrit epic poetry and narrative prose.

## SANSK 4431-4432 Directed Study

4431, fall; 4432, spring. $1-4$ credits, variable. Prerequisite: permission of instructor. Letter grades only. Staff.
Intended for advanced language study.

## Literature in Sanskrit

[SNLIT 3301-3302 Advanced Sanskrit I and II (also CLASS 3393-3394) @ \# (LA-AS)
3301, fall; 3302, spring. 4 credits each semester. Prerequisite: two years study of Sanskrit or equivalent. Next offered 20112012. L. McCrea.

Selected readings in Sanskrit literary and philosophical texts.]

## [SNLIT 4465 The Literature of Ancient

 IndiaFall. 4 credits. Next offered 2012-2013. L. McCrea.

The course will survey in translation a selection of major works of poetry, drama, and aesthetic theory and criticism from the Sanskrit literary tradition of ancient India. (LL)]

## Sinhala (Sinhalese)

SINHA 1121-1122 Elementary Sinhala I and II
1121, fall; 1122, spring. 4 credits each semester. Prerequisite: for SINHA 1122, SINHA 1121 or equivalent. Letter grades only. B. Herath.
Semi-intensive introduction to colloquial Sinhala, intended for beginners. A thorough grounding is given in all the language skills; listening, speaking, reading, and writing.

## SINHA 2201-2202 Intermediate Sinhala I

 and II @2201, fall; 2202, spring. 3 credits each semester. Satisfies Option 1.
Prerequisites: for SINHA 2201, SINHA 1102
or SINHA 1122; for SINHA 2202, 2201 or
equivalent. Letter grades only. B. Herath.
This course further develops student competence in colloquial Sinhala, attending to all the language skills: listening, speaking, reading and writing. In addition, this course prepares students for the transition to literary Sinhala.

## SINHA 3301 Literary Sinhala I @

Fall or spring. 3 credits. Satisfies Option

1. Prerequisite: SINHA $2201 / 2202$ or
permission of instructor. Letter grades only. B. Herath.

This one-semester course provides an introduction to the distinctive grammatical forms and vocabulary used in Literary Sinhala. While focused particularly on the development of reading skills, the course also introduces students to Literary Sinhala composition, and builds students' listening comprehension of semi-literary Sinhala forms (such as those used in radio and TV news).

## SINHA 4400 Literary Sinhala II

Fall or spring. 2-4 credits, variable.
Prerequisite: SINHA 3301 or permission of instructor. B. Herath.
This one-semester course further develops students' comprehension of written Literary Sinhala, using sample materials from a variety of genres prepared by the instructor, as well as excerpts from texts relevant to graduate student research (when appropriate).

## SINHA 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits,
variable. Prerequisite: permission of
instructor. Letter grades only. B. Herath.
Intended for advanced language study.

## $\overline{\text { Tagalog }}$

## TAG 1121-1122 Elementary Tagalog I and II

1121, fall; 1122, spring. 4 credits each
semester. Prerequisite: for TAG 1122, TAG
1121. Letter grades only. T. Savella.

Gives a thorough grounding in basic speaking and listening skills with an introduction to reading.

## TAG 2201-2202 Intermediate Tagalog I and II @

2201, fall; 2202, spring. 3 credits each semester. TAG 2201 satisfies Option 1. Prerequisites: for TAG 2201, TAG 1122 or equivalent; for TAG 2202, 2201 or
equivalent. Letter grades only. T. Savella.
Develops all four skills: reading, writing, speaking, and comprehension.

TAG 3301-3302 Advanced Tagalog I and
II @ II @
3301, fall; 3302, spring. 3 credits each semester. TAG 3301 satisfies Option 1.
Prerequisite: TAG 2206 or equivalent. Letter grades only. T. Savella.
Continuing instruction on conversational skills but with emphasis on reading and writing. Selected core readings in contemporary Tagalog literature are used, but students, in consultation with the instructor, may select some of the reading materials.

## TAG 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits,
variable. Prerequisite: permission of
instructor. Letter grades only. T. Savella.
Intended for advanced language study.

## $\overline{\text { Tamil }}$

TAMIL 2201-2202 Intermediate Tamil I and II
2201, fall; 2202, spring. 4 credits. TAMIL
2201 satisfies option 1. Prerequisites: for
TAMIL 2201, TAMIL 1121/1122 and
permission of instructor; for TAMIL 2202,
TAMIL 2201 and permission of instructor.
B. Herath.

To teach modern spoken and written Tamil to intermediate-level students. This course helps to acquire Tamil language proficiency, which refines and expands previously acquired linguistic skills in culturally authentic contexts. This course further incorporates reading, discussing, and analyzing texts as a basis for the expression and interpretation of meaning. All course activities are conducted in Tamil.

## Thai

THAI 1101-1102 Elementary Thai I and II 1101, fall; 1102, spring. 6 credits each semester. Prerequisite: for THAI 1102, THAI 1101 or equivalent. Intended for beginners or students placed by examination. Letter grades only. N. Jagacinski.

Gives a thorough grounding in all the language skills: listening, speaking, reading, and writing.

## THAI 2201-2202 Intermediate Thai

 Reading I and II @2201, fall; 2202, spring. 3 credits each semester. THAI 2201 satisfies Option 1. Prerequisites: for THAI 2201, THAI 1102; for THAI 2202, 2201 or equivalent. Letter grades only. N. Jagacinski.
Continuing instruction in spoken and written Thai.

## THAI 2203-2204 Intermediate

 Composition and Conversation I and II @2203, fall; 2204, spring. 3 credits each semester. THAI 2203 satisfies Option 1. Prerequisites: for THAI 2203, THAI 1102; for THAI 2204, 2203. Letter grades only. N. Jagacinski.

Intermediate instruction in spoken and written grammar and reading comprehension.

## THAI 3301-3302 Advanced Thai I and II @

3301, fall; 3302, spring. 4 credits each semester. THAI 3301 satisfies Option 1. Prerequisite: THAI 2202 or equivalent.
Letter grades only. N. Jagacinski.
Selected readings in Thai writings in various fields.

## THAI 3303-3304 Thai Literature I

 and II @3303, fall; 3304, spring. 4 credits each
semester. THAI 3303 satisfies Option 1.
Prerequisite: THAI 3302 or equivalent.
Letter grades only. N. Jagacinski.
Reading of significant novels, short stories, and poetry written since 1850 .

## THAI 4431-4432 Directed Study

4331, fall; 4432, spring. 1-4 credits
variable. Prerequisite: permission of
instructor. Letter grades only. N. Jagacinski. Intended for advanced language study.

## Urdu

URDU 1125-1126 Elementary Urdu Reading and Writing I and II (also NES 1312/1313)
1125 , fall; 1126, spring. 3 credits.
Prerequisite: for URDU 1125, some
familiarity with Hindi; for URDU 1126,
URDU 1125 or permission of instructor.
Letter grades only. S. Singh and staff.
Introduction to Urdu reading and writing. Assumes some knowledge of spoken HindiUrdu.
URDU 2225-2226 Intermediate Urdu Reading and Writing I and II (also NES 2201-2202)
2225, fall; 2226, spring. 2 credits.
Prerequisite: HINDI 1102 or HINDI 1110; and URDU 1125 or permission of
instructor. Letter grades only. S. Singh.
This course is designed to develop competence in Urdu reading and writing for students with a first-year knowledge of Hindi
and knowledge of Urdu script. May be taken concurrently with Intermediate Hindi.

## URDU 4431-4432 Directed Study

4431, fall; 4432, spring. 1-4 credits, variable. Prerequisite: permission of instructor. Letter grades only. S. Singh.
Intended for advanced language study.

## $\overline{\text { Vietnamese }}$

VIET 1101-1102 Elementary Vietnamese I and II
1101, fall; 1102, spring. 6 credits each
semester. Prerequisite: for VIET 1102, VIET 1101 or equivalent. Intended for beginners or students placed by examination. Letter grades only. T. Tranviet.
Gives a thorough grounding in all language
skills: listening, speaking, reading, and writing
VIET 2201-2202 Intermediate Vietnamese I and II @
2201, fall; 2202, spring. 3 credits each semester. VIET 2201 satisfies Option 1. Prerequisites: for VIET 2201, VIET 1102 or equivalent; for VIET 2202, 2201. Letter grades only. T. Tranviet.
Continuing instruction in spoken and written Vietnamese.

## VIET 2203-2204 Intermediate Vietnamese Composition and Reading I and II @

2203, fall; 2204, spring. 3 credits each semester. VIET 2203 satisfies Option 1. Prerequisite: placement by instructor. Letter grades only. T. Tranviet.
Designed for students and "native" speakers of Vietnamese whose speaking and listening skills are at the advanced level, but who still need to improve writing and reading skills.

## VIET 3301-3302 Advanced Vietnamese I and II @

3301, fall or spring; 3302, fall or spring. 3 credits each semester. VIET 3301
satisfies Option 1. Prerequisites: for VIET 3301, VIET 2202 or permission of instructor; for VIET 3302, 3301. Letter grades only. T. Tranviet.
Continuing instruction in spoken and written
Vietnamese; emphasis on enlarging
vocabulary, increasing reading speed, and reading various genres and styles of prose.

## VIET 4431-4432 Directed Study

4431, fall; 4432, spring. $1-4$ credits,
variable. Prerequisite: permission of
instructor. Letter grades only. T. Tranviet.
Intended for advanced language study.

## $\overline{\text { Literature in Vietnamese }}$

## [VTLIT 2222 Introduction to Classical

 Vietnamese @ \#Spring. 3 credits. Satisfies Option 1.
Prerequisite: qualification in Vietnamese or permission of instructor. Next offered
2011-2012. K. Taylor.
Introduces students to Han (classical Chinese as used in the Vietnamese language) and Nom (vernacular Vietnamese character writing). Students learn to read Han and Nom texts, from the 17 th through 19th centuries, including historical records, prose writings, and poetry. (LL)]

## Related Courses in Other Departments and Colleges

Courses in other colleges will count as College of Arts and Sciences credit only for Asian Studies majors. Courses from other departments and/or colleges generally count toward the Asian Studies major (even though not cross-listed), as long as the course content is 50 percent or more focused on Asia. Such courses typically fall under the heading of Society and Culture (SC) and must be approved by the major advisor and director of undergraduate studies.

## ASIAN AMERICAN STUDIES PROGRAM

The Asian American Studies Program is a university-wide academic program housed administratively within the College of Arts and Sciences. Its aim is to promote teaching, research, and educational activities related to Asians in the Americas and to serve as a resource to the campus and regional communities. The program's undergraduate courses, offered within the program and crosslisted with departments in various colleges, meet distribution requirements and count toward a minor in Asian American studies. The program does not offer a graduate course of study, but students can undertake graduate work in Asian American studies within selected disciplines of the university.

## Undergraduate Minor

The program's undergraduate minor affords students an opportunity to develop a multidisciplinary approach to the study of Asians in the hemispheric Americas. The course of study stresses developments not only within the United States, but also underscores the transnational and comparative contexts of Asian America and the field's connections with African American, American Indian, Latino, and Women's Studies. Students must work with a faculty advisor from among the program's affiliated faculty and must complete at least 15 units of credits as follows: (1) AAS 1100 and two additional courses in Asian American Studies; (2) one course in African American, American Indian, U.S. Latino Studies, or Feminist, Gender, \& Sexuality Studies*; and (3) one course in East Asian, South Asian, or Southeast Asian Studies.* (*These courses must be approved by the student's faculty advisor, and they should address issues of race, gender, or the histories and cultures of Asian peoples.) Students must file an application for the minor with the Asian American Studies Program.

## Resource Center

The program's Asian American Studies Resource Center, located in 420 Rockefeller Hall, provides meeting space for the more than 50 undergraduate student organizations of the Cornell Asian Pacific Student Union and the Society for Asian American Graduate Affairs. It also holds a modest print collection of books, periodicals, and newspapers; a current news clipping file; a comprehensive database of publications on Asian Americans since 1977; and a sizable collection of videotapes as well as music CDs on the Asian American experience.

## Research

The program encourages faculty and student research on Asian Americans by sponsoring guest lectures, conferences, film festivals, readings, and exhibits. It also funds research projects and student travel to conferences and research sites. The Asian American Studies Workshop is the program's principal research initiative, engaging Cornell's faculty and students with invited faculty from other universities in a yearlong intensive study of selected themes.

## Core Faculty

D. Chang, C. Lai, V. Munasinghe, S. Wong

## Courses

## AAS 1100 Introduction to Asian American Studies (CA-AS)

Spring. 3 credits. Can be used to satisfy either social science or humanities distribution requirement. Staff.
What's in a name? For starters, the contemporary term "Asian Pacific American" has been taxed to hold together in a classificatory embrace a complex, diverse, and rapidly changing population of people of Asian/Pacific descent in the Americas. In this course, we'll track the ongoing adventures of this term "Asian Pacific American" and try to understand how the social and political twists and turns in meaning over the course of its historical journey come to shape individual and collective identities. This interdisciplinary course will introduce students to key ideas and issues in the study of Asian American histories, cultures, and racial formation including, for example, matters of migration, social/cultural/ legal citizenship, social movements, and cultural politics. Materials will include films, literature, historical and sociological texts, and media and popular culture texts and productions.

> AAS 2041 Asian American Communities (also HIST/AMST 2041) (HA-AS)
> Spring. 4 credits. D. Chang.
> For description, see HIST 2041.

## AAS 2100 South Asian Diasporic Locations (also ANTHR 2410) (CAAS)

Spring. 4 credits. V. Munasinghe. This interdisciplinary course (with an emphasis in anthropology) will introduce students to the multiple routes/roots, lived experiences, and imagined worlds of South Asians who have traveled to various lands at different historical moments spanning Fiji, South Africa, Mauritius, Britain, Malaysia, United States, Trinidad, and even within South Asia itself such as the Tamil-speaking population of Sri Lanka. The course will begin with the labor migrations of the 1830s and continue up to the present period. The primary exercise will be to compare and contrast the varied expressions of the South Asian Diaspora globally in order to critically evaluate this transnational identity. Thus, we will ask what, if any, are the ties that bind a fifth-generation Indo-Trinidadian whose ancestor came to the New World as an indentured laborer or "coolie" in the mid-19th century to labor in the cane fields, to a Pakistani medical doctor who migrated to the United States in the late 1980s. If Diaspora violates a sense of identity based on territorial integrity, then could "culture" serve as the basis for a shared identity?

AAS 2130 Introduction to Asian American History (also AMST/HIST 2640) (HA-AS)

Fall. 4 credits. D. Chang.
For description, see HIST 2640.

## [AAS 2620 Asian American Literature (also AMST/ENGL 2620) (LA-AS)

Spring. 4 credits. Next offered 2011-2012. S. Wong.]

AAS $\mathbf{3 0 3 0}$ Asians in the Americas: A Comparative Perspective (also ANTHR 3703) (CA-AS)
Fall. 4 credits. V. Munasinghe.
For description, see ANTHR 3703.
[AAS 3470 Asian American Women's History (also AMST/FGSS/HIST 3470) (CA-AS)
Spring. 4 credits. Next offered 2012-2013. D. Chang.]

AAS 3801/6801 Asian American Urban Experience (also AMST/CRP 3801/6801)
Fall. 3 credits. C. Lai.
The seminar examines the histories and geographies of urban Asian American communities. We begin with an introduction to key geographical terms and spatial theories and then use them to analyze different Asian ethnic communities throughout North America. This includes an investigation of 19th- and early-20th-century segregated ethnic enclaves on the West Coast and the East Coast as well as an examination of postwar Asian American communities in suburbs.

## AAS 3901 Asian American Politics and Public Policy (also AMST/CRP 3103/ 6103) (CA-AS)

Spring. 3 credits. C. Lai.
For description, see CRP 3102.

## AAS 3950/6950 Race, Space, and Place

 (also AMST 3950/6950, CRP 3101/6101) (CA-AS)Fall. 3 credits. C. Lai.
For description, see CRP 3101.
AAS 4310 Mind, Self, and Emotion (also HD 4310, COGST 4350) (SBA-AS)
Spring. 3 credits. Prerequisite: permission of instructor. Q. Wang.
For description, see HD 4310.
[AAS 4240 Asian American Communities (also AMST/HIST 4200) (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Chang.]
[AAS 4530 20th-Century American Women Writers of Color (also AMST/ ENGL/FGSS 4530) (LA-AS)
Fall. 4 credits. Next offered 2012-2013. S. Wong.]

AAS 4790 Ethnicity and Identity Politics: An Anthropological Perspective (also ANTHR 4479) (SBA-AS)
Fall. V. Munasinghe
For description, see ANTHR 4479.

## AAS 4910-102 Honors Seminar I (also ENGL/FGSS 4912-102) <br> Fall. 4 credits. S. Wong. <br> For description, see ENGL 4910-102.

## AAS 4950 Independent Study

Fall or spring. 1-4 credits. Topic and credit hours TBA arranged between faculty and student. Independent study forms must be approved by Asian American Studies
Program office. Staff.

AAS 4954 Yellowface (also FILM/SHUM 4954, COML 4068, ENGL 4077)
Spring. 4 credits. Y. Huang.
For description, see SHUM 4954.

## [AAS 4970 Jim Crow and Exclusion-Era

 America (also AMST/HIST 4970/6970) (HA-AS)Spring. 4 credits. Next offered 2011-2012. D. Chang.]

## ASTRONOMY

I. M. Wasserman, chair ( 616 Space Sciences Bldg., 254-4556); G. J. Stacey, director of undergraduate studies ( 212 Space Sciences Bldg., 255-5900); R. E. Bean, J. F. Bell, J. A. Burns, D. B. Campbell, D. F. Chernoff, J. M. Cordes, E. E. Flanagan, P. J. Gierasch, R. Giovanelli, M. P. Haynes, T. L. Herter, J. R. Houck, D. Lai, J. P. Lloyd, R. V. E. Lovelace, P. D. Nicholson, S. W. Squyres, Y. Terzian, S. A. Teukolsky, J. F. Veverka. Emeritus: P. F. Goldsmith, M. O. Harwit

Cornell's Astronomy faculty, research staff, graduate, and undergraduate students are active in diverse areas of modern astronomy ranging from theoretical astrophysics and general relativity to radio and radar astronomy, submillimeter, infrared and optical astronomy, and the exploration of the solar system. Cornell operates two local optical observatories, the world's largest radio telescope at Arecibo, Puerto Rico, and with two other institutions, the 200-inch optical telescope at Mt. Palomar in California. With Caltech, Cornell is carrying out a design study for a large submillimeter telescope in the high Atacama desert in Chile. Several members of the department faculty are also principal investigators on major NASA space and planetary exploration missions.
The department offers a number of courses to satisfy a general interest in astronomy. These courses have few or no prerequisites and are not intended for the training of professional astronomers. Among the introductory courses, several choices are available, depending on background and on the requirements to be fulfilled. The 1000-level courses are designed primarily for nonscience majors. The alternative introductory sequence ASTRO 2211-2212 is geared toward sophomore physical science and engineering majors and requires co-registration in beginning calculus. ASTRO 2201 and 2202 are intended for students with an interest in astronomy but no scientific background; they are topical rather than survey-oriented. ASTRO 3332 is designed for physical science and engineering majors as an introduction to astrophysics. Other courses at the 2000 and 3000 levels may appeal to students of various backgrounds and interests, as indicated in the individual course descriptions.
Courses numbered above 4000 are intended for students who have had two to three years of college physics and at least two years of college mathematics. ASTRO 4940 Independent Study permits students to engage in individual research projects under the guidance of a faculty member.
Interested students are encouraged to become members of the undergraduate Cornell Astronomy Club. The club has access to the Fuertes Observatory on campus and conducts regular observing and astrophotography sessions. All students are invited to visit the

Space Sciences Building, see the exhibits on display there, and consult faculty members about career plans or choice of courses

## The Major

The purpose of the major in Astronomy is to provide in-depth knowledge and education about the nature of the universe. Astronomy relies heavily on preparation in physics and mathematics. Consequently, many courses in these fields are included as prerequisites. In preparation for the major, students normally elect the introductory physics sequence PHYS 1112-2213-2214 or 1116-2217-2218 and the complementary pathway in mathematics, MATH 1110-1220-2210-2220 or 1910-1920-2930-2940 (or equivalent). Students who anticipate undertaking graduate study are urged to elect the honors physics sequence PHYS 1116-2217-2218-3318-3327 if possible We recommend, but do not require, that prospective astronomy majors take at least one of the following courses: ASTRO 2211, ASTRO 2212, ASTRO 2233, ASTRO 2290. Students are also urged to acquire computer literacy. ASTRO 3334 is designed to give students hands-on experience with the methods of analysis, visualization, and simulation needed in astrophysical research. Acceptance to the major is first considered after completion of three semesters of introductory physics and mathematics and in general requires a GPA of 3.2 in physics and mathematics courses.

The major requirements stress the importance of building a strong preparation in physical science. The following upper-level courses are normally required:
PHYS 3314 or 3318, 3316, 3323 or 3327, 3341 and 4443
AEP 3210-3220 (or equivalent, e.g., MATH 4200 and 4220 )
ASTRO 4410, 4431, and 4432 or 4433
With permission of the major advisor, students interested in planetary studies may substitute appropriate advanced courses or may pursue an independent major under the program in the Science of Earth Systems. Majors are encouraged to supplement the above courses with any astronomy, physics, or other appropriate courses at or above the 3000 level. Advanced seniors can enroll in astronomy graduate courses with the permission of the instructor. Students are also encouraged to work with faculty members on independent study projects under the course ASTRO 4940 or to apply to a variety of programs at Cornell, Arecibo, and elsewhere that offer
undergraduates summer employment as research assistants. Nearly all undergraduate majors and concentrators become involved in research projects in the junior and senior years.

Students whose interest in astronomy is sparked somewhat late in their undergraduate career are encouraged to discuss possible paths with the director of undergraduate studies in Astronomy.
Honors. A student may be granted honors in Astronomy upon the recommendation of the Astronomy Advisors Committee of the Astronomy faculty. Typical requirements for graduating with honors are a minimum GPA of 3.5 over the past four semesters and grades of A- or better in ASTRO 4410, 4431, and 4432 or 4433

Double majors. A double major in Astronomy and another subject is possible in many circumstances. However, the set of courses used to fulfill the requirements for each major must be completely independent.
Minor. The minor in Astronomy for other majors normally requires 12 credits, at least 8 of which must be at the 3000 level or above. We recommend, but do not require, that sophomores planning to concentrate in Astronomy take at least one of the following courses: ASTRO 2211, ASTRO 2212, ASTRO 2233, ASTRO 2290.

## Distribution Requirement

All courses in astronomy, except ASTRO 1109, ASTRO 1110, and ASTRO 1700 may be used to fulfill the science distribution requirement in the College of Arts and Sciences.

## Courses

ASTRO 1101 The Nature of the Universe (PBS)
Fall. 3 credits. Limited to 30 students per disc sec. Students may not receive credit for both ASTRO 1101 and 1103. T. Herter and J. Lloyd

Introduces students to the cosmos. The birth, evolution, and death of stars, the formation of the chemical elements, and the nature of white dwarfs, neutron stars, and black holes are discussed. An introduction to the theories of special relativity and general relativity is given. The course covers the search for other worlds outside the solar system and the possible existence of life and intelligence elsewhere in the universe. Modern theories of cosmology are presented, and the origin, structure, and fate of the universe are discussed. Most of the course notes as well as sample exams and simulations are made available on the web.

## ASTRO 1102 Our Solar System (PBS)

Spring. 3 credits. Limited to 30 students per disc sec. Students may not receive credit for both ASTRO 1102 and 1104.
S. Squyres and staff.

The past few decades have seen incredible advances in the exploration of our solar system. In this course students learn about the current state and past evolution of the Sun and its family of planets, moons, asteroids, and comets. The course emphasizes images and other data obtained from current and past NASA space missions and how these data provide insights about the important processes that have shaped the evolution of solar system objects. General astronomical concepts relevant to the study of the solar system are also discussed. Critical focus is on developing an understanding of the Earth as a planetary body and discovering how studies of other planets and satellites influence models of the climatic, geologic, and biologic history of our home world. Other topics covered include energy production in stars, global warming, impact hazards, the search for life in the solar system and beyond, and future missions.

## ASTRO 1103 The Nature of the Universe

 (PBS)Fall. 4 credits. Limited to 22 students per lab, 30 students per disc sec. Students may not receive credit for both ASTRO 1101 and 1103. T. Herter and J. Lloyd. Identical to ASTRO 1101 except for addition of the laboratory.

ASTRO 1104 Our Solar System (PBS)
Spring. 4 credits. Limited to 22 students per lab, 30 students per disc sec. Students may not receive credit for both ASTRO
1102 and 1104. S. Squyres and staff. Identical to ASTRO 1102 except for addition of the laboratory.

## ASTRO 1105 The Universe (PBS)

Summer. 3 credits. Recommended: high school physics. Students may not receive credit for both ASTRO 1105 and 1107. D. Kornreich.
How do we measure the size of our galaxy and the size of the universe? Is the universe round or flat? How are the stars born, why do they shine, and how do they die? What are the chemical elements, and how were they formed in stars? What are quasars, pulsars, and black holes? How was the solar system formed? What are the environments of other planets like? What is the basic structure of Earth and the other planets? Will we catastrophically alter the earth? Does life exist elsewhere in the universe? How can we find out? Each student has an opportunity to make observations with small telescopes.

## ASTRO 1106 Relativity, Cosmology, and

 Black Holes (PBS)Summer. 3 credits. Prerequisites: high school algebra and trigonometry.
A. Brazier.

Explanation of Einstein's theory of special relativity, which brought about a fundamental change in our conceptual understanding of space and time. The consequences of the theory-including mass-energy equivalence, nuclear fission and fusion, and thermonuclear process in stars and why we can't travel faster than light-and how it all makes sense.
Cosmology, studying the evolution and future of the universe and general relativity. The death of stars: white dwarfs, neutron stars, and black holes.

## ASTRO 1107 The Universe (PBS)

Summer. 4 credits. Students may not receive credit for both ASTRO 1105 and 1107. D. Kornreich.
Identical to ASTRO 1105 except for the addition of the afternoon laboratory that emphasizes mathematical problem-solving This option is recommended for potential majors in science and engineering.

## ASTRO 1110 FWS: The Exploration of

 MarsSpring. 3 credits. M. Rice
Will humans live on Mars someday? Did Martian life ever exist? What drives us to explore the solar system, and is exploration worth the risks? In this course, we will explore such questions through a study of the history and future of Mars exploration. Topics range from the first telescopic observations to the Mars Exploration Rovers to speculations about colonization and terraforming. Readings will include popular science texts by Carl Sagan and Steve Squyres, and classic science fiction such as The Martian Chronicles by Ray Bradbury. Students will write newspaper articles and magazine stories in addition to research essays. Our goal is not to memorize facts about Mars but to use writing to understand our neighbor planet as a world and a new frontier.

## ASTRO 1195 Observational Astronomy

 (PBS)Fall. 3 credits. Limited to 24 students.
G. Stacey.

Provides a "hands-on" introduction to observational astronomy intended for liberal arts students at the freshman and sophomore level. High school mathematics is assumed, but otherwise there are no formal prerequisites. The course objective is to teach how we know what we know about the universe. The course is set up with two lectures and one evening laboratory per week. Not all of the evening sessions are used. Planned exercises include five or six observational labs (star gazing with binoculars and small telescopes, telescopic observations and CCD imaging of star clusters, nebulae, and the planets, solar observations, radio observations of the Milky Way Galaxy), plus a selection of exercises from the following: experiments in navigating by the stars; construction and use of simple instruments such as optical spectroscopes and sun dials; laboratory spectroscopy; experiments in planetary cratering; collection and study of micrometeorites; analyses of planetary and lunar images obtained by the class, measuring the diameter of Earth or the size of the solar system.

## ASTRO 1700 History of Exploration (also HIST 1700) (HA-AS)

Fall. 4 credits. S. Squyres and M. Norton. For description, see HIST 1700.

## ASTRO 2201 The History of the Universe (PBS)

Fall. 3 credits. No scientific background assumed. R. Giovanelli and M. Haynes. General discussion of how the universe has evolved since the Big Bang era and how our understanding of it has changed from ancient to modern times. Several main themes are covered over the course of the semester: the evolution of our view of the sky from that of ancient cultures to that of space telescopes; the formation and nature of black holes; dark matter and dark energy; and the origin, evolution, and fate of the universe. Presents a nonmathematical introduction to these subjects and discusses uncertainties and unresolved issues in our understanding.

## ASTRO 2202 Our Home in the Solar System (PBS)

Spring. 3 credits. Prerequisite: freshman or sophomore standing; some background in science. J. Veverka.
Writing course designed to develop an understanding of our home planet as a member of a diverse family of objects in our solar system. Discussion centers on how studies of other planets and satellites have broadened our knowledge and perspective of Earth, and vice versa. We study, debate, and learn to write critically about important issues in science and public policy that benefit from this perspective. Topics discussed include global warming, the impact threat, the searches for extrasolar planets and extraterrestrial intelligence, and the exploration of Mars.

## ASTRO 2211 Astronomy: Stars, Galaxies,

 and Cosmology (PBS)Fall. 4 credits. Intended for first- and second-year engineering and physical sciences students. Prerequisite: introductory calculus or co-registration in MATH 1110 or 1910 or permission of instructor. A. Brazier.
Course surveying the evolution of the universe from the Big Bang onwards: what happens in the first few minutes of the universe's life; star formation, structure, and evolution; the
physics of white dwarfs, neutron stars, and black holes; galaxy formation and structure; and cosmology. The roles of quantum physics, particle physics, and relativity in astrophysics are discussed (no prior knowledge of these is assumed). The course is more in-depth than ASTRO 1101/1103. All course materials are made available online.

## ASTRO 2212 The Solar System: Planets,

 Satellites, and Rings (PBS)Spring. 4 credits. Intended for first- and second-year engineering and physical sciences students. Prerequisite: introductory calculus or co-registration in MATH 1110 or 1910; some knowledge of classical physics (mechanics and thermodynamics). D. Campbell and P. Gierasch.

Introduction to the solar system with emphasis on the quantitative application of simple physical principles to the understanding of what we observe or can deduce. Topics include the Sun and the interior processes that control its luminosity, the interiors, surfaces, and atmospheres of the planets including the effects of greenhouse gases, satellites, and small bodies, orbits of solar system bodies and the search for extra-solar planets. Results from past and current spacecraft missions will be discussed including the Cassini mission to the Saturn system and the Mars Exploration Rovers.

## ASTRO 2233 Topics in Astronomy and

 Astrophysics (PBS)Fall. 3 credits. Intended for sophomores planning to major in Astronomy or related fields. Prerequisites: co-registration in PHYS 1112 or 1116, MATH 1120, 1220 or 1920. Home page: www.astro.cornell.edu/ academics/courses/astro233. D. Campbell and J. Veverka.
The course theme may change yearly. The fall 2010 course will explore the theme:
"Exoplanets and Other Planetary Systems: How Typical Is Our Solar System?" Hundreds of planets around other stars have been discovered during the past decade. How are these discoveries helping us understand how our solar system and our planets formed and evolved? How representative is our solar system of planetary systems in general? How exotic can we expect exoplanets to be? How common are planets like Earth? Besides Earth, what other potential repositories are there for life in our solar system? These and other issues related to planetary formation and evolution will be discussed.
[ASTRO 2280 Space Exploration (PBS)
Spring. 3 credits. No special background in physical sciences, math, or engineering assumed. Next offered 2011-2012.
S. Squyres.

Provides an overview of space science, with particular emphasis on the solar system, and a detailed examination of a few selected objects, including the planet Mars, the satellites in the outer solar system, and comets.]

## [ASTRO 2290 Relativity and Astrophysics (PBS)

Spring. 4 credits. Prerequisites: freshman physics, calculus, and geometry. Next offered 2011-2012. T. Herter.
Provides a geometrically based introduction to special and general relativity, followed by consideration of astrophysical applications.]

## [ASTRO 2299 Search for Life in the

 Universe (PBS)Spring. 4 credits. Prerequisites: two courses in any physical science subject or permission of instructors. Next offered 2011-2012. J. Cordes and Y. Terzian. Surveys the contents of the universe. Reviews theories of cosmic and stellar evolution, and of the formation and evolution of planetary systems, planetary atmospheres, and surfaces.]

## [ASTRO 3310 Planetary Imaging

## Processing (PBS)

Fall. 3 credits. Intended for sophomores or juniors majoring or concentrating in Astronomy or related fields. Prerequisites: two semesters of introductory physics and some experience with computer programming; permission of instructor required (form available in SS610). Next offered 2011-2012. J. Bell.
Reviews basic techniques employed in the collection and processing of spacecraft images of solar system objects. See www.astro.cornell. edu/courses/astro310/main.html for course details.]

## ASTRO 3332 Elements of Astrophysics (PBS)

Spring. 4 credits. Prerequisites: MATH 1120, 1220, 1920, or equivalent; PHYS 2213 or 2217. P. Nicholson.

Introduction to astronomy, with emphasis on the application of physics to the study of the universe. Covers: physical laws of radiation; distance, size, mass, and age of stars, galaxies, and the universe; stellar evolution and nucleosynthesis; supernovae and black holes; galaxies and quasars. Introduction to cosmology. Mainly intended for students of science, engineering, and science education interested in astronomy and astrophysics.

## [ASTRO 3334 Modern Astrophysical

 Techniques (PBS)Spring. 3 credits. Intended for sophomores majoring or concentrating in Astronomy or related fields. Prerequisites: two semesters of introductory physics and two semesters of calculus. Recommended: ASTRO 2233. Next offered 2011-2012. J. Lloyd. Reviews the basic techniques employed in astrophysical research, both observational and theoretical, to explore the universe.]

## ASTRO 3340 Symbolic and Numerical Computing (PBS)

Spring. 4 credits. Prerequisite: calculus. D. Chernoff.

Introduces modern symbolic manipulator programs, such as Mathematica and Maple, for students of quantitative disciplines. It will be offered as an elective in astronomy. The course will cover language concepts, programming tools and techniques necessary to use such programs efficiently. It will demonstrate the state of the art by treating examples from a wide variety of fields including mathematics, astronomy, physics, engineering, biology, statistics, and finance. The aim is to acquaint students with the integrated symbolic, numerical, and graphical capabilities that they may apply to their individual areas of interest.

## ASTRO 4410 Experimental Astronomy

 (PBS)Fall. 4 credits. Prerequisites: PHYS $2214 / 2218$ (or 3310 or 3360 ), PHYS 3323/3327 (or co-registration). J. Cordes and J. Houck.

Observational astrophysics. Major experiments involve techniques in CCD (charge-coupleddevice) imaging, optical photometry, optical spectroscopy, radiometry, radio spectroscopy and radio astronomy. The experiments involve use of the Hartung-Boothroyd Observatory's 24-inch telescope, a laboratory two-element radio interferometer, and a radio telescope mounted on top of the Space Sciences Building. The laboratory covers the fundamentals of using astronomical instrumentation and data analysis as applied to celestial phenomena: asteroids, normal stars, supernova remnants, globular clusters, planetary nebulae, the interstellar medium, OH masers, and galaxies

## ASTRO 4431 Introduction to Astrophysics and Space Sciences (PBS)

Fall. 4 credits. Prerequisites: mathematics above 2000 level and physics above 3000 level. Recommended: PHYS 4443. D. Lai and P. Nicholson
Overview of modern astrophysical concepts for physical science majors. Major topics include stellar formation, structure, and evolution; stellar atmospheres; compact objects (white dwarf, neutron star, and black holes); planets; and brown dwarfs. Current research problems in these areas are introduced along the way. The emphasis is on using fundamental principles of physics to explain astronomical phenomena. A variety of physics, including elements of atomic and molecular physics, solid state physics and fluid mechanics, are introduced or reviewed in a quick, practical fashion to be put to use in solving astrophysics puzzles.

## [ASTRO 4432 Introduction to

## Astrophysics and Space Sciences II

 (PBS)Spring. 4 credits. Next offered 2011-2012
T. Herter and G. Stacey

Covers two broad topics: the astrophysics of the interstellar medium and cosmology.]

## ASTRO 4433 Introduction to Cosmology

 (also PHYS 4433) (PBS)Spring. 4 credits. Prerequisites: math/ calculus at 2000 level, physics at 3000 level. R. Bean.
An introduction to theoretical and observational cosmology aimed at interested science and engineering majors. Topics include an introduction to general relativity as applied to the cosmos; the cosmic expansion history and how it relates to the nature of matter in the universe; processes in the early universe; how galaxies and clusters of galaxies form; current and prospective cosmological surveys of galaxies, galaxy clusters, gravitational lensing, and the cosmic microwave background. The material is at a less technical level than the graduate cosmology course ASTRO 6599.

## ASTRO 4445 Introduction to General

 Relativity (also PHYS 4445) (PBS) Fall. 4 credits. Staff.
## For description, see PHYS 4445.

## ASTRO 4490 Senior Seminar Critical Thinking (PBS)

Fall. 4 credits. Prerequisites: none. Open to all students. Y. Terzian.
Critical thinking in scientific and nonscientific contexts with selections from the history of astronomy. Topics include elements of classical logic, including standards of evidence. Case studies include examples of competing hypotheses in the history of
science, as well as examples from borderline sciences. Stress is put on creative generation of alternative hypotheses and their winnowing by critical scrutiny. Topics include the nature and history of the universe, the nature of time the nature of reality, the possibilities of life on other planets, and artificial intelligence. Fallacies, illusions, and paradoxes will also be discussed. The course includes debates by the students on controversial topics such as: Can machines think? Is science and technology to be blamed for Hiroshima and $9 / 11$ ? Should the genome be improved? Is the future determined?

## ASTRO 4940 Independent Study in

 AstronomyFall or spring. 2-4 credits. Prerequisite: permission of instructor; to register: obtain an independent study form in department office, 610 Space Sciences Bldg. Recommended: familiarity with topics covered in ASTRO 3332, 4431, or 4434. Individuals work on selected topics. A program of study is devised by the student and instructor

## ASTRO 6509 General Relativity I (also PHYS 6553)

Fall. 4 credits. Prerequisite: knowledge of special relativity and methods of dynamics at level of Classical Mechanics by Goldstein. E. Flanagan.
For description, see PHYS 6553.

## ASTRO 6510 General Relativity II (also PHYS 6554)

Spring. 4 credits. Prerequisite: ASTRO 6509 E. Flanagan.

For description, see PHYS 6554.

## [ASTRO 6511 Physics of Black Holes, White Dwarfs, and Neutron Stars (also PHYS 6525)

Fall. 4 credits. Prerequisites: all of physics at upper-division undergraduate level. Next offered 2011-2012. D. Lai.]

## [ASTRO 6516 Galactic Structure and Stellar Dynamics

Fall. 4 credits. Next offered 2011-2012. D. Chernoff.

Introduction to the study of the structure of galaxies via the laws of modern physics.]

## [ASTRO 6520 Radio Astronomy

Fall. 4 credits. Next offered 2011-2012.
J. Cordes and D. Campbell.

Covers radio astronomy telescopes and electronics; antenna theory; observing procedures and data analysis; concepts of interferometry and aperture synthesis.]

## ASTRO 6523 Signal Modeling, Statistical

 Inference, and Data Mining in AstronomySpring. 4 credits. J. Cordes.
Aims to provide tools for modeling and detection of various kinds of signals encountered in the physical sciences and engineering. Data mining and statistical inference from large and diverse databases are also covered. Experimental design is to be discussed. Basic topics include probability theory; Fourier analysis of continuous and discrete signals; digital filtering; matched filtering and pattern recognition; spectral analysis; Karhunen-Loeve analysis; wavelets; parameter estimation; optimization techniques; Bayesian statistical inference; deterministic, chaotic, and stochastic processes; image formation and analysis; maximum entropy techniques. Specific applications are chosen
from current areas of interest in astronomy, where large-scale surveys throughout the electromagnetic spectrum and using nonelectromagnetic signals (e.g., neutrinos and gravitational waves) are ongoing and anticipated. Applications are also chosen from topics in geophysics, plasma physics, electronics, artificial intelligence, expert systems, and genetic programming. The course is self-contained and is intended for students with thorough backgrounds in the physical sciences or engineering.

## ASTRO 6525 Techniques of Optical/

## Infrared and Submillimeter

## Astronomy

Spring. 4 credits. T. Herter, G. Stacy, and J. Lloyd.

Optical/infrared and submillimeter telescopes and instrumentation are discussed and related to current research in these fields. Includes telescope design and general optical design (ray tracing). CCD, photoconductor, photovoltaic, bolometer, impurity band conduction, and heterodyne detection systems are presented. The instrumentation discussion includes general instrument design and specific applications to cameras, spectrographs, and interferometers. Detection limits of various systems, cryogenic techniques, and astronomical data analysis techniques are also discussed. Special topics include adaptive optics.

## [ASTRO 6530 Astrophysical Processes

Spring. 4 credits. Next offered 2011-2012.
D. Lai, T. Herter, and G. Stacey.

Fundamentals of radiative transfer,
bremsstrahlung, synchrotron radiation,
Compton scattering, spectral line transfer, gas heating and cooling, and topics in atomic and molecular spectroscopy are discussed within the framework of astrophysical sources and problems.]

## ASTRO 6531 Astrophysical Fluid

 DynamicsSpring. 4 credits. D. Lai.
This course will survey fluid dynamics (including magnetohydrodynamics and some plasma physics) important for understanding astronomical phenomena. Topics include basic fluid and MHD concepts and equations, waves and instabilities of various types (e.g., sound, gravity, Rossby, hydromagnetic, spiral density waves; Rayleigh-Taylor, thermal, Jeans, rotational, magnetorotational instabilities), shear and viscous flows, turbulence, shocks and blast waves, etc. These topics will be discussed in different astrophysical contexts and applications, such as atmosphere and ocean, star and planet formation, compact objects, interstellar medium, galaxies and clusters. This course is intended mainly for graduate students (both theory and observation) interested in astrophysics and space physics. No previous exposure to fluid dynamics is required.

## ASTRO 6560 Theory of Stellar Structure

 and Evolution (also PHYS 7667)Fall. 4 credits. Prerequisites: all
undergraduate-level physics. Though
helpful, no astronomy background required. D. Chernoff.
Intended to provide a systematic development of stellar astrophysics, both theory and observations. Topics include hydrostatic equilibrium; equation of state; radiation transfer and atmospheres; convection and stellar turbulence; nuclear burning and nucleosythesis; solar neutrinos; star formation;
pre-main sequence stars; brown dwarfs; end states of stellar evolution (white dwarfs, neutron stars, and black holes); supernovae; interacting binary stars; stellar rotation and magnetic fields; stellar pulsations; winds and outflows.

## [ASTRO 6570 Physics of the Planets

Fall. 4 credits. Next offered 2011-2012. P. Nicholson.

Introductory survey of planetary science with an emphasis on the application of physical principles.]

## [ASTRO 6571 Mechanics of the Solar System (also TAM 6730)

Spring. 3 credits. Next offered 2011-2012 J . Burns.
For description, see TAM 6730.]

## ASTRO 6575 Planetary Atmospheres

 (also EAS 5750)Fall. 4 credits. P. Gierasch.
Introduction to radiative transfer in emitting and scattering atmospheres. Radiative energy balance and radiative equilibrium. Structures of the atmospheres in the solar system. Introduction to motions in atmospheres. Planetary examples of balanced flows. Mesoscale waves, wave absorption and wave accelerations. Planetary waves. The influence of wave accelerations on thermal structure and composition. Introduction to atmospheric chemistry. Dynamical transports. Observations At the level of Andrews, Atmospheric Physics.

## [ASTRO 6577 Planetary Surface

 Processes (also EAS 5770)Spring; 3 or 4 credits ( 3 credits for course only; 4 credits if registered for lab trip). Next offered 2011-2012.]

## [ASTRO 6578 Planet Formation and Evolution (also EAS 5780) <br> Fall. 4 credits. Next offered 2011-2012. M. Pritchard.]

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ASTRO 6579 Celestial Mechanics (also
            TAM 6720)
    Spring. }3\mathrm{ credits. J. Burns.
For description, see TAM }672
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## ASTRO 6590 Galaxies and the Universe

Fall. 4 credits. R. Giovanelli and M. Haynes

The universe, its large-scale structure and history; morphology, photometry, dynamics, kinematics and active nuclei of galaxies; galaxy formation and evolution; cosmological theory and observations.

## [ASTRO 6599 Cosmology (also PHYS

 6599)Spring. 4 credits. Prerequisites: statistical physics, quantum mechanics, and electromagnetic theory courses. Next offered 2011-2012. R. Bean.
Intended to provide a detailed theoretical development of current ideas in cosmology.]

## ASTRO 6940 Advanced Study and

 ResearchFall or spring. Credit TBA.
Guided reading and seminars on topics not currently covered in regular courses.

## [ASTRO 7620 Seminar: Advanced Radio

 AstronomySpring. 2 credits. Prerequisites: for advanced undergraduates, by permission of instructor. Recommended: some background in astronomical spectroscopy. Next offered 2011-2012. R. Giovanelli and M. Haynes.]
[ASTRO 7621 Seminar: Planetary Radar Astronomy
Spring. 3 credits. Prerequisites: upper-level undergraduates and graduate students in Astronomy, engineering, and geology; good background in undergraduate mathematics and physics. Next offered 2011-2012. D. Campbell.
Discussion of radar techniques and the results from the application of these techniques to the study of solar system bodies including the Earth.]

## [ASTRO 7660 Cosmic Electrodynamics

 (also AEP 6080)Spring. 2 credits. Next offered 2011-2012. R. Lovelace.]
[ASTRO 7671 Seminar: Lunar Science and Exploration (also EAS 7310)
Fall. 3 credits. Next offered 2011-2012.]

## [ASTRO 7671 Seminar: Planetary

 Science-Composition and Mineralogy of the Martian Surface (also EAS 6930)Spring. 3 credits. Next offered 2011-2012. J. Bell.]
[ASTRO 7671 Seminar: Planetary Science-Micron to Millimeter Astronomy
Spring. 3 credits. Next offered 2011-2012. J. Houck and G. Stacey.

Covers topics of current interest in infrared and submillimeter astrophysics.]

## [ASTRO 7671 Seminar: The Nature and

 Exploration of CometsFall. 3 credits. Next offered 2011-2012. J. Veverka.

The course will review the current understanding of comets. Particular attention will be given to results obtained by recent spacecraft missions.]

## [ASTRO 7673 Seminar: Planetary

 AtmospheresSpring. 2 credits. Next offered 2011-2012. P. Gierasch.]

## ASTRO 7690 Seminar: Computational

Physics (also PHYS 4480/7680)
Spring. 3 credits. Prerequisite: working knowledge of FORTRAN. Staff.
For description, see PHYS 4480/7680.
[ASTRO 7699 Seminar: Problems in Theoretical Astrophysics (also PHYS 7665)

Fall. 2 credits. Next offered 2011-2012.
D. Lai.

Topics in condensed matter, atomic, nuclear and particle astrophysics will be treated, with examples from domains ranging from planets to white dwarfs and neutron stars.]

## BIOLOGICAL SCIENCES

The biological sciences ("biology") major is distinguished from other life sciences majors by its focus on basic, as opposed to applied, aspects of biology. All biology majors take courses in genetics, evolutionary biology, and biochemistry-subjects fundamental to understanding questions spanning the full spectrum of biology in the age of genomics.
In addition to taking these core courses, each student completes a Program of Study ("concentration") that affords the opportunity for acquiring a more detailed knowledge of particular subject areas: Animal Physiology,

Biochemistry, Computational Biology, Ecology and Evolutionary Biology, Genetics and
Development, Insect Biology, Molecular and Cell Biology, Microbiology, Neurobiology and Behavior, Nutrition, Plant Biology, and Systematics and Biotic Diversity. Alternatively, students may choose to explore three or more of these areas in the General Biology Program of Study.
The continuing rapid advances in biology are built on an ever-greater integration with the physical sciences and mathematics. Thus, the biology major is designed to provide students with a strong foundation not only in core areas of modern biology, but also in chemistry, organic chemistry, physics, and mathematics.

Students work with faculty, staff, and student advisors in selecting their Program of Study and in choosing the course options that each offers. The Office of Undergraduate Biology (OUB) in 216 Stimson Hall oversees advising for biology majors and also coordinates the extensive undergraduate biology research program, including the biology research honors program, and the Biology Scholars Program.
The biology major is very popular among students of both the College of Agriculture and Life Sciences and the College of Arts and Sciences. It provides excellent preparation not only for various advanced degrees in science, but also for health careers, because so many of its requirements are also requirements for medical, dental, or veterinary programs. For more details about the biology major and minor see the section in this catalog on biological sciences or visit www.biology. cornell.edu.

## Courses with Overlapping Content

Because the department offers many courses with overlapping content, students must choose their courses carefully to ensure that they will receive credit for each course they take. Listed below are courses that have similar content. Students will receive credit for only one of the courses in each group.
BIOG 1105, 1440, (1101, 1103, 1107, 1110—no longer offered)
BIOG 1106, (1102, 1104, 1108, 1109—no longer offered)

BIOMG 3300, 3310 \& 3320, 3330, 3350, NS 3200
BIOSM 3640, 3750
BIOSM 3760, BIOEE 3730

## BIOLOGY \& SOCIETY MAJOR

K. Vogel, director of undergraduate studies, College of Arts and Sciences; S. K. Obendorf, advising coordinator, College of Human Ecology; B. Chabot, advising coordinator, College of Agriculture and Life Sciences; E. Adkins-Regan, B. Bedford, W. Bemis, K. Berggren, R. Boyd, D. Brown, R. Canfield, S. Ceci, B. Chabot, C. C. Chu, W. Crepet, J. Davis, P. Dear, R. Depue, D. Feathers, G. W. Feigenson, J. Fortune, C. Geisler, W. Ghiorse, C. Goodale, C. Greene, D. Gurak, A. Hajek, L. Harrington, R. Harris-Warrick, A. Hedge, S. Hilgartner, J. Hinestroza,
T. J. Hinrichs, B. Johnson, B. Knuth, A. Lemley, C. Leuenberger, D. Levitsky, B. Lewenstein, J. Losey, B. Lust, M. Lynch, K. McComas,
S. McCouch, J. Mikels, A. Netravali,
S. Nicholson, S. K. Obendorf, P. Parra, A. Parrot, D. Pelletier, M. Pfeffer, T. Pinch, A. G. Power, R. Prentice, S. Pritchard, W. Provine, M. Rossiter, S. Seth, R. Stedman, R. Stoltzfus, J. Tantillo, J. Thies, V. Utermohlen, K. Vogel, R. Wayne, E. Wethington, T. Whitlow, S. Wolf. Emeritus: D. Baks, D. Bates,
C. Eberhard, H. C. Howland, K. A. R. Kennedy, J. Fessenden MacDonald, J. Mueller, D. Pimentel, J. V. Reppy, J. M. Stycos

The Biology \& Society major is suited for students who wish to combine training in biology with perspectives from the social sciences and humanities on the social, political, and ethical aspects of modern biology. In addition to providing a foundation in biology, Biology \& Society students gain a
background in the social dimensions of modern biology and in the biological dimensions of contemporary social issues.
The Biology \& Society major, which involves faculty from throughout the university, is offered by the Department of Science and Technology Studies. Students in the College of Arts and Sciences, the College of Human Ecology, and the College of Agriculture and Life Sciences are eligible for the major. The major is coordinated for students in all colleges through the Biology \& Society Office. Students can get information, specific course requirements, and application procedures for the major from the Biology \& Society office in 306 Rockefeller Hall, 255-6047.

Because the major is multidisciplinary, students must attain a basic understanding of the several disciplines it comprises. The curriculum includes courses in ethics; statistics; history, philosophy, and social studies of science and biology; and basic biology (e.g., genetics and development; biochemistry and molecular-cell biology; ecology; evolutionary biology), as well as integrative courses offered through Biology \& Society. Majors are required to take a core course and must develop a theme, an intellectually coherent grouping of courses representative of their special interest in Biology \& Society. Recommended themes in the Biology \& Society major include biology, behavior, and society; biology and human population; biology and public policy; environment and society; and health and society. Students may also develop their own individually tailored themes (which in recent years have included topics such as
biotechnology and society and agriculture, environment, and society). In consultation with their faculty advisor, students select courses that meet the foundation and core course requirements so as to build a coherent theme. Sample curricula for the recommended themes
and for several student-developed themes are available in the Biology \& Society office.

Because of the interdisciplinary nature and flexibility of the Biology \& Society major, we do not allow students to triple major.

Faculty members are available (according to posted office hours or by appointment) in the Biology \& Society offices, 306 Rockefeller Hall, to answer questions and to provide assistance.

## Admission to the Major

All students should have completed a year of college-level biology or two entry-level biology courses before submitting an application during their sophomore year. An application deadline is in effect each semester for CALS and HE students; please check with the department for deadline dates. A\&S students are encouraged to apply during that time, but applications will be accepted after the deadline of their sophomore year. Applying during this period will ensure an optimal advising experience prior to preenrollment. Juniors are considered on a case-by-case basis. Upper-division applicants should realize the difficulties of completing the major requirements in fewer than two years. Freshmen admitted to the Colleges of Agriculture and Life Sciences and Human Ecology as Biology \& Society majors are considered to have been admitted to the major on a provisional basis, contingent on successful completion of the course requirement in introductory biology and submission of the application to the university major. The application includes (1) a one-page statement explaining the student's intellectual interests in the Biology \& Society major and why the major is consistent with the student's academic goals and interests; (2) the theme the student wishes to pursue in the major; (3) a tentative plan of courses fulfilling Biology \& Society requirements, including courses already taken and those the student plans to take; and (4) a transcript of work completed at Cornell University (and elsewhere, if applicable), current as of the date of application.
Acceptance into the major requires completion of the course sequence in introductory biology. Sophomores in the process of completing this prerequisite may be admitted to the major on a provisional basis. It is the student's responsibility to assure that final acceptance is granted upon satisfactory completion of the introductory biology requirement. Although only introductory biological science is a prerequisite for acceptance, students find it useful to have completed some of the other requirements (listed below) by the end of their sophomore year, preferably by the end of the first semester. Students who are considering the major may also find it beneficial to take STS 2011, What Is Science?, in their freshman or sophomore year. Human Ecology students should also consult the current Human Ecology guide and meet with the college advising coordinator, S. Kay Obendorf, sko3@ cornell.edu.

## Major Requirements

No single course may satisfy more than one major requirement. All courses must be taken for a letter grade.

## 1. Basic courses

a. Starting with the Class of 2014, AP credit will no longer be accepted by the Biology \& Society major to fulfill the Intro Bio requirement. Because the introductory biology curriculum at Cornell has changed, students should consult with the DUS, Kathleen Vogel (kmv8), or the advising staff in 306 Rockefeller Hall (sfc1) to obtain up-todate guidance on fulfilling the introductory biology requirement for the major.
b. College calculus (one course): MATH 1106, 1110, 1120 or any higher-level calculus.
c. Recommended but not required: General chemistry (one-year sequence) (prerequisite to biochemistry and other chemistry courses): CHEM 1560, 2070-2080, or 2150-2160.
2. Foundation Courses (should be completed by end of junior year).
Foundation courses are intended to provide a broad introduction to methodology and theory in their area.
These courses must be above the 1000 level, at least 3 credit hours, and taken for a letter grade.
a. Ethics: one course; BSOC 2051 (also STS 2051) or BSOC 2061 (also STS 2061, PHIL 2460).
b. Social sciences/humanities foundation: two courses; one from any two of the following subject areas: history of science; philosophy of science; sociology of science; politics of science; and science communication.
c. Biology foundation (breadth requirement): three courses; one each from three of the following subject areas: biochemistry, molecular and cell biology (BIOBM 3300 or 3310 or 3330 or NS 3200); ecology (BIOSM 3640, BIOSM 3750); genetics and development (BIOMG 2800 or 2810 or PLBR 2250 or NTRES 2830); evolutionary biology (BIOEE 1780); animal behavior (BIONB 2210, BIOSM 3290); neurobiology (BIONB 2220); anatomy and physiology (BIOAP 3110 or NS 3410); biological diversity (BIOPL 2410 or BIOMI 2900 or BIOEE 3730 or 2740 or 4500 or 4750 or 4760 or BIOSM 3080 or BIOSM 3210 or ENTOM 2120 or PLPA 3010 or 3090 or BIOSM 3100 or 3740 or 3770 or 4490); nutrition (NS 1150 or NS 1220).
d. Biology foundation (Depth
requirement): one biology course for which one of the above (2c) is a prerequisite.**
e. Statistics: one course selected from MATH 1710, BTRY 3010, AEM 2100, SOC 3010, PSYCH 3500, ECON 3190 , PAM 2100, ILRST 2100 or 2120.
3. Core Course: (one course). Should be completed by end of junior year.
BSOC 3011 Life Sciences and Society (also STS 3011); or STS 2861 Science and Human Nature (also PHIL 2860).
4. Theme (five courses that correspond to the theme selected by the student). These
courses must be above the 1000 level, at least 3 credit hours, and taken for a letter grade. Choose these courses as follows:
a. Natural science issues/biology elective (two courses). Select from the list of BSOC-approved natural science issues courses or choose course(s) with introductory biology as a prerequisite.
b. Humanities/social sciences electives (two courses). Courses from the list of senior seminars may be used as theme electives if not used to meet another requirement, or select humanities or social sciences courses in consultation with the faculty advisor.
c. Senior seminar (one course taken senior year). Courses change yearly.

* Students may petition to take a second statistics course (an advanced course, in sequence with the statistics course taken in the foundation) in place of the calculus requirement.
** A list of approved depth courses using NS 1150 and NS 1220 as a prerequisite is available in 306 Rockefeller Hall.


## Independent Study

Projects under the direction of a Biology \& Society faculty member are encouraged as part of the program of study in the student's theme area. Applications for research projects are accepted by individual faculty members. Students may enroll for 1-4 credits in BSOC 3751 Independent Study with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Applications and information on faculty research, scholarly activities, and undergraduate opportunities are available in the Biology \& Society office, 306 Rockefeller Hall.

## The Honors Program

The honors program is designed to provide independent research opportunities for academically talented undergraduate students whose major is Biology \& Society (BSOC). Students who enroll in the honors program are expected, with faculty guidance, to do independent study and research dealing with issues in Biology \& Society. Students participating in the program should find the experience intellectually stimulating and rewarding whether or not they intend to pursue a research career.
Biology \& Society majors are considered for entry into the honors program at the end of the second semester of the junior year. Application forms for the honors program are available in the Biology \& Society office, 306 Rockefeller Hall. The honors program is available to Biology \& Society majors from the Colleges of Arts and Sciences and Agriculture and Life Sciences. Biology \& Society majors in the College of Human Ecology must be selected by an honors committee within their college. To qualify for the Biology \& Society honors program, students must have an overall Cornell cumulative grade point average (GPA) of at least 3.3, have formulated a research topic, and have found a project supervisor (with an academic appointment at Cornell) and another faculty member willing to serve as their advisors. At least one of these must be a member of the Biology \& Society major. Applications will be reviewed by a committee headed by the director of undergraduate
studies, who will notify students directly of the outcome. Students will be permitted to register for the honors program only by permission of the department. Students must enroll for both the fall and spring semesters. BSOC 4991/4992 is now cross-listed with the College of Agriculture and Life Sciences as ALS 4991/4992 and the College of Human Ecology as HE 4990. Students wishing to receive CALS credit can sign up for ALS 4991/4992 and those wishing to receive Human Ecology credit must sign up for HE 4990. They must attend the honors seminar during the fall semester. More information on the honors program is available in the Biology \& Society Office, 306 Rockefeller Hall, 255-6047.

## People to contact for Biology \& Society honors information:

In Arts and Sciences: Kathleen Vogel, director of undergraduate studies, kmv8@cornell.edu
In Agriculture and Life Sciences: Brian Chabot, faculty representative to CALS Honors Committee, bfc1@cornell.edu
In Human Ecology: S. Kay Obendorf, advising coordinator, CHE, sko3@cornell.edu

## Further Information

Professor Kathleen Vogel, director of undergraduate studies, kmv8@cornell.edu
Professor Brian Chabot, advising coordinator, College of Agriculture and Life Sciences, bfc1@ cornell.edu
S. Kay Obendorf, advising coordinator, College of Human Ecology, sko3@cornell.edu
Susan Sullivan, Biology \& Society Advising Office, 306 Rockefeller Hall, 255-6047, sfc1@ cornell.edu
web site: www.sts.cornell.edu

## I. First-Year Writing Seminars

Consult the John S. Knight Institute web site for times, instructors, and descriptions. Web site: www.arts.cornell.edu/Knight_institute/ index.html.

## II. Introductory Courses

STS 1101 Science, Technology, and Politics (SBA-AS)
Fall. 3 credits. Recommended as introduction to field. Not required; may not be used to fulfill major requirement. STS 1101 and 1102 can be taken separately or in any order. R. Prentice.
For description, see STS listings, STS 1101.

## STS 1102 Histories of the Future (also HIST 1620) (CA-AS)

Fall. 3 credits. Recommended as an introduction to the field. Not required; may not be used to fulfill a major requirement.
STS 1101 and 1102 may be taken
separately or in any order. S. Seth.
For description, see STS listings, STS 1102.

## III. Foundation Courses

## A. Ethics (one course)

## BSOC 2051 Ethical Issues in Health and

 Medicine (also STS 2051) (KCM-AS)Fall. 4 credits. Limited to 150 students. Not open to freshmen. K. Vogel.
In today's rapidly changing world of health and medicine, complex ethical issues arise in many contexts from the private, interpersonal interactions between doctor and patient to the broad, mass-mediated controversies that make
medicine into headline news. This course examines ethical problems and policy issues that rise in contemporary medicine, health care, and biomedical research. Tools for ethical research are applied to a variety of topics and fundamental questions in bioethics. Perspectives from social science, history, and law also inform the course, which will consider ethical issues in their social and institutional context. We will explore problems that arise in a number of substantive areas, including the doctor-patient relationship, end-of-life decision making, distributive justice and health care, human experimentation, reproductive technology, public health, and human genetics. The course will also examine the relatively new field of bioethics itself, raising questions about what issues count as ethical ones and exploring the role of ethical expertise in contemporary societies.

## BSOC 2061 Ethics and the Environment

 (also PHIL 2460, STS 2061) (KCM-AS)Spring. 4 credits. Open to all
undergraduates; freshmen by permission of instructor. S. Pritchard.
Politicians, scientists, and citizens worldwide face many environmental issues today, but they are neither simple nor straightforward. Moreover, there are many ways to understand how we have, do, and could value the environment from animal rights and wise use to deep ecology and ecofeminism. This class acquaints students with some of the challenging moral issues that arise in the context of environmental management and policy-making, both in the past and the present. Environmental concerns also highlight important economic, epistemological, legal, political, and social issues in assessing our moral obligations to nature as well as other humans. This course examines various perspectives expressed in both contemporary and historical debates over environmental ethics by exploring four central questions: What is nature? Who counts in environmental ethics? How do we know nature? Whose nature?
B. Social Sciences/Humanities Foundation (two courses, one from any two areas)

## 1. History of Science

## [HIST 3150 Environmental History: The

 U.S. and the World (also AMST 3150) \# (HA-AS)Fall. 4 credits. Next offered 2012-2013. A. Sachs.]

NTRES 2320 Nature and Culture
Spring. 3 credits. J. Tantillo.
For description, see NTRES 2320.

## NTRES 3320 Introduction to Ethics and

 EnvironmentFall. 4 credits. J. Tantillo.
For description, see NTRES 3320.
BSOC 1941 The History of Science in Europe: From the Ancient Legacy to Isaac Newton (also HIST/STS 1941) (HA-AS)
Fall. 3 credits. P. Dear.
For description, see HIST 1941.
BSOC 1942 The History of Science in Europe: Newton to Darwin, Darwin to Einstein (also HIST/STS 1942) (HAAS)
Spring. 3 credits. P. Dear.
For description, see HIST 1942.

STS 2331 Agriculture, History, and Society: From Squanto to Biotechnology (also AMST 2331) (HA-AS)
Fall. 3 credits. M. Rossiter.
For description, see STS 2331.

## STS 2871 Evolution (also BIOEE 2070,

 HIST 2870) (PBS)Fall or summer. 3 credits. May not be taken for credit after BIOEE 2780. W. Provine.

For description, see BIOEE 2070.
STS 3561 Computing Cultures (also COMM/INFO 3561, VISST 3560) (CA-AS)
Spring. 4 credits. R. Prentice.
For description, see STS listings, STS 3561.
[STS 4331 International History of Science \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012.
M. Rossiter.

For description, see STS listings, STS 4331.]
STS 4441 Historical Issues of Gender and Science (also FGSS 4440) (CA-AS)
Spring. 4 credits. M. Rossiter.
For description, see STS listings, STS 4441.
STS 4471 Seminar in the History of Biology (also BIOEE 4670, BSOC 4471, HIST 4150) (PBS)
Fall or summer (six-week session). 4
credits. Limited to 18 students. S-U or
letter grades. W. Provine.
For description and prerequisites, see BIOEE 4670.

## 2. Philosophy of Science

STS 2011 What Is Science? An Introduction to the Social Studies of Science and Technology (also SOC 2100) (CA-AS)

Spring. 3-4 credits. T. Pinch.
For description, see STS listings, STS 2011.
STS 3811 Philosophy of Science: Knowledge and Objectivity (also PHIL 3810) (KCM-AS)
Fall. 4 credits. R. Boyd.
For description, see PHIL 3810.

## 3. Sociology of Science

BSOC 2201 Society and Natural Resources under Sociology of Science (also DSOC/NTRES 2201)
Spring. 3 credits. R. Stedman.
For description, see NTRES 2201.
BSOC 2468 Medicine, Culture, and Society (also ANTHR/STS 2468) (CA-AS)
Fall. 3 credits. S. Langwick.
For description, see ANTHR 2468.
BSOC 3011 Life Sciences and Society (also STS 3011) (SBA-AS)
Fall. 4 credits. May be used to meet sociology of science requirement if not used to meet core course requirement. M. Lynch.

For description, see "Core Courses," BSOC 3011.

## [BSOC 3311 Environmental Governance

 (also NTRES 3310, STS 3311) (CA-AS)Spring. 3 credits. Next offered 2011-2012.
S. Wolf.

For description see NTRES 3310.]
[BSOC 4421 Sociology of Science (also CRP/SOC 4420, STS 4421) (SBA-AS)
Fall. 4 credits. Next offered 2011-2012. Pinch.
For description, see STS 4421.]
DSOC 2200 Sociology of Health and Ethnic Minorities (also LSP 2200) (SBA-AS)
Fall. 3 credits. P. Parra.
For description, see DSOC 2200.
[HD 4520 Culture and Human Development
Fall. 3 credits. Next offered 2011-2012.
Q. Wang.

For description, see HD 4520.]
NS 2450 Social Science Perspectives on Food and Nutrition
Fall. 3 credits. C. Bisogni and J. Sobal.
For description and prerequisites, see NS 2450.
STS 2011 What Is Science? An Introduction to the Social Studies of Science and Technology (also SOC 2100) (CA-AS)

Spring. 3 credits. T. Pinch.
For description, see STS listings, STS 2011.
STS 3111 The Sociology of Medicine (also SOC 3130) (SBA-AS)
Fall. 4 credits. Not open to freshmen.
C. Leuenberger.

For description, see STS listings, STS 3111.
[STS 4111 Knowledge, Technology, and Property
Spring. 4 credits. Next offered 2012-2013.
S. Hilgartner.

For description, see STS 4111.]
4. Politics of Science
[BSOC 3311 Environmental Governance (also NTRES 3310, STS 3311) (CA-AS)
Spring. 3 credits. Next offered 2011-2012.
S. Wolf.

For description see NTRES 3310.]
BSOC 4071 Law, Science, and Public Values (also STS 4071) (SBA-AS)
Spring. 4 credits. M. Lynch.
For description, see STS listings, STS 4071.

## [CRP 3800 Environmental Politics

Fall. 4 credits. Next offered 2012-2013.
R. Booth.

For description, see CRP 3800.]
PAM 2300 Introduction to Policy Analysis
Fall and spring. 4 credits. R. Avery and
J. Gerner.

For description, see PAM 2300.
STS 3241 Environment and Society (also DSOC/SOC 3240) (SBA-AS)
Fall. 3 credits. G. Gillespie.
For description, see DSOC 3240.
[STS 3911 Science in the American Polity: 1960 to Now (also AMST 3911, GOVT 3091) (SBA-AS)
Spring. 4 credits. Next offered 2012-2013.
Staff.
For description, see STS 3911.]

## 5. Science Communication

COMM 4210 Communication and the Environment
Spring. 3 credits. May be used in
Foundation only if not taken as senior seminar. Offered odd-numbered years. K. McComas.

For description, see COMM 4210.

STS 2851 Communication, Environment, Science, and Health (also COMM 2850)

Spring. 3 credits. B. Lewenstein.
For description, see COMM 2850.
STS 3521 Science Writing for the Mass Media (also COMM 3520)
Fall. 3 credits. B. Lewenstein.
For description and prerequisites, see COMM 3520.
[STS 4661 Public Communication of Science and Technology (also COMM 4660/6660, STS 6661)
Spring. 3 credits. Limited to 15 students.
May be used in Foundation only if not
taken as senior seminar. Offered even-
numbered years; next offered 2011-2012.
B. Lewenstein.

For description and prerequisites, see COMM 4660.]
C. Biology Foundation (breadth requirement): Three courses: one from three of the following subject areas:

1. Biochemistry, Molecular and Cell Biology
BIOMG 3300 Principles of Biochemistry, Individualized Instruction (also BIOG 3300)

Fall and spring. 4 credits. J. Blankenship,
Y. Mao, and staff.

For description and prerequisites, see BIOMG

## 3300.

BIOMG 3310 Principles of Biochemistry: Proteins and Metabolism
Fall. 3 credits. May not be taken for credit
after BIOMG 3300 or 3330. G. Feigenson.
For description and prerequisites, see BIOMG

## 3310.

## BIOMG 3330 Principles of Biochemistry,

 LecturesSummer, six-week session. 4 credits. S. Ely. For description and prerequisites, see BIOMG

## 3330.

## NS 3200 Introduction to Human

 BiochemistryFall. 4 credits. P. Stover and S. Qian.
For description and prerequisites, see NS 3200.

## 2. Ecology

BIOSM 3640 Field Marine Science
Summer. 6 credits. Taught at Shoals Marine Laboratory; for more information and application, contact the SML office at G14 Stimson Hall. Staff.
For description and prerequisites, see BIOSM

## 3640.

BIOSM 3750 Field Marine Biology and Ecology
Summer. 6 credits. Taught at Shoals Marine
Laboratory; for more information and
application, contact the SML office at G14
Stimson Hall. Staff.
For description and prerequisites, see BIOSM
3750.
3. Genetics and Development

BIOMG 2800 Lectures in Genetics and Genomics
Fall, spring, or summer. 3 credits.
R. Goldberg and D. Nero.

For description and prerequisites, see BIOMG 2800.

BIOMG 2810 Genetics and Genomics
Fall, spring, or summer. 5 credits. Limited to 200 students. Not open to freshmen fall semester. R. Goldberg and D. Nero.
For description and prerequisites, see BIOMG 2810.

## BIOMG 2820 Human Genetics

Spring. 2 or 3 credits ( 2 credits if taken after BIOMG 2810); must be taken for 3 credits to fulfill Biology \& Society
requirements. Limited to 25 students per disc. M. Goldberg.
For description and prerequisites, see BIOMG 2820.
[NTRES 2830 Genetics for Population Biologists
Fall. 3 credits. Next offered 2011-2012.
M. Hare.

For description, see NTRES 2830.]

## PLBR 2250 Plant Genetics

Spring. 3 credits. Staff.
For description, see PLBR 2250.

## 4. Evolutionary Biology

BIOEE 1780 Evolutionary Biology
Fall or spring. 3 or 4 credits. Fall,
M. Geber; spring, staff.

For description, see BIOEE 2780.

## 5. Animal Behavior

BIONB 2210 Neurobiology and Behavior I: Introduction to Behavior
Fall. 3, 4, or 5 credits. T. Seeley.
For description and prerequisites, see BIONB

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2210 .
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BIONB 2213 Neurobiology and Behavior I: Introduction to Behavior
Summer. 3 or 4 credits. Staff.
For description, see BIONB 2213.
[BIOSM 3290 Ecology of Animal Behavior
Summer. 3, 4, or 5 credits. Taught at the
Shoals Marine Laboratory; for more
information, contact SML office at G14
Stimson Hall. Next offered 2011-2012.
Staff.
For description and prerequisites, see BIOSM
3290.]
6. Neurobiology

BIONB 2220 Neurobiology and Behavior II: Introduction to Neurobiology
Spring. 3 or 4 credits. A. Bass and staff. For description and prerequisites, see BIONB 2220.
7. Physiology and Anatomy

BIOAP 3110 Introductory Animal Physiology, Lectures (also VTBMS 3460)

Fall. 3 credits. E. Loew.
For description and prerequisites, see BIOAP 3110.

NS 3410 Human Anatomy and Physiology Spring. 3 credits. K. O'Brien.
For description, see NS 3410.
8. Biological Diversity

BIOEE 2740 The Vertebrates: Structure, Function, and Evolution
Spring. 4 credits. B. McGuire.
For description and prerequisites, see BIOEE 2740.
[BIOEE 3730 Biology of the Marine Invertebrates
Fall. 5 credits. Next offered 2012-2013.
D. Harvell.

For description and prerequisites, see BIOEE 3730.]
[BIOEE 4500 Mammalogy (Lecture)
Spring. 3 credits. Next offered 2011-2012.
B. A. McGuire.

For description and prerequisites, see BIOEE 4500.]
[BIOEE 4750 Ornithology
Spring. 4 credits. Next offered 2012-2013.
D. Winkler.

For description and prerequisites, see BIOEE 4750.]

## BIOEE 4760 Biology of Fishes

Fall. 4 credits. A. McCune.
For description and prerequisites, see BIOEE 4760.

## BIOMI 2900 General Microbiology

Lectures
Fall, spring, and summer. 2 or 3 credits; must be taken for 3 credits to fulfill major requirement. B. Batzing (summer) and W. Ghiorse.

For description and prerequisites, see BIOMI 2900.

## BIOPL 2410 Introductory Plant

Biodiversity and Evolution
Fall. 3 credits. K. Niklas and T. Silvia. For description, see BIOPL 2410.
BIOSM 3080 Field Microbial Ecology
Summer. 4 credits. Taught at Shoals Marine
Laboratory, N.H. L. Zettler and E. Zettler.
For more information, contact the SML office at G14 Stimson Hall.

## BIOSM $\mathbf{3 1 0 0}$ Marine Symbiosis

Summer. 4 credits. Taught at Shoals Marine Laboratory, N.H. For more information, contact SML office at G14 Stimson Hall.
Staff.
For description and prerequisites, see BIOSM 3100.

BIOSM 3210 Anatomy and Function of Marine Vertebrates
Summer. 4 credits. Prerequisite: one year biology. Taught at Shoals Marine
Laboratory, N.H. F. Fish and W. Bemis.
For more information, contact the SML office

## at G14 Stimson Hall.

BIOSM 3740 Field Ornithology
Summer. 4 credits. Taught at Shoals Marine Laboratory, N.H.; for more information, contact SML office at G14 Stimson Hall. Staff.
For description and prerequisites, see BIOSM

## 3740.

## BIOSM 3770 Diversity of Fishes

Summer. 4 credits. Taught at Shoals Marine Laboratory, N.H.; for more information, contact SML office at G14 Stimson Hall. Staff.
For description and prerequisites, see BIOSM 3770.

BIOSM 4490 Seaweeds, Plankton, and Seagrass: the Ecology and Systematics of Marine Plants
Summer. 4 credits. Taught at Shoals Marine Laboratory, N.H.; for more information, contact SML office at G14 Stimson Hall.
Staff.
For description and prerequisites, see BIOSM 4490.

## ENTOM 2120 Insect Biology

Fall. 4 credits. C. Gilbert.
For description and prerequisites, see ENTOM 2120.

PLPA 3010 Biology and Management of Plant Diseases
Fall. 3 credits. W. Fry.
For description, see PLPA 3010.

## [PLPA 3090 Fungi

Fall. 3 credits. Next offered 2012-2013.
K. Hodge.

For description and prerequisites, see PLPA

## 3090.]

## 9. Nutrition

NS 1220 Nutrition and the Life Cycle Spring. 3 credits. V. Utermohlen.

## For description, see NS 1120.

NS 1150 Nutrition, Health, and Society
Fall. 3 credits. D. Levitsky or J. Swanson. For description, see NS 1150.
D. Biology Foundation (depth requirement): one course for which one of the above breadth requirement courses (2C) is a prerequisite.

## E. Statistics (one course)

## AEM 2100 Introductory Statistics

Spring. 4 credits. C. VanEs.
For description and prerequisites, see AEM 2100.

## BTRY 3010 Biological Statistics I

Fall. 4 credits. P. Sullivan.
For description and prerequisites, see BTRY 3010.

ECON 3190 Introduction to Statistics and Probability
Fall. 4 credits. Y. Hong.
For description and prerequisites, see ECON 3190.

## ILRST 2100 Introductory Statistics (also

 STSCI 2100)Spring. 4 credits. L. Karns, P Velleman, and

> M. Wells.

For description, see ILRST 2100.
MATH 1710 Statistical Theory and
Application in the Real World
Fall and spring. 4 credits. Staff.
For description, see MATH 1710.
PAM 2100 Introduction to Statistics
Fall and spring. 4 credits. J. Lewis,
T. Evans, J. Carmalt, and staff.

For description, see PAM 2100.

## PSYCH 3500 Statistics and Research

Design
Fall. 4 credits. T. Cleland.
For description, see PSYCH 3500.

## SOC 3010 Evaluating Statistical

 EvidenceFall. 4 credits. Limited to Arts and Sciences
students. M. Brashears.
For description, see SOC 3010.

## IV. Core Courses

BSOC 3011 Life Sciences and Society

## (also STS 3011) (SBA-AS)

Fall. 4 credits. M. Lynch.
Biology and biotechnology are major sources of influence on personal and social life. In addition, social and historical conditions have profound influence on biological research,
and on the applications of such research in medicine, agriculture, and other fields.
Biological research itself is a social process involving personal and commercial competition, different styles of work and interpretation, and complex human interactions. The course aims to introduce students to basic science and technology studies (S\&TS) perspectives on biological knowledge and biotechnology. Students will be encouraged to critically evaluate and discuss these perspectives. The course is designed to prepare students for more advanced courses in the Biology \& Society and S\&TS majors, but students who do not plan to take further courses in those subjects can get critical insight into biology's profound role in shaping our modern way of life

## NTRES 2320 Nature and Culture

Spring. 3 credits. Approved for spring 2011 only. T. Tantillo.
For description, see NTRES 2320

## V. Themes

A. Natural Science Issues/Biology

Elective (two courses). Select from the following list of BSOC-approved natural science issues courses or choose course(s) with intro biology as a prerequisite

BEE 3299 Sustainable Development
Spring. 3 credits. Web-based course. N. Scott.

For description and more information, see BEE 3299

BIOMS $\mathbf{3 0 5 0}$ Basic Immunology
Fall. 3 credits. J. Appleton.
For description, see BIOMS 3050.
[BIOPL 2470 Plants and People
Fall. 3 credits. Offered alternate years; next offered 2011-2012. M. Luckow
For description, see BIOPL 2470.]
BIOSM 2770 Intro to Marine

## Conservation Biology

Summer, two-week session. 4 credits. Prerequisite: one year biology. Taught at Shoals Marine Laboratory, N.H. H. Weeks and K. Flessa.
For more information, contact the SML office at G14 Stimson Hall.

## BIOSM 3220 Ecology of Biological

## Invasions

Summer, two-week session. 4 credits
Prerequisite: one year biology. Taught at Shoals Marine Laboratory, N.H. R. Seeley and J. Dijkstra.
For more information, contact the SML office at G14 Stimson Hall

BIOSM 4720 Genetics of Marine Diversity
Summer, two-week session. 4 credits.
Prerequisite: one year biology. Taught at
Shoals Marine Laboratory, N.H
A. Sherlock

For more information, contact the SML office at G14 Stimson Hall.

BME 4110 Science and Technology Approaches to Problems in Human Health
Fall. 3 credits. C. B. Schaffer and
M. G. Kaplitt.

For description, see BME 4110

## [BSOC 2101 Plagues and People (also

 ENTOM 2100)Fall. 3 credits. Offered alternate years; next offered 2011-2012. L. Harrington.
For description, see ENTOM 2100.]
BSOC 2141 Biological Basis of Sex Differences (also BIOAP/FGSS 2140) (PBS)
Fall. 3 credits. Offered even-numbered
years. J. Fortune
For description, see BIOAP 2140
[BSOC 3441 Insect Conservation Biology (also ENTOM 3440)
Spring. 3 credits. Offered alternate years;
next offered 2011-2012. J. Losey.
For description, see ENTOM 3440.]
BSOC 3471 Human Growth and Development: Biological and Behavioral Interactions (also HD/NS 3470)

Spring. 3 credits. Offered alternate years
J. Haas and S. Robertson

For description and prerequisites, see HD 3470.

EAS 3220 Biogeochemistry of the Hawaiian Islands
Spring. 4 credits. Prerequisites: enrollment in EES Semester in Hawaii; EAS 2200, EAS
3030, or permission of instructor. L. Derry
For description, see EAS 3220.

## EAS 3510 Marine Ecosystems Field

 CourseSpring. 4 credits. Prerequisites: EAS 2400;
enrollment in EES Semester in Hawaii
Recommended: oceanography course.
C. Greene, B. Monger, and C. D. Harvell.

For description, see EAS 3510.
ENTOM 2020 Invasions
Fall. 3 credits. A. Hajek and J. Nyrop.
For description, see ENTOM 2020.
[ENTOM 3520 Medical and Veterinary Entomology
Fall. 3 credits. Next offered 2011-2012.
L. Harrington.

For description, see ENTOM 3520.]
FSAD 4390 Biomedical Materials and Devices for Human Body Repair
Spring. 3 credits. C. Chu.
For description, see FSAD 4390.
HD 3370 Language Development (also COGST/PSYCH 4360, LING 4436)
Spring. 4 credits. B. Lust.
For description, see HD 3370.
HD 3440 Infant Behavior and Development
Fall. 3 credits. Not open to freshmen.
S. Robertson

For description and prerequisites, see HD 3440.

## HD 3660 Affective and Social Neuroscience <br> Spring. 3 credits. R. Depue <br> For description, see HD 3660.

[HD 4260 Translational Research in Memory and Neuroscience
Fall. 4 credits. Next offered 2011-2012.
C. Brainerd.

For description, see HD 4260.]

## HD 4330 Developmental Cognitive

 NeuroscienceSpring. 3 credits. May be used as depth course if BIONB 2210 or 2220 taken as breadth. Staff.
For description, see HD 4330.

## HD 4660 Psychobiology of Temperament

 and PersonalityFall. 3 credits. R. DePue.
For description and prerequisites, see HD 4660.
[NS 2750 Human Biology and Evolution (also ANTHR 2750)
Fall. 3 credits. Offered alternate years; next
offered 2011-2012. J. Haas and Z. Gu.
For description, see NS 2750.]
[NS 3150 Obesity and the Control of Body Weight
Spring. 3 credits. Offered alternate years; next offered 2011-2012. D. Levitsky
For description see NS 3150.]
NS 3220 Maternal and Child Nutrition
Spring. 3 credits. Limited to 25 students
P. Brannon.

For description and prerequisites, see NS 2220.
NS 3310 Physiological and Biochemical Bases of Human Nutrition
Spring. 4 credits. C. McCormick and L. Qi. For description and prerequisites, see NS 3310
NS $\mathbf{3 5 0 0}$ Epidemiology in Context
Spring. 3 credits. D. Pelletier.
For description and prerequisites, see NS 3500.
NS 4210 Nutrition and Exercise
Summer. 3 credits. Nutrition majors only,
by permission of instructor. S. Travis.
For description, see NS 4210.
[NS 4750 Mechanisms of Birth Defects
Spring. 3 credits. Next offered 2011-2012
P. Stover and D. Noden.

For description and prerequisites, see NS 4750.]

NTRES 2010 Environmental Conservation Spring. 3 credits. J. Yavitt.
For description, see NTRES 2010.
NTRES 4280 Principles and Practices of Applied Wildlife Science
Spring. 3 credits. Offered alternate years. Staff.
For description, see NTRES 4280.

## PSYCH 2230 Introduction to

Biopsychology
Fall. 3 credits. D. Smith
For description, see PSYCH 2230.
[PSYCH 2750 Introduction to Personality (also HD 2600)
Fall. 3 credits. Next offered 2012-2013.
V. Zayas.

For description, see PSYCH 2750.]
PSYCH 3260 Evolution of Human Behavior
Spring. 4 credits. B. Johnston
For description and prerequisites, see PSYCH 3260.

## Examples of biology electives

ANSC 2400 Animal Reproduction and Development
Spring. 3 credits. J. Parks
For description, see ANSC 2400.

ANSC 2410 Animal Reproduction and Development Lab
Spring. 1 credit. J. Parks.
For description, see ANSC 2410.
HD 4660 Psychobiology of Temperament and Personality
Fall. 3 credits. R. DePue.
For description and prerequisites, see HD 4660.

NS 3310 Physiological and Biochemical Bases of Human Nutrition
Spring. 4 credits. C. McCormick.
For description, see NS 3310.

## B. Humanities/Social Science Elective

 (two courses)Courses listed earlier as social science/
humanities foundation courses (2B) are particularly appropriate as social science/ humanities electives. However, a single course cannot be used to meet both requirements. Examples of recommended social science or humanities electives are listed below. A more complete list is available in 306 Rockefeller Hall
Examples of social science electives
[AEM 4640 Economics of Agricultural Development (also ECON 4640)
Fall. 3 credits. Next offered 2012-2013. R. Christy.

For description, see AEM 4640.]
[ANTHR 2411 Nature and Culture
Spring. 4 credits. Next offered 2012-2013.
S. Sangren.

For description, see ANTHR 2411.]
ANTHR 4900 Primate Conservation: Cross-Cultural Perspectives on Wilderness Preservation and HumanAnimal Coexistence
Spring. 4 credits. A. Arcadi
For description see ANTHR 4900.
BEE 3299 Sustainable Development
Spring. 3 credits. Web-based course.
N. Scott.

For description and more information, see BEE 3299.

NS 2600 Introduction to Global Health
Spring. 3 credits. R. Stoltzfus and J. Mosely
For description, see NS 2600.

## [BSOC 2101 Plagues and People (also

 ENTOM 2100)Fall. 3 credits Offered alternate years; next
offered 2011-2012. L. Harrington.
For description, see ENTOM 2100.]
[BSOC 3311 Environmental Governance (also NTRES 3310, STS 3311)
Fall. 3 credits. Next offered 2011-2012.
S. Wolf.

For description, see NTRES 3310.]
[BSOC 3431 Biotechnology and the Economy (also STS 3431) (SBA-AS)
Fall. 4 credits. Next offered 2012-2013.
J. Reppy.

For description, see STS 3431.]
BSOC 4000 Community Service Learning Project (also ALS 4000)
Fall and spring. 3 credits. Prerequisite: permission of instructor. Mandatory organizational meeting, contact professor for more information. B. Chabot.
For more information, see ALS 4000.

BSOC 4351 Postcolonial Science (also ANTHR 4435/7435)
Spring. 4 credits. S. Langwick.
For description, see ANTHR 4435.
DEA 4100 Facility Planning and Design in a Diverse Society
Spring. 3 credits. L. Maxwell.
For description, see DEA 4100.
DEA 4150 Strategic Planning for Health Care and Educational Facilities
Spring. 3 credits. L. Maxwell.
For description, see DEA 4150.
DEA 4220 Ecological Literacy in Design (also ARCH 4264)
Spring. 3 credits. J. Elliott.
For description, see DEA 4220.
DSOC 2010 Population Dynamics (also SOC 2202)
Fall. 3 credits. L. Williams.
For description, see DSOC 2010.
DSOC 2050 Rural Sociology and International Development (also SOC 2060)

Spring. 3 credits. P. McMichael.
For description, see DSOC 2050.
DSOC 4100 Health and Survival Inequalities (also FGSS/SOC 4100)
Fall. 4 credits. A. Gonzales.
For description, see DSOC 4100.
[DSOC 4210 Theories of Reproduction (also FGSS/SOC 4210)
Spring. 4 credits. Next offered 2012-2013. A. Basu.

For description see DSOC 4210.]
[HD 2510 Social Gerontology: Aging and the Life Course
Spring. 3 credits. Limited to 60 students.
Highly recommended: HD 2500 or
equivalent, to be determined by instructor.
Next offered 2012-2013. E. Wethington.
For description and prerequisites, see HD

## 2510.]

[HD 3190 Memory and the Law
Fall. 3 credits. Next offered 2012-2013.
C. Brainerd.

For description, see HD 3190.]
[HD 3430 Social Worlds of Childhood
Spring. 4 credits. Next offered 2011-2012.
Staff.
For description, see HD 3430.]
[HD 3570 Social Inequalities in Physical and Mental Health
Fall. 3 credits. Offered alternate years; next
offered 2011-2012. E. Wethington.
For description, see HD 3570.]
HD 3620 Human Bonding
Spring. 3 credits. C. Hazan.
For description, see HD 3620.
[HD 4260 Translational Research in Memory and Neuroscience
Fall. 4 credits. Next offered 2011-2012.
C. Brainerd.

For description, see HD 4260.]
[HD 4570 Health and Social Behavior (also SOC 4570)
Fall. 3 credits. Offered alternate years; next
offered 2011-2012. E. Wethington.
For description, see HD 4570.]
[NS 3150 Obesity and the Control of Body Weight
Spring. 3 credits. Offered alternate years;
next offered 2011-2012. D. Levitsky.
For description see NS 3150.]
NS 3500 Epidemiology in Context Spring. 3 credits. D. Pelletier.
For description and prerequisites, see NS 3500.
NS 4210 Nutrition and Exercise Summer. 3 credits. Limited to nutrition majors, others by permission of instructor. S. Travis.

For description and prerequisites, see NS 4210.
[NS 4570 Health, Poverty, and Inequality: A Global Perspective
Fall. 3 credits. Offered alternate years; next offered 2011-2012. D. Sahn.
For description see NS 4570.]
[NS 6500 Food and Nutrition Assessment in a Social Context
Fall. 3 credits. Next offered 2011-2012.
D. Pelletier and G. Pelto.

For description and prerequisites, see NS 6500.]

NTRES 3330 Ways of Knowing: Indigenous and Local Ecological Knowledge (also AIS/AMST 3330)
Fall. 3 credits. K. Kassam.
For description, see NTRES 3330.
[NTRES 4310 Environmental Strategies (also DSOC 4320)
Spring. 3 credits. Next offered 2011-2012.
S. Wolf.

For description, see NTRES 4310.]
PAM 3280 Fundamentals of Population Health
Spring. 3 credits. J. Carmalt.
For description, see PAM 3280.
PAM 3290 Health, Demographic Processes, and the Life Course
Spring. 3 credits. J. Carmalt.
For description, see PAM 3290.
PAM 3350 Low-Income Families: Qualitative and Policy Perspectives
Spring. 3 credits. M. Waller.
For description, see PAM 3350.
PAM 3370 Race and Public Policy (also SOC 3370)
Spring. 3 credits. A. Sassler.
For description, see PAM 3370.
PAM $\mathbf{3 8 0 0}$ Human Sexuality
Spring. 4 credits. A. Parrot.
For description, see PAM 3800.
PAM 4050 Reproductive Health Policy (also FGSS 4051)
Fall. 3 credits. A. Parrot.
For description see PAM 4050.
[PAM 4370 Economics of Health Policy
Fall. 3 credits. Next offered 2012-2013.
Staff.
For description and prerequisites, see PAM

## 4370.]

## [PSYCH 2750 Introduction to Personality

 (also HD 2600)Fall. 3 credits. Next offered 2012-2013.
V. Zayas.

For description, see PSYCH 2750.]

## PSYCH 3250 Adult Psychopathology

 (also HD 3700)Spring. 3 credits. H. Segal.
For description, see PSYCH 3250.

SOC 2650 Latinos in the U.S.A. (also LSP 2010)

Spring. 3 credits. H. Velez-Guadalupe.
For description see SOC 2650.
Examples of humanities electives
PHIL 2410 Ethics
Spring. 4 credits. E. Taylor.
For description, see PHIL 2410.
STS 4811 Problems in the Philosophy of Science (also PHIL 4810, STS 6811)
Fall. 4 credits. R. Boyd.
For description, see PHIL 4810.

## C. Senior Seminars

## ASRC 4606 The Family and Society in

 AfricaFall and summer. 3 credits. N. AssiéLumumba.
For description, see ASRC 4606.
[BSOC 3181 Living in an Uncertain World: Science, Technology, and Risk (also STS 3181) (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Pritchard.

For description, see STS 3181.]
[BSOC 4021 Bodies in Medicine, Science, and Technology (also FGSS/STS 4021) (sr sem) (CA-AS)

Spring. 4 credits. Next offered 2011-2012.
R. Prentice.

For description, see STS 4021.]
BSOC 4122 Darwin and the Making of Histories (also HIST/STS 4122) (HA-AS)
Fall. 4 credits. P. Dear and S. Seth. For description, see HIST 4122.

BSOC 4161 Microbes and Food: Contemporary Issues Affecting Humanity (also PLPA 4160)
Spring. 4 credits. S. Beer.
For description, see PLPA 4160.
[BSOC 4231 Gender and Technology in Historical Perspective (also FGSS/ HIST/STS 4231) (HA-AS)
Spring. 4 credits. Next offered 2011-2012.
S. Pritchard.

For description, see STS 4231.]
[BSOC 4291 Politics of Science (also STS 4291, GOVT 4293) (SBA-AS)
Fall. 4 credits. Next offered 2012-2013.
R. Herring.]
[BSOC 4421 The Sociology of Science (also SOC 4420, STS 4421) (SBA-AS)
Spring. 4 credits. Next offered 2011-2012.
T. Pinch.

For description, see STS 4421.]
BSOC 4471 Seminar in the History of Biology (also BIOEE 4670, HIST 4150, STS 4471) (PBS)
Summer, six-week session, or fall. 4 credits.
W. Provine.

For description, see BIOEE 4670.
[BSOC 4711 The Dark Side of Biology: Biological Weapons, Bioterrorism, and Biocriminality (also STS 4711) (SBA-AS)
Fall. 4 credits. Prerequisites: at least one course in STS and one semester of biology beyond introductory biology. Next offered 2011-2012. K. Vogel.
Rapid advances in biotechnology, as well as changing social and political climates, have created new public fears that the malicious release of pathogens and toxins by states and/
or terrorist groups is a serious threat. Debates have also emerged as to what biological research and publications should be restricted and censored to prevent misuse. The course explores the scientific, social, political, legal, and ethical discussions surrounding historical and current work on dangerous pathogens and toxins. This course also takes a look at the role that the expert and lay communities play in the shaping of popular perceptions and public policies in these threat discussions.]

BSOC 4911 Vitality and Power in China (also HIST 4962/6962, RELST 4931, ASIAN 4429, STS 4911)
Spring. 4 credits T. Hinrichs.
For description, see HIST 4931.

## BSOC 6610-6611 Environmental Policy

 (also ALS/BIOEE 6610-6611) (PBS) Fall and spring (yearlong). Students must enroll in both BSOC 6610 and BSOC 6611. 3 credits each semester. Limited to 12 students. D. Pimentel.For description and prerequisites, see BIOEE 6610-6611.
[COML 4900 Energy, Empire, Modernity (also COML 6900) (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
A. Banerjee.

For description, see COML 4900.]
[COMM 4210 Communication and the Environment
Spring. 3 credits. Offered odd-numbered
years; next offered 2012-2013.
K. McComas.

For description, see COMM 4210.]
CSS 4100 Environmental Impacts of Agricultural Biotechnology
Spring. 3 credits. D. Buckley and P. Hobbs. For description, see CSS 4100.
CSS 4940 Biotechnology and Development (also GOVT 4300)
Spring. 4 credits. R. Herring and J. Thies.

## For description see CSS 4940.

[DSOC 4380 Population and Development (also DSOC 6380, SOC 2370)
Spring. 3 credits. Next offered 2011-2012.
D. Gurak.

For description, see DSOC 4380.]
[HD 3430 Social Worlds of Childhood Spring. 4 credits. Next offered 2011-2012. Staff.
For description, see HD 3430.]
HD 4140 Social and Psychological Aspects of the Death Penalty
Spring. 3 credits. C. J. Brainerd.
For description, see HD 4140.
[HD 4180 Aging: Contemporary Issues
Fall. 3 credits. Next offered 2011-2012.
J. Mikels.

For description, see HD 4180.]

## [HD 4190 Midlife Development

Fall. 3 credits. Next offered 2011-2012.
A. Ong.

For description, see HD 4190.]
[HD 4200 Laboratory in Risk and Traditional Decision-Making
Spring. 3 credits. Next offered 2011-2012.
V. Reyna.

For description, see HD 4200.]

HD 4310 Mind, Self, and Emotion: Research Seminar
Spring. 3 credits. Q. Wang.
For description, see HD 4310.
[HD 4320 Cognitive, Social, and Developmental Aspects of Scientific Reasoning (also COGST 4320)
Fall. 3 credits. Next offered 2011-2012.
B. Koslowski.

For description, see HD 4320.]

## [HD 4590 Transitions Across the Life

 SpanFall. 3 credits. Next offered 2011-2012.
C. Loeckenhoff.

For description, see HD 4590.]

## [HD 4640 Adolescent Sexuality (also

 FGSS 4670)Fall. 3 credits. Next offered 2011-2012.
R. Savin-Williams.

For description, see HD 4640.]
HD 4660 Psychobiology of Temperament and Personality
Fall. 3 credits. R. Depue.
For description and prerequisites, see HD 4660.

## HD 4680 Stress in Childhood and

 AdolescenceSpring. 3 credits. J. Eckenrode.
For description, see HD 4680.
[HD 4740 Autism and the Development of Social Cognition
Fall. 3 credits. Next offered 2011-2012.
Staff.
For description, see HD 4740.]

## HD 4780 Attention Deficit/Hyperactivity

 Disorder in ChildrenSpring. 3 credits. S. Robertson.
For description, see HD 4780.

## NS 4600 Explorations in Global Health

Spring. 3 credits. Prerequisite: Global
Health minors or permission of instructor.
D. Pelletier.

For description, see NS 4600.

## NTRES 4300 Environmental Strategies

Spring. 3 credits. B. Knuth.
For description, see NTRES 4300.

## NTRES 4330 Applied Environmental

 PhilosophySpring. 4 credits. J. Tantillo.
For description, see NTRES 4330.

## STS 4221 New York Women (also FGSS

 4220) (HA-AS)Fall. 4 credits. M. Rossiter.
For description, see STS listing, STS 4221.

## STS 4311 From Surgery to Simulation

 (SBA-AS)Fall. 4 credits. R. Prentice.
For description, see STS 4311.
STS 4441 Historical Issues of Gender and Science (also FGSS 4440) (CA-AS)
Spring. 4 credits. M. Rossiter.
For description see STS listing, STS 4441.

## STS 4531 Knowledge and Society (also SOC 4530) (CA-AS) <br> Spring. 4 credits. C. Leuenberger. <br> For description, see STS 4531.

[STS 4661 Public Communication of Science and Technology (also COMM 4660/6660, STS 6661)
Spring. 3 credits. Limited to 15 students Offered even-numbered years; next offered 2011-2012. B. Lewenstein.
For description and prerequisites, see COMM 4660.]

## [STS 4751 Science, Race, and

 Colonialism (also HIST 4751) (HA-AS)Fall. 4 credits. Next offered 2012-2013. S. Seth.

For description see STS listing, STS 4751.]

## STS 4951 Social Studies of the Human

 Sciences (CA-AS)Spring. 4 credits. C. Leuenberger.
For description, see STS listing, STS 4951.

## VI. Other Courses

BSOC 1451 Body, Mind, and Health (also STS 1451) \# (CA-AS)
Summer. 3 credits. Open to high school students. D. Caruso.
For description, see STS 1451.

## BSOC 3751 Independent Study

Fall or spring. 1-4 credits. Prerequisite: biology and society majors; written permission of faculty supervisor. Projects under the direction of a Biology and Society faculty member are encouraged as part of the program of study within the student's concentration area. Applications for research projects are accepted by individual faculty members. Students may enroll for 1 to 4 credits in BSOC 3751 Independent Study with written permission of the faculty supervisor and may elect either the letter grade or the S-U option. Students may elect to do an independent study project as an alternative to, or in advance of, an honors project. Applications and information on faculty research, scholarly activities, and undergraduate opportunities are available in the Biology and Society Office, 306 Rockefeller Hall. Independent study credits may not be used in completion of the major requirements.

## BSOC 4991/4992 Honors Project I and II

 (also ALS 4991/4992, HE 4990)Fall and spring (yearlong). Prerequisite: senior biology and society students by permission of department; overall GPA of 3.3. Students should apply in 306 Rockefeller Hall. Arts and Sciences students should enroll in BSOC 4991 to receive Arts and Sciences credit; CALS students should enroll in ALS 4991 to receive College of Agriculture and Life Sciences credit; HE students should enroll in HE 4990 for College of Human Ecology credit. Students who are admitted to the honors program are required to complete two semesters of honors project research and to write an honors thesis. The project must include substantial research, and the completed work should be of wider scope and greater originality than is normal for an upperlevel course. The student must find a project supervisor and a second faculty member willing to serve as faculty reader; at least one of these must be a member of the Biology and Society faculty.
Students must register for the 4 credits each semester for a total of 8 credits. After the fall semester, students receive a letter grade of "R"; a letter grade for both semesters is submitted at the end of the second semester whether or not the student completes a thesis or is recommended for honors. Minimally, an
honors thesis outline and bibliography should be completed during the first semester. In consultation with the advisors, the director of undergraduate studies will evaluate whether the student should continue working on an honors project. Students should note that these courses are to be taken in addition to those courses that meet the regular major requirements.
If students do not complete the second semester of the honors project, they must change the first semester to independent study to clear the " $R$ " and receive a grade. Otherwise, the " $R$ " will remain on their record and prevent them from graduating.

## BURMESE

See "Department of Asian Studies."

CAMBODIAN (KHMER)
See "Department of Asian Studies."

## CATALAN

See "Department of Romance Studies."

## CENTER FOR APPLIED MATHEMATICS

The Center for Applied Mathematics administers a broadly based interdepartmental graduate program that provides opportunities for study and research over a wide range of the mathematical sciences. This program is based on a solid foundation in analysis, algebra, and methods of applied mathematics. The remainder of the graduate student's program is designed by the student and his or her Special Committee. For detailed information on opportunities for graduate study in applied mathematics, students should contact the director of graduate studies of the Center for Applied Mathematics, 657 Frank H. T. Rhodes Hall.

There is no special undergraduate degree program in applied mathematics.
Undergraduate students interested in an application-oriented program in mathematics may select an appropriate program in the Department of Mathematics, the Department of Computer Science, or some department of the College of Engineering.
A listing of selected graduate courses in applied mathematics can be found in the description of the center under "Interdisciplinary Centers, Programs, and Studies."

CENTER FOR INTERNATIONAL STUDIES
See "Interdisciplinary Centers, Programs, and Studies."

## CHEMISTRY AND CHEMICAL BIOLOGY

B. A. Baird, chair (122 Baker Laboratory, 2554175); D. B. Collum, associate chair; P. J. Chirik, director of undergraduate studies; H. D. Abruña, B. A. Baird, R. A. Cerione, G. Chan, P. Chen, P. J. Chirik, G. W. Coates, D. B. Collum, B. R. Crane, H. F. Davis, S. DeBeer George, W. R. Dichtel, F. J. DiSalvo, S. E. Ealick, G. S. Ezra, J. H. Freed, B. Ganem, M. A. Hines, R. Hoffmann, S. Lee, G. Lewis, H. Lin, D. R. Lorey, J. A. Marohn, J. Park, P. Peterson, T. Ruttledge, D. Y. Sogah, J. Terry, D. A. Usher, P. T. Wolczanski, D. B. Zax

The Department of Chemistry and Chemical Biology offers a full range of courses in physical, organic, inorganic, analytical, theoretical, bioorganic, and biophysical chemistry. In addition to their teaching interests, chemistry and chemical biology faculty members have active research programs. The link between teaching and research is a vital one in a continuously evolving scientific subject; it ensures that students will be provided with the most advanced information and perspectives and affords opportunities for students to participate in research. For additional information about the department and course offerings, see the department course web page (www.chem. cornell.edu).

## The Major

To fit the widely varying needs of our undergraduate majors, the department offers two different tracks that both lead to the same undergraduate degree:
Standard Major-The standard major provides a comprehensive background in all fields of chemistry. Most students who complete the standard major go on to graduate study in chemistry or to medical school, although some students proceed directly to a position in the chemical industry. With additional independent research (which is not required), the standard chemistry major is fully accredited by the American Chemical Society.
Alternative Major-The alternative major offers a flexible program of study that is primarily designed for students who intend to double major in another field. For example, students majoring in biology can complete the alternative major with little additional class work. This program might also be attractive for students interested in law (especially patent law), as a double major in government or economics plus chemistry is quite feasible. This program is not suited to further graduate work in chemistry. With few exceptions, students in the alternative major are not chosen to participate in the honors program in chemistry. The alternative major is not accredited by the American Chemical Society.
Either version of the major can be completed in three years of study. Most students, however, complete all of the requirements in their first three years with the exception of CHEM 4100, Inorganic Chemistry, which is usually taken in the fall semester of the senior year. The typical chemistry course sequence is:

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first year: general chemistry and mathematics
second year: organic chemistry, analytical and organic laboratories, and physics
third year: physical chemistry lectures and laboratories
fourth year: inorganic chemistry
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## Admission to the Major

Admission to the chemistry major requires the satisfactory completion of a number of introductory courses which, when taken together, demonstrate an ability to complete the major. These courses include (1) CHEM $2150-2160$ or $2070-2080$ (CHEM 2090 or 1560 may be substituted for 2070 but 1560 is not recommended); (2) CHEM 3000; (3) PHYS 2207 or 1112 or 1116 ; and (4) MATH 1110 or 1910. Second-semester sophomores (or beyond) who have completed all but one of these requirements may be admitted to the major provided that they have a plan for completing the major on schedule

## The Standard Major

The following courses must be completed for the standard major:
General chemistry: CHEM $2070+2080$ or CHEM $2150+2160$. (CHEM 2090 may be substituted for CHEM 2070).

Organic chemistry: CHEM $3570+3580$ or CHEM $3590+3600$
Physical chemistry: CHEM $3890+3900$
Inorganic chemistry: CHEM 4100
Laboratory chemistry: CHEM $3000+3010+$ $3020+3030$

Physics: (PHYS 2207 or 1112 or 1116) + (PHYS 2208 or 2213).

Mathematics: MATH $1110+1120+2130$ or MATH $1110+1220+2210+2220$ or MATH $1910+1920+2930$

Most standard majors also perform independent research at some point in their academic career, either during the semester or in the summer. Many students take advanced courses to complement this program.

## The Alternative Major

The following courses must be completed for the alternative major:
General chemistry: CHEM $2070+2080$ or CHEM $2150+2160$. (CHEM 2090 may be substituted for CHEM 2070)

Organic chemistry: CHEM 1570 (CHEM 3570 + 3580 or CHEM $3590+3600$ may be substituted)

Physical chemistry: CHEM 2870 (CHEM 3890 + 3900 may be substituted)
Inorganic chemistry: CHEM 4100
Laboratory chemistry: CHEM $2510+2900+$ 3000 (CHEM 3010 may be substituted for CHEM 2510; CHEM 3030 may be substituted for CHEM 2900).

Physics: (PHYS 2207 or 1112 or 1116) + (PHYS 2208 or 2213)

Mathematics: MATH $1110+1120$ or MATH $1110+1220$ or MATH $1910+1920$

One additional 3- or 4-credit advanced chemistry course at the 3000 level or above. (CHEM 3580, 3600 or 3900 can be used to satisfy this requirement.)

Three additional courses, of 3 or more credits each, that form a cohesive unit and are not at the introductory level. These three courses must be approved by the director of undergraduate studies.
The three additional courses may be in another field of study, such as biochemistry, physics, biology, materials science, economics,
government, or education. Many students who double major use courses from their second major to satisfy this requirement.
Like the standard majors, many alternative majors perform independent research, either in the chemistry department or with a member of the Chemistry field.

## Honors

Any student who completes the requirements for a standard major in chemistry with a cumulative GPA of 3.5 or higher shall be awarded a degree with honors (cum laude).
In addition, senior chemistry majors who have superior grades in chemistry and related subjects and who have had good performance in at least 8 credits of undergraduate research (or the equivalent) in chemistry or a related field (e.g., biochemistry) may be nominated for the honors program. To ensure that the nomination process runs smoothly, all students who are interested in the honors program should discuss this possibility with their advisor early in the fall semester of the senior year. Admission to the honors program is by invitation only. Students completing the alternative major are only eligible for the honors program in exceptional cases.
Students in the honors program participate in the honors seminar (CHEM 4980) and write a senior thesis. The successful completion of the honors program leads to the degree of bachelor of arts with honors or high honors in chemistry

## Program for Science Teachers

Chemistry majors who wish to become teachers will be interested to know that Cornell University offers a certification program for teachers of secondary (grades 7-12) science. Interested students apply to the program during their sophomore or junior years. If accepted, students integrate some course work in education with the rest of their undergraduate studies. All chemistry majors who enter this program will remain in the College of Arts and Sciences to complete the major.
After earning the bachelor's degree, certification students enter the graduate field of education to complete a fifth year of study at Cornell. Following this fifth year, students are eligible for a master's degree from Cornell and a teaching certificate from New York State. For additional information, contact the Department of Education, 255-2207.

## Laboratory Course Regulations

Students registered for laboratory courses who do not appear at the first meeting of the laboratory will forfeit their place in that laboratory but are not automatically dropped from the course.

Students and members of the teaching staff are required to wear safety goggles and lab aprons in all chemistry
laboratories. Closed-toed footwear is required (no sandals). Students are reminded to take their goggles and lab aprons to the first laboratory session. Those who fail to cooperate with the safety program will be asked to leave the aboratories.

Students in organic and analytical labs are required to pay for glassware and any other items broken or missing from their laboratory desks at the close of each semester. Students who fail to inventory their desks at the appointed time in the presence of their
instructor are charged a $\$ 20$ fee in addition to charges for any breakage.

## Courses

Note: Class meeting times are accurate at the time of publication. If changes occur, the department will provide new information as soon as possible.

Preliminary examinations for all courses may be given in the evening.

## Courses with Overlapping Content

Because the department offers several courses with overlapping content, students should select courses carefully to meet the needs of their academic programs and to ensure credit for each course they take. Listed below are groups of courses with largely similar content. In general, students may receive credit for only one course in each group.
CHEM 1560, 2070, 2090, 2160
CHEM 2080, 2150
CHEM 1570, 3570

## CHEM 1007 Academic Support for CHEM

 2070Fall. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning, Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations. S. Johnson.

CHEM 1007 reviews material presented in CHEM 2070 lectures and also provides problem-solving strategies and practice. This course is recommended for students who want to improve their chemistry problem-solving skills. CHEM 1007 is not a substitute for CHEM 2070 lectures and recitations

## CHEM 1008 Academic Support for CHEN

 2080Spring. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning, Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations S. Johnson.

CHEM 1008 reviews material presented in CHEM 2080 lectures and also provides problem-solving strategies and practice. This course is recommended for students who want to improve their chemistry problem-solving skills. CHEM 1008 is not a substitute for CHEM 2080 lectures and recitations.

## CHEM 1057 Academic Support for CHEM

 3570Fall. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning, Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations. J. Walcott.

Reviews material presented in CHEM 3570 lectures and offers practice with CHEM 3570 material. Weekly review sessions focus on the most important topics covered in lecture, and office hours held throughout the week are designed to help improve performance in CHEM 3570.

## CHEM 1058 Academic Support for CHEM

 3580Spring. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning,
Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations. J. Walcott.
Reviews material presented in CHEM 3580 lectures and offers practice with CHEM 3580 material. Weekly review sessions focus on the most important topics covered in lecture and office hours held throughout the week are designed to help improve performance in CHEM 3580.

## CHEM 1150 The Language of Chemistry (PBS)

Fall. 3 credits. Contributes to satisfying CALS physical science requirement of one course in chemistry. S-U or letter grades. Lec, M W F. T. Ruttledge.
Adam Sandler once said, "Chemistry can be a good and a bad thing. Chemistry is good when you make love with it. Chemistry is bad when you make crack with it." Using this sophisticated view of chemistry as a perhaps widely held perception and as a focus, a thorough examination of the good and the bad that chemistry has accomplished will be examined.
[CHEM 1160 The World of Chemistry (PBS)
Spring. 3 credits. Contributes to satisfying CALS physical science requirement of one course in chemistry. S-U or letter grades.
Lec, M W F. Next offered 2011-2012.
Students in The World of Chemistry will explore the stresses we have placed on our ecosystem-and atmosphere-and learn how chemistry allows us to understand these problems and to repair them.]

## CHEM 1560 Introduction to General Chemistry (PBS)

Fall or summer. 4 credits. Limited enrollment. (Refer to list of courses with overlapping content.) Nonrefundable lab fee (covers cost of safety goggles, lab apron, and breakage): \$20. Lec, M W F; lab, M, T, W, R, or F; prelims, Sept. 30, Nov. 11. S. Lee.
A one-semester introduction to chemistry, both qualitative and quantitative. CHEM 1560 prepares students for CHEM 1570; CHEM 1560 is not recommended for premedical or preveterinary students; however, students who have never taken a chemistry course in secondary school or who have a very weak preparation sometimes take CHEM $1560+$ 2080.

CHEM 1570 Introduction to Organic and Biological Chemistry (PBS)
Spring or summer. 3 credits. (Refer to list of courses with overlapping content.) Prerequisite: CHEM 1560 or 2070. Because CHEM 1570 is only a 3-credit course, it does not provide a practical route to satisfying medical school requirements. Because of duplication of materials, students who take both 1570 and 3570 will receive graduation credit only for CHEM 1570. Lec, M W F; prelims, Feb. 17, Mar. 15, Apr. 12. P. J. Chirik.
Introduction to organic chemistry with emphasis on structure, reactivity, and mechanisms of carbon compounds relevant to the life sciences.

## CHEM 2070-2080 General Chemistry

 (PBS)2070, fall or summer; 2080, spring or summer. 4 credits each semester. (Refer to list of courses with overlapping content.) CHEM 2070 (or CHEM 2090) is a prerequisite for CHEM 2080. (CHEM 1560 is accepted, but not recommended.) CHEM 2070 has a $\$ 20$ nonrefundable lab fee that covers cost of safety goggles, lab apron, and breakage. Engineering students should take CHEM 2090 and cannot take CHEM 2070 without written permission from the Chemistry Office of Undergraduate Studies and the College of Engineering.
Exceptionally well prepared students may receive credit for CHEM 2070 by demonstrating competence in the advanced placement examination of the College Entrance Examination Board or in the departmental examination given at Cornell before classes start in the fall. Taking CHEM 2080 after 2150 may be done only by permission of the director of undergraduate studies. Lec, T R; lab, M T W R F; discs, T W R F; prelims, Oct. 5, Nov. 11, Mar. 1, Apr. 12. Fall; F. J. DiSalvo and P. J. Chirik; spring, D. A. Usher. Covers fundamental chemical principles, with considerable attention given to the quantitative aspects and techniques important for further work in chemistry.

## CHEM 2090 Engineering General

 ChemistryFall or spring. 4 credits. (Refer to list of courses with overlapping content.) Enrollment limited to Engineering students; students from other colleges cannot take CHEM 2090 without written permission from the Chemistry Office of Undergraduate Studies. Prerequisite: high school chemistry or permission of instructor. CHEM 2090 is required of all Engineering freshmen and is a prerequisite for CHEM 2080. Entering students exceptionally well prepared in chemistry may receive advanced placement credit for General Chemistry by demonstrating competence in the advanced placement examination of the College Entrance Examination Board or in the departmental examination given at Cornell before classes start in the fall. Nonrefundable lab fee (covers cost of safety goggles, lab apron, and breakage): \$20. Lec, M W F; lab, M T W R F; prelims, Oct. 5, Nov. 11, Mar. 1, Apr. 12. Fall: B. R. Crane; spring: P. T. Wolczanski.

Covers basic chemical concepts, such as reactivity and bonding of molecules, intermolecular forces in liquids and solids, gases, chemical equilibrium, thermodynamics, introductory quantum mechanics, and kinetics.

Attention will be focused on aspects of chemistry most pertinent to engineering.

## CHEM 2150-2160 Honors General and Inorganic Chemistry (PBS)

2150, fall; 2160, spring. 4 credits each
semester. (Refer to list of courses with overlapping content.) Limited enrollment. Prerequisites: two years high school
chemistry or permission of instructor,
physics, and mathematics. Corequisite: calculus course at level of MATH 1110 or 1910 for students who have not taken high school calculus; for CHEM 2160, CHEM 2150. Recommended for students who intend to specialize in chemistry or in related fields. Taking CHEM 2080 after CHEM 2150 may be done only by permission of director of undergraduate studies. Nonrefundable lab fee (covers cost of safety goggles, lab apron, and breakage): $\$ 20$. Lec, M W F; lab, M T W R or F; prelims, Oct. 7, Nov. 11, Mar. 1, Apr.
7. Fall: H. F. Davis; spring: S. Lee. Intensive systematic study of the laws and concepts of chemistry, with considerable emphasis on quantitative aspects. First semester covers thermochemistry, kinetics, and equilibrium. Second semester includes systematics of inorganic chemistry. Laboratory work covers qualitative and quantitative analysis, transition metal chemistry, and spectroscopic techniques.

## CHEM 2510 Introduction to Experimental

 Organic ChemistryFall, spring, or summer. 2 credits. Limited enrollment. Corequisite: CHEM 1570 or 3570. Not recommended for chemistry majors considering graduate school in chemistry. Lec, fall, R or F; spring, R; lab, M T W R or F; prelims, fall: Nov. 16; spring: Apr. 14. T. Ruttledge.
Introduction to the synthesis, separation, characterization, and handling of materials, including the applications of different types of chromatography, extraction, crystallization, infrared spectroscopy, polarimetry, and others. An experiment is performed the first week of lab and to prepare for this lab students need to enroll in the course Blackboard site and complete the appropriate pre-lab assignments outlined on that site before coming to the first lab.

## CHEM 2870-2880 Introductory Physical

 Chemistry (PBS)2870, fall; 2880, spring. 3 credits each semester. Prerequisites: CHEM 2080 or 2160 and MATH 1110-1120 and PHYS 2208, or permission of instructor; for CHEM 2880, CHEM 2870 or 3890. Lec, M W F; prelims: 2870: Oct. 7, Nov. 23. 2880: Mar. 10, Apr. 19. Fall: R. F. Loring; spring: H. F. Davis.

Survey of the fundamental principles of physical chemistry, focusing in the fall on thermodynamics, chemical kinetics, and the electronic structure of atoms and molecules. In the spring, the course is oriented to the application of physical chemistry to biological systems, including statistical mechanics, phenomena in condensed phases, transport, electrochemistry, and spectroscopy. CHEM 2870 satisfies the minimum requirement for physical chemistry in the alternative chemistry major.

## CHEM 2900 Introductory Physical

 Chemistry LaboratorySpring. 2 credits each semester. Lec, T R; lab: M T R F. J. A. Marohn.
Survey of the methods basic to the experimental study of physical chemistry, with a focus on the areas of kinetics, equilibrium, calorimetry, and molecular spectroscopy.
CHEM 3000 Quantitative Chemistry
Fall. 2 credits. Prerequisite: CHEM 2080 or 2160 or advanced placement in chemistry.
Lec, R; lab, M T W R. J. A. Marohn. Volumetric, spectrophotometric, and potentiometric methods are emphasized. Techniques are learned by analysis of knowns, and then are used on unknowns. Lectures and problem sets stress the relationship between theory and applications.

## CHEM 3010 Honors Experimental

 Chemistry I (PBS)Spring. 4 credits. Prerequisites: CHEM 3000 and 3570 or 3590 . Lec, M W F; 2 labs, M W or T R. T. Ruttledge.
Introduction to the techniques of synthetic organic chemistry. A representative selection of the most important classes of organic reactions is explored in the first half of the semester, augmented by lectures on the reaction chemistry and the theory of separation and characterization techniques.

## CHEM 3020 Honors Experimental

 Chemistry II (PBS)Fall. 4 credits. Limited enrollment; priority given to chemistry majors. Prerequisite:
CHEM 3010. Lec, M W F; 2 labs, M W T R.
F. H. P. Petersen.

Instrumental methods of analysis, including chemical microscopy, visible and infrared spectroscopies, and gas chromatography.

## CHEM 3030 Honors Experimental

 Chemistry III (PBS)Spring. 4 credits. Limited to 10 students per lab. Prerequisites: CHEM 3020, 3890, 3900; co-registration in latter permissible. Lec, M W F; 2 labs, M W or T R. D. B. Zax. Introduction to experimental physical chemistry, including topics in spectroscopy and kinetics. The analysis and numerical simulation of experimental data is stressed.

## CHEM 3570-3580 Organic Chemistry for

 the Life Sciences (PBS)Fall or summer, 3570; spring or summer, 3580.3 credits each semester. (Refer to list of courses with overlapping content.) Prerequisite: for CHEM 3570, CHEM 2080 or 2160 or advanced placement; for CHEM 3580, CHEM 3570 or permission of instructor. Recommended: concurrent registration in CHEM 2510 or 3000. Because of duplication of material, students who take both CHEM 1570 and 3570 will receive graduation credit only for CHEM 1570 . Lec, M W F, optional disc may be offered; prelims, Sept. 21, Oct. 19, Nov. 11, Feb. 17, Mar. 15, Apr. 21. Fall:
B. Ganem; spring: D. Y. Sogah.

Study of the important classes of carbon compounds-including those encountered in the biological sciences. The course
emphasizes their three-dimensional structures, mechanisms of their characteristic reactions, their synthesis, methods of identifying them, and their role in modern science and technology.

## CHEM 3590-3600 Honors Organic

 Chemistry I and II (PBS)3590, fall; 3600 , spring. 4 credits each semester. Limited enrollment. Prerequisites: CHEM 2080 or CHEM 2160 or permission of instructor. Recommended: co-registration in CHEM 3000-3010-3020. Recommended for students who intend to specialize in chemistry or closely related fields. Lec, M W F; disc, W; prelims, Sept. 23, Oct. 26,
Nov. 11, Spring: Feb. 17, Mar. 15, Apr. 21. Fall: C. Lewis; spring, H. Lin.
Rigorous and systematic study of organic compounds, their structures, the mechanisms of their reactions, and the ways they are synthesized in nature and in the laboratory.

## CHEM 3890-3900 Honors Physical Chemistry I and II (PBS)

Fall, 3890; spring, 3900. 4 credits each semester. Prerequisites: MATH 2130 or 2310-2220; PHYS 2208; CHEM 2080 or 2160 or permission of instructor; for CHEM 3900, CHEM 3890. Lec, 3890: M W F; rec, M, T, or W. Lec, 3900: M W F; rec M W R; prelims: 3890, Sept. 28, Oct. 7, Nov. 16; 3900, Feb. 17, Mar. 15, Apr. 14. Fall, 3890: G. S. Ezra; spring, 3900: J. Park.

CHEM 3890 is an introduction to the quantum mechanics of atoms and molecules. The fundamental principles of quantum mechanics are introduced, and applications of the theory to atomic and molecular structure are covered in detail. CHEM 3900 is a continuation of CHEM 3890 and discusses the thermodynamic behavior of macroscopic systems in the context of quantum and statistical mechanics. After an introduction to the behavior of ensembles of quantum mechanical particles (statistical mechanics), kinetic theory and the laws of thermodynamics are covered in detail.

## CHEM 4040 Entrepreneurship in Chemical Enterprise

Spring. 1 credit. Lec, T. B. Ganem. Designed to acquaint students with the problems of planning, starting, and managing a new scientifically oriented business venture, the course consists of six weekly 75 -minute meetings focusing on case studies and assigned reading, as well as outside lectures by entrepreneurs in the chemical, pharmaceutical, and biotechnology industries. Topics include new technology evaluation and assessment, business formation, resource allocation, management development, as well as manufacturing and sales issues.
CHEM 4100 Inorganic Chemistry (PBS)
Fall. 4 credits. Prerequisites: CHEM 3580 or 3600, and 2870 or 3900. Lec, M W F; prelims, Oct. 5, Nov. 9. S. George. Systematic study of the synthesis, structure, bonding, reactivity, and uses of inorganic, organometallic, and solid-state compounds.

## CHEM 4210 Introduction to Inorganic Chemistry Research

Fall or spring. 2-4 credits. Prerequisites: CHEM 3030 and 3890-3900, or 2870-2880, and 2900 with average of B- or better, or permission of instructor. Selected faculty.
Research in inorganic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

## CHEM 4330 Introduction to Analytical Chemistry Research

Fall or spring. 2-4 credits. Prerequisites: CHEM 3030 and 3900 with average of Bor better or permission of instructor. Selected faculty.

Research in analytical chemistry involving both laboratory and library work, planned in consultation with a faculty member.

## [CHEM 4400 Bio-Inorganic Chemistry

 (PBS)Spring. 3 credits. Prerequisites: CHEM 2150-2160 or 2070-2080, 3570-3580, 35903600 or equivalent. Lec, W F. Next offered 2011-2012. B. R. Crane.
Addresses important aspects of inorganic chemistry in biological systems. Topics include (1) the distribution and properties of metals in biology; (2) coordination chemistry of biological metals; (3) properties of metalcontaining macromolecules; (4) redox processes and long-range electron transfer; (5) metallocofactors and metal clusters; (6) Lewis acid catalysis; (7) metal-oxygen reactions in biology; and (8) metal trafficking and metalloprotein assembly.]

## [CHEM 4500 Principles of Chemical

 Biology (also BIOMG 4500) (I) (PBS)Fall. 3 credits. Prerequisites: CHEM 3570-
3580, 3590-3600 or equivalent. Lec, T R.
Next offered 2011-2012. H. Lin.
Covers topics at the interface of chemistry and biology with a focus on problems where organic chemistry has made a particularly strong contribution to understanding the mechanism of the biological system.]

## [CHEM 4510 Structural Chemical Biology

 (PBS)Spring. 3 credits. Prerequisites: CHEM 2880 and 3580 or equivalent. Lec, T; lab, R. Next offered 2011-2012. S. Ealick.
Intended for students with a basic
understanding of chemistry who want more knowledge about chemical biology. The interrelationship between the structure and function of biologically important molecules will be explored.]

## CHEM 4610 Introduction to Organic

 Chemistry ResearchFall or spring. 2-4 credits. Prerequisites: CHEM 3020 and 3580 or 3600 with grade of B - or better or permission of instructor. Selected faculty.
Research in organic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

## CHEM 4770 Introduction to Physical

 Chemistry ResearchFall or spring. 2-4 credits. Prerequisite: CHEM 3900 with average of B- or better or permission of instructor. Selected faculty.
Research in physical chemistry involving both laboratory and library work, planned in consultation with a faculty member.

## CHEM 4980 Honors Seminar

Spring. 0 credits. Admission only by department invitation. Additional pre- or corequisites: outstanding performance in two coherent 4-credit units of research in course such as CHEM 4210, 4330, 4610,
4770; or equivalent amount of research in another context. Lec W. J. Park.
In the Chemistry Honors Seminar students will present their research in written and oral form. The Seminar will also include a broader discussion of professional issues and life skills in the world of chemistry.

## CHEM 6000-6010 General Chemistry

 Colloquium6000, fall; 6010, spring. 0 credits. R. Staff. Series of talks representative of all fields of current research interest in chemistry given by distinguished visitors and faculty members.

## CHEM 6020 Information Literacy for the

 Physical ScientistSpring. 1 credit. Primarily for graduate students and undergraduate chemistry majors doing research. Lec, T. L. Solla. Introduction to physical science information research methods, with hands-on exploration of print and electronic resources. Much important information can be missed and valuable time wasted without efficient information research strategies. Topics include finding chemical and physical properties, reaction and analytical information; patents, web resources; using specialized resources in chemistry, physics, biochemistry, and materials science; and managing citations.

## CHEM 6050 Advanced Inorganic

 Chemistry I: Symmetry, Structure, and ReactivityFall. 4 credits. Prerequisite: CHEM 3890-
3900 or equivalent or permission of instructor. Lec, M W F. P. Wolczanski. Introduction to chemical bonding and applications of group theory, including valence bond theory, and spectroscopy as applied to main group and transition-metal coordination compounds. An introduction to reactivity covers substitution, electron transfer, and related reactions. Readings are at the level of Carter's Molecular Symmetry and Group Theory and Jordan's Reaction Mechanisms of Inorganic and Organometallic Systems.
CHEM 6060 Advanced Inorganic Chemistry II: Spectroscopy
Spring. 4 credits. Prerequisite: CHEM 6050 or equivalent or permission of instructor. Lec, M W F. S. George.
Introduction to spectroscopic methods (including optical absorption, x-ray absorption, emission, EPR, Mössbauer, and vibrational spectroscopy).

## [CHEM 6070 Advanced Inorganic

 Chemistry III: Solid-State ChemistrySpring. 4 credits. Prerequisite:
undergraduate inorganic chemistry or permission of instructor. Lec, M W F. Next offered 2011-2012. S. Lee.
Third in a three-semester sequence. Interdisciplinary approach to solids. Topics include solid-state structure and X-ray diffraction, phase diagrams, diffusion kinetics, synthetic methods, electronic structure, and physical properties of solids.]

## [CHEM 6080 Advanced Inorganic Chemistry I: Organometallic Chemistry

Spring. 4 credits. Prerequisites: CHEM 6050,6650 , or permission of instructor. M W F. Next offered 2011-2012. P. J. Chirik. Synthesis, structure, and reactivity of organometallic compounds and applications in catalysis.]

## CHEM 6250 Advanced Analytical

 Chemistry ISpring. 4 credits. Prerequisite: CHEM 2880 or 3890 or equivalent. Lec, M W F; occasional labs, TBA. W. F. Schroeder. Application of high-resolution NMR spectroscopy and mass spectroscopy in chemical biology, synthetic organic chemistry, inorganic chemistry, and polymer chemistry
problems. Some practical experience in NMR and MS is offered.

## [CHEM 6270 Advanced Analytical Chemistry II

Spring. 3 credits. Primarily for graduate students. Prerequisite: CHEM 7930 or equivalent preferable. Lec, M W F. Next offered 2011-2012. D. B. Zax.
Modern techniques in nuclear magnetic resonance. Little overlap is expected with CHEM 6250, as this course focuses on more general questions of experimental design, understanding of multipulse experiments, and aspects of coherent averaging theory.]

## CHEM 6280 Trace Element and Isotopic

 Analysis (also NS 6900)Fall. 3 credits. Primarily for graduate students and advanced undergraduates. Prerequisite: CHEM 2880 or 3900 or 3020 , or CHEM 2080 and PHYS 2208, or permission of instructor. Lec, T R. J. T. Brenna.

Survey course in modern high-precision isotope ratio mass spectrometry (IRMS) techniques and trace/surface methods of analysis.

## [CHEM 6290 Electrochemistry

Spring. 4 credits. Primarily for graduate students and junior and senior undergraduates. Prerequisite: CHEM 3900 or equivalent. Recommended: MATH 2130. Lec, T R. Next offered 2011-2012.

## H. D. Abruña.

Fundamentals and applications of electrochemistry. Topics include the fundamentals of electrode kinetics, electron transfer theory, the electrical double layer, diffusion, and other modes of transport. A broad range of electrochemical techniques and instrumentation is also covered.]

## CHEM 6500-6510 Organic and

 Organometallic Chemistry Seminar 6500, fall; 6510, spring. 0 credits. Requirement for graduate students majoring in organic or bioorganic chemistry. Juniors and seniors encouraged to attend. T R. Staff.Series of talks representative of all fields of current research interest in organic organometallic chemistry, given by research associates, faculty members, and distinguished visitors.
CHEM 6650 Advanced Organic Chemistry
Fall. 4 credits. Primarily for graduate students and junior and senior undergraduates. Prerequisites: CHEM 3580 or 3600, and CHEM 3900 or equivalents, or permission of instructor. Lec, M W F.

## W. R. Dichtel.

Focuses on properties of organic compounds and reactive intermediates as well as many modern techniques used for their elucidation.

## CHEM 6660 Synthetic Organic Chemistry

Spring. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: CHEM 6650 or permission of instructor. Lec, T R. D. B. Collum. Modern techniques of organic synthesis; applications of organic reaction mechanisms and retrosynthetic analysis to the problems encountered in rational multistep synthesis, with particular emphasis on modern developments in synthesis design.
[CHEM 6670 Topics in Chemical Biology Fall. 4 credits. Prerequisite: CHEM 3600 or equivalent, BIOMG 3300 or permission of instructor. Lec, M W F. Next offered 20112012. H. Lin.

This course is intended for advanced undergraduate students majoring in chemical biology and graduate students working in related areas.]

## [CHEM 6680 Chemical Aspects of

Biological Processes
Fall. 4 credits. Prerequisite: CHEM 3600 or equivalent. Lec, T R. Next offered 20112012. T. P. Begley.

Examines a representative selection of the most important classes of enzyme-catalyzed reactions from a mechanistic perspective. Topics include the chemical basis of enzymatic catalysis, techniques for the elucidation of enzyme mechanism, cofactor chemistry, and the biosynthesis of selected natural products. The application of chemical principles to understanding biological processes is emphasized.]

## CHEM 6690 Organic and Polymer

 Synthesis Using Transition Metal CatalystsSpring. 4 credits. Prerequisite: primarily for graduate students or advanced
undergraduates; CHEM 6050 or equivalent
or permission of instructor. G. W. Coates.
Transition metal-based catalysts are invaluable in both organic and polymer snythesis. This course begins with an overview of polymer chemistry, organometallic chemistry, and catalysis. Subsequent modules on catalytic synthesis of small molecules and polymers are then presented. Topics of current interest are emphasized.

## [CHEM 6700 Fundamental Principles of

 Polymer ChemistryFall. 4 credits. Prerequisite: CHEM $3590 / 3600$ or equivalent or permission of instructor. Primarily for graduate students and advanced undergraduates. No previous knowledge of polymers required. Lec, T R. Next offered 2011-2012. G. W. Coates. Emphasizes general concepts and fundamental principles of polymer chemistry.]

## [CHEM 6710 Synthetic Polymer

 Chemistry (also CHEME 6750, MSE 6710)Spring. 4 credits. Prerequisites: minimum of organic chemistry at level of CHEM 3590/3600. Students without this organic chemistry background should see instructor before registering. Primarily for graduate students and advanced undergraduates. Recommended: knowledge of material covered in CHEM 6700 or MSE 6220. Lec, T R. Next offered 2011-2012. D. Y. Sogah.
Emphasizes application of organic synthetic methods to the development of polymerization methods and control of polymer architecture.]

## [CHEM 6720 Kinetics and Regulation of Enzyme Systems

Spring. 4 credits. Primarily for graduate students with interests in biophysical chemistry and quantitative treatments of protein function. Prerequisite: CHEM 2880 or 3900 , BIOMG 3300,3310 , or equivalents or permission of instructor. Lec, M W F.
Next offered 2011-2012. B. Baird.
Focus is on protein interactions and related changes in structure and activity.]
[CHEM 6770 Chemistry of Nucleic Acids Fall. 4 credits. Primarily for graduate students. Prerequisites: CHEM 3580 or 3600 , and 3900 or equivalents. Lec, M W. Next offered 2011-2012. D. A. Usher. Structure, properties, synthesis, and reactions of nucleic acids from a chemical point of view. Special topics include RNAi, antisense and antigene technology, ribozyme reactions (including the ribosome), mutagens, PCR, recent advances in sequencing, DNA as a computer, and alternative genetic materials.]

## [CHEM 6810 Introduction to Quantum

 ChemistryFall. 4 credits. Prerequisites: one year of undergraduate physical chemistry, three semesters of calculus, one year of college physics. Lec T R. Next offered 2011-2012. G. S. Ezra.

Introduction to the application of quantum mechanics in chemistry. Covers many of the topics in CHEM 7930-7940 at a more descriptive, less mathematical level.]

## CHEM 6860 Physical Chemistry of

 ProteinsFall. 4 credits. Primarily for graduate students. Prerequisite: CHEM 2880 or 3900 or equivalents. Letter grades for undergraduate and graduates. Lec, M W F. P. Chen.

Protein studies using physical methods are presented, with focuses on using single molecule spectroscopic methods and on metalloprotein structures/functions. Topics include (1) physical concepts: chemical structure and conformation of proteins; protein folding energy landscape; electron transfer theory; enzyme kinetics; proteinprotein interactions; protein-DNA interactions. (2) Experimental methodologies: absorption/ emission spectroscopy; fluorescence resonance energy transfer; confocal microscopy; total internal reflection microscopy; single molecule spectroscopy; time correlated single photon counting; fluorescence correlation
spectroscopy; atomic force microscopy; optical/magnetic tweezers; super resolution optical microscopy; (3) Protein structure and function: oxygen binding and activation proteins; electron transfer proteins; oxygenases and oxidases; metallochaperones; metalloregulatory proteins; green fluorescent proteins; motor proteins (kinesin, dynein and F1-ATPase); and live cell imaging.

## [CHEM 7000 Baker Lectures

Fall and spring. Next offered 2011-2012. Distinguished scientists who have made significant contributions to chemistry will come to Cornell for one-day symposiums. Refer to the Chemistry and Chemical Biology web site for more information, www.chem. cornell.edu.]

## [CHEM 7160 Introduction to Solid State Organic Chemistry

Spring. 3 credits. Recommended: CHEM 6070 or some exposure to or course in solid state chemistry and quantum mechanics; good undergraduate physical chemistry course may be sufficient for quantum theory; PHYS 4443 or CHEM 7930 or 7940 are at substantially higher level than what is needed. Lec, M W F. Next offered 2011-2012. S. Lee.
Examines some principles of crystallography and also electronic structure theory of solids. We then consider properties such as conduction, superconductivity, ferroelectricity, and ferromagnetism. The final portion of this
course is concerned with structure-property relations.]

## [CHEM 7650 Physical Organic Chemistry I

Fall. 4 credits. Primarily for graduate students. Lec, M W F. Next offered 20112012. C. F. Wilcox.

Explores contemporary tools for calculating molecular structures and energies of species of all sizes. The course uses computers extensively but requires only a limited knowledge of mathematics).]

## [CHEM 7740 Chemistry of Natural

 Products: Combinatorial Chemistry Spring. 3 credits. Prerequisites: CHEM 3600 and BIOMG 3300 or equivalent. Lec, M W F. Next offered 2011-2012. T. P. Begley. This course explores the design, synthesis, screening, and use of natural (i.e., peptide, protein, nucleic acid, carbohydrate) and unnatural (i.e., totally synthetic) libraries.]
## [CHEM 7800 Chemical Kinetics and

 Molecular Reaction Dynamics Fall. 4 credits. Prerequisite: CHEM 6810 or permission of instructor. Lec, T R. Next offered 2011-2012. Staff.Principles and theories of chemical kinetics and molecular reaction dynamics. Topics include potential energy surfaces, transition state theory, and statistical theories of unimolecular decomposition. Depending on class interest, the course also includes special topics such as surface reactions and photochemistry.]

## [CHEM 7870 Mathematical Methods of

 Physical ChemistryFall. 4 credits. Prerequisites: one year of undergraduate physical chemistry, three semesters of calculus, and one year of college physics. Lec, T R. Next offered 2011-2012. J. Park.
Provides the mathematical foundation for graduate courses in physical chemistry, such as quantum mechanics and statistical mechanics, as well as for research in experimental and theoretical physical chemistry.]

## [CHEM 7880 Macromolecular

Crystallography (also BIOMG 7380)
Fall. 3 credits. Prerequisite: permission of instructor. Lec, T R. Next offered 20112012. S. E. Ealick.

Lectures cover the fundamentals of X-ray crystallography and focus on methods for determining the three-dimensional structures of macromolecules. Topics include crystallization, data collection, phasing methods, model building, refinement, structure validation, and structure interpretation.]

## CHEM 7890-7900 Introduction to

 Nanoscale Materials Research 7890, fall; 7900, spring. 3 credits each semester. Primarily for graduate students. Lec, T R. M. A. Hines.A broad introduction to the scientific and technical challenges and techniques that underlie nanoscale materials research, including some of the skills necessary for a successful career in science or engineering (e.g., public speaking, research ethics). The course is composed of a rotating series of short modules presented in a variety of formats, including lectures, workshops, laboratory experiments and seminars. Students will receive training in both experimental and computational techniques. Enrolled students must complete all modules.

## [CHEM 7910 Spectroscopy

Spring. 4 credits. Prerequisite: CHEM 7930 or PHYS 4443 or equivalent. Lec, T R. Next offered 2011-2012. J. H. Freed.
Magnetic Resonance Spectroscopy and
Molecular Spectroscopy are offered alternate
years. Molecular Spectroscopy (offered spring 2011) includes principles of molecular rotational, vibrational, and electronic spectroscopy; interaction of molecules with radiation; Born-Oppenheimer approximation, diatomic molecules, polyatomic molecules,

## molecular symmetry groups.]

[CHEM 7920 Molecular Collision Theory
Spring. 4 credits. Lec, T R. Next offered
2011-2012. G. S. Ezra.
The concepts and methods of scattering theory are described with particular emphasis on applications to problems of chemical interest. At the level of Child's Molecular Collision Theory and Taylor's Scattering Theory.]

## CHEM 7930 Quantum Mechanics I

Fall. 4 credits. Prerequisites: CHEM 3900, co-registration in AEP 3210, or CHEM 7870 or equivalents or permission of instructor. Lec, T R F. J. Park.
Basic quantum mechanics at the level of Shankar: time-independent and timedependent Schrodingers equation, matrix, operators, and bracket formalisms, orbital and spin angular momentum, one-dimensional examples, tunnelling, hydrogen atom, manyelectron wavefunctions and particle statistics, time-independent perturbation theory, variational principle.

## CHEM 7940 Quantum Mechanics II

Spring. 4 credits. Prerequisites: CHEM 7930 or equivalent and CHEM 7870 or
equivalent or co-registration in AEP 3220, or permission of instructor. Lec, T R. G. S. Ezra.

Topics include WKB theory; density matrix; evolution operator; path integral formulation of quantum mechanics; time-dependent phenomena; two-level system; time-dependent perturbation theory; Fermi's Golden rule; interaction of radiation with matter; second quantization, stimulated and spontaneous emission; correlation functions and response theory; electric and magnetic properties of molecules; scattering theory; molecular spectroscopy.
CHEM 7950 Statistical Thermodynamics
Fall. 4 credits. Primarily for graduate students. Prerequisite: CHEM 3900 or equivalent. Pre or corequisite: CHEM 6810 or CHEM 7930 or equivalent. Lec T R. J. H. Freed.

## CHEM 7960 Statistical Mechanics

Spring. 4 credits. Prerequisites: CHEM 7950, CHEME 7110, CHEM 7930 or equivalent. Lec, T R. R. F. Loring. Statistical mechanics of interacting atoms and molecules. Topics include structure and thermodynamics of molecular liquids, critical phenomena, computational statistical mechanics, and nonequilibrium statistical mechanics. Applications of nonequilibrium statistical mechanics include spectroscopy, chemical kinetics, and transport.
[CHEM 7980 Electronic Structure Theory Spring. 4 credits. Prerequisites: CHEM 7930 or equivalent. Lec, T R. Next offered 20112012. G. K. Chan.

Quantum mechanics of many-particle systems as found in quantum chemistry and
condensed matter. The emphasis is on methods and techniques, although examples are drawn both from molecular systems and condensed matter models. Most systems are considered at zero temperature.]

## CHINA AND ASIA-PACIFIC STUDIES

X. Xu, director (123 McGraw Hall, 255-4741), R. Bush, A. Carlson, J. Chen, Z. Chen,
S. Cochran, S. Divo, E. Gunn, T. J. Hinrichs,
S. Jackson, P. Katzenstein, F. Logevall, T. Lowi, T. Lyons, R. McNeal, A. Mertha. Affiliated faculty: M. Evangelista, M. Fiskesjo, J. Kirshner, J. V. Koschmann, V. Nee, B. Rusk, E. Sanders, E. Tagliacozzo, K. Taylor.

China and Asia-Pacific Studies (CAPS) offers a unique approach to the study of China's language, history, politics, society, and foreign relations by providing students with experience both on- and off-campus, including three years in Ithaca, one semester in Washington, D.C., and one semester in Beijing.
web site: www.einaudi.cornell.edu/caps

## The Major

Students are required to take one of the introductory courses: CAPS 2570, CAPS 2827, or CAPS 3403. The intro course is normally completed during a student's first two years at Cornell, but a student may declare the CAPS major before taking either of these or any other CAPS courses. All CAPS courses must be completed with a grade of "C" or better. The other required courses are:

- All of the following Chinese language courses: CHIN 1101-1102, 2201-2202, 3301-3302, and 4111-4112 or CHIN 11091110, 2109-2110, 3309-3310, and 4431-4432 for heritage learners and higher-level starters or the equivalents for FALCON students.
- Chinese language courses according to student ability offered in Washington, D.C., and Beijing (comparable to their equivalents offered in Ithaca): CHIN 3341 to CHIN 3301; CHIN 4441 and 4451 to CHIN 4411; and CHIN 4457 to CHIN 4427
- CAPS students may elect to take CHIN 3306 (also CAPS 3306) or CHIN 4426 upon permission of instructor.
- Two of the following courses: CAPS 2940, CAPS 3140, CAPS 3520, CAPS 3857, CAPS 4364, CAPS 4690, CAPS 4827, and CAPS 4930. Students may choose other CAPSrelated courses upon permission of the program director
- All of the following seminars: CAPS 3000, and CAPS 4997 or CAPS 4998 (during fall of junior year at Cornell in Washington); CAPS 4001 and CAPS 4002 (during fall of senior year at Peking University); and CAPS 4030 (during spring of senior year in Ithaca).
Students interested in the CAPS major should speak to the program director to arrange for a major advisor.


## Externships

CAPS majors hold externships in diverse areas, including government, business, the media, and in other organizations during the
semesters they study in Washington, D.C., and in Beijing, China. Majors are encouraged to coordinate the two experiences. For example, in successive years students might hold externships at the China desk of the Washington Post in Washington, D.C., and at the China bureau of the Washington Post in Beijing, China.

## Honors

To become a candidate for honors, a CAPS major must maintain a grade average of $\mathrm{B}+$ and have approval for a senior essay proposa from a faculty advisor. During senior year, a CAPS honors student completes the research and writing of a senior essay by taking two tutorials, CAPS 4010 in Beijing and CAPS 4020 in Ithaca.

## Introductory Courses

CAPS 2570 China Encounters the World (also ASIAN 2257, HIST 2571) @ (HA AS)
Fall. 4 credits. J. Chen.
For description, see HIST 2571
CAPS 2827 China and the World (also GOVT 2827) @ (CA-AS)
Spring. 3 credits. A. Carlson.
For description, see GOVT 2827

## Courses in Ithaca

CAPS 1910 Introduction to Modern Asian History (also HIST 1910, ASIAN 1191) @ (HA-AS)

Fall. 4 credits. D. Ghosh and
E. Tagliacozzo.

For description, see HIST 1910.
[CAPS 2281 Antiquity and Modernity in Contemporary China (also ASIAN 2281) @ \# (CA-AS)

Spring. 3 credits. Next offered 2012-2013. R. McNeal.]
[CAPS 2940 History of China in Modern Times (also HIST 2940, ASIAN 2294) @ (HA-AS)
4 credits. Next offered 2011-2012.
S. Cochran.]

CAPS 3140 U.S. in the World (also AMST/ HIST 3140) (HA-AS)
Spring. 4 credits. F. Logevall.
For description, see HIST 3140.
CAPS 3403 China Under Revolution and Reform (also GOVT 3403) @ (SBA-AS)
Fall. 4 credits. A. Mertha
For description, see GOVT 3403
[CAPS 3520 20th-Century Asian American Relations (also HIST 3520) @ (HA-AS)
Spring. 4 credits. Next offered 2011-2012. J. Chen.]
[CAPS 3857 Seminar on American Foreign Policy (also GOVT 3857) (SBA-AS)
4 credits. Next offered 2011-2012.
P. Katzenstein.]

CAPS 4020 Honors Thesis Tutorial II Spring. 4 credits. Prerequisite: CAPS 4010 Staff.

## CAPS 4030 Issues in China and Asia-

 Pacific Studies @ (CA-AS)Spring. 4 credits. X. Xin.
Serves as the wrap-up seminar for CAPS students. It is designed for CAPS seniors to review their experience in conducting CAPS
studies in Ithaca, Washington, D.C., and Beijing, to reflect the key challenges that they have encountered in such experiences and the solutions that they have come up with, and to enhance their basic abilities crucial for pursuing future studies and/or careers that are related to their CAPS experience after graduating from Cornell. Central to the course are the "course projects" that, with the assistance and support of instructor, the students are to take the initiative to develop by themselves.

CAPS 4406 Readings in Chinese History and Business Culture (also CHIN 4406) @

Fall. 4 credits. Satisfies Option 1.
Z. Chen.

For description, see CHIN 4406.
[CAPS 4690 China's Economy Under Mao and Deng (also ECON 4690) @ (SBAAS)
4 credits. Next offered 2011-2012. T. Lyons. For description, see ECON 4690.]
CAPS 4827 Unifying While Integrating: China in the World (also GOVT 4827/6827) @ (HA-AS)
Spring. 4 credits. A. Carlson.
For description, see GOVT 4827
[CAPS 4870 Asian Security (also GOVT 4877/6877) @ (SBA-AS)
Spring. 4 credits. Next offered 2011-2012 A. Carlson.]

CAPS 4930 Problems in Modern Chinese History (also HIST 4930, ASIAN 4493) @ (HA-AS)

Fall. 4 credits. S. Cochran.
For description, see HIST 4930.
CAPS 4999 CAPS Independent Study
Fall and spring. 1 to 4 credits. Prerequisite: junior or senior standing. Permission of instructor required. Staff.

## Chinese Language Courses

CHIN 1101-1102 Beginning Mandarin I and II
1101, fall; 1102, spring. 6 credits each semester. S. Divo.
For description, see CHIN 1101-1102 under "Asian Studies."

CHIN 1109-1110 Beginning Chinese Reading and Writing for Students of Chinese Heritage
1109 , fall; 1110, spring. 4 credits each semester.
For description, see CHIN 1109-1110 under "Asian Studies."

CHIN 2201-2202 Intermediate Mandarin I and II
2201, fall; 2202, spring. 4 credits each semester.
For description, see CHIN 2201-2202 under "Asian Studies."

## CHIN 2209-2210 Intermediate Chinese Reading and Writing for Students of

 Chinese Heritage2209, fall; 2210, spring. 4 credits each semester.
For description, see CHIN 2009-2210 under "Asian Studies."

## CHIN 3301-3302 High Intermediate Mandarin I and II

3301, fall; 3302, spring. 4 credits each semester.
For description, see CHIN 3301-3302 under "Asian Studies."

## CHIN 3309-3310 Business Chinese in

 Cultural Context3309 , fall; 3310 , spring. 4 credits each semester.
For description, see CHIN 3309-3310 under "Asian Studies."

## CHIN 4411-4412 Advanced Mandarin I

 and II4411, fall; 4412 , spring. 4 credits each semester.
For description, see CHIN 4411-4412 under "Asian Studies."
CHIN 4426 Reading and Viewing Modern China (also CAPS 4650, CHIN 4426/6625, HIST 4650/6650) @
Spring. 4 credits. Satisfies Option 1.
Permission of instructor required. Z. Chen. For description, see HIST 4650.
CHIN 4431-4432 Directed Study
4431, fall; 4432, spring. 4 credits each semester.
For description, see CHIN 4431-4432 under "Asian Studies."

Courses in Washington, D.C. CAPS 3000 Seminar on American Relations with China (also ASIAN 3305, HIST 3391) (HA-AS)
Fall. 4 credits. Offered in Cornell in
Washington Program only. R. Bush. A historical review of the fragile and volatile U.S.-China relationship from the opening by Richard Nixon in the early 1970s until the present. Several individual sessions will be led by current or former executive branch or congressional officials, business people, journalists, representatives of nongovernmental organizations and others who have worked in China or have participated in the making of U.S. policy toward China

CAPS 4997 Research Seminar in American Studies (also HIST/AMST 4997)

Fall. 8 credits. Offered in Cornell in
Washington Program only. S. Jackson.
For description, see HIST 4997.
CAPS 4998 Politics and Policy: Theory, Research, and Practice (also GOVT/ AMST/ALS 4998, PAM 4060)
Fall. 8 credits. Offered in Cornell in
Washington Program only. S. Jackson.
For description, see HIST 4997.
CHIN 3341 High Intermediate Mandarin I @
Fall. 4 credits. Offered in Cornell in Washington Program only. Staff. For description, see CHIN 3301 under "Asian Studies."
CHIN 4441 Advanced Mandarin I @
Fall. 4 credits. Offered in Cornell in
Washington Program only. Staff.
For description, see CHIN 4441 under "Asian Studies."
CHIN 4445 Directed Study for CAPS Students in D.C.
Fall. 1-4 credits, variable. Offered in
Cornell in Washington Program only. Staff.
Prerequisite: permission of instructor. Intended
for advanced language study.

## Courses in Beijing

## CAPS 4001 China's Changing Politics,

 Economy, and Society @ (CA-AS)Fall. 4 credits. Offered at Peking University
for CAPS majors only. Q. Zhang.
Using resources specifically available in China, this course combines lectures, guest lectures, field trips, and faculty-directed research projects to help students achieve an in-depth understanding of China's changing politics,

## economy, society, and culture.

## CAPS 4002 Chinese Perspectives on

 International Relations @ (SBA-AS)Fall. 4 credits. Offered at Peking University for CAPS majors only. Peking University staff.
This course, offered by faculty members of Peking University's School of International Studies, provides Chinese perspectives on contemporary China's international relations.

## CAPS 4010 Honors Thesis Tutorial I

Fall. 4 credits. Offered at Peking University for CAPS majors only. See program director about making arrangements with appropriate advisors. Staff.

## CHIN 4451 Advanced Mandarin for CAPS

 Students in BeijingFall. 4 credits. Equivalent to CHIN 4411 in Ithaca. Offered at Peking University for CAPS majors only. Staff.
For description, see CHIN 4411 under "Asian Studies."

## CHIN 4455 Directed Study for CAPS Students in Beijing

Fall. 1-4 credits, variable. Prerequisite: permission of instructor. Intended for advanced language study. Offered at Peking University for CAPS majors only. Staff.

## CHIN 4457 High Advanced Mandarin

Fall. 4 credits. Equivalent to CHIN 4427 in Ithaca. Offered at Peking University for CAPS majors only. Staff.
For description, see CHIN 4427 under "Asian Studies."

## CHINESE

FALCON Program (Chinese)
See Department of Asian Studies.

## CLASSICS

H. Pelliccia, chair and director of graduate studies; F. M. Ahl, T. Brennan, C. Brittain, K. Clinton, G. Fine, M. Fontaine,
B. Huelsenbeck, D. Mankin, S. Manning, A. Nussbaum, V. Platt, P. Pucci, H. R. Rawlings III, E. Rebillard, A. Ruppel, J. Rusten, director of undergraduate studies; B. Strauss,
R. VanDusen.

The Department of Classics at Cornell is one of the oldest in the country. It offers both the traditional core training in the languages, literature, philosophy, art, and history of ancient Greece and Rome, and also newer approaches developed from the comparative study of Mediterranean civilizations, peace studies, and feminist and literary theory. The broad range of instruction includes courses offered by professors with appointments in the Departments of History, Philosophy, Comparative Literature, History of Art,

Linguistics, and Near Eastern Studies, and in the Programs of Archaeology, Medieval Studies, and Religious Studies.
The department offers a wide variety of classical civilization courses in English translation on such subjects as Greek mythology, ancient mystery religions, early Christianity, and Greek and Roman society; ancient epic, lyric, tragedy, comedy, satire, novels, and love-poetry; Periclean Athens, Republican Rome, the Roman Empire, and Plato, Aristotle, and Hellenistic philosophy. These courses are designed to introduce aspects of classical antiquity to the students with very divergent primary interests. Courses in art, archaeology, and dendrochronology also have wide appeal. These courses make use of the university's large collections of ancient coins and of reproductions of sculptures, inscriptions, and other ancient objects. For example, since 1976 over 500 Cornell students have worked in the Aegean Dendrochronology Project's laboratory, measuring the annual rings on thousands of samples of wood and charcoal, and using the rings to date structures as old as 7000 BC . In the summers selected students have participated in collecting trips around the eastern end of the Mediterranean (see web site at www.arts.cornell.edu/dendro). Students who wish to gain first-hand archaeological experience may also join one of several summer Cornell-sponsored field projects in Greece and Turkey.
The study of language is a vital part of classics. Offerings range from 1000-level classes designed to further the understanding of English through the study of the Latin and Greek sources of much of its vocabulary, to courses in linguistics on the morphology and syntax of the ancient languages, comparative grammar, and Indo-European (the reconstructed source of the family of languages that includes Greek, Latin, Sanskrit, and most modern European languages).
The core function of the department is the study of ancient Greek and Latin. Elementary Greek and Latin are taught in both twosemester courses and intensive summer courses. (For students whose Latin is a bit rusty, the department also offers a rapid, onesemester review class.) Students with a more advanced knowledge of Greek or Latin can choose from a wide selection of courses, from intermediate language classes at the 2000 level, which refresh and broaden knowledge of syntax and vocabulary, to graduate and faculty reading groups. All of these courses concentrate on exciting literary texts, whether the poems of Catullus and Virgil, or the dialogues of Plato and Xenophon, at the 2000 level, or, in the advanced reading groups, the latest papyrological discoveries, such as the "new" fragments of Empedocles' cosmic poem or the "new" epigrams of Posidippus.
The primary purpose of language instruction is to make possible the study at first hand of the extraordinary range of powerful and challenging ideas embodied in Greek and Latin texts. The department offers undergraduate and graduate seminars on literary, linguistic, historical, and philosophical topics, studied through the Greek and Latin works of authors from Homer (probably from the eighth century BCE ) to Boethius (sixth century CE), and occasionally from later writers such as Dante, Petrarch, or Milton. The department strives to adapt its program to the needs of individual students from all disciplines.

## Majors in Classics

The major in Classics offers four tracks, which are Greek, Latin, classics, and classical civilization. Only classes passed with a C- or better may be applied to the classics major.

## Classics

The classics track requires: (1) six courses in Greek and Latin numbered 2101 or above; (2) either CLASS 2675/HIST 2650 or one term of CLASS 2681/HIST 2670-CLASS 2682/HIST 2671, and (3) two courses in other related subjects selected in consultation with the student's departmental advisor (see below). Classics majors are required to take a minimum of two 3000 -level courses in one language and one 3000 -level course in the other.
Students who are considering graduate study in classics are strongly advised to complete the classics major.

## Greek

The Greek track requires: (1) GREEK 1105; (2) five courses in Greek numbered 2101 or above; (3) CLASS 2675/HIST 2650; and (4) two courses in other related subjects selected in consultation with the student's departmental advisor (see below). The courses in Greek must include at least three at the 3000 level.

## Latin

The Latin track requires: (1) LATIN 1205 or 2201; (2) five courses in Latin numbered 2202 or above; (3) one term of CLASS 2681/HIST 2670-CLASS 2682/HIST 2671; and (4) two courses in other related subjects selected in consultation with the student's departmental advisor (see below). The courses in Latin must include at least three at the 3000 level.

## Classical Civilization

The classical civilization track requires: (1) either (a) two 2000-level courses in either ancient Greek or Latin, or (b) one course at the 2000 level in ancient Greek and Latin; (2) either (a): CLASS 2601 or 2603 and one term of CLASS 2681/HIST 2670-CLASS 2682/HIST 2671, or (b): CLASS 2612 and CLASS 2675/ HIST 2650; (3) one course at the 2000 level in ancient Greek or Roman material culture; and (4) six additional courses in classical civilization, classical archaeology, ancient history, ancient philosophy, ancient Greek or Latin (at 2000 level or above), or related subjects (this last may number up to two, selected in consultation with the student's departmental advisor).

## Related Subjects

Classics is an interdisciplinary field concerned with the study of Mediterranean civilizations from the 15 th century BCE to the sixth century cE. Subjects in the field include Greek and Latin language, literature, and linguistics; ancient philosophy, history, archaeology, and art history; papyrology, epigraphy, and numismatics. In addition to the required courses in language and literature, the majors include a requirement for related courses intended to give breadth and exposure to the other disciplines within the field and to enrich the student's study of classical languages and literature. Since the influence of the Greek and Roman world extended far beyond antiquity, a related course may focus on some aspect of the classical tradition in a later period. Students select related courses in consultation
with their departmental advisors or the director of undergraduate studies.

## Honors

Candidates for the degree of bachelor of arts with honors in classics, Greek, Latin, or classical civilization must fulfill the requirements of the appropriate major and complete the two-semester honors course, CLASS 4721-4722. (Credit for the honors course may be included in the credits required for the major.) Candidates for honors must have a cumulative average grade of 3.0 and an average of 3.5 in their major. Students choose an honors advisor by the end of their sixth semester, in consultation with the
departmental honors committee or the DUS. By the second week of their seventh semester, they submit an outline of their proposed research to their advisor and the committee. The thesis is written in the second semester of the course, under the supervision of the student's honors advisor. The level of honors is determined by the committee, in consultation with students' advisors. Copies of successful honors theses are filed with the department. Further details about this program are provided in the brochure Guidelines for Honors in Classics, available in the department office, 120 Goldwin Smith Hall, or on the department web page: www.arts.cornell.edu/ classics/honors.asp.

## Independent Study

Independent study at the 3000 level may be undertaken by undergraduates upon completion of one semester of work at the 3000 level in the relevant field and only with the permission of the director of undergraduate studies.

## Study Abroad

Cornell is associated with four programs that provide opportunities for summer, semester, or yearlong study abroad in Greece and Italy. The American School of Classical Studies at Athens offers a summer program for graduate students and qualified undergraduates; College Year in Athens offers semester-long courses (consult Cornell Abroad for details). The Intercollegiate Center for Classical Studies in Rome provides semester-long courses in Latin, Greek, ancient history, art, archaeology, and Italian; the American Academy in Rome offers both full-year and summer programs for qualified graduate students. The Department of Classics awards several travel grants each year for graduate students from the Townsend Memorial Fund; undergraduates are eligible for the Caplan Travel Fellowships (see "Caplan Fellowships," below). Detailed information on these programs is available in the department office, 120 Goldwin Smith Hall.

## Summer Support for Language Study

The Department of Classics has at its disposal resources to assist students who wish to enroll in intensive Latin or Greek in the Cornell summer session. These courses are designed to enable students to enter second-year Latin or Greek the following fall. Preference is given to undergraduate majors in classics and other students needing Latin or Greek for completion of their majors or graduate programs; dyslexic students are accorded additional preference. Two different kinds of support are available: (1) The KandersTownsend Prize Fellowship provides a stipend to cover up to $\$ 4,600$ in living expenses and
full tuition for either GREEK 1103 or LATIN 1203, and is open only to freshman or sophomore classics majors (or potential classics majors) who have already begun one classical language and wish to start the other in the summer. (2) Classics department tuition support is open to Cornell undergraduate and graduate students and provides some level of tuition support, up to the full amount; no stipend for living expenses is offered.
Applications are due to the chair of the Department of Classics by March 31. See also "Caplan Fellowships," below.

## Placement in Greek and Latin

Placement of first-year undergraduates in Greek and Latin courses is determined by examinations given by the Department of Classics during orientation week. For details concerning these examinations, contact the director of undergraduate studies.

## Satisfying the College Language Requirements with Greek or Latin

Ancient Greek: Option 1 is satisfied by taking GREEK 2101 or above. Option 2 is satisfied by taking either (a) GREEK 1101, 1102, and 1105 or (b) GREEK 1103 and 1105. (GREEK 1103 counts as two courses. Although credits for 1103 and 1105 add up to only 9 , this sequence does satisfy Option 2 of the college's language requirement.)
Modern Greek: Option 1 is satisfied by taking GREEK 2144. Option 2 is satisfied by taking GREEK 1141, 1142 and 1143.
Latin: Option 1 is satisfied by taking LATIN 2201 or above. Option 2 is satisfied by taking either (a) LATIN 1201, 1202, and 1205 or (b) LATIN 1203 and 1205. (LATIN 1203 counts as two courses. Although credits for 1203 and 1205 add up to only 9, this sequence does satisfy Option 2 of the college's language requirement.) The sequence LATIN 1204-1205 does not satisfy Option 2. Students can place into LATIN 2201 with an A- or better in LATIN 1202, 1203 or 1204. Upon completing 2201, they satisfy Option 1. LATIN 1204 overlaps with LATIN 1202 therefore cannot be taken (or counted toward the degree) after completing LATIN 1202 or 1203.

## First-Year Writing Seminars

The department offers first-year writing seminars on a wide range of classical and medieval topics. Consult John S. Knight Writing Seminar Program brochures for times, instructors, and descriptions.

## Caplan Fellowships

The Harry Caplan Travel Fellowships are awarded annually to one or two outstanding juniors by the College of Arts and Sciences for summer travel or projects in Europe or the Near East. Interested juniors should consult the director of undergraduate studies.

## Classical Civilization

## CLASS 1692 Bioscientific Terminology (also BIOMI 1720) (HA-AS)

Summer and winter. 3 credits. D. Bowman and H . Roisman.
A study of the Greek and Latin word elements that combine to form most of the specialized terms in the biological sciences. The student who learns the meanings of those elements and the rules of word formation can usually recognize the basic meaning of any unfamiliar
word in that field. This skill is especially valuable for pre-law, pre-medical, pre-dental, pre-veterinary students and for those in other health and legal fields, as well as for students who would like to broaden their general vocabulary. This course would be excellent preparation for students prior to taking standardized test: e.g., SAT, GRE, MCAT, TOEFL, LSAT, etc.

## CLASS 1699 English Words: Histories and Mysteries (also LING 1109) \# (HA-AS)

Spring. 3 credits. A. Nussbaum.
For description, see LING 1109.

## CLASS 2601 The Greek Experience \# (CA-AS)

Spring. 3 credits. Limited to 50 students. F. Ahl.

Introduction to the literature and thought of ancient Greece. Topics include epic and lyric poetry, tragedy and comedy, and historical, political, philosophical, and scientific writings. Some attention is also given to the daily life of ordinary citizens, supplemented by slides of ancient art and architecture.

## CLASS 2603 Initiation to Greek Culture \#

 (LA-AS)Fall. 4 credits. Limited to 18 students. Intended especially for freshmen. Students must apply in writing to chair, Department of Classics, 120 Goldwin Smith Hall P. Pucci.

Knowledge of Greek or Latin is not necessary, since all texts are in translation. What is necessary is the willingness to participate in three one-hour seminars each week and also a supplementary one- or two-hour session, during which the class participates in workshops with specially invited guests. This course covers a wide range of Greek literary and philosophical works as well as modern critical and philosophical writings on the Greeks. The focus throughout is on the status of language, the many forms of discourse that appear in the literature, and the attempts the Greeks themselves made to overcome the perceived inadequacies and difficulties inherent in language as the medium of poetry and philosophy. The course inquires into the development of philosophy in the context of a culture infused with traditional, mythological accounts of the cosmos. It asks how poetic forms such as tragedy responded to and made an accommodation with philosophical discourse while creating an intense emotional effect on the audience; how the first historians, using literary and philosophical discourse, created space for their own inquiry; and discusses how these issues persist and are formulated in our own thinking.

CLASS 2604 Greek Mythology \# (LA-AS)
Summer and fall. 3 credits. Limited to 50
students in summer; 300 in fall. D. Mankin. Survey of the Greek myths, with emphasis on the content and significance of the myths in Mediterranean society, including the place of myth in Greek life and consciousness; the factors and influences involved in the creation of myths; and the use of myths for our understanding of Greek literature, religion, and moral and political concepts.

CLASS 2605 Theater, Sport, and Spectacle: Performance and Competition in Greece and Rome (also THETR 2605) \# (CA-AS)
Fall. 3 credits. J. Rusten.
A study of richly documented tradition of competitive artistic, athletic, and spectacular performances sponsored by cities, wealthy individuals, and kings/emperors in antiquity, with special attention to the ongoing connections and cross-influences between music/theater, athletics, and human/animal combats. We will take our comparative material from the fifth century BCE to the late Roman empire. Topics include organizational frameworks, funding sources, associations of performers and their ideologies and rivalries, regulation and hierarchies of audiences, public claques, the adaptation of performance to political events, influence on art, and institutional and intellectual opposition. Evidence will include ancient treatises, inscriptions, mosaics, wall-paintings, and terracottas; all source readings available in

## English.

## CLASS 2612 The Roman Experience \#

 (CA-AS)Spring. 3 credits. D. Mankin.
Introduction to the civilization of the Romans as expressed in their literature, religion, and social and political institutions.
[CLASS 2613 Intro to New Testament and Other Early Christian Literature (also JWST/NES/RELST 2629) @ \# (HA-AS)
Spring. 3 credits (see CLASS 3629 for additional 1 credit). Next offered 20112012. K. Haines-Eitzen.]

## [CLASS 2632 Paranoia and Conspiracy

 (also COML 2632) \# (LA-AS)Spring. 3 credits. Next offered 2011-2012. M. Fontaine.

This course examines paranoia, fearmongering, and conspiracies imagined in ancient Greece and Rome. Readings cover a range of literary and philosophical texts.]

## CLASS 2637 The Jewish Galilee in Late

 Antiquity (also JWST/NES/RELST 2677) @ \# (HA-AS)Fall. 3 credits. G. Herman.
For description, see NES 2677.
CLASS 2651 The Comic Theater (also COML/THETR 2230) \# (LA-AS)
Spring. 3 credits. J. Rusten.
The origins of comic drama in ancient Greece and Rome, and its subsequent incarnations especially in the Italian renaissance
(Commedia erudita and Commedia dell'arte), Elizabethan England, 17th-century France, the English Restoration, and Hollywood in the thirties and forties. Chief topics will be the growth of the comic theatrical tradition and conventions; techniques and themes of comic plots (trickster, parody, farce, caricature); and the role of comedy in society.

## CLASS 2661 Ancient Philosophy (also

 PHIL 2200) \# (KCM-AS)Fall. 4 credits. G. Fine.
For description, see PHIL 2200.
CLASS 2675 Ancient Greece from Homer to Alexander the Great (also HIST 2650) \# (HA-AS)

Spring. 4 credits. Open to first-year
students. R. Van Dusen.
For description, see HIST 2650.

## CLASS 2676 Periclean Athens (also HIST

 2580) \# (HA-AS)Fall. 4 credits. H. Rawlings III.
The first five weeks will provide a synoptic view of Athens' historical and cultural achievement in the middle of the fifth century BC-the traditional pinnacle of "The Glory that was Greece." Readings will be taken from Greek historians, philosophers, poets and documentary texts. The next seven to eight weeks will follow the course of the Peloponnesian War to its end; readings from Thucydides will be interwoven with contemporaneous texts composed by the dramatists (Sophocles, Euripides, and Aristophanes) and the sophists (supplemented with readings from Plato). The remaining classes will consider the fate of Socrates. The basic aim of the course is to approach an understanding of how and why a vital and creative society came unglued. There will be weekly discussion sections and at least two debates.

## CLASS 2677 Topics in the Ancient

 Mediterranean (also HIST 2177)Spring. 4 credits. R. Van Dusen. Topic: Pompeii: Everyday Life in Ancient Rome.

## CLASS 2681 History of Rome I (also

 HIST 2670) \# (HA-AS)Fall. 4 credits. Open to first-year students. R. Van Dusen.

Rome's beginnings and the Roman Republic. The course is a general introduction to Roman history from the foundation of Rome in the middle of the eighth century $B C$ to the end of the Republic ( 31 BC ). It is the first part of a two-term survey of Roman history up to the deposition of the last Roman emperor in the West ( 476 AD ). We will examine the rise of Rome from a village in Italy to an imperial power over the Mediterranean world and consider the political, economic, and social consequences of that achievement.

## [CLASS 2682 History of Rome II (also

HIST 2671) \# (HA-AS)
Spring. 4 credits. Open to first-year
students. Next offered 2011-2012. Staff.
The second part of a two-term survey of Roman history examines the history of the Roman Empire from the beginnings of the Augustan Principate ( 31 BC ) to the fall of the Western Empire in the fifth century (AD 476).]

## [CLASS 3603 Medieval to Renaissance in

 Greek Literature (also COML 3825, NES 3705) \# (LA-AS)Fall. 4 credits. K. Yiavis.
Late Medieval literature in vernacular Greek established the possibility of high-quality writing outside the learned canon. Subsequent production proved that secular creativity could cater for the needs of new audiences, like women and a semi-literate public, for whom it created a space. It evolved a conceptual vocabulary that anticipated the important achievements of the Renaissance. This literature was an integral constituent of European tradition. It also interacted in powerful ways with Near Eastern letters. This course will challenge perceptions of Greek as insular, and will seek to show that mobility and exchange were the norm, not the exception, in the late Medieval and Renaissance Greek culture as it emerges to modernity.]

## [CLASS 3625 Christianization of the

 Roman World (also HIST 3625, NES 3633, RELST 3635) \# @ (HA-AS)Fall. 4 credits. Next offered 2012-2013.
E. Rebillard.

This seminar will focus on the approaches to the problem of Christianization and on its documentation.]
[CLASS 3629 Intro to New Testament and Other Early Christian Literature (also JWST/NES/RELST 3629)
Spring. 1 credit. Next offered 2011-2012.
K. Haines-Eitzen.

Extra credit option for students who have had one year of Greek, to read portions of the
New Testament and other Christian writings in

## Greek.]

CLASS 3630 By the Rivers of Babylon (also JWST/NES 3505)
Spring. 4 credits. G. Herman.
For description, see NES 3505.

## CLASS 3642 Greeks, Romans, and

Victorians (also COML 3820) \# (LA-AS)
Fall. 4 credits. F. Ahl.
This course explores how 19th-century (and especially Victorian English and Irish) poets, dramatists, and to a lesser extent, novelists, present Greco-Roman antiquity. The varied influences of Vergil and Homer, Seneca and Sophocles, Plautus and Aristophanes, Horace, and Greek lyric poetry will be discussed in selected works of Thomas Moore, Shelley, Byron, Swinburne, W. S. Gilbert, Oscar Wilde, and the pre-Raphaelites and Victorian poets.

## [CLASS 3644 Sages and Saints/Ancient

 World (also HIST 3644, RELST 3644) \# (HA-AS)Spring. 4 credits. Next offered 2012-2013. E. Rebillard.

This seminar considers the continuities and changes in the representations of the holy man, from the sages of classical antiquity to the saints of early Christianity.]
[CLASS 3645 The Tragic Theater (also COML 3440, THETR 3450) \# (LA-AS)
Spring. 4 credits. Limited to 40 students. Next offered 2011-2012. F. Ahl.
Tragedy and its audiences from ancient Greece to modern theater and film. Topics: origins of theatrical conventions; Shakespeare and Seneca; tragedy in modern theater and

## film.]

CLASS 3662 History of Battle (also HIST 3630) \# (HA-AS)

Spring. 4 credits. B. Strauss/Baptist.
For description, see HIST 3630.
CLASS 3664 Aristotle (also PHIL 3203) \# (KCM-AS)
Spring. 4 credits. T. Brennan.
For description, see PHIL 3203.
CLASS 3669 Plato (also PHIL 3202) \# (KCM-AS)
Fall. 4 credits. Prerequisite: at least one philosophy course at 2000 level or above; or permission of instructor. T. Brennan.
For description, see PHIL 3202.

## [CLASS 3676 Greek and Roman

Historiography \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. J. Rusten.

A study of the major ancient authors (from Herodotus through Ammianus Marcellinus) who invented and developed the genres of historical writing.]

CLASS 3686 Independent Study in Classical Civilization, Undergraduate Level
Fall and spring. 1-4 credits. Prerequisite: permission of director of undergraduate studies, in extraordinary circumstances only.

## CLASS 4602 The Political Lives of Things

 (also SHUM 4953)Spring. 4 credits. A. Smith.
For description, see SHUM 4953.
[CLASS 4630 Senior Seminar \# (LA-AS)
Spring. 4 credits. Next offered 2012-2013.
H. Pelliccia.

We will study the history of the idea of the classic author or text from fourth-century Greece forward to the late-20th-century "canon wars."]

## CLASS 4662 Topics in Ancient

 Philosophy (also PHIL 4200) \# (KCM-AS)Fall, spring. 4 credits. Fall, G. Fine; spring, T. Brennan.

For description, see PHIL 4200.
CLASS 4678 Seminar on the Ancient Mediterranean (also HIST 4862)
Fall. 4 credits. R. VanDusen.
Topic: Italy Beyond Rome.

## CLASS 4683 Classics and Early America (also HIST 4861, GOVT 4862) \#

 (HA-AS)Spring. 4 credits. H. Rawlings III. The point of the seminar is to study several related questions: how deep was the Founders' knowledge of the Classics (i.e., did it go beyond Plutarch and Livy?) How well did they know Latin and Greek? To what extent did these men actually use Greek and Roman texts in developing their political theories and ultimately the U.S. Constitution? How conscious were they of classical influences upon their thought? To what extent did they model their political aspirations and behavior upon the lives of leading Greeks and Romans? How did their views of actual Athenian democracy and the Roman Republic influence their political thinking? The format will be seminar discussion of mostly primary reading.

## CLASS 7173 Seminar in Ancient

 Philosophy (also PHIL 6200)Fall, spring. 4 credits. Fall, G. Fine; spring, T. Brennan.

For description, see PHIL 6200.

## CLASS 7345 Graduate TA Training

Fall and spring. 1 credit. Staff.
Pedagogical instruction and course
coordination. Requirement for all graduate student teachers of LATIN 1201-1202 and firstyear writing seminars.
[CLASS 7459 Seminar in Vedic Philology (also ASIAN/LING 6659)
Spring. 4 credits. Prerequisite: two years of
Sanskrit or permission of instructor. Next
offered 2012-2013. M. Weiss.
For description, see LING 6659.]

## CLASS 7960 Independent Study in

 Classical StudiesFall and spring. Up to 4 credits.

## CLASS 9900 Doctoral Dissertation

 ResearchFall and spring. 0 credits. Letter grades only. Staff.

## Greek

GREEK 1101 Elementary Ancient Greek I
Fall. 4 credits. A. Nussbaum.
Introduction to Attic Greek. Designed to enable the student to read the ancient authors as soon as possible.

## GREEK 1102 Elementary Ancient

 Greek IISpring. 4 credits. Prerequisite: GREEK 1101 or equivalent. H. Pelliccia.
Continuation of GREEK 1101, prepares students for GREEK 1105.

## GREEK 1103 Intensive Greek

Summer. 6 credits. Staff.
Intensive introduction combining the fundamentals of ancient Greek grammar with readings from a variety of classical authors in the original Greek. Prepares students in a single semester for GREEK 1105.

## GREEK 1105 Intermediate Ancient

 Greek I \#Fall. 3 credits. Prerequisites: GREEK 1102,
1103, or placement by departmental exam. P. Pucci.

Introduces students to reading Greek literary texts (Xenophon's Anabasis) and a dialogue of Plato. Covers complex syntax and reviews the grammar presented in GREEK 1102 or 1103.

## [GREEK 1141 Elementary Modern Greek

 I (also NES 1340)Fall. 4 credits. Next offered 2011-2012. K. Yiavis.

The course is intended for students with no experience in modern Greek. The goal is to provide a thorough grounding in Greek language with an emphasis on communication.]
GREEK 1142 Elementary Modern Greek II (also NES 1341)
Spring. 4 credits. Prerequisite: NES 1340/ GREEK 1141 or placement by departmental exam. Staff.
Intended for students with no experience in Greek. The goal is to provide a thorough grounding in Greek language with an emphasis on communication. Small class size provides intensive practice in speaking, writing, and listening/comprehension.

## GREEK 1143 Intermediate Modern Greek

 I (also NES 1342)Fall. 4 credits. Prerequisite: GREEK 1142/
NES 1341 or placement by departmental exam. Staff.
Emphasizes complex grammatical and syntactical phenomena of the Modern Greek language through oral communication and texts. Students look into idiomatic nuances and special features of the language. Oral speech and writing are more crucial at this level.
GREEK 2101 Greek Prose \# (LA-AS) Spring. 3 credits. Satisfies Option 1. Prerequisite: GREEK 1105. A. Nussbaum. Selected readings from Greek prose.

## [GREEK 2103 Homer \# (LA-AS)

Spring. 3 credits. Satisfies Option 1.
Prerequisite: GREEK 1105. Next offered
2011-2012. Staff.
Readings in the Homeric epic.]
[GREEK 2104 Euripides: Alcestis \# (LA-AS)
Spring. 3 credits. Satisfies Option 1.
Prerequisite: GREEK 1105. Next offered
2012-2013. P. Pucci.

With the Alcestis we encounter Greek tragedy in one of its Euripidean versions: serious events and comic happenings interlace and weave a most mysterious analysis of human responses.]

## GREEK 2144 Intermediate Modern Greek II (also NES 2324) ©

Spring. 4 credits. Satisfies Option 1.
Prerequisite: GREEK 1143/NES 1342 or placement by departmental exam. Staff.
This course emphasizes complex grammatical and syntactical phenomena of the Modern Greek language through oral communication and texts. Students look into idiomatic nuances and special features of the language. Oral speech and writing are more crucial at this level.

## GREEK 3101 Greek Epic \# (LA-AS)

 Spring. 4 credits. Satisfies Option 1. Prerequisite: one 2000-level Greek course P. Pucci.Undergraduate Seminar. This course focuses on the epic language, its specificity, its poetic means (epithets, formulae, similes, etc.), its function in constructing and interpreting the world, and its aesthetic, emotional effects. The central text we will follow is Homer's Odyssey.

## [GREEK 3102 Greek Historiography and

 Oratory \# (HA-AS)Fall. 4 credits. Satisfies Option 1.
Prerequisite: one 2000-level Greek course. Next offered 2011-2012. Staff.
Undergraduate seminar.]
[GREEK 3103 Greek Philosophy and Rhetoric \# (LA-AS)
Spring. 4 credits. Satisfies Option 1. Prerequisite: one 2000-level Greek course Next offered 2012-2013. H. Rawlings III. Undergraduate seminar. Topic: Greek rhetoric. We will read speeches by several Greek orators.]

## GREEK 3104 Seminar: Greek Drama \#

 (LA-AS)Fall. 4 credits. Satisfies Option 1.
Prerequisite: one 2000-level Greek course. H. Rawlings III.

GREEK 3185 Independent Study in Greek, Undergraduate Level
Fall and spring. Up to 4 credits.
Prerequisite: permission of DUS in extraordinary circumstances only. Staff.
GREEK 4101 Advanced Readings in Greek Literature \# (LA-AS)
Fall. 4 credits. Prerequisite: one semester of 3000-level Greek. F. Ahl.

## GREEK 4102 Advanced Readings in

 Greek Literature \# (LA-AS)Spring. 4 credits. Prerequisite: one semester of 3000-level Greek. H. Rawlings III.
Topic: TBD.

## [GREEK 4116 Advanced Greek

 Composition (LA-AS)Spring. 4 credits. Prerequisite: GREEK 3116 or equivalent. Next offered 2012-2013. J. Rusten.]
[GREEK 7171 Graduate Seminar in Greek Fall. 4 credits. Next offered 2011-2012. Staff.
Topic: TBD.]
[GREEK 7172 Graduate Seminar in Greek Spring. 4 credits. Next offered 2011-2012. Staff.
Topic: TBD.]

GREEK 7910 Independent Study in Greek Fall and spring. 1-4 credits.

## Latin

## LATIN 1201 Elementary Latin I

Fall. 4 credits. Staff.
Introductory course designed to prepare students to start reading Latin prose at the end of a year. The class moves swiftly and includes extensive memorization of vocabulary and paradigms; study of Latin syntax; and written homework, quizzes, tests, and oral drills.

## LATIN 1202 Elementary Latin II

Spring. 4 credits. Students may not receive credit for both LATIN 1202 and LATIN 1204. Students should be ready for LATIN 1205 by the end of the course, but may take LATIN 2201 if they pass with A- or better. Prerequisite: 1201 or equivalent. Staff.
Continuation of LATIN 1201, using readings from various authors; prepares students for

## LATIN 1205.

## LATIN 1203 Intensive Latin

Summer. 6 credits. Staff.
Intensive introduction that quickly instills the essentials of Latin grammar before progressing to readings in the original Latin. Prepares students in a single term for LATIN 1205.

## LATIN 1204 Latin in Review

Fall. 4 credits. Students may not receive credit for both LATIN 1202 and LATIN
1204. Prerequisite: placement by
departmental examination. A. Ruppel.
Designed to accommodate students who have had some Latin, but are insufficiently prepared to take 1202. It begins with review of some material covered in 1201 and then continues with second-term Latin material (1202). The class moves swiftly and includes extensive memorization of vocabulary and paradigms; study of Latin syntax; and written homework, quizzes, tests, and oral drills. Students should be ready for LATIN 1205 by the end of the course, but may take LATIN 2201 if they pass with A- or better.

## LATIN 1205 Intermediate Latin I

Fall and spring. 3 credits. Prerequisites: LATIN 1202, 1203, 1204 or placement by departmental exam. A. Ruppel. Introduces students to reading a literary Latin text (Ovid, Ars Amatoria I.) Covers complex syntax and reviews the grammar presented in LATIN 1202, 1203, or 1204.

## LATIN 2201 Latin Prose \# (LA-AS)

Fall. 3 credits. Satisfies Option 1.
Prerequisite: LATIN 1205 or grade of A- or above in LATIN 1202, 1203, or 1204 or
placement by departmental exam.
H. Pelliccia.

Cicero's famous speech pro Archia, written on behalf of the claim to Roman citizenship of the poet Archias, contains an eloquent and inspiring defense of the liberal arts-plus some amazing Latin!

## [LATIN 2202 Ovid: Erotic Poetry \#

 (LA-AS)Fall. 3 credits. Satisfies Option 1.
Prerequisite: LATIN 1205 or grade of A- or above in LATIN 1202, 1203, 1204 or placement by departmental exam. Next offered 2012-2013. Staff.]

## LATIN 2203 Catullus \# (LA-AS)

Spring. 3 credits. Satisfies Option 1.
Prerequisite: LATIN 1205 or grade of A- or above in LATIN 1202, 1203, 1204, or
placement by departmental exam. P. Pucci.
Aims to present the poems of Catullus within their cultural and historical context. The poems are read and translated, and their significance discussed in class.

## [LATIN 2204 Roman Drama \# (LA-AS)

Spring. 3 credits. Satisfies Option 1.
Prerequisite: LATIN 1205 or 2201. Next offered 2012-2013. Staff.

## Topic: TBA.]

## [LATIN 2206 Roman Letters \# (LA-AS)

 Spring. 3 credits. Satisfies Option 1. Prerequisite: LATIN 1205 or grade of A- or above in LATIN 1202, 1203, 1204 or placement by departmental exam. Next offered 2011-2012. Staff.
## Topic: TBA.]

LATIN 3201 Roman Epic \# (LA-AS)
Fall. 3 credits. Satisfies Option 1.
Prerequisite: 2000-level Latin. D. Mankin.
Undergraduate seminar.

## LATIN 3202 Roman Historiography \#

 (LA-AS)Spring. 4 credits. Satisfies Option 1.
Prerequisite: one term of 2000 -level Latin
or permission of instructor. J. Rusten.
Undergraduate seminar. Topic: Livy.
[LATIN 3203 Roman Poetry \# (LA-AS)
Fall. 3 credits. Satisfies Option 1.
Prerequisite: one 2000-level Latin course.
Next offered 2011-2012.
Undergraduate seminar. Topic: TBA.]
[LATIN 3204 Roman Prose \# (LA-AS)
Spring. 3 credits. Satisfies Option 1.
Prerequisite: one 2000-level Latin course.
Next offered 2012-2013. H. Pelliccia.
Undergraduate seminar.]
[LATIN 3215 Imperial Latin \# (LA-AS)
Spring. 4 credits. Satisfies Option 1.
Prerequisite: one semester of 2000-level
Latin. Next offered 2011-2012. Staff.
Undergraduate Latin seminar. Topic: TBA.]

## [LATIN 3217 Latin Prose Composition \#

 (LA-AS)Fall. 4 credits. Prerequisite: one semester of 2000-level Latin. Next offered 2011-
2012. Staff.]

LATIN 3286 Independent Study in Latin, Undergraduate Level
Fall and spring. Variable to 4 credits.
Prerequisite: permission of DUS in
extraordinary circumstances only. Staff.
LATIN 4201 Advanced Readings in Latin Literature \# (LA-AS)
Fall. 4 credits. Prerequisite: one semester of 3000-level Latin. B. Huelsenbeck.
Topic: Tacitus.
[LATIN 4202 Advanced Readings in Latin Literature \# (LA-AS)
Spring. 4 credits. Prerequisite: one semester of 3000-level Latin. Next offered 2011-
2012. Staff.

Topic: TBD.]
[LATIN 4203 Survey of Latin Literature \# (LA-AS)
Fall. 4 credits. Seniors must obtain
permission from instructor to enroll. Next offered 2011-2012.]
[LATIN 4213 Survey of Medieval Latin Literature (also LATIN 7213, MEDVL 4103/6103) \# (LA-AS)
Fall. 3 credits. Next offered 2011-2012. Staff.
For description, see MEDVL 4103.]
[LATIN 4216 Advanced Latin Prose Composition \# (LA-AS)
Fall. 4 credits. Prerequisite: graduate standing; undergraduates who have completed LATIN 3217 and have permission of instructor. Next offered 2011-2012. Staff.]
[LATIN 4223/7223 Topics in Medieval Latin Literature (also MEDVL 4201/6201) \# (LA-AS)
Spring. 4 credits. Next offered 2012-2013.]
[LATIN 7213 Survey of Medieval Latin Literature (also MEDVL 4103/6103, LATIN 4213)
Fall. 3 credits. Next offered 2011-2012. Staff.
For description, see MEDVL 4103.]
LATIN 7222 Latin Paleography (also MEDVL 6102 )
Fall. 4 credits. B. Huelsenbeck.
For description, see MEDVL 6102.
[LATIN 7271 Graduate Seminar in Latin (also PHIL 6201)
Fall. 4 credits. Next offered 2011-2012. Staff.
Topic: TBA.]
LATIN 7272 Graduate Seminar in Latin
Spring. 4 credits. F. Ahl.
Topic: Aeneid.
LATIN 7920 Independent Study in Latin Fall and spring. 1-4 credits. Staff.

## Classical Art and Archaeology

CLASS 2700 Introduction to Art History: The Classical World (also ARKEO 2700, ARTH 2200) \# (HA-AS)
Fall. 4 credits. Each student must enroll in a sec. A. Alexandridis.
For description, see ARTH 2200.
[CLASS 2727 Art and Archaeology in the Ancient Mediterranean World (also ARKEO 2728, ARTH 2227) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Manning.

This course introduces students to a selection of the major themes and issues in the archaeology and art of the ancient Mediterranean region from the later prehistoric period (the Bronze Age) through to the Roman era.]

## CLASS 3727 Iconography of Greek Myth

 (also ARTH 3230) \# (HA-AS)Spring. 4 credits. A. Alexandridis.
For description, see ARTH 3230.

## CLASS 3750 Introduction to

 Dendrochronology (also ARKEO 3090, ARTH 3250) \# (HA-AS)Fall. 4 credits. Limited to 10 students. Prerequisite: permission of instructor. Letter grades only. S. Manning.
Introduction and training in dendrochronology and its application to archaeology, art history, and environmental stress through participation in a research project dating ancient to modern tree-ring samples from both the Mediterranean and the Upper New York State region. Supervised reading, laboratory/project work,
field trip(s) in local area. A possibility exists for summer fieldwork in the Mediterranean.

## CLASS 4745 Image and Text in the Greek Roman Empire

Fall. 4 credits. V. Platt and J. Rusten. Exploration of the sophisticated visuality of Greek culture under Roman rule: statuary, sarcophagi, wall-paintings, mosaics, and literary ekphrasis.
CLASS 4746 Greek and Roman Art and Archaeology (also ARTH/FGSS 4233)
Spring and fall. 4 credits. A. Alexandridis. For description, see ARTH 4233.

## [CLASS 7729 Emergence of Greek

 Civilization (also ARKEO 7729)Spring. 4 credits. Next offered 2012-2013. S. Manning.

Development of complex to state-level society in the Aegean, and its relations with neighboring regions, from start of Neolithic through Bronze Age and down to Homer.]
CLASS 7742 Research Methods in Archaeology (also ARKEO 7742, ARTH 6252)
Spring. 4 credits. S. Manning.
CLASS 7745 Image and Text in the Greek Roman Empire
Fall. 4 credits. V. Platt and J. Rusten.
For description, see CLASS 4745.
CLASS 7746 Greek and Roman Art and Archaeology (also ARTH/FGSS 6233)
Spring and fall. 4 credits. A. Alexandridis. For description, see ARTH 4233.

## Greek and Latin Linguistics

## [GREEK 4411 Greek Comparative

 Grammar (also LING 4451) (KCM-AS)Spring. 4 credits. Prerequisite: thorough familiarity with morphology of classical
Greek. Next offered 2011-2012.
A. Nussbaum.

The prehistory and evolution of the sounds and forms of ancient Greek as reconstructed by comparison with the other Indo-European languages.]
[LATIN 4452 Latin Comparative Grammar (also LING 4452) (KCM-AS)
Fall. 4 credits. Prerequisite: thorough familiarity with morphology of classical Latin. Next offered 2011-2012.
A. Nussbaum.

The prehistory and evolution of the sounds and forms of Classical Latin as reconstructed by comparison with the other Indo-European languages.]

## [LATIN 4453 Structure of Latin (also

 LING/ROMS 4453) \# (KCM-AS)Fall. 4 credits. Cannot be used toward the language course major requirement. Next offered 2011-2012. Staff.
For description, see LING 4453.]

## [GREEK 4455 Greek Dialects (also LING

 4455) (KCM-AS)Fall. 4 credits. Next offered 2012-2013.
A. Nussbaum.

Survey of the dialects of ancient Greek
through the reading and analysis of
representative epigraphical and literary texts.]

## [LATIN 4456 Archaic Latin (also LING

 4456) \# (LA-AS)Spring. 4 credits. Prerequisite: reading knowledge of Latin. Next offered 20122013. M. Weiss.

Reading of epigraphic and literary preClassical texts with special attention to archaic and dialectal features.]
[GREEK 4457 Homeric Philology (also LING 4457) \# (LA-AS)
Spring. 4 credits. Prerequisite: ability to read Homeric Greek. Next offered 20122013. A. Nussbaum.

Language of the Homeric epics: dialect background, archaisms, modernizations. Notion of a Kunstsprache: its constitution, use, and internal consistency. Phonological and morphological aspects of epic compositional technique.]
[GREEK 4459 Mycenaean Greek (also LING 4459) (LA-AS)
Spring. 4 credits. Prerequisite: thorough familiarity with morphology of Classical Greek. Next offered 2011-2012. Staff.]

## $\overline{\text { Sanskrit }}$

CLASS 1331-1332 Elementary Sanskrit (also LING/SANSK 1131-1132)
1331, fall; 1332, spring. 4 credits each semester. Prerequisite: for 1331, none; for 1332, 1331. A. Ruppel.
For description, see SANSK 1131-1132.
CLASS 2351-2352 Intermediate Sanskrit (also LING/SANSK 2251-2252) @ \# 2351, fall; 2352, spring. 3 credits each semester. CLASS 2351 satisfies Option 1. Prerequisite: CLASS 1332 or equivalent. Fall, A. Nussbaum; spring, staff.
For description, see SANSK 2251-2252.

## CLASS 3391 Independent Study in

 Sanskrit, Undergraduate Level Fall and spring. Variable to 4 credits. Prerequisite: permission of director of undergraduate studies, in extraordinary circumstances only. Staff.
## [CLASS 3393 Advanced Sanskrit I (also

 SNLIT 3301) @ \# (LA-AS)Fall. 4 credits. Next offered 2011-2012. L. McCrea.

For description, see SNLIT 3301.]

## [CLASS 3394 Advanced Sanskrit II (also

 SNLIT 3302) @ \# (LA-AS)Spring. 4 credits. Next offered 2011-2012. L. McCrea.

For description, see SNLIT 3302.]

## [CLASS 4490 Sanskrit Comparative

 Grammar (also LING 4460) (KCM-AS)Fall. 4 credits. Next offered 2012-2013.
A. Nussbaum.

Survey of the historical phonology and morphology of Sanskrit in relation to the Indo-Iranian and Indo-European comparative evidence.]

## CLASS 7950 Independent Study in

 SanskritFall and spring. Variable to 4 credits. Staff.

## Honors Courses

CLASS 4721-4722 Honors Course: Senior Essay
Fall and spring. 8 credits. Student must choose advisor by end of sixth semester. Topics must be approved by Standing Committee on Honors by beginning of seventh semester.
See "Honors" under Classics front matter.

## COGNITIVE SCIENCE PROGRAM

M. Christiansen (psychology) and Jeff Hancock (information science), directors. G. Gay, J. Hancock (communication); C. Cardie, R. Constable, J. Halpern, D. Huttenlocher, T. Joachims, L. Lee, B. Selman, R. Zabih (computer science); G. Evans, A. Hedge (design and environmental analysis); K. Basu, L. Blume, D. Easley (economics); J. Dunn, R. Ripple, D. Schrader (education); S. Wicker (electrical and computer engineering); M. Belmonte, C. Brainerd, M. Casasola, S. Ceci, B. Koslowski, B. Lust, V. Reyna, S. Robertson, Q. Wang, E. Wethington, W. Williams (human development); K. O'Connor, J. Russo, J. Bowers, A. Cohn, M. Diesing, W. Harbert, S. McConnell-Ginet, A. Miller-Ockhuizen, M. Rooth, C. Rosen, J. Whitman, D. Zec (linguistics); A. Nerode, R. Shore (mathematics); H. Lipson; R. Harris-Warrick, H. Howland, R. Hoy, C. Linster, H. K. Reeve (neurobiology and behavior); R. Boyd, M. Eklund, C. Ginet, H. Hodes, D. Pereboom, S. Shoemaker, B. Weatherson (philosophy); T. Cleland, J. Cutting, R. Darlington, T. DeVoogd, D. Dunning, S. Edelman, M. Ferguson, D. Field, B. Finlay, T. Gilovich, M. Goldstein, B. Halpern, A. Isen, R. Johnston, C. Krumhansl, U. Neisser, D. Pizarro, E. Adkins Regan (psychology); M. Macy (sociology). R. Canfield, S. Hertz (associate members).

Cognitive Science comprises a number of disciplines that are linked by a major concern with fundamental capacities of the mind, such as perception, memory, reasoning, language, the organization of motor action, and their neural correlates. In the College of Arts and Sciences these disciplines are represented in the departments of Computer Science, Economics, Linguistics, Mathematics, Neurobiology and Behavior, Philosophy, Psychology, and Sociology. Elsewhere in the university they are represented in the departments of Mechanical and Computer Engineering, and Mechanical and Aerospace Engineering (College of Engineering); the departments of Design and Environmental Analysis and Human Development (College of Human Ecology); the departments of Communication and Education (College of Agriculture and Life Sciences); the Information Science Program, and the Johnson Graduate School of Management.
The issues addressed in Cognitive Science arise at several levels. At the broadest level are problems of characterizing such basic notions as "mind," "knowledge," "information," and "meaning." At a more specific level are questions regarding the abstract operating principles of individual components of the mind, such as those underlying visual perception, language ability, and understanding of concepts. These principles concern the organization and behavior of the components and how they are biologically represented in the brain. At the most specific level are questions about the properties of the elementary computational structures and processes that constitute these components.
Important insights into issues of these kinds have been achieved in recent years as a result of the various Cognitive Science disciplines converging in their theoretical and methodological approaches. It is this convergence, in fact, that warrants grouping the disciplines together under the single term "Cognitive Science." Even greater progress can
be expected in the future as a consequence of increasing cooperation among the disciplines.

## Undergraduate Minor

An interdisciplinary undergraduate minor in Cognitive Science is available to Cornell University undergraduates in the College of Arts and Sciences. Students from other colleges who seek such a minor should discuss such possibilities with the Cognitive Science office, which will provide information and contacts concerning such minors.
The undergraduate minor in Cognitive Science is designed to enable students to engage in a structured program directly related to the scientific study of cognition and the mind. The minor provides a framework for the design of structured, supervised programs of study in this growing interdisciplinary field. Such programs of study serve as complements to course work in a single discipline as represented by an individual department. It is considered crucial that students gain a strong background in their major, independent of their work in the minor. Independent majors and college scholars may also apply. Colleges vary in their procedures for formal recognition of this minor (contact the Cognitive Science office for details). The Cognitive Science Program faculty have designed five structured "tracks" that offer students different ways of satisfying the minor. In addition, students are always able to construct their own programs of study subject to approval by their minor advisor. The courses listed under each track are program suggestions. The student should consult his or her Cognitive Science advisor to develop a more customized curriculum. In some cases, students may want to combine or cross tracks.
In general, it is expected that students in the minor will take COGST 1101 or COGST 2140 as their introductory course requirement; either COGST 4120, COGST 4160, COGST 4500, or COGST 4700 as their lab course requirement; and three courses at the 3000 and 4000 level in at least two departments (or certain suitable 2000-level courses by petition) Courses are to be chosen by student and advisor to provide a coherent program. Even though only five courses are required to complete the minor, we assume students interested in Cognitive Science will often end up taking more. An independent research project (e.g., COGST 4700 if this is not used to satisfy the lab requirement) and a research workshop (COGST 4710) are encouraged. Please note: minor modifications to this outline may be made in extenuating circumstances by the advisor, in consultation with the program director.
The five typical tracks are as follows. Note that many of these courses have substantial prerequisites.

## 1. Perception and Cognition

This track focuses on psychological, computational, and neurobiological approaches to the interface between perception and cognition. Students will develop a grasp of the continuum between sensory impressions and complex thought.
BIONB 3260 The Visual System
BIONB 4330/COGST 4310/PSYCH 4320 Consciousness and Free Will

COGST 1101/CS 1710/LING 1170/PHIL 1910/PSYCH 1102 Introduction to
Cognitive Science
COGST/PSYCH 2140 Cognitive Psychology
COGST/PSYCH 3420 Human Perception:
Applications to Computer Graphics, Art, and Visual Display
COGST/PSYCH 4160 Modeling Perception and Cognition
COGST 4500/HD 4370/LING 4500/PSYCH 4370 Lab Course: Language Development
COGST 4650/CS 3920/PSYCH 4650 Topics in High-Level Vision
PSYCH 3050 Visual Perception
PSYCH 3160 Auditory Perception
PSYCH 4120 Laboratory in Cognition and Perception
PSYCH 4180 Psychology of Music
2. Language and Cognition

This track focuses on the representation, processing, and acquisition and learning of language, as well as its role in cognition and culture. Students will acquire skills and knowledge in formal and applied linguistic theory,
psycholinguistic experimentation, and
computational modeling techniques.
COGST 1101/CS 1101/LING 1170/PHIL 1910/PSYCH 1102 Introduction to Cognitive Science
COGST/PSYCH 2140 Cognitive Psychology COGST/LING/PSYCH 2150 Psychology of Language
COGST/PSYCH 4270 Evolution of Language
COGST/LING/PSYCH 4280 Connectionist Psycholinguistics
COGST 4340/HD 4240 Current Topics in Cognitive Development
COGST/HD 4360/LING 4436/PSYCH 4360 Language Development
COGST 4500/HD 4370/LING 4500/PSYCH 4370 Lab Course: Language Development
CS 4110 Programming Languages and Logics
LING 3301-3302 Introduction to Phonetics
LING 3303 Introduction to Syntax
LING 3304 Introduction to Semantics Pragmatics
LING 4403 Syntax I, II
LING 4421-4422 Semantics I and II
PHIL 3320 Philosophy of Language
3. Cognition and Information Processing

This track focuses on how the mind (or a computer) can encode, represent, and store information. Students will develop an understanding of concepts, categories, memory, and the nature of information itself.
COGST 1101/CS 1101/LING 1170/PHIL 1910/PSYCH 1102 Introduction to Cognitive Science
COGST/PSYCH 2140 Cognitive Psychology
COGST/PSYCH 4140 Comparative Cognition
COGST 2340/HD 3340 The Growth of the Mind
COGST/HD 4320 Cognitive, Social, and Developmental Aspects of Scientific Reasoning
COGST 4500/HD 4370/LING 4500/PSYCH 4370 Lab Course: Language Development
CS 2110 Computers and Programming

CS 4700 Foundations of Artificial Intelligence
CS 4701 Practicum in Artificial Intelligence
PSYCH 4120 Laboratory in Cognition and Perception
PSYCH 4130 Information Processing: Conscious and Nonconscious
PSYCH 4150 Concepts, Categories, and Word Meanings
PSYCH 4170 The Origins of Thought and Knowledge
4. Cognitive Neuroscience

This track focuses on neurobiological and computational approaches to understanding how perception and cognition emerge in the human brain. Students will acquire knowledge of what neural structures subserve what perceptual/cognitive processes, and how they interact.
COGST 1101/CS 1101/LING 1170/PHIL 1910/PSYCH 1102 Introduction to Cognitive Science
COGST/PSYCH 2140 Cognitive Psychology
COGST/HD 2200 The Human Brain and Mind
COGST/BIONB/PSYCH 3300 Introduction to Computational Neuroscience
PSYCH 3320/BIONB 3280 Biopsychology of Learning and Memory
PSYCH/BIONB 3960 Introduction to Sensory Systems
PSYCH 4250 Cognitive Neuroscience
5. Independent Study

With approval from the Cognitive Science undergraduate curriculum committee, a student and advisor in the Cognitive Science program can arrange their own unique collection of courses that do not belong to the above categories for satisfying the minor requirements.
COGST 4700 Undergraduate Research in Cognitive Studies
COGST 4710 Cognitive Studies Research Workshop
A Cognitive Science undergraduate laboratory and computer facility (201 Uris Hall) is available for all students in a Cognitive Science minor. This facility will help link resources from different laboratories across the Cornell campus as well as providing a central location for developing and conducting experimental research in Cognitive Science.
Students who complete the minor requirements will have their minor in Cognitive Science officially represented on their transcript. In addition, students who have made substantial progress toward completing the requirements for the minor will be eligible for enrollment in the graduate courses in Cognitive Science during their senior year.
Minor Application Procedures. Initial inquiries concerning the undergraduate concentration should be made to the Cognitive Science Program manager, Julie SimmonsLynch, cogst@cornell.edu, 255-6431, who will provide application materials.
To formally initiate the minor in Cognitive Science, a student must gain approval for a selection of courses from a minor advisor (one of the program faculty). The courses selected must form a coherent cluster that makes sense to both the advisor and the student. To be admitted to the minor, the student must submit this plan of study to the Cognitive Science undergraduate faculty committee for final approval.

In addition to assisting in and approving the student's selection of courses, the minor advisor serves as a general source of information about the field of Cognitive Science, relevant resources around the university, and job and graduate school opportunities. Often, the advisor can help the student develop independent research experience.
Independent Research. The minor encourages each student to be involved in independent research that bears on research issues in Cognitive Science, if possible. COGST 4700 is available for this purpose. It is recommended that students report on their research activities in an annual undergraduate forum. The Undergraduate Minor Committee is committed to helping students find an appropriate research placement when needed.
The Committee for Undergraduate Minor in Cognitive Science consists of: Bart Selman, Computer Science, 255-5643, 4144 Upson Hall, selman@cs.cornell.edu; Draga Zec, linguistics, 255-0728, 217 Morrill Hall, dz17@cornell.edu; Morten Christiansen, psychology, 255-3570, 2380 Uris Hall, mhc27@cornell.edu. The current director of undergraduate studies is Draga Zec.

## Graduate Minor

Entering graduate students, as well as advanced undergraduates, who are interested in cognition and in the cognitive sciences are advised to take the proseminar course COGST 6501 Introduction to Cognitive Science in the fall semester. Enrolling in this 4 -credit version of COGST 1101 involves a weekly section meeting with the instructor and will satisfy the introductory course requirement.
Graduate students minoring in Cognitive Science will take additional courses recommended by their graduate committee to complete their course requirements.
For more information, consult the program office (233 Uris Hall, 255-6431, cogst@cornell. edu) or the director of graduate studies, Morten Christiansen (255-3570, mhc27@ cornell.edu).

## Courses

## Cognitive Science

COGST 1101 Introduction to Cognitive Science (also CS 1710, LING 1170, PHIL 1910, PSYCH 1102) (KCM-AS)
Fall. 3 or 4 credits; 4 -credit option involves
writing section instead of exams. J. Hale. Surveys the study of how the mind/brain works. Examines how intelligent information processing can arise from biological and artificial systems. Draws primarily from five disciplines that make major contributions to cognitive science: philosophy, psychology, neuroscience, linguistics, and computer science. The first part of the course introduces the roles played by these disciplines in cognitive science. The second part focuses on how each of these disciplines contributes to the study of five topics in cognitive science: language, vision, learning and memory, action, and artificial intelligence.

## COGST 1110 Brain, Mind, and Behavior

 (also BIONB/PSYCH 1110) (PBS)Spring. 3 credits. Intended for freshmen and sophomores in humanities and social sciences; seniors not allowed. Not recommended for psychology majors; biology majors may not use course for credit toward major. Letter grades only. R. Hoy and E. Adkins Regan.

Understanding how the brain creates complex human behavior and mental life is a great scientific frontier of the next century. This course enables students with little scientific background from any college or major to appreciate the excitement. What are the interesting and important questions? How are researchers trying to answer them? What are they discovering? Why did the brain evolve this remarkable capacity?
COGST 1500 Intro to Human Environment Relations (also DEA 1500) (SBA-AS)
Spring. 3 credits. G. Evans.
For description, see DEA 1500.

## COGST 2140 Cognitive Psychology (also

 PSYCH/INFO 2140/6140) (KCM-AS)Spring. 4 credits. Limited to 200 students.
Prerequisite: sophomore standing.
S. Edelman.

For description, see PSYCH 2140.

## COGST 2150 Psychology of Language

 (also LING 2215, PSYCH 2150) (KCMAS)Spring. 3 credits. Prerequisite: sophomore, junior, or senior standing; any one course in psychology or human development. M. Christiansen.

For description, see PSYCH 2150.

## COGST 2300 Cognitive Development

 (also HD 2300)Fall. 3 credits. Prerequisite: HD 1150 or PSYCH 1101. T. Kushnir.
For description, see HD 2300.

## COGST 2380 Thinking and Reasoning

 (also HD 2380)Fall. 3 credits. Prerequisite: HD 1150 or PSYCH 1101. B. Koslowski.
For description, see HD 2380.
COGST 3300 Introduction to Computational Neuroscience (also BIONB/PSYCH 3300) (PBS)
Fall. 3-4 credits; 4-credit option includes lab providing additional computer simulation exercises. Limited to 25 students. Prerequisite: BIONB 2220 or permission of instructor. C. Linster. For description, see BIONB 3300.
[COGST 3330 Problems in Semantics
(also LING 3333, PHIL 3700) (KCM (also LING 3333, PHIL 3700) (KCMAS)
Spring. 4 credits. Prerequisites: course in logic or semantics or permission of instructor. Next offered 2011-2012. D. Abusch.
For description, see LING 3333.]

## COGST 3340 The Growth of the Mind (also HD 3340) (KCM-AS)

Spring. 4 credits. Prerequisite: course in human experimental psychology, cognitive psychology, statistics, HD 1150, or equivalent, or permission of instructor. Primarily intended for sophomores through seniors. B. Lust
For description, see HD 3340.

COGST 3370 Language Development (also HD 3370, LING 4436, PSYCH 4360) (KCM-AS)

Spring. 4 credits. Open to undergraduate and graduate students. Graduate students should also enroll in HD 6330 or LING
7700 , a supplemental graduate seminar.
Prerequisite: at least one course in
developmental psychology, cognitive
psychology, cognitive development, or
linguistics. S-U or letter grades. B. Lust.
For description, see HD 3370.
COGST 3420 Human Perception: Applications to Computer Graphics, Art, and Visual Display (also PSYCH 3420/6420, VISST 3342) (KCM-AS)
Fall. 3 or 4 credits; 4 -credit option involves term paper. Prerequisite: PSYCH 1101 or permission of instructor. Highly
recommended: PSYCH 2050. D. Field.
For description, see PSYCH 3420.
COGST 4120 Laboratory in Cognition and Perception (III) (also PSYCH 4120) (KCM-AS)
Spring. 4 credits. Limited to 15 students. Prerequisite: statistics and one course in cognition or perception recommended.
Graduate students, see PSYCH 6120.
D. J. Field.

For description, see PSYCH 4120.

## COGST 4240 Computational Linguistics

 (also CS 3470, LING 4424) (MQR)Fall. 4 credits. Recommended: CS 2006.
Labs involve work in Unix environment.
J. Hale.

For description, see LING 4424.

## COGST 4260 Learning Language (also

 PSYCH 4260/7260) (KCM-AS)Spring. 4 credits. Limited to 20 students.
Prerequisite: PSYCH 2140 or permission of instructor. S. Edelman.
For description, see PSYCH 4260.

## [COGST 4270 Evolution of Language

 (also PSYCH 4270/6270)Fall. 3 credits. Limited to 20 students.
Prerequisite: senior standing or permission of instructor. Offered alternate years; next
offered 2011-2012. M. Christiansen.
For description, see PSYCH 4270.]

## COGST 4280 Connectionist

 Psycholinguistics (also LING 4428, PSYCH 4280/6280)Fall. 3 credits. Prerequisite: senior standing or permission of instructor. Offered
alternate years. M. Christiansen.
For description, see PSYCH 4280.
COGST 4310 Topics in Cognitive Science: Consciousness and Free Will (also BIONB 4330, PSYCH 5310, LING 4310)
Fall. 4 credits. Prerequisite: PSYCH/
COGST/INFO 2140/6140. S. Edelman.
This advanced course builds on the
foundations of the computational understanding of the human mind provided by PSYCH 2140 (Cognitive Psychology). It covers consciousness, free will, ethics, wisdom, and happiness through a combination of readings (which include a textbook, research articles, and short stories by Borges), lectures, and in-class discussions. For details, see the instructor's web page.
[COGST 4320 Cognitive, Social, and Developmental Aspects of Scientific Reasoning (also HD 4320) (KCM-AS)
Fall. 3 credits. Prerequisites: HD 1150 or
PSYCH 1101. Offered alternate years; next offered 2011-2012. B. Koslowski.
For description, see HD 4320.]
COGST 4330 Developmental Cognitive Neuroscience (also HD 4330)
Spring. 3 credits. Limited to 25 students.
Prerequisite: HD 1150 or PSYCH 1101 and one semester of biology; permission of instructor.
For description, see HD 4330.
[COGST 4340 Current Topics in Cognitive Development (also HD 4340) (KCM-AS)
Spring. 3 credits. Corequisite: COGST/HD 2340; permission of instructor. Offered alternate years; next offered 2011-2012.
For description, see HD 4340.]
COGST 4350 Mind, Self, and Emotion: Research Seminar (also AAS/HD 4310) (SBA-AS)

Fall. 3 credits. Limited to 20 students. Prerequisite: upperclass undergraduate or graduate standing. Letter grades only. Q. Wang.

For description, see HD 4310.
COGST 4500 Lab Course: Language Development (also HD/PSYCH 4370, LING 4450)
Fall. 2 credits. In conjunction with COGST/
HD/LING/PSYCH 4370. B. Lust.
For description, see HD 4370.
[COGST 4650 Topics in High-Level Vision (also PSYCH 4650/6650) (KCM-AS)
Spring. 4 credits. Next offered 2011-2012.
S. Edelman and M. Goldstein.

For description, see PSYCH 4650.]
COGST 4700 Undergraduate Research in Cognitive Science
Fall or spring. 1-4 credits. Prerequisite: permission of major advisor; written permission of Cognitive Science faculty member who supervises research and assigns grade. S-U or letter grades. Cognitive Science faculty.
Experience in planning, conducting, and reporting independent laboratory, field, and/or library research in an interdisciplinary area relevant to Cognitive Science.

## COGST 4710 Cognitive Science Research

 WorkshopFall or spring. Variable credit. Prerequisites: enrollment in an independent research course either in Cognitive Science (e.g., COGST 4700) or in a related department or in honors thesis research in one of the departments relevant to Cognitive Science. Staff (interdisciplinary faculty from
Cognitive Science Program).
Provides a research workshop in which undergraduate students who are engaged in research in a particular area relevant to cognitive science can meet across disciplines to learn and practice the essentials of research using interdisciplinary approaches. In this workshop, students critique and discuss the existing literature in a field of inquiry, individual students present their research designs, methods, and results from their independent research studies, debate the interpretation of their research results, and participate in the generation of new research hypotheses and designs, in a peer group of
other undergraduate students involved in related research.
COGST 4740 Introduction to Natural Language Processing (also CS 4740, LING 4474)
Fall or spring. 4 credits. Prerequisite: CS 2110. C. Cardie.

For description, see CS 4740.
COGST 4760-4770 Decision Theory I and II (also COGST/ECON 6760-6770, ECON 4760-4770) (MQR)
Fall and spring. 4 credits each semester. In fall, course is lecture based. Students are required to complete several problem sets and there is a final exam. In spring, there are additional lectures as well as visiting speakers. Students are required to read speakers' papers, participate in discussions, and complete a research project.
For description, see ECON 4760-4770.

## COGST 4910 Research Methods in Psychology (also COGST 6910, PSYCH 4910/6910)

Spring. 4 credits. Limited to 15 students. Recommended: permission of instructor, PSYCH 3500, experience in upper-division psychology courses, or graduate standing. Graduate students, see COGST 6910. V. Zayas.

For description, see PSYCH 4910.

## Computer Science

CS 1710 Introduction to Cognitive Science (also COGST 1101, LING 1170, PHIL 1910, PSYCH 1102)
Fall. 3 or 4 credits. J. Hale.
CS 2110 Computers and Programming
Fall, spring, or summer. 3 credits.
CS 3110 Data Structures and Functional Programming
Fall or spring. 4 credits.
CS 3470 Computational Linguistics (also COGST 4240, LING 4424)
Fall. 4 credits. M. Rooth.
CS $\mathbf{3 8 1 0}$ Introduction to Theory of Computing
Fall, summer. 4 credits.
CS 4700 Foundations of Artificial Intelligence
Fall. 3 credits. T. Joachims.

## CS 4701 Practicum in Artificial Intelligence

Fall. 2 credits. T. Joachims.

## CS 4740 Introduction to Natural Language Processing (also COGST 4740, LING 4474) <br> Fall. 4 credits. M. Rooth.

## CS 4780 Machine Learning

Spring. 3 credits.
CS 4860 Applied Logic (also MATH 4860) Spring. 4 credits.

## Education (College of Agriculture and Life Sciences)

## EDUC 6140 Gender, Context, and

 Epistemological Development Fall. 3 credits. D. Schrader.
## Human Development (College of Human Ecology)

HD 1150 Human Development
Fall or summer. 3 credits.
HD 2200 The Human Brain and Mind: Biological Issues in Human
Development (also COGST 2200)
Fall. 3 credits.
HD 2300 Cognitive Development (also COGST 2300)
Fall. 3 credits. Q. Wang.
HD 2380 Thinking and Reasoning (also COGST 2380)
Fall. 3 credits. B. Koslowski.
HD 2660 Emotional Functions of the Brain
Spring. 3 credits.
HD 3200 Human Developmental Neuropsychology
Spring. 3 credits. B. Koslowski.
HD 3360 Connecting Social, Cognitive, and Emotional Development
Fall. 3 credits. M. Casasola.
HD 3370 Language Development (also COGST/PSYCH 3370, LING 4436)
Spring. 4 credits. B. Lust.
HD 3440 Infant Behavior and Development
Fall. 3 credits. S. Robertson.
HD 3470 Human Growth and Development: Biological and Behavioral Interactions (also BSOC/ NS 3470)
Spring. 3 credits. S. Robertson and J. Haas.
HD 3620 Human Bonding
Fall. 3 credits.
HD 4310 Mind, Self, and Emotion: Research Seminar (also COGST 4350)

Fall. 3 credits. Q. Wang.
HD 4320 Cognitive, Social, and Developmental Aspects of Scientific Reasoning (also COGST 4320)
Fall. 3 credits. B. Koslowski.
HD 4330 Developmental Cognitive Neuroscience (also COGST 4330)
Spring. 3 credits. E. Temple.
HD 4370 Lab Course: Language Development (also COGST/LING 4450, PSYCH 4370)
Spring. 2 credits. In conjunction with HD
3370, COGST/LING/PSYCH 4360. B. Lust.

## Linguistics

LING 1170 Introduction to Cognitive Science (also COGST 1101, CS 1710, PHIL 1910, PSYCH 1102)
Fall. 3 or 4 credits. J. Hale.
LING 2215 Psychology of Language (also COGST 2150, LING 7715, PSYCH 2150/7150)
Spring. 3 credits. M. Christiansen.
LING 3332 Philosophy of Language (also PHIL 3320)
Fall. 4 credits. Staff.

LING 3333 Problems in SemanticsQuantification in Natural Language (also COGST/PHIL 3330)
Spring. 4 credits.
LING 4424 Computational Linguistics (also COGST 4240, CS 3470)
Fall. 4 credits. M. Rooth.
LING 4425 Pragmatics
Spring. 4 credits.
LING 4428 Connectionist Psycholinguistics (also COGST 4280, LING 6628, PSYCH 4280/6280)
Fall. 3 credits. Offered alternate years. M. Christiansen.

LING 4436 Language Development (also COGST/HD/PSYCH 4360)
Fall. 4 credits. B. Lust.
LING 4474 Introduction to Natural Language Processing (also COGST/ CS 4740)
Fall. 4 credits. L. Lee.
LING 4500 Lab Course: Language Development (also COGST 4500, HD/ PSYCH 4370)
Fall. 2 credits. In conjunction with COGST/ HD/LING/PSYCH 4360. B. Lust.

## Mathematics

[MATH 2810 Deductive Logic (also PHIL 3310)]

MATH 4810 Mathematical Logic (also PHIL 4310)
Spring. 4 credits. Offered alternate years.
MATH 4860 Applied Logic (also CS 4860) Spring. 4 credits.

## $\overline{\text { Neurobiology and Behavior }}$

BIONB 1110 Brain, Mind, and Behavior (also COGST/PSYCH 1110)
Spring. 3 credits. R. Hoy and E. Adkins Regan.
BIONB 2210 Neurobiology and Behavior I: Introduction to Behavior
Fall. 3 or 4 credits.
BIONB 2220 Neurobiology and Behavior II: Introduction to Neurobiology Spring. 3 or 4 credits.
BIONB 3260 The Visual System Spring. 4 credits. H. Howland.
BIONB 3280 Biopsychology of Learning and Memory (also PSYCH 3320)
Spring. 3 credits. T. DeVoogd.
BIONB 3330 Introduction to Computational Neuroscience (also COGST/PSYCH 3300)
Fall. 3-4 credits. C. Linster.
BIONB 3920 Drugs and the Brain Spring. 4 credits. R. Harris-Warrick and L. M. Nowak.

BIONB 3960 Introduction to Sensory Systems (also PSYCH 3960)
Spring. 3 or 4 credits. B. Halpern.
BIONB 4210 Effects of Aging on Sensory and Perceptual Systems (also PSYCH 4310/6310)
Fall. 3 or 4 credits. B. Halpern.

BIONB 4240 Neuroethology (also PSYCH 4240)

Spring. 4 credits.
BIONB 4260 Animal Communication Spring. 4 credits.

BIONB 4920 Sensory Function (also PSYCH 4920/6920, VISST 4920)
Spring. 3 or 4 credits. H. Howland.
BIONB 4960 Bioacoustic Signals in Animals and Man
Fall. 3 credits. C. Clark and R. Hoy.

## Philosophy

PHIL 2620 Introduction to Philosophy of Mind
Fall. 4 credits.
PHIL 4310 Mathematical Logic (also MATH 4810)

## Psychology

PSYCH 1102 Introduction to Cognitive Science (also COGST/CS 1101, LING 1170, PHIL 1910)
Fall. 3 or 4 credits. J. Hale.
PSYCH 1110 Brain, Mind, and Behavior (also BIONB 1111, COGST 1110)
Spring. 3 credits. R. Hoy and E. Adkins Regan.
PSYCH 2050 Perception (also PSYCH 6050)

Fall. 3 credits. J. Cutting.
PSYCH 2090 Developmental Psychology (also PSYCH 7090)
Spring. 4 credits. M. Goldstein.
PSYCH 2140 Cognitive Psychology (also COGST 2140)
Spring. 3 credits. S. Edelman.
PSYCH 2150 Psychology of Language (also COGST 2150, LING 2215/7715, PSYCH 7150)
Spring. 3 credits. M. Christiansen.
PSYCH 2230 Introduction to Biopsychology
Fall. 3 credits. D. Smith.
PSYCH 3050 Visual Perception (also VISST 3305)
Spring. 4 credits. J. Cutting.
[PSYCH 3160 Auditory Perception (also PSYCH 7160)
Spring. 3 or 4 credits. Next offered 20112012. C. Krumhansl.]

PSYCH 3260 Evolution of Human Behavior (also PSYCH 6260)
Spring. 4 credits. R. Johnston.
PSYCH 3300 Introduction to Computational Neuroscience (also BIONB/COGST 3300)
Fall. 3-4 credits. C. Linster.
PSYCH 3320 Biopsychology of Learning and Memory (also BIONB 3280, PSYCH 6320)
Spring. 3 credits. T. DeVoogd.
PSYCH 3420 Human Perception: Applications to Computer Graphics, Art, and Visual Display (also COGST 3420, PSYCH 6420, VISST 3342)
Fall. 3 or 4 credits. D. Field.
[PSYCH 3610 Biopsychology of Normal and Abnormal Behavior (also NS 3610)

Fall. 3 credits. Next offered 2011-2012.
B. J. Strupp.]
[PSYCH 3960 Introduction to Sensory Systems (also BIONB 3960, PSYCH 6960)

Spring. 3 or 4 credits. Next offered 20112012. B. Halpern.]

PSYCH 4120 Laboratory in Cognition and Perception (also PSYCH 6121)
Spring. 4 credits. D. Field.
[PSYCH 4180 Psychology of Music (also PSYCH 6180)
Fall. 3 or 4 credits. Next offered 2011-2012. C. Krumhansl.]
[PSYCH 4240 Neuroethology (also BIONB 4240)

Spring. 4 credits. Next offered 2011-2012. C. D. Hopkins.]

PSYCH 4250 Cognitive Neuroscience (also PSYCH 6250)
Fall. 4 credits. B. Finlay.
PSYCH 4260 Learning Language Spring. 4 credits. S. Edelman.
[PSYCH 4270 Evolution of Language (also COGST 4270, PSYCH 6270)
Fall. 3 credits. Offered alternate years; next offered 2011-2012. M. Christiansen.]

PSYCH 4280 Connectionist Psycholinguistics (also COGST 4280, LING 4428/6628, PSYCH 6280)
Fall. 3 credits. Offered alternate years. M. Christiansen.

PSYCH 4310 Effects of Aging on Sensory and Perceptual Systems (also BIONB 4210, PSYCH 6310)
Fall. 3 or 4 credits. B. Halpern.
PSYCH 4320 Topics in Cognitive Science: Consciousness and Free Will (also COGST/LING 4310, BIONB 4330)

Fall. 4. credits. S. Edelman.
PSYCH 4360 Language Development (also COGST/HD 4360, LING 4436)
Spring. 4 credits. B. Lust.
PSYCH 4370 Lab Course: Language Development (also COGST/LING 4500, HD 4370)
Fall. 2 credits. In conjunction with COGST/ HD/LING/PSYCH 4360. B. Lust.
[PSYCH 4650 Topics in High-Level Vision: Embodied Cognition (also COGST 4650, CS 3920, PSYCH 6655)
Spring. 4 credits. Offered alternate years; next offered 2011-2012. S. Edelman and M. Goldstein.]

PSYCH 4910 Research Methods in Psychology (also COGST 4910/6910, PSYCH 6910)
Spring. 4 credits. V. Zayas.
[PSYCH 4920 Sensory Function (also BIONB/VISST 4920, PSYCH 6920)
Spring. 4 credits. Next offered 2012-2013.
B. Halpern and H. Howland.]

## Graduate Courses and Seminars

The following courses and seminars are generally for graduate students only. However, some may be appropriate for advanced undergraduates. The director of the minor
must approve an undergraduate's use of any of these for satisfying the minor requirements.

## [COGST 5500 Special Topics in Cognitive

 ScienceFall. 4 credits. Next offered 2012-2013. Staff.]
COGST 6140 Cognitive Psychology (also PSYCH 6140)
Spring. 3 credits. Includes lec of COGST/
PSYCH 2140 and a sec. S. Edelman.
For description, see PSYCH 6140.
COGST 6330 Language Acquisition Seminar (also HD 6330, LING 6633)
Fall. 1-4 credits. Prerequisite: COGST/HD/ LING/PSYCH 4360 or equivalent, or permission of instructor. B. Lust.
For description, see LING 6633.
[COGST 6501 Introduction to Cognitive Science, Proseminar
Fall. 4 credits. Next offered 2011-2012. Staff.
Surveys the study of how the mind/brain works, drawing primarily from five disciplines philosophy, psychology, neuroscience, linguistics, and computer science. Graduate students will observe the Tues./Thurs. lectures for COGST 1101 and attend a weekly discussion section.]

COGST 6710 Introduction to Automated Reasoning (also CS 6762)
Fall. 4 credits. Prerequisite: (CS 6110 and graduate standing) or permission of instructor.
Topics in modern logic needed to understand and use automated reasoning systems such as HOL, Nuprl, and PVS. Special emphasis is on type theory and logic and on tactic-oriented theorem proving.
COGST 6760-6770 Decision Theory (also COGST 4760-4770, CS 5846-5847, ECON 4760-4770/6760-6770)
Fall and spring. 4 credits each semester.
Fall: lecture-based; students must complete several problem sets and a final exam.
Spring: additional lectures as well as visiting speakers; students must read speakers' papers, participate in discussions, and complete a research project. L. Blume,
D. Easley, and J. Halpern.

For description, see ECON 4760-4770.
COGST 6910 Research Methods in Psychology (also COGST 4910, PSYCH 4910/6910)
Spring. 4 credits. Limited to 15 students.
V. Zayas.

For description, see PSYCH 4910.
COGST 7000 First-Language Acquisition (also HD 6370)
Spring. 1-4 credits. Prerequisites: COGST/ HD/LING/PSYCH 3370 and permission of instructor. B. Lust.
For description, see HD 6370.
COGST 7100 Research in Human Experimental Psychology (also PSYCH 7100)
Fall or spring. Credit TBA. Prerequisite: permission of instructor.
CS 6670 Machine Vision Spring. 4 credits. R. Zabih.
CS 6700 Advanced Artificial Intelligence Spring. 4 credits. Prerequisite: CS 4700.

CS 6740 Natural Language Processing Fall. 4 credits. Prerequisite: CS 4700. Not offered every year.

CS 6762 Introduction to Automated Reasoning (also COGST 6710)
Fall. 4 credits.
CS 6764 Reasoning about Knowledge
Fall. 4 credits. Prerequisites: mathematical maturity and acquaintance with propositional logic.

CS 6766 Reasoning about Uncertainty Fall. 4 credits. Prerequisites: mathematical maturity and acquaintance with propositional logic.

CS 7794 Seminar in Natural Language Understanding
Fall and spring. 2 credits. C. Cardie.
CS 7970 Seminar in Artificial Intelligence Fall and spring. 2 credits.
EDUC 6140 Gender, Context, and Epistemological Development (also FGSS 6240)
Fall. 3 credits. D. Schrader.
HD 6330 Language Acquisition Seminar (also COGST/LING 6633)
Fall. 1-4 credits. Prerequisite: COGST/HD/
LING/PSYCH 4360 or equivalent. B. Lust.
LING 6609 Second Language Acquisition and the Asian Languages (also ASIAN 6610)
Fall. 4 credits. Prerequisite: LING 44144415. Staff.

## LING 6633 Language Acquisition

 Seminar (also COGST/HD 6330)Fall. 1-4 credits. Prerequisite: COGST/HD/
LING/PSYCH 4360 or equivalent. B. Lust.
[LING 6688 Connectionist Psycholinguistics (also COGST/LING 4428, PSYCH 4280/6280)
Fall. 3 credits. Offered alternate years; next offered 2011-2012. M. Christiansen.]

## LING 7700 Graduate Seminars

## MATH 6810 Logic

Spring. 4 credits.
MATH 7810-7820 Seminar in Logic Fall and spring. 4 credits each.
MATH 7880 Topics in Applied Logic Fall. 4 credits.
NBA 6630 Managerial Decision Making Fall. 3 credits. J. Russo.

## PHIL 7000 Graduate Seminars

[PSYCH 5500 Special Topics in Cognitive Science (also COGST 5500)
Spring. 4 credits. Next offered 2011-2012.]
PSYCH 6140 Cognitive Psychology (also COGST 6140)
Spring. 5 credits. S. Edelman.
[PSYCH 6180 Psychology of Music (also PSYCH 4180)
Fall. 4 credits. Next offered 2011-2012.
C. Krumhansl.]

PSYCH 6210 Behavioral and Brain Sciences (BBS)
Fall and spring. 4 credits each semester.
PSYCH 6270 Evolution of Language
PSYCH 6280 Connectionist Psycholinguistics (also COGST/ PSYCH 4280, LING 4428/6628)
Fall. 3 credits. M. Christiansen.

## PSYCH 6310 Effects of Aging on Sensory and Perceptual Systems (also BIONB 4210, PSYCH 4310) <br> Fall. 3 or 4 credits. B. Halpern.

## [PSYCH 6650 Topics in High-Level Vision: Embodied Cognition (also COGST/PSYCH 4650, CS 3920)

Spring. 4 credits. Offered alternate years; next offered 2011-2012. S. Edelman and M. Goldstein.]

PSYCH 6830 Affects and Cognition (also NRE 5070)
Fall. 4 credits. A. M. Isen.
PSYCH 6910 Research Methods in Psychology (also COGST 4910/6910, PSYCH 4910)
Spring. 4 credits. V. Zayas.

## [PSYCH 7160 Auditory Perception (also

 PSYCH 3160)Spring. 4 credits. Next offered 2011-2012. C. Krumhansl.]

## COLLEGE SCHOLAR PROGRAM

K. Gabard, director ( 55 Goldwin Smith Hall, 255-5004)

The College Scholar Program is described in the introductory section of Arts and Sciences.

## COLLS 3970 Independent Study-Senior

 ProjectFall or spring. 1-4 credits. Prerequisite: permission of program office.

## COLLS 4990 Honors Research

Fall or spring. 1-8 credits; max. 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit brief proposal approved by honors committee.

## COMPARATIVE LITERATURE

B. deBary (fall), TBA (spring), acting chair (247 Goldwin Smith Hall), N. Melas, director of undergraduate studies ( 247 Goldwin Smith Hall); J. Monroe, director of graduate studies ( 247 Goldwin Smith Hall); F. Ahl,
A. Banerjee, C. Carmichael, D. Castillo,
C. Chase, W. Cohen, J. Culler, B. de Bary,

## L. Dubreuil, L. Ferri, P. Hohendahl,

G. Holst-Warhaft, W. J. Kennedy, D. LaCapra,
P. Liu, B. Maxwell, T. McNulty, N. Melas,
J. Monroe, T. Murray, K. Pinkus, N. Saccamano, N. Sakai, W. Sayers. Emeritus: D. Grossvogel, W. Holdheim, E. Rosenberg, L. Waugh. Also cooperating: J. Bajorek, B. Bosteels, M. I. Dadi, P. Gilgen, S. Haenni, E. Hanson, Y. Huang, D. Rubenstein, J. Rusten, A. Schwarz, D. Schwarz, D. Starr, S. Toorawa, G. Waite.

The Department of Comparative Literature provides a broad range of courses in European and non-European literature as well as visual and media studies. Courses stress significant authors, themes, problems, styles, genres, historical periods, and theoretical perspectives. In cooperation with related departments in the humanities, the departmental offerings reflect current interdisciplinary approaches to literary study: hermeneutics, semiotics, deconstruction, cultural criticism, Marxism, reception aesthetics, feminism, and psychoanalysis.
The Department of Comparative Literature provides a broad range of courses in European
as well as non-European literatures. Courses devoted to literary studies variously stress significant authors, themes, problems, genres, historical periods, and theoretical perspectives. The Department also offers an array of courses in visual and media studies and enables the study of literature in relation to the history and theory of film, video, and other arts, as well as media. In cooperation with related departments in the humanities, the department encourages the interdisciplinary study of literature-in conjunction with anthropology, history, philosophy, sexuality studies, psychology, sociology, and so forth. The course offerings reflect current theoretical approaches to literature, media, and the arts-hermeneutics, semiotics, deconstruction, cultural criticism, Marxism, postcolonialism, reception aesthetics, feminism, and psychoanalysis.

## The Major

## Requirements for the Major

All majors in Comparative Literature are expected to have completed 10 courses, half of which must be devoted to the study of works in cultures other than English in their original languages.
Five of these courses must be taken in the Department of Comparative Literature and must include the following two courses: The Seminar in Theory (COML 4999 Fall) and the Core Course, to be taken in the junior or senior year. The designated Core Course changes every year (for 2010-2011, it will be COML 4015 Spring). Both courses will be offered once each academic year. Students must earn a minimum grade of $C$ for a course to be counted toward the major. If elected, an honors essay will also count as one of these required five courses.
An honors essay (COML 4930 [fall], COML 4940 [spring]) of roughly 50 pages is optional. It is to be written during the senior year under the direction of a faculty member, preferably from within the department, who has agreed to work in close cooperation with the student. Students are urged to begin research on their thesis topic during the summer preceding their senior year.
Students who elect to do a double major with another literature department may count up to three courses from that major toward their requirements in Comparative Literature.
The department encourages students to study abroad in pursuit of their cultural and linguistic interests, and the number of courses that may be counted toward the major will be determined in consultation with the faculty advisor and with the approval of the director of undergraduate studies.
The major enables students to pursue this commitment to a comparative study that includes a substantial non-English component by offering two tracks.
A. Comparative Literary Studies. This track is designed for students who wish to place greater emphasis on literary study in their course work. Students who select this track are required to complete:

1. Five courses in Comparative Literature at the 2000 level and above, including the Seminar in Theory and the Core Course.
2. Five courses in literature or other areas of the humanities at the 2000 or higher level, to be taken in one or more foreign
literature departments. Texts must be read in the original language. A student may offer one advanced-level foreign language course (conversation, composition, etc.) toward fulfilling this requirement.
B. Literary, Visual, and Media Studies. This track is designed for students who wish to pursue their comparative study of literature and theory by integrating rigorous work on film, video, or other arts and media. Students who select this track are required to complete:
3. The Seminar in Theory and the Core Course offered in the Department of Comparative Literature must be included among the 10 required courses.
4. Four courses in literary study at the 2000 or higher level offered by the Department of Comparative Literature or other humanities departments or programs.
5. Six courses in visual arts or media studies at the 2000 or higher level offered by the Department of Comparative Literature or other humanities departments or programs.
The following guidelines might be used to determine whether a course in Literary, Visual, and Media Studies may be counted toward the five courses in non-English cultural study required of all majors. Where the media involve a large component of speech or writing (such as film, video, or hypertext), the student would need to work with this material in the original foreign language. Where text or speech in a foreign language is peripheral in a course that focuses on visual material (such as art or architecture) from non-English cultures, the student would need to draw on primary and secondary materials in a foreign language for oral reports, papers, and so forth. Because of the flexibility and interdisciplinary range of this track, students who select it should work closely with their faculty advisor to organize a coherent plan of study and to determine, with the approval of the Director of Undergraduate Studies, which courses satisfy the foreign language requirement of the major.

## Honors

A student who completes the requirements for the major with a minimum grade point average of $\mathrm{B}+$ is eligible for the degree of bachelor of arts with honors in Comparative Literature. The department bases its decision on the students achieving grades of at least $\mathrm{B}+$ on the senior essay, in course work for the major, and in their overall academic performance at Cornell.

## First-Year Writing Seminars

Most 1000-level courses may be used toward satisfying the first-year writing seminar requirements. See "John S. Knight Institute for Writing in the Disciplines" for a full description of the first-year seminar program.

## Courses <br> COML 2000 Introduction to Visual Studies (also ENGL 2920, VISST/ ARTH 2000) (LA-AS) <br> Spring. 4 credits. M. I. Dadi. <br> For description, see VISST 2000.

## COML 2010 Great Books \# (LA-AS)

Fall. 4 credits. COML 2010 and 2020 may be taken independently of each other. W. J. Kennedy.

Reading of seminal texts that represent and have shaped Western culture and hence form an essential part of the student's intellectual equipment. By analyzing, interpreting, and evaluating, students will develop critical reading abilities. Selections from the Bible, Homer, Dante, Rabelais, Shakespeare, and others.

## COML 2020 Great Books (LA-AS)

Spring. 4 credits. A. Banerjee.
The course traces the evolution of the story of the road as theme, trope, and organizing principle of seminal books from the Renaissance to the postmodern. Through readings of Rabelais, Cervantes, Swift, Sterne, Twain, Gogol, Conrad, Hemingway, Nabokov, and Kerouac, we will explore how literary adventures structure our experience of the world.

## COML 2030 Introduction to Comparative Literature (LA-AS)

Spring. 4 credits. P. Liu.
The course is intended to answer the question persistently asked by undergraduates: "What is Comparative Literature, anyway?" We will learn about different approaches to Comparative Literature and study the literatures of five different national/historical traditions: (Kafka, Faulkner, Lu Xun, Plautus, and Murakami). We will also read philosophical writings and works of literary criticism and ask three questions: (1) Why do Comparatists want to learn foreign languages and work with texts in the original? (2) How do we compare cultures and texts? (3) Is there such a thing as "world literature"? Writing assignments will include critical essays, short response papers, and creative projects.

## COML 2040 Global Fictions (CA-AS)

Fall. 4 credits. N. Melas
This course will be an introduction and an inquiry into global perspectives on fiction. Can the reading of fiction point us toward becoming citizens of the world? How might we know this world? How might we imagine it? We will consider the condition of the stranger in this global era as well as construct a geography of reading. Readings will be drawn mainly but not only from the contemporary period and outside Europe Readings will change depending on instructor but may include works of Rushdie, Marquez, Conde, Munif, Castellanos, Oe, Ngugi, Wolf, Kincaid, and Homer.

## COML 2050 Introduction to Poetry (LA-AS)

Spring. 4 credits. W. J. Kennedy. Surveys early and modern historical periods and poetic genres in Europe, Asia, and the Americas, from conventional "strict" genres such as songs, sonnets, and haiku to forms closely associated with our own times: free verse, "the prose poem," etc. Texts are drawn from poetry by such women and me as Sappho, Li Bai, Rumi, Shakespeare, Sor Juana, Basho, Goethe, Keats, Dickinson, Baudelaire, Rilke, Akhmatova, Sowol, Neruda, Sexton, Rich, and others. Poems not in English are read in translation, with texts in the original languages available for comparison. No previous study of poetry required

COML 2150 Comparative American Literatures (also AMST 2150) (LA-AS)
Spring. 4 credits. B. Maxwell.
Twentieth-century writing from Canada, the
United States, the Caribbean, and Latin America. A hemispheric American Studies perspective will encourage thinking about and
across cultural, linguistic, and national demarcations. This course proposes taking seriously words from Africa, passed on by the novelist Paule Marshall: "Once a great wrong has been done, it never dies. People speak the words of peace, but their hearts do not forgive. Generations perform ceremonies of reconciliation but there is no end." Countering the literature of amnesia and baseless optimism, the works that we will read cannot forget, and decline to forgive, the historical traumas that so bitterly flavor them. Our concern largely will be with understanding the aesthetic strategies and innovations that these writers use to perform ceremonies not bent on reconciliation.

## COML 2200 Thinking Surrealisms (also ARTH 2019, VISST 2190) (LA-AS)

Fall. 4 credits. B. Maxwell.
Borrowing its title from a formulation of Marxist philosopher Ernst Bloch, and beginning from the "forays of demoralization" instigated by the Dadas, who bequeathed to surrealism the precious gift of unreconciliation to the given, this course ranges over several surrealist moments: the inception of surrealist precept and practice in Paris in the mid-1920s; the explicitly anti-fascist political phase of the 1930s and 40s; the supplementation of Parisian surrealism by Caribbean, Mexican, African American, Quebecois, and Mauritian writers and artists; the reflections of and on surrealism by Bloch, Walter Benjamin, and Theodor W. Adorno; the relations of surrealism to the Situationist International Throughout, the course will ask what the proliferation of "thinking surrealisms" meant to the culture and politics of modernity. All readings in English.

## COML 2230 The Comic Theatre (also CLASS 2651) \# (LA-AS) <br> Spring. 4 credits. J. Rusten. <br> For description, see CLASS 2651.

## COML 2270 Life and Love in Two

 Languages (LA-AS)Fall. 4 credits. Next offered 2011-2012. N. Melas.]

## COML 2450 Jews and Arabs in Contact and Conflict: Modern Period (also JWST/NES 2735) @ (CA-AS)

Spring. 3 credits. D. Starr.
For description, see NES 2735.

## COML 2550 The Crime Film (also FILM 2550) <br> Spring. 4 credits. S. Haenni. <br> For description, see FILM 2550

COML 2760 Desire (also ENGL/FGSS 2760, THETR 2780) (LA-AS)
Spring. 4 credits. E. Hanson.
For description, see ENGL 2760.
[COML 3040 Europe and Its Others: An Introduction to the Literature of Colonialism @ (LA-AS)
Spring. 4 credits. Next offered 2011-2012. N. Melas.

Through an examination of selected works from the early 20th century to the present from France, England, Africa, and the Caribbean, this course will provide an introduction to the literature written alongside and against the historical phenomenon that has arguably had the most far reaching impact in modern history: European colonialism. How was culture instrumental in the political project of domination? How have writers of the postcolonial period attempted to write
back? What problems and possibilities does colonialism present for cultural identity and cultural resistance? In addition to close reading of texts and a consideration of historical background we will also examine visual representations of colonialism, particularly film. Authors will include Conrad, Ngugi, Nandy, Condé, Duras, Salih, Fanon, Memmi, Djebar, Resnais, and Pontecorvo. All readings available in English.]

## COML 3111 Literature, Art and the

## Environment (LA-AS)

Fall. 4 credits. K. Pinkus.
That literature and art can express concern over the environment or reflect environmental attitudes is nothing new. This course, however, will open up the possibility that literature, film, and art actively intervene in helping to confront compelling issues and to define the boundaries of what constitutes the environment (literally that which turns around us) or Nature itself. As we think about the profound links between writing and the environment; landscape and human activity; geological time and human time our guides may include authors Homer, Wordsworth, Rousseau, Thoreau, Melville; artists Poussin, Turner, Rothko and Smithson, and others. Students will write several short papers and participate in a group project, imagining an exhibit of Earth Art and Literature

## COML 3115 Video and New Media: Art, Theory, Politics (also ENGL/FILM/

 VISST 3115)Spring. 4 credits. T. Murray
The course will offer an overview of video art, alternative documentary video, and digital installation and networked art. It will analyze four phases of video and new media: (1) the development of video from its earliest turn away from television; (2) video's relation to art and installation; (3) video's migration into digital art; (4) the relation of video and new media to visual theory and social movements. Screenings will include early political and feminist video (Ant Farm, Rosler, Paper Tiger TV, Jones), conceptual video of the '80s and '90s (Vasulka, Lucier, Viola, Hill), gay and multicultural video of the '90s (Muntadas Riggs, Piper, Fung, Parmar), networked and activist new media of the 21st century (Critical Art Ensemble, Electronic Disturbance Theater, SubRosa, Preemptive Media). Secondary theoretical readings on postmodernism, video theory, multicultural theory, and digital culture will provide students with a cultural and political context for the discussion of video and new media style, dissemination, and reception
[COML 3150 Literature and Media in Japan (also ASIAN/VISST 3318) @ (CA-AS)
Spring. 4 credits. Next offered 2011-2012 B. de Bary.]

COML 3260 Christianity and Judaism (also RELST 3260) \# (LA-AS)
Spring. 4 credits. C. Carmichael.
Study of the New Testament as a product of the first-century Palestinian and Hellenistic Judaism. Other text (also in translation): The Passover Haggadah.

COML 3280 Literature of the Old Testament (also RELST 3280) @ \# (LA-AS)
Fall. 4 credits. C. M. Carmichael.
Analysis of small sections of well-known material for in-depth discussion.

## [COML 3440 The Tragic Theatre (also

 CLASS 3645, THETR 3450) \# (LA-AS)Spring. 4 credits. Next offered 2011-2012. F. Ahl.

For description, see CLASS 3645.]
COML 3480 Shakespeare and Europe (also ENGL 3490) \# (LA-AS)
Fall. 4 credits. W. J. Kennedy. In their own times, Shakespeare's plays registered a strong interest in the culture and society of Renaissance Europe beyond England. In later times, they cast a powerful spell over culture and society in 19th- and 20th-century Europe. This course will examine their debts to and influences upon continental drama. Readings will focus upon Shakespeare's plays in relation to Italian comedy, early French tragedy, and plays by Friedrich Schiller, Bertolt Brecht, and Luigi Pirandello.

## COML 3630 The European Novel \#

 (LA-AS)Fall. 4 credits. N. Saccamano.
This course surveys the European novel until 1850, focusing on the social, literary, and philosophical significance of its early forms. Of particular interest will be to understand why the early novel claims not to be a novel and presents itself in various guises: travelogue, autobiography, collections of letters, journals, and so forth. Topics to be discussed: truth, history, and the invention of "fiction"; the novel as a challenge to traditional literary norms and social values; literature, market society, and the rise of a reading public; literary versus visual representation; love, sexuality, and the novelistic constitution of identity. Texts include Lazarillo de Tormes, Montesquieu's Persian Letters, Defoe's Moll Flanders, Laclos's Dangerous Liaisons, Goethe's The Sorrows of Young Werther, Brontë's Wuthering Heights.

## COML 3640 The European Novel \#

 (LA-AS)Spring. 4 credits. A. Banerjee. From Lafayette to Proust. Topics will include the interplay between fiction, desire and forms of identity; the intersection between novelistic form and European social and intellectual history; realism, romance, and the novel's political unconscious; the privileging of plots of adultery, surveillance, and policing; the role of gender in defining the genre and, in particular, the concept of "character"; the representation of first-person experience through third-person narration. Authors may include Madame de Lafayette, Austen, Balzac, Stendhal, Flaubert, Tolstoy, Kafka, Woolf, and Proust. All texts in English translation, but may of course be read in the original by students with command of the pertinent language.
COML 3701 Global Martial Arts Film and Literature (also ASIAN 3370, FILM 3701) @ (LA-AS)

Fall. 4 credits. Required: weekly film viewings $W$ 7:30-9:30 p.m.; enrollment in sec 101. P. Liu.
With recent blockbusters such as Kill Bill, Kung Fu Hustle, Hero, and The Matrix, a spiritual and bodily discipline from medieval Asia called "martial arts" has turned into an object of popular consumption in
transnational cinema. This course studies the Asianization of global postmodern culture by comparing the historical routes, institutional bases, and ideologies of representations of martial arts in film and literature. Our questions will include the historical origins of martial arts and martial arts cinema; differences between "wuxia" and "kung fu"; contemporary Hong Kong, Taiwan, and Hollywood popular culture; Orientalism, race, and masculinity in transnational cinema; kinship, rites, honor, and duty in Chinese society; kung fu as philosophy; and the relation of martial arts to women, ethics, nation, work, and pleasure.

COML 3723 The Arabian Nights Now and Then (NES 3723/6723) @ \# (LA-AS)
Spring. 3 credits. S. Toorawa.
For description, see NES 3723.
COML 3725 Ideology 2 (also FREN/GOVT 3725) @ (CA-AS)

Fall. 4 credits. D. Rubenstein.
For description, see GOVT 3725.
[COML 3735 Puppetry: Comic, Dramatic, and Political (LA-AS)
Spring. 4 credits. Next offered 2011-2012. B. Maxwell.]

COML 3742 Arab Women Writers (also NES 3742/6742)
Spring. 4 credits. D. Starr.
For description, see NES 3742.
COML 3800 Poetry and Poetics of Americas (also AMST 3820, ENGL 3801, LATA/SPAN 3800) (LA-AS)
Fall. 4 credits. J. Monroe.
As globalization draws the Americas ever closer together, reshaping our sense of a common (uncommon) American culture, what claims might be made for a distinctive, diverse "poetry of the Americas"? How might we characterize its dominant forms and alternative practices? What shared influences, affiliations, concerns and approaches might we find and what differences emerge? Ranging across North and South America, Central America and the Caribbean, this course will place in conversation such figures as Whitman, Martí, Dickinson, Darío, Poe, Borges, Stein, Mistral, Williams, Neruda, Pound, Césaire, Rich, Walcott, Glissant, Brathwaite, Ashbery, Zuríta, Fanny Howe, Parra, Susan Howe, Harjo, Cisneros, Bracho, and Vicuna. All texts not written in English will be available in translation as well as in the original.
[COML 3820 Greeks, Romans, and Victorians (also CLASS 3642) \#

## (LA-AS)

Fall. 4 credits. F. Ahl.
For description, see CLASS 3642.]
[COML 3825 Medieval to Renaissance in Greek Literature (also CLASS 3603, NES 3705) \# (LA-AS)
Fall. 3 credits. K. Yiavis.
For description, see CLASS 3603.]
[COML 3850 Partition/Fiction and Film (also ASIAN 3389, VISST 3851)
Fall. 4 credits. Next offered 2011-2012. A. Banerjee.]

> COML 3980 Theorizing Gender and Race in Asian Histories and Literatures (also ASIAN 3388/6688, COML 6680, FGSS 3580/6580) @ (CA-AS)
> Fall. 4 credits. N. Sakai.
> For description, see ASIAN 3388.

## COML 4015 Passion and Literary

 EnlightenmentSpring. 4 credits. Core course for COML majors. Limited to 15 students.
N. Saccamano.

This course will consider the essential role of the passions in views of human nature and society primarily in the 18th century, and will examine how the priority given to life, the body, and acquisitive and sexual drives subverted traditional ethics and produced "sentimentality" as a reaction. Through readings of novels and some moral and political philosophy (Montaigne, Cavendish, Hobbes, Cleland, LaMettrie, Laclos, Rousseau, Nietzsche), we will discuss such topics as: the "savage" and the "state of nature" in genealogies of moral and political development; the "sexual contract," civil society, and the family as a political-economic institution; love and sympathy in relation to law and obligation; pornography and sentimental-sexual education; tragedy, suffering, and ethical community. We will also read theoretical work by Althusser, Foucault, Butler, and Zizek to address narrative form (especially fictional autobiography and epistolary novels) and mechanisms of identity formation.
COML 4067 Photography and Decolonial Imagination (also ARTH/ASRC/HIST/ SHUM/VISST 4951)
Spring. 4 credits. J. Bajorek.
For description, see SHUM 4951.

## COML 4068 Yellowface (also AAS/FILM/ SHUM 4954, ENGL 4077) <br> Spring. 4 credits. Y. Huang. <br> For description, see SHUM 4954.

COML 4069 Transatlantic Decadence (also FREN/SHUM/SPAN 4956)
Spring. 4 credits. B. Bosteels.
For description, see SHUM 4956.
[COML 4100 Science, Technology, and Culture (also STS 4101) (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
A. Banerjee.]

COML 4190-4200 Independent Study 4190, fall; 4200, spring. Variable credit. COML 4190 and 4200 may be taken independently of each other. Applications available in 247 Goldwin Smith Hall. Students must prepare a proposal for independent study (proposal forms are available in the Office of Undergraduate Admissions and Advising, 55 and 172 Goldwin Smith Hall).

## [COML 4220 Literature and Oblivion

 (LA-AS)Fall. 4 credits. Limited to 15 students. Next offered 2011-2012. N. Melas.]

COML 4250 Marx, Nietzsche, Freud (also GERST 4150, GOVT 4735) \# (CA-AS)
Fall. 4 credits. G. Waite.
For description, see GERST 4150.

## COML 4260 Biblical Seminar II (also

 RELST 4260) \# (HA-AS)Spring. 4 credits. Limited to 15 students.
Topic: The Book of Genesis.
C. M. Carmichael.

Discussing attitudes to sexuality in the Bible, we will examine in Old and New Testament texts the clash between ancestral behavior and subsequent laws, as well as the contrast between legal and religious ideas. Topics will include marriage and divorce, incest, intermarriage, gender discrimination, guilt and
shame, homosexuality, women and purity, sexual language and symbols. It should be possible to say something new about the topics and also, because of the perennial nature of the issues, to say something that is relevant to contemporary life.

## COML 4280 Biblical Seminar I (also

 RELST 4280) @ \# (HA-AS)Fall. 4 credits. Limited to 15 students. C. Carmichael.

Topic: Law as Commentary on Narrative.
A study of how biblical ethical and legal rules (in Exodus, Leviticus, and Deuteronomy) comment on incidents in the biblical narratives (Genesis through 2 Kings). The link between law and narrative enables us to observe in detail how ancient thinkers evaluate ethical and legal problems of perennial interest.
[COML 4290 Postcolonial Poetry and the Poetics of Relation (also COML 6350, ENGL 4840/6850, FREN/SPAN 4350/6350) (LA-AS)
Spring. 4 credits. Limited to 15 students. Next offered 2011-2012. J. Monroe.]
[COML 4365 Caribbean Crossings (also COML 6365) @ (SBA-AS)
Spring. 4 credits. Next offered 2011-2012. N. Melas.]

COML 4430 Cold War Aesthetics in East Asia (also ASIAN 4465) @ (LA-AS)
Spring. 4 credits. Limited to 15 students. P. Liu.

This course is concerned with literature, music, film, and the Cold War in East Asia-the "partitioning" of China, Japan, and Korea into mutually hostile and temporally
de-synchronized "zones" in the post-WW II era. How do aesthetic works explore this historical trauma and ideological rift? Beginning with the major historical and social scientific writings on the formation of "East Asia" as a region, we will study the shifting relations between U.S. and East Asian cultures through a comparison of two case studies: the creation of North Korea/South Korea, and the division/unification of Taiwan/China. We will compare Korean and Chinese histories of anti-Communism, responses to the legacy of Japanese colonialism, industries of popular culture, and the strategic positions of South Korea and Taiwan as U.S. security concerns.

## [COML 4500 Renaissance Poetry (also

 COML 6500, ENGL 6220, ITAL
## 4500/6500) \# (LA-AS)

Fall. 4 credits. Next offered 2011-2012. W. J. Kennedy.]
[COML 4515 Ariosto, Rabelais, Spenser (also COML 6515, ENGL/ROMS 4515/6515) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. W. J. Kennedy.]

COML 4520 Renaissance Humanism (also COML 6520, ENGL 4200/6240) \# (LA-AS)
Spring. 4 credits. Limited to 15 students. W. J. Kennedy.

A reading and discussion of key texts by Renaissance humanists in Italian, French, English, and other European literature from the 14 th to the 17 th centuries.

## COML 4580 Studies in Contemporary

 World Fiction (CA-AS)Fall. 4 credits. Limited to 15 students. A. Banerjee.

Topic: Narratives of Travel, Migration, and Exile
The course explores the relationship between space, place, and subjectivity through texts whose motivation and premise explicitly involve dislocation rather than emplacement. Readings are drawn from multiple contexts and periods, with emphasis on those that question established cartographic notions of east and west, north and south. These texts, individually and in a comparative framework, will provide opportunities for critiquing not only spatial concepts such as home and the world, inclusion and exclusion, center and periphery, but also temporal labels such as pre-/ early-/post-colonial, -modern, or -national. Discussions will be framed by theoretical readings from Foucault, Said, Anderson, Pratt, and Bhabha among others.

## [COML 4740 Topics in Modern European

 Intellectual and Cultural History
## (also HIST 4740, JWST 4674)

 (HA-AS)Fall. 4 credits. Prerequisite: permission of instructor. Next offered 2011-2012.
D. LaCapra.]

COML 4741 Topics in Modern European Intellectual History (also HIST 4741/6730, COML 6730, JWST 4675/6674) (HA-AS)
Fall. 4 credits. D. LaCapra.
Topic: Classics in Modern European
Intellectual History. For description, see HIST 4741.

COML 4750 Contemporary Readings of the Ancients: Derrida (also COML 6727, GOVT 4705) (CA-AS)
Fall. 4 credits. D. Rubenstein.

## For description, see GOVT 4705.

[COML 4800 Baudelaire in the Lyric \# (LA-AS)
Spring. 4 credits. Next offered 2011-2012. J. Culler.]
[COML 4810 Studies in Gender Theory: Kinship and Embodiment (CA-AS)
Spring. 4 credits. Limited to 15 students. Next offered 2011-2012. P. Liu.]

## COML 4830 Imagining the Holocaust

 (also ENGL/JWST 4580, GERST 4570) (LA-AS)Spring. 4 credits. D. Schwarz.
For description, see ENGL 4580.
COML 4860 Contemporary Poetry and Poetics (also COML 6865, ENGL 6850, SPAN 4880) (LA-AS)
Spring. 4 credits. Limited to 15 students. J. Monroe.

What gives contemporary poetry and poetics its resonance and value? What are its dominant features, audiences, and purposes? In an increasingly global, pervasively technological culture, what's become of such familiar distinctions as the "traditional" and the "experimental," the "mainstream" and the "alternative"? How does contemporary poetry situate itself among other genres, disciplines, discourses, and media? How are we to understand its evolving public spheres and its relation to the central cultural and historical developments of our time? With special attention to poetry since $9 / 11$, this seminar will explore these and related questions in a range of works that open onto the rich interplay of contemporary poetry and poetics with issues concerning personal and collective identity, language, and culture.

## [COML 4900 Energy, Empire, Modernity

 (also COML 6900) (CA-AS)Fall. 4 credits. Limited to 15 students. Next offered 2011-2012. A. Banerjee.]

## COML 4930-4940 Senior Essay

Fall and spring. 8 credits.
Times TBA individually in consultation with director of Senior Essay Colloquium.
Approximately 50 pages to be written over the course of two semesters in the student's senior year under the direction of the student's advisor. An R grade is assigned on the basis of research and a preliminary draft completed in the first semester. A letter grade is awarded on completion of the second semester.

## COML 4960 Imagining the Mediterranean

 (also JWST/NES 4738) @ (LA-AS)Spring. 4 credits. G. Holst-Warhaft.
For description, see NES 4738.

## COML 4999 Seminar in Theory

Fall. 4 credits. P. Liu.
This course is a study of the main trends and issues in contemporary cultural and literary theories, with particular attention to poststructuralism, feminism, queer theory, psychoanalysis, postcolonial studies, and Marxism. Primary readings include Foucault, Butler, Derrida, Zizek, Jameson, Spivak, Sedgwick, and Said.

## [COML 6050 Contemporary Global

 Fiction (also ENGL 6830)Fall. 4 credits., Next offered 2011-2012. W. Cohen.

Please prepare assignment listed on course's Blackboard site for first meeting of class.]

## COML 6015 Kant's Political Reason (also

 GERST 6940, GOVT 6015)Spring. 4 credits. P. Gilgen.
For description, see GERST 6940.
COML 6130 Spaces in Literature (also GERST 6160)
Spring. 4 credits. A. Schwarz.
For description, see GERST 6160.
COML 6160 Translation, in Theory (also ASIAN 6619, VISST 6190)
Spring. 4 credits. B. de Bary.
For description, see ASIAN 6619.
COML 6190-6200 Independent Study
6190, fall; 6200, spring. Variable credit. COML 6190 and 6200 may be taken independently of each other. Applications available in 247 Goldwin Smith Hall.

## COML 6300 Aesthetics in the 18th

 Century (also ENGL 6300)Fall. 4 credits. N. Saccamano.
For description, see ENGL 6300.

## COML 6335 Borderwork (also SPANL/

 LATA/LSP 6640, ASIAN 6633)Fall. 4 credits. A. Banerjee and D. Castillo. The seminar explores a new model of SouthSouth comparison through a study of borders in Latin America and South Asia. Rather than the traditional vantage point of examining mobility, inclusion, and exclusion between West and East or North and South, we privilege theoretical insights and site-specific texts generated within the two regions and emerging out of their dialogue. Discussions will be organized around topics including indigeneity, gender, labor, and violence, and dates such as 1848, 1947, 1971, and 9/11 that decisively affected the concept and function of borders in Latin America and South Asia.

## COML 6341 Aesthetic of Excess Technologies (also ENGL/VISST/ SHUM/FREN 6341)

Fall. 4 credits. T. Murray
Topic: Psycho-Philosophical Approaches to Technologies
The rise of cinema and mechanized representational technologies has provided an informative backdrop for a century-long reflection on aesthetics and the excesses of affect, sentiment, and corporeality in relation to modern/postmodern formulations of subjectivity, community, politics, race, and sexuality. Emphasizing French psychophilosophical approaches to cinematic technologies, the course will rehearse the intellectual backdrop for understanding this aesthetics of excess with readings in Freud, Bergson, Artaud, Heidegger, and MerleauPonty in order to frame discussion of later 20th- and 21st-century reflections on the balance between aesthetics and cinematic and new media technologies. In dialogue with a range of films and digital artworks, we will analyze texts to be chosen from Fanon, Barthes, Simondon, Lyotard, Deleuze, Derrrida, Kristeva, Laplanche, Stiegler, Duguet, Bellour, Nancy, and Rancière.
[COML 6350 Postcolonial Poetry and the Poetics of Relation (also COML 4290, ENGL 4840/6850, FREN/SPAN 6350)
Spring. 4 credits. Limited to 15 students. Next offered 2011-2012. J. Monroe.]
COML 6360 Comparative Modernisms/ Alternative Modernities
Fall. 4 credits. Limited to 15 students. N. Melas.

This course will inquire into the geographical coordinates that alternately relay and obscure the relation between modernism as an aesthetic movement and modernity as worldhistorical and political-economic project. Central emphasis will fall on colonialism and its particular inflection of the temporality of modernist aesthetics and the progress of modernity in the two regions that will be our focus: the French Caribbean and Mediterranean Egypt. While including canonical theoretical texts on Western modernity, modernism and postcolonial theory, readings will be focused on the multiple and intersecting influences around two central figures, Martinican poet Aimé Césaire and the modern Greek Alexandrian poet Constantine Cavafy.
[COML 6365 Caribbean Crossings (also COML 4365)
Spring. 4 credits. Next offered 2011-2012 N. Melas.]

COML 6385 The Fiction of Empire (also ENGL 6385)
Fall. 4 credits. W. Cohen.
A primarily colonizers'-eye-view of European expansion in canonical fiction of the 19th century. Emphasis on the relationship of genre and geography, and in particular on the representational capacities of realism and other fictional forms, the literary consequences of the differences between land-based and overseas empires, and the significance of being on the delivering or the receiving end. Fiction: Chateaubriand, Atala; Melville, MobyDick; Multatuli, Max Havelaar; Flaubert, Salammbô; Dostoevsky, Crime and Punishment; Rizal, Noli Me Tangere; Tagore, stories; Machado de Assis, Dom Casmurro; Conrad, Heart of Darkness; Gide, The Immoralist. Criticism: Moretti, Said, Spivak, etc. Reading available in English.
[COML 6410 Derrida, Writing, and the Institution of Literature (also ENGL 4410/6420)
Spring. 4 credits. Next offered 2011-2012. J. Culler.]

## COML 6445 Early Modern Literature

Spring. 4 credits. W. Cohen.
An attempt to define a Eurasian-wide literary system in the era prior to European hegemony, from the rise of Islam to the Industrial Revolution. A set of paired readings of European and Asian texts designed to show, through structural parallels and influences across a number of genres, the value of thinking about early modern literature in this expanded fashion. Problems of geography, historiography, periodization, and cultural agency. Readings from epic: Hildebrandslied-Firdowsi; romance: GorganiGottfried von Strasburg; religious lyric: Occitan/Petrarchan tradition-South Asian bbakti; religious epic: Tulsidas-Milton; frame tale: 1001 Nights-Boccaccio; drama:
Shakespeare-Chikamatsu; novel: RichardsonCao Xueqin. Readings available in English.
[COML 6500 Renaissance Poetry (also COML 4500, ENGL 6220)
Fall. 4 credits. Next offered 2011-2012.
W. J. Kennedy.]
[COML 6515 Ariosto, Rabelais, Spenser (also COML 4515, ENGL/ROMS 4515/6515)
Fall. 4 credits. Next offered 2011-2012. W. J. Kennedy.]

COML 6520 Renaissance Humanism (also COML 4520)
Spring. 4 credits. Limited to 15 students. W. J. Kennedy

For description, see COML 4520.
COML 6630 Nietzsche and Heidegger (GERST 6630)
Fall. 4 credits. G. Waite
For description, see GERST 6630.
COML 6660 Visual Ideology (also GERST 6600, ARTH/VISST 6060)
Spring. 4 credits. G. Waite.
For description, see GERST 6600.
COML 6665 Media Theory (also GOVT 6665)

Spring. 4 credits. D. Rubenstein.
For description, see GOVT 6665.
COML 6680 Race and Gender: Asian History and Literature (also ASIAN 3388/6688, FGSS 3580/6580)
Fall. 4 credits. N. Sakai.
For description, see ASIAN 6688.
[COML 6710 Transnational Imaginaries: Globalization and Culture
Fall. 4 credits. Limited to 15 students. Next offered 2011-2012. N. Melas.]
[COML 6720 Topics in Modern European Intellectual and Cultural History (also HIST 6720)
Fall. 4 credits. Next offered 2011-2012.
D. LaCapra.

For description, see HIST 6720.]
COML 6723 The Arabian Nights, Then and Now (also COML 3723, NES 3723/6723)
Spring. 4 credits. S. Toorawa.
For description, see NES 6723.
COML 6727 Contemporary Readings of the Ancients: Derrida (also COML 4750, GOVT 4705, FREN 4700)
Fall. 4 credits. D. Rubenstein.

For description, see GOVT 4705.
COML 6730 Topics in Modern European Intellectual History (HIST 6730, JWST 4675/6674, COML/HIST 4741)
Fall. 4 credits. D. LaCapra.
For description, see HIST 4741.
COML 6779 Psychoanalysis and Sexual Difference (also FREN 6920)
Fall. 4 credits. T. McNulty.
For description, see FREN 6920.
COML 6820 Cultural Materialism and Geopolitics
Spring. 4 credits. Limited to 15 students. P. Liu.

What is a "materialist" analysis of culture? Are the "material" and the "cultural" mutually exclusive? This course examines the foundational texts in "cultural materialism" (Marx, Lukacs, Gramsci, Althusser, Spivak, Jameson) and the implications of a dualistic construction of material vs. cultural life for geopolitical thinking. We will be interested in the different ways in which tropes of "matter" and "world" are appropriated to delineate new temporal and spatial relations in postcolonial conversations (Fanon, Said, Lye, Chatterjee, Gilroy). By paying special attention to debates about uneven development, the materiality of race and the body, and alternative modernities, we will seek to understand "materialism" itself as an overdetermined category in 20th-century political history.

## COML 6840 Hopkins and Baudelaire

 (ENGL 6820)Spring. 4 credits. J. Culler.
The study of seductive lyrics by two apparently antithetical poets, priest and satanist. In addition to exploring the lyric techniques of these two masters of poetic craft, the course will raise questions about possibilities of the comparative study of lyric, the grounds of comparison, and, more generally, about how the study of lyric should go beyond the individual poem.
COML 6865 Contemporary Poetry and Poetics (also COML 4860, ENGL 6880, SPAN 4880)
Spring. 4 credits. J. Monroe.
For description, see COML 4860.
[COML 6900 Energy, Empire, and Modernity (also COML 4900)
Fall. 4 credits. Next offered 2011-2012. A. Banerjee.]
[COML 6970 Cosmopolitanism (also ENGL 6970)
Spring. 4 credits. Next offered 2011-2012. N. Saccamano.]

## COMPUTER SCIENCE

J. Halpern, chair; G. Bailey, K. Bala, D. Bindel, K. Birman, C. Cardie, R. L. Constable, D. Fan,
N. Foster, J. Gehrke, C. Gomes, D. Greenberg, D. Gries, J. E. Hopcroft, D. Huttenlocher,
D. James, T. Joachims, J. Kleinberg,
R. Kleinberg, C. Koch, D. Kozen, L. Lee,
S. Marschner, A. Myers, R. Pass, A. Saxena,
F. B. Schneider, B. Selman, D. Shmoys,
E. G. Sirer, N. Snavely, E. Tardos, R.

Teitelbaum, C. Van Loan, H. Weatherspoon, R. Zabih
The Department of Computer Science is affiliated with both the College of Arts and Sciences and the College of Engineering. Students in either college may major in

Computer Science. For details, visit our web site at www.cs.cornell.edu/ugrad.

## The Major

CS majors take courses covering algorithms, data structures, logic, programming languages, systems, and theory. Electives include artificial intelligence, computer graphics, computer vision, cryptography, databases, networks, and scientific computing. Requirements include:

- MATH 1110, 1120 (or 1220) and 2210 or (MATH 1910, 1920, and 2940)
- two semesters of introductory computer programming (CS 1110 and CS 2110 or CS 1112, 1130, and 2110). CS 1114 is an honors-level substitute for CS 1112.
- a five-course computer science core (CS 2800, 3110, 3410, or 3420; 4410, and 4820)
- three $4000+$ level computer science electives (CS 4999 not allowed; CS 3220 and CS 3810 allowed). If CS 2800 was taken before Spring 2009, CS 3810 or CS 4810 must be either one of these electives or one of the technical electives (see below).
- a computer science project course (CS 4121, 4321, 4411, 4450, 4621, 4701, 5150, 5412,5414 , or 6670 )
- three 3000+ level courses (only one of ENGRD 2700 or MATH 2930 may be counted) that are technical in nature, as determined by the major.
- a three-course "external specialization" in a topic area other than computer science, all numbered 3000 level or greater
- one of BTRY 4080, CS 4850, ECE 3100, ECON 3190, ENGRD 2700, MATH 4710.
- an elective requirement consisting of a single $3+$ credit course or a combination of courses coming to $3+$ credits total. Roughly speaking, all academic courses (inside or outside of CS) count. No PE courses, courses numbered 10xx, or ROTC courses below the 3000 level are allowed.
All the major electives described above must be courses of at least 3 credits, with the exception of the CS project course, which is at least 2 credits, or as otherwise specified.
Additionally, students' course selections must satisfy the requirements of at least one "vector" or CS-centric specialization, defined by the department. The set of vectors at the time of this writing include artificial intelligence, computational science and engineering, dataintensive computing, graphics, human-language technologies, network science, programming languages, security and trustworthy systems, software engineering/code warrior, systems, theory, and a broad "Renaissance" vector. See www.cs.cornell.edu/ugrad for the requirements of each vector.
The program is broad and rigorous, but it is structured in a way that supports in-depth study of outside areas. Intelligent course selection can set the stage for graduate study and employment in any technical area and any professional area such as business, law, or medicine. With the advisor, the Computer Science major is expected to put together a coherent program of study that supports career objectives and is true to the aims of liberal education.


## Admission

All potential affiliates are reviewed on a case-by-case basis relative to the following criteria:

- a grade of C or better in all CS courses and MATH courses
- a GPA of 2.5 or better in CS 2110 and 2800.
- a GPA of 2.5 or better in MATH 1120 (or 1220 or 1920) and CS 2800.
Courses used in the affiliation GPA
computations may be repeated if the original course grade was below a C. The most recent grade will be used for all repeated courses. Qualifying courses must be taken at Cornell.
Departmental honors in Computer Science is granted to students who have maintained a cumulative GPA greater than or equal to 3.5 and completed a set of coherent courses and research activities that satisfy the following requirements.
The program consists of at least 9 credits beyond the minimum required for graduation, as follows:
- at least one CS course (at least 3 credit hours) at or above the 5000 level with a grade of A- or better; no seminars.
- at least two 3-credit semesters of CS 4999 (Independent Reading and Research) with a CS faculty member, with grades of Aor better each semester.
Latin Designations (appended to the degree), awarded by the field of Computer Science for all who qualify as stated above, are based on the final cumulative GPA, as follows:
- cum laude, 3.50 or above
- magna cum laude, 3.75 or above
- summa cum laude, 4.00 or above

Note: Honors courses may not be used to satisfy the CS 4000+ elective requirement, the CS project requirement, the technical electives, or the $3+$ credit elective. See the CS undergraduate web site for more information on eligibility: www.cs.cornell.edu/ugrad.

## Computing in the Arts Undergraduate <br> Minor

A minor in Computing in the Arts with an emphasis on computer science is available both to Computer Science majors and to students majoring in other subjects. For more information, see p. 539.

## Courses

For complete course descriptions, see "Computer Science" under "Computing and Information Science (CIS)."

## CS 1109 Fundamental Programming Concepts

Summer. 2 credits. Pre-freshman standing or permission of instructor. Prerequisites: none. S-U grades only.

## CS 1110, 1112, 1114 Introduction to

 Computer Programming (MQR) Fall, spring, summer. 4 credits. Students may not receive credit for CS 1110, 1112, 1114 and BEE 1510.CS 1110, CS 1112, and CS 1114 are all described in the "Computing and Information Science (CIS)" section.

CS 1130 Transition to Object-Oriented Programming
Fall, spring. 1 credit. Prerequisite: one course in programming. S-U grades only.
CS 1132 Transition to Matlab
Fall, spring. 1 credit. Prerequisite: one course in programming. S-U grades only.
CS 1300 Introductory Design and Programming for the Web (also INFO 1300)

Fall. 4 credits.
[CS 1305 Computation and Culture (also INFO 1305)
Summer. 3 credits. Prerequisites: none at university level; must be high school junior or rising senior. Offered alternate years; next offered 2011.]

CS 1610 Computing in the Arts (also CIS/ ENGRI 1610, DANCE 1540, FILM 1750, MUSIC 1465, PSYCH 1650) (LA-AS)
Fall. 3 credits. Recommended: good comfort level with computers and some of the arts.

CS 1620 Visual Imaging in the Electronic Age (also ARCH 3702, ART 1700, CIS/ ENGRI 1620)
Fall. 3 credits.
For description, see ART 1700.

## CS 1710 Introduction to Cognitive Science (also COGST 1101, LING 1170, PHIL 1910, PSYCH 1102)

 (KCM-AS)Fall, summer. 3 credits.
For description, see COGST 1101.

## CS 2022 Introduction to C

Spring, usually weeks $1-4$. 1 credit.
Prerequisite: one programming course or equivalent programming experience. Credit granted for both CS 2022 and 2024 only if 2022 taken first. S-U grades only.

## CS 2024 C++ Programming

Fall. 2 credits. Prerequisite: one programming course or equivalent programming experience. Students who plan to take CS 2022 and 2024 must take 2022 first. S-U grades only.

## CS 2042 Unix Tools

Fall, usually weeks $1-4$. 1 credit.
Prerequisite: one programming course or equivalent programming experience. S-U grades only.

CS 2044 Advanced UNIX Programming and Tools
Spring, usually weeks 5-8. 1 credit.
Prerequisite: CS 2042 or equivalent. S-U grades only.
CS 2110 Object-Oriented Programming and Data Structures (also ENGRD 2110) (MQR)

Fall, spring, summer. 3 credits. Prerequisite: CS 1110 or CS 1130, or equivalent course in Java or C++.
CS 2300 Intermediate Design and Programming for the Web (also INFO 2300)

Spring. 3 credits. Prerequisite: CS 1300 strongly recommended.

CS 2800 Discrete Structures (MQR)
Fall, spring. 3 credits. Pre- or corequisite: one programming course or permission of instructor.

CS 2850 Networks (also ECON/INFO 2040, SOC 2090) (SBA-AS)
Fall. 4 credits. Prerequisites: none.
For description, see ECON 2040.

## CS 3110 Data Structures and Functional

 Programming (MQR)Fall, spring. 4 credits. Prerequisite: CS 2110 and 2111 or equivalent programming experience. Pre- or corequisite: CS 2800.
Should not be taken concurrently with CS 3410 or 3420.

CS 3220 Introduction to Scientific Computation (also ENGRD 3220)
Spring. 3 credits. Prerequisites: CS 1112 or 1132 and MATH 2220, 2230, or 2940.

## [CS 3300 Data-Driven Web Applications

 (also INFO 3300)Spring. 3 credits. Prerequisite: CS/ENGRD 2110 and (CS 2300 or permission of instructor). CS majors may use only one of the following toward their degree: CS/
INFO 3300 or CS 4321. Next offered 20112012.]

CS 3410 Computer System Organization and Programming
Spring. 4 credits. Prerequisites: CS 2110 or equivalent programming experience.
Should not be taken concurrently with CS 3110.

CS 3420 Computer Organization (also ECE 3140)
Spring. 4 credits. Prerequisite: CS 2110 or
ENGRD 2300. Should not be taken
concurrently with CS 3110.
CS 3740 Computational Linguistics (also COGST 4240, LING 4424) (MQR-AS)
Fall or spring. 4 credits. Recommended: CS 2042.

For description, see LING 4424.
CS 3758 Autonomous Mobile Robots (also MAE 4180)
Spring. 4 credits. Prerequisite: MAE 3260 or permission of instructor.
For description, see MAE 4180.

## CS 3810 Introduction to Theory of

 ComputingFall. 3 credits. Prerequisite: CS 2800 or permission of instructor.
CS 4110 Programming Languages and Logics
Fall. 4 credits. Prerequisite: CS 3110 or permission of instructor.
[CS 4120 Introduction to Compilers
Fall or spring. 3 credits. Prerequisites: CS 3110 or permission of instructor and CS
3410 or 3420 . Corequisite: CS 4121. Next
offered 2011-2012.]
[CS 4121 Practicum in Compilers
Fall or spring. 2 credits. Corequisite: CS
4120. Next offered 2011-2012.]

CS 4210 Numerical Analysis and Differential Equations (also MATH 4250) (MQR)

Fall. 4 credits. Prerequisites: MATH 2210 or 2940 or equivalent, one additional mathematics course numbered 3000 or above, and knowledge of programming.
For description, see MATH 4250.
CS 4220 Numerical Analysis: Linear and Nonlinear Equations (also MATH 4260) (MQR)

Spring. 4 credits. Prerequisites: MATH 2210 or 2940 or equivalent, one additional
mathematics course numbered 3000 or
above, and knowledge of programming.
For description, see MATH 4260.
CS 4300 Information Retrieval (also INFO 4300)

Fall. 3 credits. Prerequisite: CS 2110 or equivalent.
CS 4302 Web Information Systems (also INFO 4302)
Spring. 3 credits. Prerequisites: CS 2110 and some familiarity with web site technology.

## CS 4320 Introduction to Database

 SystemsFall. 3 credits. Prerequisites: CS 3110 (or 2110, 2111, and permission of instructor).
CS 4321 Practicum in Database Systems Fall. 2 credits. Pre- or corequisite: CS 4320. CS majors may use only one of the following toward their degree: CS/INFO 3300 or CS 4321.
Cs 4410 Operating Systems
Fall. 3 credits. Prerequisite: CS 3410 or 3420.

CS 4411 Practicum in Operating Systems Fall. 2 credits. Corequisite: CS 4410.

CS 4420 Computer Architecture (also ECE 4750)
Fall. 4 credits. Prerequisites: ENGRD 2300 and CS 3420/ECE 3140.

CS 4620 Introduction to Computer Graphics (also ARCH 3704) Fall. 3 credits. Prerequisite: CS/ENGRD 2110.

CS 4621 Computer Graphics Practicum
Fall. 2 credits. Pre- or corequisite: CS 4620.
CS 4670 Introduction to Computer Vision Fall or spring. 4 credits. Prerequisites: CS 2110, CS 2800. Offered fall 2010.

## CS 4700 Foundations of Artificial

 IntelligenceFall. 3 credits. Prerequisites: CS 2110 and 2800 (or equivalent).
CS 4701 Practicum in Artificial Intelligence
Fall. 2 credits. Pre- or corequisite: CS 4700.

## CS 4740 Introduction to Natural

 Language Processing (also COGST 4740, LING 4474)Spring. 4 credits. Prerequisite: CS 2110.
CS 4758 Robot Learning (also ECE/MAE 4758)

Spring. 4 credits. Prerequisites: knowledge of basic computer science principles and skills at a level sufficient to write a reasonably nontrivial computer program (e.g., CS 1114 or CS 2110 or CS 3110 or equivalent.) Any one of the following courses in probability/statistics or signal processing: CS 2800 or ECE 2200 or ECE 3100 or ENGRD 2700 (or equivalent).

## [CS 4780 Machine Learning

Spring. 4 credits. Prerequisites: CS 2110, CS 2800, or basic probability theory, and basic knowledge of linear algebra. Next offered 2011-2012.]

Cs 4812 Quantum Info Processing (also PHYS 4481/7681) (PBS)
Spring. 3 credits. Prerequisite: familiarity with theory of finite-dimensional vector spaces over complex numbers.
For description, see PHYS 4481.
CS 4820 Introduction to Analysis of Algorithms
Spring, summer. 4 credits. Prerequisites: CS 2800 and 3110.

CS 4830 Introduction to Cryptography Fall. 4 credits. Prerequisites: CS 2800 (or equivalent), mathematical maturity, or permission of instructor.
[CS 4850 Mathematical Foundations for the Information Age
Spring. 4 credits. Prerequisite: mathematical maturity. Next offered 2011-2012.]
CS $\mathbf{4 8 6 0}$ Applied Logic (also MATH 4860) (MQR)
Fall. 4 credits. Prerequisites: MATH 2220 or
2940, CS 2800 or equivalent (e.g., MATH
3320, 4320, 4340, 4810), and some
additional course in mathematics or
theoretical computer science.
CS 4999 Independent Reading and Research
Fall, spring. 1-4 credits.
CS 5150 Software Engineering
Fall. 4 credits. Prerequisite: CS 2110 or
equivalent experience programming in Java or C++.
[CS 5220 Applications of Parallel Computers
Fall or spring. 4 credits. Prerequisite: course in numerical methods at level of CS
3220 or higher. Next offered 2011-2012.]
CS 5300 The Architecture of Large-Scale Information Systems (also INFO 5300)

Spring. 4 credits. Prerequisite: CS/INFO 3300 or CS 4320.
[CS 5412 Cloud Computing
Fall or spring. 4 credits. Prerequisite: CS
4410 or permission of instructor. Next
offered 2011-2012.]

## CS 5414 Distributed Computing

 PrinciplesFall. 4 credits. Prerequisite: CS 4410 or permission of instructor.
CS 5420 Parallel Computer Architecture (also ECE 5720)
Fall. 4 credits. Prerequisite: ECE 4750.
For description, see ECE 5720.
CS 5430 System Security
Fall or spring. 4 credits. Prerequisites: CS 4410 or 4450 and familiarity with JAVA, C, or C\# programming languages. Offered spring 2011.
[CS 5540 Computational Techniques for Analyzing Clinical Data
Fall or spring. 3 credits. Prerequisites: some programming experience, exposure to introductory statistics and algorithms; or permission of instructor. Next offered 2011-2012.]
[CS 5620 Interactive Computer Graphics Fall or spring. 4 credits. Prerequisite: CS 4620. Next offered 2011-2012.]

## [CS 5643 Physically Based Animation for

 Computer GraphicsFall or spring. 4 credits. Prerequisites: CS/ ENGRD 3220 and/or CS 4620 or permission of instructor. Next offered 2011-2012.]

CS 5722 Heuristic Methods for Optimization (also CEE 5290, ORIE 5340)

Fall. 3 or 4 credits. Prerequisites: CS/ ENGRD 2110 or 3220 or CEE/ENGRD 3200, or graduate standing, or permission of instructor.

## CS 5846 Decision Theory I (also ECON 4760/6760) <br> Fall. 4 credits. <br> For description, see ECON 4760.

## CS 6110 Advanced Programming

 LanguagesSpring. 4 credits. Prerequisite: graduate standing or permission of instructor.

CS 6210 Matrix Computations
Fall. 4 credits. Prerequisites: MATH 4110 and 4310 or permission of instructor. Offered alternate years.
[CS 6320 Database Systems
Spring. 4 credits. Prerequisite: CS 4320 or permission of instructor. Next offered 2011-2012.]
CS 6410 Advanced Systems
Fall or spring. 4 credits. Prerequisite: CS 4410 or permission of instructor. Offered fall 2010.

CS 6460 Peer-to-Peer Systems
Spring. 4 credits. Recommended: CS 6410.
[CS 6620 Advanced Interactive Graphics
Fall or spring. 4 credits. Prerequisite: CS 4620 and 4621 or 5620 or permission of instructor. Next offered 2011-2012.]
[CS 6630 Realistic Image Synthesis Fall or spring. 4 credits. Prerequisites: CS 4620 or equivalent and undergraduate-level understanding of algorithms, programming, and vector calculus. Next offered 20112012.]

CS 6650 Computational Motion
Fall or spring. 4 credits. Prerequisites: undergraduate-level understanding of algorithms, and some scientific computing. Offered spring 2011.
CS 6670 Computer Vision
Fall or spring. 4 credits. Prerequisites: undergraduate-level understanding of algorithms and MATH 2210 or equivalent.
[CS 6700 Advanced Artificial Intelligence Fall or spring. 4 credits. Prerequisite: CS 4700 or permission of instructor. Next offered 2011-2012.]

## CS 6740 Advanced Language

 Technologies (also INFO 6300)Fall or spring. 3 credits. Prerequisite: permission of instructor. Neither CS 4300 nor CS 4740 are prerequisites. Offered fall 2010.

## CS 6742 Natural Language Processing

 and Social InteractionSpring. 3 credits. Prerequisites: CS 2110 or equivalent programming experience; course in artificial intelligence or any relevant subfield (e.g., NLP, information retrieval, machine learning); graduate standing; or permission of instructor.

## CS 6758 Robot Learning

Spring. 4 credits. Prerequisites: knowledge of basic computer science principles and skills at a level sufficient to write a reasonably nontrivial computer program (e.g., CS 1114 or CS 2110 or CS 3110 or equivalent); any one of the following courses in probability/statistics or signal
processing: CS 2800 or ECE 2200 or ECE 3100 or ENGRD 2700 (or equivalent).

## CS 6780 Machine Learning and Pattern

 RecognitionFall. 4 credits. Prerequisites: programming skills (e.g., CS 2110 or CS 3110) and basic knowledge of linear algebra and probability theory (e.g., CS 2800).

## CS 6782 Probabilistic Graphical Models

 (also BTRY 6790)Fall. 4 credits. Prerequisites: probability theory (BTRY 4080 or equivalent), programming and data structures (CS 2110 or equivalent); a course in statistical methods is recommended but not required (BTRY 4090 or equivalent).

## [CS 6784 Advanced Topics in Machine

 LearningFall or spring. 4 credits. Prerequisites: CS 4780 or equivalent, or CS 5780 or equivalent, or permission of instructor. Next offered 2011-2012.]

## [CS 6810 Theory of Computing

Fall or spring. 4 credits. Prerequisite: CS 3810 and CS 4820 or 6820 or permission of instructor. Next offered 2011-2012.]

## CS 6820 Analysis of Algorithms

Fall. 4 credits. Prerequisite: CS 4820 or graduate standing.
[CS 6825 The Science Base for the Information Age
Fall or spring. 4 credits. Prerequisites: none. Next offered 2011-2012.]

## [CS 6830 Cryptography

Fall or spring. 4 credits. Prerequisites: General ease with algorithms and elementary probability theory, maturity with mathematical proofs (ability to read and write mathematical proofs). Next offered 2011-2012.]
[CS 6840 Algorithmic Game Theory Fall or spring. 4 credits. Prerequisite: background in algorithms and graphs at level of CS 4820. No prior knowledge of game theory or economics assumed. Next offered 2011-2012.]
CS 6850 The Structure of Information Networks (also INFO 6850)
Spring. 4 credits. Prerequisite: CS 4820.
cs 6860 Logics of Programs
Spring. 4 credits. Prerequisites: CS 4810,
6810, and (CS/MATH 4860 or MATH 4810).
CS 6862 Automated Reasoning and Formal Methods
Fall. 4 credits. Prerequisites: CS 6110 and graduate standing or permission of instructor.

CS 7090 Computer Science Colloquium Fall, spring. 1 credit. For staff, visitors, and graduate students interested in computer science. S-U grades only.

## [CS 7190 Seminar in Programming

 LanguagesFall, spring. 1 credit. Prerequisite: CS 6110 or permission of instructor. S-U grades only. Next offered 2011-2012.]

CS 7192 Seminar in Programming Refinement Logics
Fall, spring. 4 credits. Prerequisite: permission of instructor.

## CS 7290 Seminar on Scientific

 Computing and Numerics (also MATH 7290)Fall, spring. 1 credit. Prerequisites: none.
CS 7390 Database Seminar
Spring. 1 credit. Prerequisite: by permission only. S-U grades only.

CS 7412 Scalable Distributed Consistency: Models and Applications
Spring. 4 credits. Prerequisites: none.
CS 7490 Systems Research Seminar Fall, spring. 1 credit. S-U grades only.

CS 7594 Seminar on Computational Issues in Medicine
Fall. 1 credit. Prerequisites: none.
CS 7670 Computer Vision Seminar
Fall, spring. 1 credit. Prerequisites: none.
CS 7690 Computer Graphics Seminar Fall, spring. 3 credits.
CS 7790 Seminar in Artificial Intelligence Fall, spring. 4 credits. Prerequisite: permission of instructor. S-U grades only.
CS 7794 Seminar in Natural Language Understanding
Fall, spring. 2 credits.
CS 7890 Seminar in Theory of Algorithms and Computing
Fall, spring. 4 credits. Prerequisite: permission of instructor. S-U grades only.

## CS 7893 Cryptography Seminar

 Fall, spring. 1 credit.CS 7999 Independent Research
Fall, spring. Prerequisite: permission of a Computer Science advisor.
Independent research for master of
engineering project.

## CS 9999 Thesis Research

Fall, spring. Prerequisite: permission of a Computer Science advisor. S-U grades only.
Doctoral research.

## COMPUTING IN THE ARTS <br> UNDERGRADUATE MINOR

The computer plays a role in almost every aspect of human life, and its influence and potential now extend routinely not only to technical and commercial pursuits but also into the realms of the imaginative and the aesthetic. The Computing in the Arts minor offers students opportunities to use computers to realize works of art, to study the perception of artistic phenomena, and to think about new, computer-influenced paradigms and metaphors for the experiences of making and appreciating art. Faculty from several departments in the college offer courses toward the minor, drawing on disciplines in the arts, the social sciences, the humanities, and the physical sciences. Currently, the minor is offered in five tracks: computer science, dance, film, music, and psychology, each described in more detail below. Students may minor in the same area as their major, or in a different area.

It is likely that additional tracks in other disciplines will be added to the minor, indeed possible that this will have occurred after the publication deadline for this year's Courses of Study but in time to take effect in the 20102011 academic year. The director and area representatives listed below will always have the latest information.

## Director

Graeme Bailey

## Applying for the Minor and Choosing Courses

Students should meet with the track representative in their chosen discipline for initial advising about the minor. For 20102011, these representatives are Graeme Bailey (computer science track), Kevin Ernste (music track), Allen Fogelsanger (dance track),
Stephanie Owens (art track), Marilyn Rivchin (film track), and Carol Krumhansl (psychology track).
Regardless of which track they choose, all students in the minor are required to take the core course, Computing in the Arts (CS 1610, cross-listed as CIS 1610, DANCE 1540, ENGRI 1610, FILM 1750, MUSIC 1465, and PSYCH 1650). This course combines fundamental background in cognitive modeling, statistics, programming, and algorithmic thinking, as preparation for more specialized work; hence, though it is not a formal prerequisite to other courses, it should be taken as early as possible in the student's program. For students who have already gained an equivalent background through other courses, however, it may be waived by permission of the director.
In addition to the core course, each student chooses another five courses satisfying the following requirements:

1. At least one must entail a significant computing component, regardless of its home department (marked * in the lists below).
2. At least two must entail a significant artistic component (marked $\dagger$ in the lists below).
3. For students majoring in a field offering a track, none of the courses from that track may be double-counted as also satisfying major requirements.
The goal is to encourage the development of reasonable depth within one area, without neglecting the interdisciplinary nature of the field. Hence, rather than choosing courses at random from the lists below or focusing too narrowly on one particular corner of the field, each student should work actively with an advisor from his or her minor in building an appropriate program.

## Course Lists

Art track. In addition to the core course, CIS 1610, any five of the following. Note that some of these courses may have ART prerequisites.
$\dagger$ ART 1701 Introduction to Digital Media
$\dagger$ ART 2305 Interactive Digital Media
†*ART 2501/CIS 3000 Introduction to
Computer Game Design
$\dagger$ ART 2702 Digital Video and Sound
$\dagger$ ART 3703 Advanced Projects in Time-Based Art
$\dagger^{*}$ ART 3705 Art in the Age of Networks $\dagger$ ART 3706 Mobile Media and the City *CS 5640 Computer Animation
*CS 5642 Advanced Animation
Up to two courses from another track.
Computer Science track. In addition to the core course, CS 1610, any five of the following. Note that some of these courses have CS prerequisites.
$\dagger$ ART 1700 Visual Imaging in the Electronic Age (also ARCH 4508, CIS 1620, ENGRI 1620)
${ }^{*}+$ CIS 3000 Introduction to Computer Game Design
*CS 2110 Object-Oriented Programming and Data Structures
*CS 4620 Introduction to Computer Graphics
*CS 4700 Foundations of Artificial Intelligence
*CS 4740 Introduction to Natural Language Processing
*CS 4780 Machine Learning
*CS 5640 Computer Animation
*CS 5642 Advanced Animation
*CS 5780 Empirical Methods in Machine Learning and Data Mining
*INFO 3450 Human-Computer Interaction Design
*INFO 4400 Advanced Human-Computer Interaction Design
INFO 4500 Language and Technology
Up to two courses from another track.
Dance track. In addition to the core course, DANCE 1540 (for description, see CS 1610), any five of the following. Note that some of these courses have DANCE pre- and/or corequisites. Note also that for this track, two courses marked * should be taken, and they should not be I and II of any one series for the purposes of satisfying the * requirement.
$\dagger$ DANCE 2430/VISST 2430 Hip-Hop,
Hollywood, and Home Movies
$\dagger$ DANCE 2500/VISST 2711 Beginning Dance Composition
$\dagger$ DANCE 3500 Intermediate Dance Composition I
$\dagger$ DANCE 3510 Intermediate Dance Composition II
$\dagger^{*}$ DANCE 3550 Techno Soma Kinesics
$\dagger$ DANCE 3660/THETR 3620 Lighting Design Studio I
*DANCE 3560/MUSIC 3441/THETR 3690 Interactive Performance Technology
$\dagger$ DANCE 3570 Media Arts Studio
*DANCE 3680/MUSIC 3431/THETR 3680 Sound Design and Digital Audio
$\dagger$ DANCE 4500 Advanced Dance Composition I $\dagger$ DANCE 4510 Advanced Dance Composition II $\dagger$ DANCE 4550 Techno Soma Kinesics II
$\dagger$ DANCE 4660/THETR 4620 Lighting Design Studio II
$\dagger^{+}$MUSIC 3421 Scoring the Moving Image $\dagger$ PSYCH 3050/VISST 3305 Visual Perception *THETR 3650 Automated Lighting and Control Up to two courses from another track.
Film track. In addition to the core course,
FILM 1750, any five of the following. Note that some of these courses have FILM pre- and/or corequisites.
$[\dagger$ ART 1700 Visual Imaging in the Electronic Age]
[†ART 2702 Digital Video and Sound]
*ART 2703/CS 5640 Computer Animation
*CS 5642 Advanced Computer Animation
FILM 3250 Animation: History and Practice
$\dagger$ FILM 3770 Introduction to 16 mm and Digital Filmmaking
$\dagger$ FILM 4220 Cinematography
$\dagger$ FILM 4770 Intermediate Film and Video Projects: Documentary and Experimental Workshop
$\dagger$ FILM 4930 Advanced Film and Video Projects
*THETR 3680 Sound Design and Digital Audio $\dagger *$ THETR 3690 Digital Performance
Up to two courses from another track.
Music track. In addition to the core course, MUSIC 1465, any five of the following. Note that some of these courses have MUSIC prerequisites.

* $\uparrow$ CIS 3000 Introduction to Computer Game Design
$\dagger^{*}$ MUSIC 1421 Introduction to Computer Music
MUSIC 2111/PHYS 1204 Physics of Musical Sound
$\dagger^{*}$ MUSIC 2421 Computers in Music Performance
$\dagger$ MUSIC 3111/3112/3113 Jazz Improvisation (any two of these 2 -credit courses)
$\dagger^{*}$ MUSIC 3421 Scoring the Moving Image
*MUSIC 3431/THETR 3680 Sound Design and Digital Audio
*     + MUSIC 3441/THETR 3690 Interactive Performance Technology
$\dagger$ MUSIC 4101 Counterpoint
$\dagger$ MUSIC 4103 Topics in Post-Tonal Theory and Analysis
$\dagger$ MUSIC 4111 Composition
$\dagger$ MUSIC 4122 Orchestration
Up to two courses from another track.
Psychology track. In addition to the core course, PSYCH 1650, any five of the following. Note that some of these courses have PSYCH prerequisites.
$\dagger$ ART 1700 Visual Imaging in the Electronic Age (also ARCH 4508, CIS/CS/ENGRI 1620)
*CS 4620 Introduction to Computer Graphics
*INFO 2140/PSYCH 2140 Cognitive Psychology
$\dagger^{*}$ MUSIC 1421 Introduction to Digital Music
$\dagger$ MUSIC 4181/PSYCH 4180 Psychology of Music
PSYCH 2050 Perception
$\dagger$ PSYCH 3050 Visual Perception
PSYCH 3160 Auditory Perception
*PSYCH 3420 Human Perception: Applications to Computer Graphics, Art, and Visual Display
Up to two courses from another track.


## CZECH

See "Department of Russian."

## DUTCH

See "Department of German Studies."

## EARTH AND ATMOSPHERIC SCIENCES

L. D. Brown, chair; Arthur T. DeGaetano, associate chair (CALS); director of undergraduate studies, N. Mahowald (Science of Earth Systems); M. W. Wysocki Atmospheric Sciences), R. W. Allmendinger, W. D. Allmon, C. Andronicos, L. M. Cathles, G. Chen, J. L. Cisne, S. J. Colucci, L. A. Derry, M. Goman, C. H. Greene, D. L. Hysell, T. E. Jordan, R. W. Kay, S. Mahlburg Kay, R. Lohman, B. Monger, A. Moore, J. Phipps Morgan, M. Pritchard, S. J. Riha, W. M. White, D. S. Wilks

## Science of Earth Systems (SES)

Offered by the Department of Earth and Atmospheric Sciences
Contact: 2124 Snee Hall, 255-5466, www.eas cornell.edu

The Earth Sciences have never been more critical to society than they are today. Global warming, dwindling energy resources, inadequate water supplies, political strife over strategic minerals, and megadisasters threatened by volcanic eruptions, earthquakes, tsunami, and hurricanes: these are but a few of the headlines that appear with increasing frequency. The Department of Earth and Atmospheric Sciences at Cornell is a global leader in research directed toward understanding the fundamental processes that have shaped our planet, and is committed to providing Cornell students with the earth literacy needed to serve as informed citizens and wise stewards of the Earth. EAS faculty members and graduate students carry out frontier research on both basic and applied aspects of subjects as diverse as satellite monitoring of volcanic activity, the deep structure of the Andes and Tibetan Plateau, the nature of the earth's ionosphere, ocean acoustics, controls on global climate, and improved weather prediction.
The Science of Earth Systems (SES) major is the undergraduate program offered by EAS to Cornell students in the Colleges of Engineering, Arts and Sciences, and Agriculture and Life Sciences. Students in this program can pursue education and research that prepares them to compete for careers or graduate study at leading institutions in this country and abroad Students may chose to focus on one of a number of disciplinary specialties, such as geophysics or tectonics, or develop the broad expertise needed to understand the interactions between the diverse elements of earth and life in the past, present, and future. By analyzing the complex relations among the ocean, solid earth, atmosphere, and biosphere, students can help meet society's growing demand for energy, minerals, and clean water as well as contribute to mitigating the negative impacts related to global warming, rising sea level, natural hazards, and decreasing biodiversity.
The SES program is unique in that it incorporates the fundamentals of Earth Science
with the emergence of a new and more complete approach that encompasses all components of the earth system-air, life, rock, and water-to gain a new and more comprehensive understanding of the world as we know it.
To achieve a complete understanding of these important issues, students must have a desire to take a very hands-on approach. An abundance of opportunities exist for geological, oceanographic, and meteorological research in the field and for nationwide and international travel, as well as paid research experience. Students have worked with faculty members in the Andes, the Aleutians, the Rocky Mountains, the Atacama Desert, the Caribbean, Tibet, and Hawaii, and have spent a semester at sea in the Woods Hole Ocean Studies Program. Students are also able to probe the ionosphere of Earth and the surface of Mars by utilizing techniques in remote sensing.
The SES major provides a strong preparation for graduate school in any one of the earth sciences, such as atmospheric sciences, geological sciences, geophysics, geochemistry, oceanography, hydrology, and biogeochemistry Students seeking employment with the B.A. or B.S. degree will have many options in a wide variety of careers related to energy, the environment, and critical resources in both the private sector and government. Students with the strong science background provided by the SES major are also highly valued by graduate programs in environmental law, public affairs, economics, and public policy.

## Requirements for the Science of Earth Systems major

1. Basic Math and Sciences

This part of the SES curriculum builds a strong and diverse knowledge of fundamental science and mathematics, providing the student with the basic tools needed in upper-level science classes.
a. MATH 1110-1120 (or MATH 19101920)
b. PHYS 1112-2213 (or PHYS 2207-2208)
c. CHEM 2070-2080, or CHEM 20902080, or CHEM 2070-1570
d. BIOLOGY-three options:
i. one year of biology, choosing from the introductory biology sequences of courses: BIOG 1101/1103-1102/1104, or BIOG 1105/1106, or BIOG 1109/1110
ii. one semester from the introductory biology sequences of courses (listed in option 1) and EAS/BIOEE 1540 or EAS 1700
iii. students may substitute (with written permission of their advisor) one semester of biology with an additional semester of chemistry, math, or physics.
2. Required Introductory Course: EAS 2200 The Earth System
3. SES Core Courses

The core courses emphasize the interconnectedness of the Earth system, and are founded on the most modern views of the planet as an interactive and ever-changing system. Each crosses the traditional boundaries of disciplinary science. Three courses selected from the following four core courses are required for the major.

EAS 3010 Evolution of the Earth System EAS 3030 Biogeochemistry
EAS 3040 Interior of the Earth
EAS 3050 Climate Dynamics

## 4. Concentration Courses

The concentration is achieved by completion of four intermediate to advanced-level courses (3000 level and up) that build on the core courses and have prerequisites in the required basic sciences and mathematics courses. Note that additional basic math and science courses may be required to complete the concentration courses, depending upon the student's choice of concentration. The concentration courses build depth and provide the student with a specific expertise in some facet of Earth system science. Four concentrations are defined for the major: geological sciences, biogeochemistry, atmospheric sciences, and ocean sciences. Other concentrations can be tailored to a student's interests in consultation with the student's advisor and upon approval of the SES curriculum committee. Examples include sustainable earth and environmental systems earth system science and policy, hydrology, planetary science, and soil science. The concentration should be chosen during the junior year or before in consultation with the student's advisor and with the approval of the director of undergraduate studies.

## 5. Field/Observational/Laboratory

 ExperienceExposure to the basic observations of earth science, whether directly in the field, or indirectly by various techniques of remote sensing or in the laboratory, is necessary to understand fully the chosen area of concentration in the major. A minimum of 3 credits of appropriate course work is required Possibilities include the following:

Courses in the Hawaii Environmental Semester program;

Courses given by the Shoals Marine Laboratory;
EAS 2500 Meteorological Observations and Instruments;
EAS 4170 Field Mapping in Argentina;
EAS 4370 Geophysical Field Methods;
EAS 4910 and/or 4920 Undergraduate Research, with appropriate choice of project;
Field courses taught by another college or university (3-credit minimum).

For more information contact Natalie
Mahowald, Department of Earth and Atmospheric Sciences, nmm63@cornell.edu, and visit the web site: www.eas.cornell.edu.

Honors. An honors program is offered by the Department of Earth and Atmospheric Sciences for superior students. Candidates for honors must maintain an overall 3.0 GPA, a cumulative average of 3.5 in the major, and complete an honors thesis (usually through EAS 4910 and/or 4920). Students interested in applying should contact the director of undergraduate studies during the second semester of the junior year or early in the first semester of the senior year.

## Courses

## EAS 1101 Earth Science in the 21 st

 Century (PBS)Fall. 3 credits. R. W. Allmendinger. This course provides a basic understanding of earth processes, emphasizing those critical to humans in the 21st century and beyond. Designed for non-science majors, course topics include energy, water resources, natural hazards (earthquakes, tsunamis, volcanos, landslides, floods, delta subsidence), coastal processes, river systems, climate change, and mountain building among others. Current events relating to the earth are highlighted and difficult choices facing society discussed. The course develops an appreciation for the Earth, its history and how it works. [Students interested in a more formal introduction to Earth sciences with a lab should register for EAS 2200 instead.

## EAS 1108 Earth in the News (PBS)

Summer. 3 credits. R. Ross.
Provides an introduction to physical geology and earth systems science and explores the scientific basis for informed decision making regarding many timely environmental issues, including global warming; water pollution and use; geologic hazards such as floods, earthquakes, and volcanoes; fossil fuel distribution and use; and land use. A field trip is taken in the Ithaca area.

## EAS 1109 Dinosaurs!

Fall. 1 credit. J. L. Cisne.
Introductory survey course for anyone interested in dinosaurs. Lectures examine the fossil evidence and illustrate how various geological and biological disciplines contribute to understanding dinosaurs and their world.

## EAS 1150 Severe Weather Phenomena (PBS)

Summer. 3 credits. S-U or letter grades.

## M. W. Wysocki.

A description of the structure of the Earth's atmosphere and forces that govern its motion will be presented and then applied to understanding the aspects of severe weather, including snowstorms/lake effect snow, windstorms, tornadoes, thunderstorms, tropical cyclones, El Niño, floods, drought, and heat waves.

## EAS 1190 Fossil Preparation

Fall. 1 credit. Prerequisite: EAS 1109 or related EAS course. W. Allmon and J. Cisne.

Hands-on experience in the preparation and curation of fossils in laboratories at the Paleontological Research Institution (PRI). Students provide own transportation to the Museum of the Earth via public transit or other means. Activities include preparation and study of vertebrate, invertebrate, and plant specimens; sorting of bulk material such as field collections and mastodon dung, and curation of prepared specimens.

## EAS 1220 Earthquake! (also ENGRI 1120)

 (PBS)Spring. 3 credits. L. Brown.
Explores the science of natural hazards, their societal impacts, and means of mitigation. The focus is on earthquakes, volcanoes, and tsunami, but hurricanes, severe weather, climate change, landslides, wildfires, and the threat of extinction from a future impact by an extraterrestrial body are also considered.

## EAS 1310 Basic Principles of

 Meteorology (PBS)Fall. 3 credits. M. W. Wysocki.
Simplified treatment of the structure of the atmosphere: heat balance of the Earth; general and secondary circulations; air masses, fronts, and cyclones; and hurricanes, thunderstorms, tornadoes, and atmospheric condensation. The optional 1-credit laboratory for this course is offered as EAS 1330.

## EAS 1330 Basic Meteorology Lab

Fall. 1 credit. Corequisite: EAS 1310.
M. W. Wysocki.

This course is required for atmospheric science majors, but is optional for other students taking EAS 1310.

## EAS 1340 Introductory Weather Analysis and Forecasting

Spring. 1 credit. Prerequisites: EAS 1310 and EAS 1330. S-U grades only.
M. W. Wysocki and staff.

This course will serve as an extension of the EAS 1330 first-year majors lab. It will provide opportunity for formal weather briefings, explore specific atmospheric storms (synoptic and mesoscale, including the climatology of each storm type), through assigned readings, map analysis, and weather discussions.

## EAS 1400 Freshman Writing Seminar "Writing in the Sciences:

 Environmental Perspectives"Spring. 3 credits. S. Jessup.
This course is a Freshman Writing Seminar in which students examine interactions between humans and the natural environment from individual, societal, and scientific perspectives. Readings include a brief historical survey of humanity's role within the natural world and short readings about current environmental issues. Includes a research project where each student explores a current environmental issue.

## EAS 1420 Freshman Writing Seminar "Sustainable Earth, Energy, and Environmental Systems"

Fall. 3 credits. L. McGarry and A. Baker. Explores climate change science and policy, threats to sustainable ecosystems on land and sea, and challenges for food, water, and energy through readings, discussions, and writing. A speaker series, open to the public, but designed specifically for this course, is a special feature of this class.

## EAS 1540 Introductory Oceanography, Lecture (also BIOEE 1540) (PBS)

Fall, summer. 3 credits. Fall: C. H. Greene and B. C. Monger; summer: B. C. Monger. Intended for both science and non-science majors, this course covers the basic workings of the ocean including its physics, chemistry, and biology. The course also examines threats to the health of the ocean and the important role the ocean plays in global climate change. Non-science majors should pay particular attention to this course because it fulfills a science requirement for certain colleges. CALS students who are interested in fulfilling the Intro Bio distribution requirement for non-life science majors should see EAS 1560.

## EAS 1551 Introduction to Oceanography,

 Laboratory (also BIOSM 1551)Summer. 1 credit. Prerequisites: collegelevel science course, or EAS 1540, or marine science course or permission of instructor. B. C. Monger and C. H. Greene. Field course covering topics presented in EAS/ BIOEE 1540, but presented in the field on Appledore Island, Maine at the Shoals Marine

Laboratory. Topics/activities include Plankton Tow, CDT casts, water bottle sampling, chlorophyll analysis, nutrient chemistry analysis, satellite remote sensing in the Gulf of Maine, data acquisition, data processing, data analysis, and display.

## EAS 1560 Introductory Oceanography with Laboratory (also BIOEE 1560) (PBS)

Fall. 4 credits. C. H. Greene and
B. C. Monger

Intended for both science and non-science majors. Includes combination of lecture and laboratory participation. Covers the basic workings of the ocean including its physics, chemistry, and biology. Following this basic description, the course examines threats to the health of the ocean and the important role the ocean plays in global climate change. Nonscience majors should pay particular attention to this course because it fulfills a science requirement for certain colleges. This course will fulfill the Intro Bio distribution requirement for non-life science majors in CALS.

## EAS 1700 Evolution of the Earth and Life (PBS)

Spring. 3 credits. J. L. Cisne.
Earth systems and their evolution; Earth history's astronomical context; plate tectonics, continental drift, and their implications for climate and life; co-evolution of life and the atmosphere; precedents for ongoing global change; dinosaurs, mass extinctions, and human ancestry. Includes laboratories on reconstructing geological history and mapping ancient geography.

## EAS 2130 Marine and Coastal Geology (PBS)

Summer. 4 credits. Prerequisite:
introductory geology or ecology course or permission of instructor. Staff.
A special two-week course offered at Cornell's Shoals Marine Laboratory (SML), located on Appledore island in the Gulf of Maine. For more details, including estimated cost and an application, contact SML office, G14 Stimson Hall, or visit www.sml.cornell.edu.

## EAS 2200 The Earth System (PBS)

Fall, spring. 4 credits. Prerequisites: MATH 1110/1910. Letter grades only. A. Moore and W. M. White.
An integrated introduction to the earth system stressing the geological, biological, chemical, and physical interactions among the atmosphere, ocean, and solid earth. Topics include biogeochemical cycles, climate dynamics, and the evolution of the atmosphere, biosphere, cryosphere (ice), hydrosphere, and lithosphere (solid earth).

## EAS 2220 Seminar-Hawaii's Environment

Fall. 1 credit. S-U grades only. A. Moore. For students interested in the unique environmental systems of the Hawaiian Islands. Designed to bring together students returning from field studies in Hawaii with students interested in going there to study. Through reading and discussion, we will explore the geology, biology, ocean, atmosphere, and culture of the Hawaiian environment.

## EAS 2500 Meteorological Observations

 and InstrumentsFall. 4 credits. Prerequisite: EAS 1310. M. W. Wysocki.

Covers methods and principles of
meteorological measurements and observations including surface, free-air, and remote systems. Also covers instrument siting, mounting, and protection; instrument response characteristics, calibration, and standardization; and recorders and data logging systems. Laboratory exercises are in observation and data analysis.

## EAS 2680 Climate and Global Warming

 (PBS)Spring. 3 credits. Prerequisite: basic college
math. S-U or letter grades. A. T. DeGaetano.
Familiarizes students from a range of
disciplines with such contemporary issues in climatology as global warming and El Niño. Introduces the natural greenhouse effect, past climates, and observed and projected climate changes and impacts. Also covers natural climate variations (e.g., El Niño) and their consequences and predictability. Readings focus on recent scientific findings related to climate change.

## EAS 2900 Computer Programming and

 Meteorology SoftwareSpring. 3 credits. Prerequisite: EAS 1310, MATH 1110, or equivalent. N. Mahowald and B. Belcher.
Introduction to Fortran computer programming and visual software packages specifically tailored for meteorological application usage. Topics include basic FORTRAN 90 programming (this includes problem analysis, algorithm development, and program writing and execution), data manipulation, and instruction in the use of GrADS, and GEMPACK visual display tools.

## EAS 2960 Forecast Competition

Fall and spring. 1 credit; students enroll for two consecutive semesters; credit awarded after second semester; may be repeated for credit. Prerequisite: undergraduate standing in atmospheric science or permission of instructor. S-U grades only. D. S. Wilks. Two-semester course providing daily exercise in probabilistic weather forecasting, in which students compete to forecast local weather most skillfully.

## EAS 3010 Evolution of the Earth System

 (PBS)Fall. 4 credits. Prerequisites: EAS 2200,
MATH 1110 or 1910 and one course in chemistry (college or high school). Two field trips, either Sat or Sun. T. Jordan, S. Riha, and W. Allmon.
Life activities alter the physical and chemical environment and are altered by that environment. This interaction over very long times constitutes a co-evolution of earth and life. Course uses modern systems, tens of thousand year old systems, and hundreds of million year old systems to illustrate principles, methods of reconstructing deep history, and the context of natural change inherent to life and earth.

## EAS 3030 Introduction to

Biogeochemistry (also NTRES 3030)
(PBS) (PBS)
Fall. 4 credits. Prerequisites: CHEM 2070 or equivalent, MATH 1120, and a course in biology and/or geology. L. A. Derry and J. Yavitt.

Control and function of the Earth's global biogeochemical cycles. Begins with a review
of the basic inorganic and organic chemistry of biologically significant elements, and then considers the biogeochemical cycling of carbon, nutrients, and metals that take place in soil, sediments, rivers, and the oceans. Topics include weathering, acid-base chemistry, biological redox processes, nutrient cycling, trace gas fluxes, bio-active metals, the use of isotopic tracers, controls on atmospheric carbon dioxide, and mathematical models. Interactions between global biogeochemical cycles and other components of the Earth system are discussed.

## EAS 3040 Interior of the Earth (PBS)

Spring. 3 credits. Prerequisite: EAS 2200 or
permission of instructor. C. Andronicos.
This class will investigate the geology of the solid earth with emphasis on igneous and metamorphic petrology, structure of the continents and ocean basins, and large scale tectonics. Interaction between deformation, melt generation and metamorphism will be examined as mechanisms by which the crust is differentiated from the underlying mantle. Geophysical and geochemical techniques for probing the deep interior of the earth will be investigated. Plate tectonics will be used as a unifying theme to understand processes operating in the solid earth.

## EAS 3050 Climate Dynamics (PBS)

Fall. 3 credits. Prerequisites: two semesters of calculus and one semester of physics. N. Mahowald.

Discusses processes that determine climate and contribute to its change, including atmospheric radiation, ocean circulation, and atmospheric dynamics. Investigates contemporary climate change issues and discusses them in the context of natural variability of the system.

## EAS 3060 Evolution of Ancient and Modern Oceans (also BIOSM 3060) (PBS)

Summer. 6 credits. Prerequisites: introductory biology (two semesters) and a college-level course in Earth Science, or permission of instructor. W. Allmon.
An intensive survey of the biological and geological history of the oceans, starting with the record of ancient oceans and life preserved in the rocks of central New York, followed by a transect and examination of the history of the Appalachian Mountains, ending with the oceanography and marine biology of the Gulf of Maine at Shoals Marine Lab.

## EAS 3220 Biogeochemistry of the Hawaiian Islands (PBS)

Spring. 4 credits. Prerequisites: enrollment in EES Semester in Hawaii; EAS 2200, EAS 3030, or permission of instructor. L. A. Derry.

A field-oriented biogeochemistry course held on the island of Hawaii. Field, class, and laboratory work focus on how landscape age and climate strongly control biogeochemical cycling and ecosystem development in Hawaii, and on carbon cycling at short and long time scales. Other topics include succession of ecosystems, evolution of nutrient cycles, and impacts of invasive species. The course is structured around field projects, carried out both as groups and individually.

## [EAS 3340 Microclimatology (PBS)

Spring. 3 credits. Prerequisite: a course in physics. Offered alternate years; next
offered 2011-2012. D. S. Wilks.
The relationship of radiant energy,
temperature, wind, and moisture in the
atmosphere near the ground. The interplay between physical processes of the atmosphere, plant canopies, and soil is examined with emphasis on the energy balance.]

## EAS 3400 Field Study of the Earth System (PBS)

Spring. 6 credits. Prerequisites: enrollment in EES Semester in Hawaii; one semester of calculus (MATH 1910/1920 or 1110/1120) and two semesters of any of the following: PHYS 2207/2208 or 1112/2213; CHEM 2070/2080 or 2090/2080; BIOG 1101/1103-1102/1104 or 1105/1106 or $1109 / 1110$; or equivalent course work. A. Moore.

Interdisciplinary field course covering fundamental concepts of the Earth system. Topics include global circulation patterns in the solid Earth, atmosphere, and ocean; energy and mass transfer; change and variability of Earth, atmosphere, and ocean systems; the temporal record of change preserved in the geologic record; and Earth, oceanic, and atmospheric controls on ecosystem processes. The course is projectbased with students engaged in hands-on, active learning that takes advantage of local resources.

## EAS 3410 Atmospheric Thermodynamics

 and Hydrostatics (PBS)Fall. 3 credits. Prerequisites: one year of calculus and one semester of physics. A. T. DeGaetano.

Introduction to the thermodynamics and hydrostatics of the atmosphere and to the methods of description and quantitative analysis used in meteorology. Topics include thermodynamic processes of dry air, water vapor, and moist air and concepts of hydrostatics and stability.
EAS 3420 Atmospheric Dynamics (PBS)
Spring. 3 credits. Prerequisites: familiarity with multivariate calculus (e.g., MATH 2930, 2130, or 2200 or equivalent); one semester of university physics. G. Chen. Introduction to the basic equations and techniques used to understand motion in the atmosphere, with an emphasis on the space and time scales typical of storm systems (the synoptic scale). Derives the governing equations of atmospheric flow from first principles and applies them to middle latitude and tropical meteorology. Topics include balanced flow, atmospheric waves, circulation, and vorticity.

## [EAS 3500 Dynamics of Marine

 Ecosystems (also BIOEE 3500) (PBS)Fall. 3 credits. Prerequisites: one year of calculus and one semester of oceanography (i.e., EAS 1540), or permission of instructor. Offered alternate years; next offered 2011-2012.
C. H. Greene and R. W. Howarth.

Lecture course covering the interactions of physical and biological processes in marine ecosystems.]

## EAS 3510 Conservation Oceanography (also BIOEE 3510) (PBS) (also BIOEE 3510) (PBS)

Spring. 4 credits. Prerequisites: enrollment in EES Semester in Hawaii; one semester of calculus and two majors-level biology courses or permission of instructor. C. H. Greene and C. D. Harvell. Covers the interactions of physical and biological processes in marine ecosystems. Begins by looking at these processes on ocean-basin to regional scales and works
down to the smaller scales relevant to individual organisms. Introduces students to modern techniques of marine-ecosystems research, including remote sensing, oceanographic-survey methods, and experimental marine ecology. This course is field and laboratory intensive with students engaged in hands-on, active learning that takes advantage of local resources.

EAS 3520 Synoptic Meteorology I (PBS) Spring. 3 credits. Prerequisite: EAS 3410. Corequisite: EAS 3420. M. W. Wysocki Study of weather map analysis and forecasting techniques by applying the principles of fluid and heat flow. Strengthens previously introduced meteorological concepts that are applied to forecasting midlatitude synoptic scale weather systems, such as cyclones, anticyclones, jet streams, fronts, and waves.

## EAS 3530 Physical Oceanography (PBS)

Fall. 3 credits. Prerequisites: MATH 1120 or 1920, or one year of physics, or permission of instructor. Offered alternate years B. C. Monger.

The course covers thermohaline and wind driven circulation and surface-ocean boundary-layer dynamics. Mathematical expressions for describing conservation of momentum, mass, and heat in a fluid are used to explain the ocean's responses to wind and buoyancy forcing.

## EAS 4010 Fundamentals of Energy and

 Mineral Resources (PBS)Fall. 3 credits. Recommended: previous course in geology. L. Cathles.
The Earth's energy and mineral resources reflect some of the most important changes and dramatic events that have punctuated earth history. Course provides an overview of resource types in the context of the Earth's atmospheric evolution, rifting, mantle convection, and hydrologic cycle. The processes of resource accumulation are described in terms of simple chemical and physical principles and in the societal contexts of supply, demand, and sustainability.

## EAS 4040 Geodynamics (PBS)

Spring. 3 credits. Prerequisite: calculus and calculus-based physics courses or permission of instructor. Offered alternate years. J. Phipps Morgan.
Quantitative study of the deformation, heat transport, and melting processes that have shaped the evolution of the solid Earth. Familiar physical and chemical principles and concepts are applied to the study of plate tectonics, fluid dynamics, mantle convection, melting, and mountain building.

## EAS 4050 Active Tectonics (PBS)

Fall. 3 credits. Recommended: mechanical background equivalent to EAS 4260/4880
Offered alternate years. M. Pritchard
Develops the ideas and methods necessary to understand how the Earth deforms-from individual earthquakes to the construction of mountain ranges. Discusses the driving forces of deformation, and how these forces interact with different geologic materials to cause deformation.

## [EAS 4060 Marine Geology and Geophysics (PBS)

Spring. 4 credits. Prerequisite: EAS 2200 or comparable courses; completion of some EAS classes helpful, but not required. Offered alternate years; next offered 20112012. J. Phipps Morgan.

Uses geological, geochemical, and geophysical approaches to explore the geology of the ocean floor.]

## EAS 4170 Field Mapping in Argentina

 (PBS)Summer. 4 credits. Prerequisite: introductory geology course and EAS 4260 or permission of instructor. EAS 3040 recommended. Offered alternate years. S. Mahlburg Kay.

Field mapping course in Argentina that fulfills field requirement for majors with interests in geological sciences and provides a field geological experience for others. Course consists of lectures in Buenos Aires followed by field exercises in the Sierras Pampeanas, Precordillera, and Main Cordillera Ranges of the Argentine Andes in the provinces of San Juan and Mendoza. A variety of exercises use modern techniques in the field mapping of a broad range of variably deformed sedimentary, metamorphic and igneous rocks. The course further provides an introduction to the tectonics and magmatic processes of the central Andes with emphasis on comparable processes in the United States. Exercises are done in combination with students and faculty of the University of Buenos Aires.
[EAS 4240 The Rio Grande Rift: A Window into the Geological Evolution of North America
Spring. 2 credits. Prerequisite: permission of instructor. Field trip over spring break.
Offered alternate years; next offered 20112012. C. Andronicos.

This course will investigate the geological evolution of the Rio Grande rift. It will meet as a seminar once a week and include a field trip to New Mexico over spring break to study the rift in the field. The cost of the trip should not exceed \$250.]

## EAS 4250 European Discovery of

 Impacts and Explosive Volcanism Spring. 2 credits. Prerequisite: junior, senior, or graduate students with background in geology and permission of instructor. Letter grades only. Meets one day per week plus field trip during spring break. Fee probably charged for required weeklong field trip. Offered alternate years. J. Phipps Morgan.
## EAS 4260 Structural Geology (PBS)

Spring. 4 credits. Prerequisite: one semester of calculus, plus introductory geology course or permission of instructor. One weekend field trip. C. Andronicos.
The nature and origin of deformed rocks at submicroscopic to global scales. The course begins with review of elementary principles of continuum mechanics and continues with a discussion of deformation mechanisms commonly observed in earth materials. The geometry, kinematics, and mechanics of faults folds, are then addressed and the class ends with a description of the tectonic setting of structural families such as thrust belts, rift provinces, and zones of strike slip deformation. A weekend field trip to a region of spectacular folding and thrusting provides an opportunity to apply the concepts learned in lecture.

## EAS 4340 Exploration Geophysics (PBS)

Fall. 3 credits. Prerequisites: MATH 1920 and PHYS 2208, 2213, or equivalent. Offered alternate years. L. D. Brown Fundamentals of subsurface imaging by geophysical methods as used in oil
exploration and environmental investigations Covers seismic reflection, refraction, gravity, magnetics, resistivity, and ground-penetrating radar (GPR) techniques.

## EAS 4350 Statistical Methods in

 Meteorology and Climatology (MQR) Fall. 3 credits. Prerequisites: one introductory course each in statistics (e.g., AEM 2100) and calculus. D. S. Wilks. Statistical methods used in climatology, operational weather forecasting, and selected meteorological research applications. Includes statistical characteristics of meteorological data, including probability distributions and correlation structures. Covers operational forecasts derived from multiple regression models, including the MOS system; and forecast evaluation techniques.[EAS 4370 Geophysical Field Methods (also ARKEO 4370) (PBS)
Fall. 3 credits. Prerequisite: PHYS 2208 or 2213, or permission of instructor. Offered alternate years; next offered 2011-2012. L. D. Brown.

Field exercises using geophysical techniques to probe the subsurface.]

## [EAS 4400 Seminar on Climate Change Science, Impacts, and Mitigation

 Fall. 3 credits. Prerequisites: junior or higher standing. Offered alternate years; next offered 2011-2012. N. Mahowald.This course will focus on reading,
understanding, and evaluating the IPCC report (2007 version) and other climate change-
related issues. Students will present and lead a discussion on their choice of topics.]

## [EAS 4470 Physical Meteorology (PBS)

Fall. 3 credits. Prerequisites: one year each of calculus and physics. Offered alternate years; next offered 2011-2012.
A. T. DeGaetano.

Primarily a survey of natural phenomena of the atmosphere, with emphasis on their underlying physical principles.]

## EAS 4510 Synoptic Meteorology II (PBS)

 Fall. 3 credits. Prerequisites: EAS 3410 and 3420. S. J. Colucci.Structure and dynamics of large-scale, midlatitude weather systems, such as cyclones, anticyclones, and waves, with consideration of processes that contribute to temperature changes and precipitation. Lab sessions involve real-time weather forecasting and the computer application of a numerical model of the atmosphere to study selected large-scale, midlatitude weather events

## EAS 4530 Mineralogy (PBS)

Fall. 4 credits. Prerequisite: CHEM 2070 or 2090 or permission of instructor.
S. Mahlburg Kay.

Chemical and physical properties and identification of minerals with emphasis on the rock-forming minerals that are the principal constituents of the Earth and nearby planets. Topics include internal and external crystallography, crystal chemistry, introductions to x-ray crystallography and optical mineralogy, and a systematic examination of the structures, chemistry, and occurrence of the rock-forming minerals. Independent project includes use of electron microprobe (EPMA) and x-ray facilities.

## EAS 4540 Petrology and Geochemistry

 (PBS)Spring. 4 credits. Prerequisite: EAS 4530 or permission of instructor. R. W. Kay.
Principles of phase equilibrium as applied to igneous and metamorphic systems.
Distribution of trace elements and isotopes as used to define processes and chronologies. Kinetics, reaction pathways and textural and mineralogical characterization. Geochemistry, origin and dating of igneous and metamorphic rocks as applied the formation and evolution of the earth, terrestrial planets and meteorites.

## [EAS 4550 Geochemistry (PBS)

Fall. 4 credits. Prerequisites: CHEM 2070 or 2090 and MATH 1920 or equivalent. Recommended: EAS 3040. Offered alternate years; next offered 2011-2012.
W. M. White.

The Earth from a chemical perspective: physical chemistry applied to the Earth; trace element and isoptpe geochemistry.]
[EAS 4560 Mesoscale Meteorology (PBS)
Spring. 3 credits. Prerequisites: EAS 3410 and 3420 or permission of instructor.
Offered alternate years; next offered 20112012. S. J. Colucci.

Structure and dynamics of midlatitude mesoscale weather systems such as fronts, jets, squall lines, convective complexes,
precipitation bands, downslope windstorms, mountain breezes, seas breeze circulations, and lake effect snowstorms.]

## EAS 4570 Atmospheric Air Pollution (PBS)

Fall. 3 credits. Prerequisites: EAS 3410 or thermodynamics course, and one semester of chemistry, or permission of instructor.
Offered alternate years. M. W. Wysocki. Examines sources, effects, transport, measurement, and controls of air pollution. Discusses the basic principles in each area with an emphasis on their local, regional, and global impacts.

## EAS 4580 Volcanology (PBS)

Fall. 3 credits. Prerequisite: EAS 3040 or equivalent. Offered alternate years. R. W. Kay.

Causes of volcanism, melting in the Earth, and the origin of magmas. Physical volcanology, nature and types of volcanic eruptions and associated deposits, and eruption mechanisms. Volcanic plumbing systems, magma chamber processes, evolution of magma. Volcanism and impact phenomena in the solar system.
Volcanic hazard assessment and volcano monitoring. Ore deposits associated with volcanism.

## [EAS 4600 Late Quaternary Paleoecology (also ARKEO 4600) (PBS)

Fall. 4 credits. Offered alternate years; next offered 2011-2012. M. Goman.
Explores topics in Late Quaternary
paleoecology. Broadly divides into sections:
(1) lectures that cover a variety of topics; (2) field- and laboratory-based research.]

## [EAS 4610 Paleoclimate: Since the Last

 Ice Age (PBS)Fall. 3 credits. Prerequisites: EAS 2200 or permission of instructor. Offered alternate years; next offered 2011-2012. M. Goman This course examines changes and variability in climate for the last 21,000 years.]

EAS 4620 Marine Ecology (also BIOEE 4620) (PBS)

Fall. 3 credits. Limited to 75 students. Prerequisite: BIOEE/BIOG 1610. Offered alternate years. C. D. Harvell and C. H. Greene.

For description, see BIOEE 4620.

## EAS 4700 Advanced Weather Forecasting and Analysis (PBS)

Spring. 3 credits. Prerequisites: EAS 3520 and 4510. M. W. Wysocki.
Applied course focusing on weather
forecasting and analysis techniques for various regions around the world. Lectures emphasize the application of student's knowledge of atmospheric dynamics, thermodynamics, and computer-data analysis to forecast the development and movement of multiscale weather systems. Students participate in weekly forecast discussions; write daily forecasts that include a synoptic discussion, quantitative precipitation forecasts, and severe weather outlook for the forecast region; and lead class discussion on assigned readings.

## EAS 4710 Intro to Groundwater (also

 BEE 4710) (PBS)Spring. 3 credits. Prerequisite: MATH 2930 and fluid mechanics or hydrology course. Offered alternate years. L. Cathles and T. Steenhuis.

Intermediate-level study of aquifer geology, groundwater flow, and related design factors. Includes description and properties of natural aquifers, groundwater hydraulics, soil water, and solute transport.

## EAS 4750 Special Topics in Oceanography

Fall, spring, summer. 2-6 credits, variable. Prerequisites: one semester of oceanography and permission of instructor. Fall, spring:
C. H. Greene; summer: B. C. Monger. Undergraduate instruction and participation in advanced areas of oceanographic research. Topics change from semester to semester. Contact instructor for further information.
[EAS 4760 Sedimentary Basins (PBS)
Spring. 3 credits. Prerequisite: EAS 3010 or permission of instructor. Offered alternate years; next offered 2011-2012. T. E. Jordan. The large-scale physical characteristics of sedimentary basins, which host fossil fuels and groundwater, and can potentially store $\mathrm{CO}_{2}$ are explored. Principles of the mechanics that controls subsidence, tectonic causes of basins, and analysis methods are treated.]

## EAS 4780 Stratigraphy (PBS)

Fall. 3 credits. Prerequisite: EAS 3010 or permission of instructor. Offered alternate years. T. E. Jordan.
Approaches to study of ages of and genetic relations among sedimentary rocks are treated, including techniques and applications of sequence stratigraphy.

## EAS 4790 Paleobiology (also BIOEE 4790) (PBS)

Spring. 4 credits. Prerequisites: two majorslevel biology courses and either BIOEE 2740 or 3730 or EAS 3010, or permission of instructor. W. Allmon.
Surveys the major groups of organisms and their evolutionary histories. Intended to fill out the biological backgrounds of Earth and atmospheric science students concerning the nature and significance of the fossil record for their respective studies.

EAS 4800 Our Changing Atmosphere: Global Change and Atmospheric Chemistry (also BEE 4800) (PBS)
Fall. 3 credits. Prerequisites: CHEM 2090, MATH 1920, PHYS 1112, or equivalent, or permission of instructor. S-U or letter grades. P. G. Hess.

## For description, see BEE 4800.

[EAS 4830 Land, Water, Agriculture, and Environment (also CSS 4830) (PBS)
Fall. 3 credits. Offered alternate years; next offered 2011-2012. H. van Es and
S. J. Riha.

For description, see CSS 4830.]

## EAS 4840 Inverse Methods in the Natural Sciences (PBS)

Fall. 3 credits. Prerequisite: MATH 2940. D. Hysell.

An exploration of solution methods for inverse problems with examples taken from geophysics and related fields, with particular attention to making inferences from inaccurate, incomplete, or inconsistent physical data. Applications include medical and seismic tomography, earthquake location, image processing, and radio/radar imaging. Linear algebra (including condition numbers) and probability and statistics (including error analysis, Bayes theorem, Gibbs distribution, and Markov chains) will be reviewed. Methods to be covered include nonlinear least-squares, maximum likelihood methods, and local and global optimization methods, including simulated annealing and genetic algorithms.

## EAS 4850 Climate Information and

 Management (PBS)Spring. 3 credits. Prerequisites: statistics and at least one physical science or calculus course. S. Riha, M. W. Wysocki.
People mitigate climate impacts, use climate as a resource, and prepare for climate hazards, including floods, freezes, high winds, heat waves and droughts. In this course, you will learn how to integrate climate information with other decision support tools to adapt, mitigate and respond to climate variability and change.

## EAS 4870 Introduction to Radar Remote

 Sensing (also ECE 4870) (PBS)Spring. 3 credits. Prerequisite: PHYS 2208
or 2213 or equivalent, or permission of instructor. D. L. Hysell.
Fundamentals of radar, antennas, and remote sensing. Exposes students to the principles underlying the analysis and design of antennas used for communication and for radar-related applications. Students also encounter both a mathematical and a practical description of how radars function, how their performance can be optimized for different applications, and how signals acquired by them can be processed. The objective is to familiarize students with a wide variety of radars rather than turn them into practicing radar engineers. Each topic is developed from basic principles so students with a wide variety of backgrounds are able to take the course. Emphasizes radar applications in geophysics, meteorology and atmospheric sciences, and astronomy and space sciences. Gives special attention to radar remote sensing of the Earth from spacecraft.

## EAS 4850 Climate Information and Management (PBS)

Spring. 3 credits. Prerequisites: statistics
and at least one physical science or calculus course. S. Riha, M. W. Wysocki.

People mitigate climate impacts, use climate as a resource, and prepare for climate hazards, including floods, freezes, high winds, heat waves and droughts. In this course, you will learn how to integrate climate information with other decision support tools to adapt, mitigate and respond to climate variability and change.

## EAS 4880 Global Geophysics (PBS)

Fall. 3 credits. Prerequisites: MATH 1920 (or 1120) and PHYS 2208 or 2213. EAS 3040 recommended. M. Pritchard and R. Lohman.

Covers global tectonics and the deep structure of the solid Earth as revealed by investigations of earthquakes, earthquake waves, the Earth's gravitational and magnetic fields, and heat flow.

EAS 4910-4920 Undergraduate Research Fall, spring. 1-4 credits. Students must complete form at 2124 Snee Hall. Staff. (N. Mahowald, coordinator).

Introduction to the techniques and philosophy of research in the earth sciences and an opportunity for undergraduates to participate in current faculty research projects. Topics chosen in consultation with, and guided by, a staff member. A short written report is required, and outstanding projects are prepared for publication.

## EAS 4940 Special Topics in Atmospheric Science (undergraduate level)

Fall, spring. 8 credits max. S-U or letter grades. Staff.
The department teaches "trial" courses under this number. Offerings vary by semester and are advertised by the department before the beginning of the semester. The same course is not offered more than twice.

## EAS 4960 Internship Experience

Fall, spring. 1-2 credits. Prerequisites: EAS
3400; enrollment in EES Semester in
Hawaii. S-U grades only. A. Moore. During the last three and a half weeks of the semester students carry out a service learning project with a local NGO, environmental business, government agency, research lab, or educational facility. Projects are carefully designed with the student, sponsoring agency, and faculty member. A final report is required.

## EAS 4970 Individual Study in

 Atmospheric ScienceFall or spring. 1-6 credits. S-U grades only. Students must register using independent study form. Staff.
Topics are arranged at the beginning of the semester for individual study or for group discussions.

## EAS 4980 Teaching Experience in Earth

 and Atmospheric SciencesFall, spring. 1-4 credits. S-U grades only. Staff.
The student assists in teaching an EAS course appropriate to his or her previous training. The student meets with a discussion or laboratory section, prepares course materials, grades assignments, and regularly discusses course objectives and teaching techniques with the faculty member in charge of the course.

## EAS 4990 Undergraduate Research in Atmospheric Science

Fall or spring. Credit TBA. S-U grades
only. Students must register using
independent study form. Staff.
Independent research on current problems in atmospheric science.

## EAS 5000 Design Project in Geohydrology

Fall, spring; may continue over two or more semesters. 3-12 credits. Alternative to industrial project for M.Eng. students choosing geohydrology option. L. Cathles.

## EAS 5010 Fundamentals of Energy and Mineral Resources

Fall. 3 credits. Prerequisites: introductory college-level geology and basic physics and chemistry, or permission of instructor. Co-meets with EAS 4010. L. Cathles.
Students enrolled in the graduate-level version of this course will be expected to complete and present a substantial class project to be negotiated with the instructor. For full course description, see EAS 4010.

## EAS 5011 Evolution of the Earth System

Fall. 4 credits. Prerequisites: EAS 2200, one calculus course (either MATH 1110 or 1910), one course in chemistry (college or high school), or permission of instructor. Two field trips, either Sat or Sun. Co-meets with EAS 3010. T. Jordan, S. Riha, and

> W. Allmon.

Students enrolled in the graduate-level version of this course will be required to complete an additional project. For full course description, see EAS 3010.

## EAS 5020 Case Histories in Groundwater Analysis

Spring. 4 credits. L. M. Cathles.
Groundwater flow in a specific area, such as a proposed nuclear-waste disposal site, is analyzed in depth. Geological and resource data on the area are presented early in the course. Then the material is analyzed by students working as an engineering analysis team. Each student makes a weekly progress report and writes part of a final report. Results are presented in a half-day seminar at the end of term.

## EAS 5041 Geodynamics

Spring. 3 credits. Prerequisites: calculus and calculus-based physics courses or permission of instructor. Offered alternate
years. Co-meets with EAS 4040. J. Phipps

> Morgan.

Students enrolled in the graduate-level version of this course will be required to complete a computational lab. For full course description, see EAS 4040.

## [EAS 5050 Fluid Dynamics in the Earth Sciences

Spring. 3 credits. Prerequisites: MATH
through 2940, PHYS through 2208 or 2214 or permission of instructor. Offered
alternate years; next offered 2011-2012.
L. Cathles and M. Wysocki.

The Earth system provides fascinating examples of fluid dynamics phenomena that are also of societal importance. Fundamentals of fluid dynamics and earth science are covered.]

## EAS 5051 Climate Dynamics

Fall. 3 credits. Prerequisites: two semesters of calculus and one semester of physics.
Co-meets with EAS 3050. N. Mahowald. Students enrolled in the graduate-level version of this course will be required to complete an additional project. For full course description,

## see EAS 3050.

## EAS 5110 Earth System Interactions

Fall. 1 credit (S-U grades) or 2 credits ( $\mathrm{w} /$ paper, letter grades). Prerequisite:
permission of instructor. J. L. Cisne.

New ways of conceptualizing, characterizing, and measuring phenomena can be as important as new instruments or empirical discoveries in opening new areas to exploration or established ones to more rigorous investigation. This seminar aims to prepare seniors and beginning graduate students for independent research on Earth systems by analyzing examples ranging from epoch-making classics to work now appearing in the literature.

## [EAS 5220 Advanced Structural

 Geology IFall. 3 credits. Prerequisites: EAS 4260 and permission of instructor. Offered alternate years; next offered 2011-2012.
R. W. Allmendinger and C. Andronicos.

Stress-strain theory and application. Advanced techniques of structural analysis.]

## [EAS 5240 Advanced Structural Geology II

Fall. 3 credits. Prerequisites: EAS 4260 and permission of instructor. Offered alternate years; next offered 2011-2012.
R. W. Allmendinger.

Geometry, kinematics, and mechanics of structural provinces.]

## EAS 5350 Statistical Methods in

 Meteorology and ClimatologyFall. 3 credits. Prerequisites: one
introductory course each in statistics (e.g.,
AEM 2100) and calculus. Co-meets with
EAS 4350. D. S. Wilks.
For full course description, see EAS 4350.

## [EAS 5500 Dynamics of Marine Ecosystems

Fall. 3 credits. Prerequisites: one year of calculus and one semester of oceanography (i.e., BIOEE/EAS 1540) or permission of instructor. Offered alternate years; next offered 2011-2012. Co-meets with BIOEE/EAS 3500. C. H. Greene and R. W. Howarth.

Students enrolled in the graduate-level version of this course will be required to complete an additional project. For full course description, see EAS 3500.]

## [EAS 5530 Advanced Petrology

Fall. 3 credits. Prerequisite: EAS 4540 or permission of instructor. Offered alternate years; next offered 2011-2012. R. W. Kay. Currently popular frontier topics in petrology and geochemistry, for example crustal delamination, subduction erosion, slab melting, and the causes of mantle heterogeneity.]

## [EAS 5540 Advanced Mineralogy

Spring. 3 credits. Prerequisites: EAS 4530 or permission of instructor. Offered alternate years; next offered 2011-2012. S. Mahlburg Kay.
Advanced crystallography and crystal chemistry of minerals and methods of their study. Intended to follow EAS 4530 or equivalent. Includes an individual research project.]

## EAS 5620 Marine Ecology

Fall. 3 credits. Limited to 75 students. Prerequisite: BIOEE/BIOG 1610. Offered
alternate years. Co-meets with BIOEE/EAS 4620. C. D. Harvell and C. H. Greene. Students enrolled in the graduate-level version of this course will be required to complete an additional project. For full course description, see BIOEE 4620.

## EAS 5750 Planetary Atmospheres (also

 ASTRO 6575Fall. 4 credits. Prerequisites: undergraduate physics, vector calculus. Offered alternate years. P. Gierasch.
For description, see ASTRO 6575.

## [EAS 5770 Planetary Surface Processes

 (also ASTRO 6577)Spring. 3 or 4 credits. Offered alternate years; next offered 2011-2012. J. Bell.]

## [EAS 5780 Planet Formation and

 Evolution (also ASTRO 6578)Fall. 4 credits. Prerequisites: familiarity with elementary physics and math or permission of instructor. Offered alternate years; next offered 2011-2012. J. L. Margot and M. Pritchard.
For description, see ASTRO 6578.]

## EAS 5840 Inverse Methods in the Natural

 SciencesFall. 3 credits. Prerequisite: MATH 2940.
Co-meets with EAS 4840. D. L. Hysell.
Students enrolled in the graduate-level version of this course will be expected to complete and present a substantial class project to be negotiated with the instructor. For full course description, see EAS 4840.
[EAS 5880 Advanced Methods in Radar (also ECE 5890)
Fall. 3 credits. Prerequisite: EAS 4870 or permission of instructor. Next offered 2011-2012. D. L. Hysell.
Addresses the theory and practice of advanced radar techniques used for remote sensing, with emphasis placed on studying the upper atmosphere and ionosphere.]

## EAS 6280 Geology of Orogenic Belts

Spring. 3 credits. Prerequisite: permission
of instructor. S. Mahlburg Kay.
Seminar course in which students study specific geologic topics of an orogenic belt selected for study during the semester.

## EAS 6410 Analysis of Biogeochemical

 SystemsSpring. 2 credits. Prerequisite: MATH 2930
or permission of instructor. Offered
alternate years. L. A. Derry.
Dynamics of biogeochemical systems; kinetic treatment of biogeochemical cycles; box models, residence time, response time; analytical and numerical solutions of model systems. Transport problems, including diffusion-reaction-advection models in soils, streams, and organisms.

## EAS 6480 Air Quality and Atmospheric

 Chemistry (also MAE 6480)Fall. 3 credits. Prerequisites: freshman chemistry, fluid mechanics or equivalent, and thermodynamics. S-U or letter grades. K. M. Zhang.

For description, see MAE 6480.

## EAS 6520 Advanced Atmospheric Dynamics

Spring. 3 credits. Prerequisites: EAS 3410 and 3420 or equivalent. Offered alternate years. S. J. Colucci.
Covers quasigeostrophic theory, atmospheric waves, hydrodynamics instability, general circulation of the atmosphere, and other topics selected from among numerical weather prediction and tropical mesoscale, and middle atmosphere processes according to student interest.

EAS 6560 Isotope Geochemistry Spring 3 credits. Open to undergraduates. Prerequisite: EAS 4550 or permission of instructor. Offered alternate years. W. M. White.

Radiogenic and stable isotope geochemistry applied to geological problems such as evolution of the crust and climate. Formation of the elements, geochronology, and cosmochronology.
EAS 6660 Applied Multivariate Statistics Spring. 3 credits. Prerequisites: multivariate calculus, matrix algebra, and two statistics courses. Offered alternate years.
D. S. Wilks.

Statistical techniques for multivariable data.
Topics include multivariate exploratory data
analysis, the multivariate normal distribution, parametric and non-parametric inference about multivariate means, principal component analysis, canonical correlation analysis, discriminant analysis, and cluster analysis. Emphasizes geophysical applications, using primarily atmospheric and
oceanographic data as examples, but the development is general enough to be of broader interest.

## EAS 6750 Modeling the Soil-Plant-

 Atmosphere System (also CSS 6750)Spring. 3 credits. Prerequisite: CSS/EAS 4830 or equivalent. S. J. Riha.
Introduction to the structure and use of soil-plant-atmosphere models. Topics include modeling plant physiology, morphology, and development; potential crop production and crop production limited by moisture and nutrient availability; plant-plant competition; and land surface processes as well as model data requirements, validation, and scale. Discusses use of soil-plant-atmosphere models for teaching, research, extension, and policy

## formation.

## EAS 6920 Special Topics in Atmospheric

 ScienceFall or spring. 1-6 credits. S-U or letter grades. Staff.
Study of topics in atmospheric science that are more specialized or different from other courses. Special topics covered depend on staff and student interests.

## EAS 6930 Special Topics in Geological

 SciencesFall or spring. 1-3 credits, variable. S-U or letter grades. Staff.
Study of specialized advanced topics in the Earth sciences through readings from the scientific literature, seminars, and discussions.

## EAS 7000-7990 Seminars and Special Work

Fall, spring. 1-3 credits. Prerequisite:
permission of instructor. Staff.
Advanced work on original investigations in earth and atmospheric sciences. Topics change from semester to semester. Students should contact appropriate professor for more information.

## EAS 7010-7020 Thesis Research

7010, fall; 7020, spring. 1-15 credits,
variable. Staff.

## EAS 7110 Upper Atmospheric and Space

 PhysicsFall or spring. 1-6 credits. Seminar course. D. L. Hysell.

## EAS 7220 Advanced Topics in Geodetic Monitoring and Modeling <br> R. W. Allmendinger.

## EAS 7310 Advanced Topics in Geodetic Monitoring and Modeling

 M. Pritchard.EAS 7330 Advanced Topics in Geodynamics
Spring. J. Phipps Morgan.
EAS 7500 Satellite Remote Sensing in Biological Oceanography
Summer. 3 credits. B. C. Monger.
The intensive summer training course meets
from $9 \mathrm{a} . \mathrm{m}$. to $5 \mathrm{p} . \mathrm{m}$. for a two-week period.
The goal of the course is to teach participants the skills needed to work independently to acquire data sets derived from a variety of satellite sensors (SeaWiFS, MODIS, AVHRR, SeaWinds and Topex-Poseidon) and to merge these data sets to examine biological response to changes in the physical environment. Course time is split equally between lectures and computer lab work. Lectures cover the fundamentals of bio-optics, pigment algorithms, primary production algorithms and the underlying physical principals leading to the measurement of sea surface temperature, ocean wind speed and ocean topography. Computer labs focus on developing the IDL (Research Systems, Inc.) programming skills needed to process, analyze and visualize satellite image data. See the course syllabus for more details on the topics covered in this course.

## EAS 7510 Petrology and Geochemistry

 R. W. Kay.EAS 7550 Advanced Topics in Tectonics and Geochemistry
Fall. 3 credits. J. Phipps Morgan.
EAS 7570 Current Research in Petrology and Geochemistry
S. Mahlburg Kay.

EAS 7620 Advanced Topics in Paleobiology
W. D. Allmon.

## EAS 7650 Topics in Paleoecology

Fall. 1 credit. S-U grades only. G. Dietl.

## EAS 7710 Advanced Topics in

 Sedimentology and StratigraphyT. E. Jordan.

## EAS 7730 Paleobiology

J. L. Cisne.

EAS 7750 Advanced Topics in Oceanography
C. H. Greene.

## EAS 7800 Earthquake Record Reading

 Fall. R. Lohman.EAS 7810 Advanced Topics in Seismic Imaging
L. D. Brown.

EAS 7930 Andes-Himalaya Seminar S. Mahlburg Kay, R. W. Allmendinger, M. Pritchard, and T. E. Jordan.

## EAS 7950 Low-Temperature Geochemistry L. A. Derry.

EAS 7960 Geochemistry of the Solid Earth
W. M. White.

## EAS 7970 Multiphase Subsurface Fluid Flow: Modeling and Tracers Spring. L. M. Cathles.

## EAS 7990 Soil, Water, and Geology Seminar

Spring. L. M. Cathles and T. S. Steenhuis.

## EAS 8500 Master's-Level Thesis

 Research in Atmospheric ScienceFall or spring. Credit TBA. S-U grades only. Graduate faculty.
Thesis research for atmospheric science master's students.

## EAS 9500 Graduate-Level Dissertation

 Research in Atmospheric ScienceFall or spring. Credit TBA. S-U or letter grades. Graduate faculty.
Dissertation research for atmospheric science Ph.D. students only before "A" exam has been passed.

## EAS 9510 Doctoral-Level Dissertation

 Research in Atmospheric ScienceFall or spring. Credit TBA. S-U or letter grades. Graduate faculty.
Dissertation research for atmospheric science Ph.D. students after "A" exam has been passed.

## ECONOMICS

D. Easley, chair; T. Mitra, director of graduate studies; T. Lyons, director of undergraduate studies; T. Bar, L. Barseghyan, D. Benjamin, J. Berry, G. Besharov, L. Blume, A. BodohCreed, R. Burkhauser, S. Coate, D. Easley, R. Ehrenberg, L. Falkson, G. Fields,
A. Guerdjikova, G. Hay, Y. Hong, R. Kanbur,
N. Kiefer, T. Lyons, M. Majumdar, K. Mertens,
T. Mitra, F. Molinari, T. O'Donoghue, U. Possen,
A. Razin, D. Sahn, K. Shell, J. Stoye,
V. Tsyrennikov, H. Y. Wan, Jr., J. Wissink. Emeritus: T. E. Davis, W. Isard, A. Kahn, P. D. McClelland, R. E. Schuler, E. Thorbecke, J. Vanek

The study of economics provides an understanding of the way economies operate and an insight into public issues. The department offers a broad range of undergraduate courses in such fields as money and banking; international and comparative economics; econometrics; theory; history; growth and development; and the organization, performance, and control of industry.

## The Major

## Prerequisites

ECON 1110 and 1120 and MATH 1110 (or equivalents) are required, all with grades of $C$ or better; MATH 1120 (or equivalent) is recommended.
ECON 3010 with a grade of $C$ or better substitutes for 1110; ECON 3020 with a grade of C or better substitutes for 1120 .

## Requirements

Eight courses listed by the Department of Economics at the 3000 level or above, or approved by the student's major advisor, all with grades of C - or better. (S-U grade option is not allowed.)
These eight courses must include:

1. ECON 3130 and 3140
2. ECON 3210, or ECON 3190 and 3200 (ECON 3130, 3140, 3210 or 3190, 3200 should be completed before senior year.)
3. at least three courses from the following: ECON 3180, 3200, 3220-3990

ECON 3010 with a grade of B or better substitutes for both 1110 and 3130; ECON 3020 with a grade of B or better substitutes for both 1120 and 3140 .

If ECON 3210 is applied toward the major, neither 3190 nor 3200 can be applied.
ECON 4980 and 4990 cannot be counted toward the eight-course requirement.

If ECON 3130 is applied to the major, ECON 3010 cannot be.

If ECON 3140 is applied to the major, ECON 3020 cannot be.
If both ECON 3670 and ECON 3680 are taken, only one can be applied to the major.

## Honors Program

An honors program is currently being offered. Students should consult the director of undergraduate studies before May of their junior year for more information.

## Recommended Courses

Students planning graduate work in economics should select ECON 3190-3200 rather than 3210 and should consider including some of the following courses in their majors:
ECON 3670 (Game Theoretic Methods) or ECON 3680 (Game Theory)
ECON 4160 (Intertemporal Economics)

## ECON 4190 (Economic Decisions under

 Uncertainty)Students planning careers in business management should consider including some of the following courses in their majors:
ECON 3330 (Financial Economics)
ECON 3510 or 3520 (Industrial Organization)
ECON 3580 (Behavioral Economics)
ECON 3610-3620 (International Trade and Finance)

ECON 4430 (Compensation, Incentives, and Productivity)
In addition to completing the economics major, such students should also consider courses in accounting and subjects such as finance, marketing, entrepreneurship, business administration, and business law. Courses in these subjects are offered by the Department of Applied Economics and Management, the School of Hotel Administration, and the Johnson Graduate School of Management.
Students planning to attend law school should consider including some of the following courses in their majors:

ECON 3510 or 3520 (Industrial Organization)
ECON 3610-3620 (International Trade and Finance)
ECON 4040 (Economics and the Law)
In addition to completing the economics major, such students should inquire at Career Services, College of Arts and Sciences, concerning recommended courses offered by other departments.

In regard to ECON 1110, 3010, and 3130, college credit applies as follows:
a. If 3010 is taken and a grade of B or better is earned, it alone can only receive college credit.
b. If 3010 is not taken, either or both 1110 and 3130 can receive college credit.
c. If 3010 is taken and a grade of less than B is earned, only 3010 and 3130 can receive college credit.
In regard to ECON 1120, 3020, and 3140, college credit applies as follows:
a. If 3020 is taken and a grade of B or better is earned, it alone can only receive college credit.
b. If 3020 is not taken, either or both 1120 and 3140 can receive college credit.
c. If 3020 is taken and a grade of less than B is earned, only 3020 and 3140 can receive college credit.

## Courses

ECON 1001 Academic Support for ECON 1110
Fall, spring. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning, Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and
Sciences, and Industrial and Labor Relations.
Reviews lecture material presented in ECON
1110 lectures; provides problem-solving
techniques, study tips, and additional problems to prepare for exams and problem sets; provides additional time for questions and discussion of concepts. Provides additional instruction for students who need reinforcement.

## ECON 1002 Academic Support for ECON

 1120Fall, spring. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning,
Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations.
Reviews lecture material presented in ECON 1120 lectures; provides problem-solving techniques, study tips, and additional problems to prepare for exams and problem sets; provides additional time for questions and discussion of concepts. Provides additional instruction for students who need reinforcement.

## ECON 1011 PSP Economics

Summer only. 1 transcript credit (will appear on transcript, does not count toward graduation.) Counts toward semester's good standing for students in Colleges of Architecture, Art, and Planning, Engineering, Hotel Administration, and Human Ecology. Does NOT count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations.

This course is designed to prepare students for ECON 1110 and ECON 1120. Students are introduced to the economic way of thinking and to analyzing social problems. The objective of the course is to introduce students to the core principles in microeconomics and macroeconomics. The goal of the course is to improve the level of critical thinking and to improve communication skills. Topics include the explanation and evaluation of how the price system operates in determining what goods are produced, how goods are produced, who receives income, unemployment, inflation, balance of payments, and government deficits.

## ECON 1110 Introductory Microeconomics

 (SBA-AS)Fall, spring, winter, and summer. 3 credits ECON 1110 is not a prerequisite for 1120. Students may not receive credit for both ECON 1110 and HADM 1141. Students who take ECON 1110 and ECON 3130 may not receive credit for ECON 3010 or PAM 2000.
Explanation and evaluation of how the price system operates in determining what goods are produced, how goods are produced, who receives income, and how the price system is modified and influenced by private organizations and government policy.

## ECON 1120 Introductory

## Macroeconomics (SBA-AS)

Fall, spring, winter, and summer. 3 credits. ECON 1110 is not a prerequisite for 1120 .
Students who take ECON 1120 and 3140 may not receive credit for ECON 3020.

Analysis of aggregate economic activity in relation to the level, stability, and growth of national income. Topics may include the determination and effects of unemployment, inflation, balance of payments, deficits, and economic development, and how these may be influenced by monetary, fiscal, and other policies.

## ECON 2040 Networks (also CS 2850, INFO 2040, SOC 2090) (SBA-AS)

Fall. 4 credits.
This interdisciplinary course examines network structures and how they matter in everyday life. The course examines how each of the computing, economic, sociological and natural worlds are connected and how the structure of these connections affects each of these worlds. Tools of graph theory and game theory are taught and then used to analyze networks. Topics covered include the web, the small world phenomenon, markets, neural networks, contagion, search and the evolution of networks.

## ECON 2300 International Trade and

 Finance (SBA-AS)Cannot be applied to ECON major. For description, see AEM 2300.

## ECON 3010 Microeconomics (SBA-AS)

Fall. 4 credits. Prerequisite: calculus.
Students who take ECON 1110 and ECON 3130 may not receive credit for ECON 3010 or PAM 2000.
Intended for students with strong analytical skills who have not taken ECON 1110, 1120. May be used to replace both ECON 1110 and 3130 (may replace 3130 only with grade of B or better). Covers the topics taught in ECON 1110 and 3130. An introduction to the theory of consumer and producer behavior and to the functioning of the price system.

ECON 3020 Macroeconomics (SBA-AS)
Spring. 4 credits. May be used to replace both ECON 1120 and 3140 (may replace 3140 only with grade of B or better). Students who take ECON 1120 and 3140 may not receive credit for ECON 3020. Prerequisite: calculus.

Intended for students with strong analytical skills who have not taken ECON 1110, 1120. Covers the topics taught in ECON 1120 and 3140. An introduction to the theory of national income determination, unemployment, growth, and inflation.

## ECON 3130 Intermediate Microeconomic

 Theory (SBA-AS)Fall, spring. 4 credits. Students who take ECON 1110 and ECON 3130 may not receive credit for ECON 3010 or PAM
2000. Prerequisites: ECON 1110-1120 and calculus.
The pricing processes in a private enterprise economy are analyzed under varying competitive conditions, and their role in the allocation of resources and the functional distribution of national income is considered.

## ECON 3140 Intermediate Macroeconomic Theory (SBA-AS)

Fall, spring, and summer. 4 credits.
Students who take ECON 1120 and
3140 may not receive credit for ECON
3020. Prerequisites: ECON 1110-1120 and calculus.
Introduces the theory of national income and determination and economic growth in alternative models of the national economy. Examines the interaction and relation of these models to empirical aggregate economic data.

## ECON 3190 Introduction to Statistics

 and Probability (MQR)Fall and spring. 4 credits. Students who take ECON 3190 may not receive credit for MATH 4710 or BTRY 4080.
Students who take ECON 3190 may not receive credit for MATH 4720 or
BTRY 4090. Prerequisites: ECON 11101120 and MATH 1110-1120.
Provides an introduction to statistical inference and to principles of probability. It includes descriptive statistics, principles of probability, discrete and continuous distributions, and hypothesis testing (of sample means,
proportions, variance). Regression analysis and correlation are introduced.

## ECON 3200 Introduction to Econometrics (MQR)

Fall and spring. 4 credits. Students may not receive credit for both ECON 3200
and ECON 3210. Prerequisites: ECON
1110-1120, 3190, or equivalent.
Introduction to the theory and application of econometric techniques. How econometric models are formulated, estimated, used to test hypotheses, and used to forecast; understanding economists' results in studies using regression model, multiple regression model, and introduction to simultaneous equation models.
ECON 3210 Applied Econometrics (MQR) Fall, spring, and summer. 4 credits. Students may not receive credit for both ECON 3200 and ECON 3210. Prerequisites: ECON 1110-1120 and calculus.
Provides an introduction to statistical methods and principles of probability. Topics include analysis of data, probability concepts and distributions, estimation and hypothesis testing, regression, correlation and time series analysis.

Applications from economics are used to illustrate the methods covered in the course.

## [ECON 3230 American Economic History

 (also AMST 3230) \# (SBA-AS)Fall. 4 credits. Prerequisite: ECON 11101120 or equivalent. Next offered 2011-2012
Surveys problems in American economic history from the first settlements to early industrialization.]
ECON 3240 American Economic History \# (SBA-AS)
Fall. 4 credits. Prerequisites: ECON 11101120 or equivalent.
Surveys problems in American economic
history from the Civil War to World War I.
ECON 3310 Money and Credit (SBA-AS)
Fall. 4 credits. Prerequisites: ECON 11101120 and 3140.
A systematic treatment of the determinants of the money supply and the volume of credit. Economic analysis of credit markets and financial institutions in the United States.

## ECON 3330 Financial Economics

## (SBA-AS)

Fall. 4 credits. Students who take ECON 3330 may not receive credit for AEM 3240 or HADM 2222. Prerequisites: ECON 3130 and 3140.
Examines the theory and decision making in the presence of uncertainty and the practical aspects of particular asset markets.

## ECON 3340 Banks

Spring. 4 credits. Prerequisites: ECON 3200, 3210 or an equivalent statistics background (probability, probability distributions, expectations, regression).
Covers bank management and supervision, with special reference to international supervisory agreements (Basel II) and U.S. Federal guidance. Sources of risk are considered-market, credit, operational, and others. Quantitative methods for modeling and measuring risk are covered.

## ECON 3350 Public Finance: The

## (SBA-AS)

Fall. 4 credits. Prerequisites: ECON 11101120 and 3130, or equivalent, and one semester of calculus.
Analyzes the role of government in a free market economy. Topics include public goods, market failures, allocation mechanisms, optimal taxation, effects of taxation, and benefit-cost analysis. Current topics of an applied nature vary from semester to semester.

## ECON 3360 Public Finance: Resource

Allocation and Fiscal Policy (SBA-AS) Spring. 4 credits. Prerequisites: ECON 11101120, 3130 or equivalent and one semester of calculus. Covers the revenue side of public finance and special topics. Subjects include the federal debt, the budget, and government regulation and transfers, as well as problems like local public goods, health care, education, the hierarchy of governmental structure, plus a variety of applied problems.

## ECON 3410 Labor Market Analysis (SBA-AS)

For description, see ILRLE 4400.

[^1]
## ECON 3470 Economics of Education

 For description, see ILRLE 6470.
## ECON 3510 Industrial Organization I (SBA-AS)

Fall. 4 credits. Students may not receive credit for both ECON 3510 and AEM
4320. Prerequisite: ECON 3130 or equivalent.
Examines markets with only a few firms (i.e., oligopolies), and the primary focus is the strategic interactions between firms. Topics include static competition in oligopolies, cartels and other forms of collusive behavior, competition between firms producing differentiated products, entry behavior, RD behavior, and government interventions in oligopoly industries (e.g., antitrust laws).

## ECON 3520 Industrial Organization II (SBA-AS)

Spring. 4 credits. Prerequisite: ECON 3130 or equivalent.
Focuses primarily on the pricing decisions of firms. The course does not consider the strategic response of other firms to these pricing decisions. The pricing decisions include price discrimination, commodity bundling, pricing a product line and pricing a durable good. In addition to pricing decisions, the course considers topics associated with private information such as adverse selection, signaling, and moral hazard. Numerous theoretical models are presented and empirical results are discussed.

## ECON 3530 Organization of the Firm (SBA-AS)

Spring. 4 credits. Prerequisite: ECON 3130. This course analyzes theories of the firm. We will review the neoclassical theory of the firm and discuss its strengths and weaknesses in explaining their organization and features. We will then explore agency, peer effect, transaction cost, and incomplete contracting theories that explain institutional features of firms.

## ECON 3580 Behavioral Economics (SBA-AS)

Spring. 4 credits. Prerequisite: ECON 3130. Introduces students to behavioral economics, an emerging subfield of economics that incorporates insights from psychology and other social sciences into economics. Examines evidence on how human behavior systematically departs from the standard assumptions of economics, and also investigates attempts by behavioral economists to improve economic analyses.

## ECON 3590 Experiments and Games (MQR)

Spring. 4 credits. Prerequisite: ECON 3130. Game theory makes many assumptions and predictions about human strategic interaction. This course investigates the main empirical findings from experimental studies that test various aspects of game theory. Rationality and rational expectations assumptions are investigated by looking at experiments on dominance-solvable games, coordination, and social learning. Experiments on bargaining and public good games allow, in addition, to examine whether preferences are purely selfinterested. Along the way, alternative models of human decision behavior are introduced, such as level-k reasoning and learning theories. Several forms of experiments (laboratory, field, natural) and aspects of experimental design will be presented.

ECON 3610 International Trade Theory and Policy (SBA-AS)
Fall. 4 credits. Prerequisites: ECON 11101120 and 3130.
Surveys the sources of comparative advantage. Studies commercial policy and analyzes the welfare economics of trade between countries. Some attention is paid to the institutional aspects of the world trading system.

## ECON 3620 International Monetary Theory and Policy (SBA-AS)

Spring. 4 credits. Prerequisites: ECON 1110-1120 and 3140.
Surveys the determination of exchange rates and theories of balance of payments adjustments. Also explores open economy macroeconomics and analyzes some of the institutional details of foreign exchange markets, balance of payments accounting, and the international monetary system.

## [ECON 3670 Game Theoretic Methods

 (SBA-AS)Fall. 4 credits. Students may not receive credit for both ECON 3670 and ECON 3680. Prerequisites: ECON 1110 or equivalent. ECON 3670 is not a prerequisite for ECON 3680. Next offered 2012-2013.
Introduces students to the use of gametheoretic methods for the social sciences. This leads to an analysis of the social and political foundations of economics that prepares students to think strategically on social and economic matters and thus serves as a background for more advanced courses in economics, game theory, and related social sciences.]

## ECON 3680 Game Theory (MQR)

Spring. 4 credits. Students may not receive credit for both ECON 3670 and ECON 3680. Prerequisites: ECON 3130
and 3190. ECON 3670 is not a prerequisite for ECON 3680.
Studies mathematical models of conflict and cooperation in situations of uncertainty (about nature and about decision makers).

## ECON 3710 Economic Development

 (SBA-AS)Spring. 4 credits. Prerequisite: ECON 3130 or equivalent
Examines microeconomic issues in developing countries, with an emphasis on recent research in the field. Studies the theoretical and empirical aspects of current economic and policy questions. Topics include education, health and nutrition, insurance and credit, gender and family, agricultural contracts, and corruption.

## ECON 4040 Economics and the Law

 (SBA-AS)Spring. 4 credits. Prerequisite: ECON 1110. Examines, through the lens of economic analysis, of legal principles drawn from various branches of law, including contracts, torts, and property. Cases are assigned for class discussion; in addition, there are several writing assignments.
ECON 4080 Production Economics and Policy (SBA-AS)
For description, see AEM 6080.
ECON 4090 Environmental Economics (SBA-AS)
For description, see AEM 4510.

## ECON 4160 Intertemporal Economics

 (SBA-AS)Fall. 4 credits. Prerequisite: ECON 3130,
MATH 1120, and basic knowledge of real analysis.
Intended for advanced economics majors who are especially interested in economic theory. Topics include (1) review of the one good Ramsey model of optimal savings and accumulation; conditions for intertemporal efficiency in production; comparative dynamics and sensitivity analysis; (2) some earlier models of capital accumulation; the roles of present value and internal rate of return in guiding investment decisions; (3) growth, exhaustible resources; pollution and conservation: discussion of the trade-offs facing a society.

## ECON 4170 History of Economic Analysis

 \# (HA-AS)Spring. 4 credits. Prerequisites: ECON
1110-1120 or permission of instructor. Covers early writings in economics and their relationship to current economic analysis and policy issues. Examples include ancient and medieval philosophers on justice in exchange; mercantilist arguments for trade protection; early theories about the effect of monetary expansion (D. Hume); the role of the entrepreneur (Cantillon); and general competitive equilibrium (the Physiocrats). The most recent reading assignment in this course is Adam Smith's Wealth of Nations but the emphasis is on the relationship between the precursors of Adam Smith and his Wealth of Nations to modern economics analysis and current efforts to answer some of the questions raised in the early writing on economics.

## [ECON 4190 Economic Decisions under Uncertainty

Fall. 4 credits. Prerequisites: ECON 3130
and 3190. Next offered 2011-2012.
Provides an introduction to the theory of decision making under uncertainty with emphasis on economic applications of the theory.]

## ECON 4300 Policy Analysis: Welfare

 Theory, Agriculture, and Trade (SBA-AS)For description, see AEM 6300.
ECON 4340 Financial Economics, Derivatives, and Risk Management (SBA-AS)
Summer only. 4 credits. Prerequisite: ECON 3130.

Helps students understand, design, and price derivative contracts. Topics include pricing of forwards, options, and swaps; developing trading strategies with derivatives; using derivatives for financial risk management; and the importance of flexibility in various economic settings.

## ECON 4370 Economics of Health Policy

 For description, see PAM 4370
## ECON 4380 Economics of Public Health

 For description, see PAM 4380
## ECON 4410 Economics of Consumer Law

 For description, see PAM 3410.ECON 4430 Compensation, Incentives, and Productivity
For description, see ILRLE 4430.
ECON 4440 Evolution of Social Policy in Britain and America
For description, see ILRLE 4440.

## ECON 4450 Industrial Policy (SBA-AS)

Spring. 4 credits. Prerequisite: ECON 3130. Highlights of the course include (1) the role of the state in an industrial society; the drive for industrialization; the prevention of de-industrialization; the views of the Nobelists-Friedman, the Libertarian vs. North, the institutionist; the original intent of laissezfaire; (2) the major debates-the pros and cons of the Washington Consensus ("liberalization"); IMF and "conditionality"; market failure vs. government failure as roots for crises; (3) the East Asian episodes; Komiya on the Japanese MITI-early successes/recent problems; Linsu Kim about Korean policyare subsequent difficulties the necessary price for the early triumphs?; industrial policy without protectionism (the cases of Singapore and Pennan, Malaysia)—viable approaches under the WTO rules; (4) present
developments and implications; trade frictions (the export expansion of the PRC);
environmental concerns.

## ECON 4460 Economics of Social Security

 (SBA-AS)For description, see PAM 4460.

## ECON 4500 Resource Economics

(SBA-AS)
For description, see AEM 4500.
ECON 4540 China and India: Growth Miracle (also AEM 4540) @ (SBA-AS)
For description, see AEM 4540.
ECON 4550 Income Distribution (SBA-AS)
For description, see ILRLE 4410.

## ECON 4570 Women in the Economy (also

 FGSS 4460) (SBA-AS)For description, see ILRLE 4450.
ECON 4580 Topics in 20th-Century Economic History (SBA-AS)
For description, see ILRLE 4480.
ECON 4600 Economic Analysis of the Welfare State (SBA-AS)
For description, see ILRLE 6420.
ECON 4640 Economics of Agricultural Development
For description, see AEM 4640.
[ECON 4690 China's Economy under Mao and Deng (also CAPS 4690) @ (SBA-AS)
Spring. 4 credits. Prerequisite: ECON 11101120 or permission of instructor. Next offered 2011-2012.
Examines the development of the Chinese economy and the evolution of China's economic system between the early 1950 s and late 1990s.]

## ECON 4730 Economics of Export-Led

 Development @ (SBA-AS)Fall. 4 credits. Prerequisites: ECON 3130, 3140, or equivalent.
Examines the phenomenon of export-led development from both the theoretical and empirical points of view. Concentration is on experiences within the West Pacific Rim.
ECON 4740 Health, Poverty, and Inequity: A Global Perspective
For description, see NS 4570.
[ECON 4750 The Economy of India @ (SBA-AS)
Fall. 4 credits. Prerequisite: ECON 11101120 or equivalent background. Next offered 2011-2012.

Presents the major economics and development problems of contemporary India and examines the country's future economic prospects. The aim is, however, to discuss these problems in their proper historical perspectives. Hence, the course starts with a brief outline of the social and political history of India. It then turns to a more detailed account of the economic history of India in two stages.]

## ECON 4760 Decision Theory I (also COGST 4760, CS 5846, ECON 6760)

 (MQR)Fall. 4 credits.
Research on decision theory resides in a variety of disciplines including computer science, economics, game theory, philosophy, and psychology. This course attempts to integrate these various approaches. The course is taught jointly by faculty from Game Theory and Computer Science. The course covers several areas: (1) basic decision theory. This theory, sometimes known as "rational choice theory," is part of the foundation for the disciplines listed above. It applies to decisions made by individuals or by machines; (2) the limitations of and problems with this theory. Issues discussed here include decision theory paradoxes revealed by experiments, cognitive and knowledge limitations, and computational issues; (3) new research designed in response to these difficulties. Issues covered include alternative approaches to the foundations of decision theory, adaptive behavior and shaping the individual decisions by aggregate/evolutionary forces and more computationally based approaches.

## ECON 4770 Decision Theory II (also

 COGST 4770, CS 5847, ECON 6770) (MQR)Spring. 4 credits. Prerequisite: ECON 4760 or 6760 or CS 5846.
A continuation of ECON 4760.

## ECON 4980 Independent Study in

 EconomicsFall or spring. Variable credit. Independent study.

## ECON 4990 Honors Program

Fall and spring. 8 credits. Prerequisites: ECON 3130, 3140, 3120 (or 3190-3200) and at least two additional 3000-level ECON courses.
Students should consult the director of undergraduate studies for details. Admission is competitive. Interested students should apply to the program in the spring semester of their junior year.

## Graduate Courses and Seminars <br> ECON 6090 Microeconomic Theory I

 Fall. 4 credits.Topics in consumer and producer theory.
ECON 6100 Microeconomic Theory II Spring. 4 credits.
Topics in consumer and producer theory, equilibrium models and their application, externalities and public goods, intertemporal choice, simple dynamic models and resource depletion, choice under uncertainty.

## ECON 6110 Microeconomic Theory III

 Fall. 4 credits. Prerequisites: ECON 6090 and 6100 .This class is part of a three-semester sequence in microeconomic theory. It provides a rigorous underpinning of partial equilibrium competitive analysis and reviews theories of
noncompetitive markets, including Bertrand, Cournot, and monopolistic competition. It covers the classical sources of market failure (public goods, externalities, and natural monopoly) and discusses market failures stemming from informational asymmetries. It also provides an introduction to contract theory, bargaining theory, social choice theory, and theory of mechanism design.

## ECON 6130 Macroeconomics I

Fall. 4 credits.
Covers the following topics: static general equilibrium; intertemporal general equilibrium: infinitely lived agents models and overlapping generations models; welfare theorems; equivalence between sequential markets and Arrow-Debreu Markets; Ricardian proposition; Modigliani-Miller theorem; asset pricing; recursive competitive equilibrium; the Neoclassical Growth Model; calibration; and introduction to dynamic programming.

## ECON 6140 Macroeconomics II

Spring. 4 credits.
Covers the following topics: dynamic programming; stochastic growth; search models; cash-in-advance models; real business-cycle models; labor indivisibilities and lotteries; heterogeneous agents models; optimal fiscal and monetary policy; sustainable plans; and endogenous growth.

## ECON 6170 Intermediate Mathematical Economics I

Fall. 4 credits. Prerequisites: calculus II and intermediate linear algebra.
Covers selected topics in Matrix algebra (vector spaces, matrices, simultaneous linear equations, characteristic value problem), calculus of several variables (elementary real analysis, partial differentiation, convex analysis), classical optimization theory (unconstrained maximization, constrained maximization).

## ECON 6190 Econometrics I

Fall. 4 credits. Prerequisite: ECON 3190-
3200 or permission of instructor.
Gives the probabilistic and statistical background for meaningful application of econometric techniques. Topics include probability theory probability spaces, random variables, distributions, moments, transformations, conditional distributions, distribution theory and the multivariate normal distribution, convergence concepts, laws of large numbers, central limit theorems, Monte Carlo simulation; statistics: sample statistics, sufficiency, exponential families of distributions. Further topics in statistics are considered in ECON 6200.

## ECON 6200 Econometrics II

Spring. 4 credits. Prerequisite: ECON 6190. A continuation of ECON 6190 (Econometrics I) covering statistics: estimation theory, least squares methods, method of maximum likelihood, generalized method of moments, theory of hypothesis testing, asymptotic test theory, and nonnested hypothesis testing; and econometrics: the general linear model, generalized least squares, specification tests, instrumental variables, dynamic regression models, linear simultaneous equation models, nonlinear models, and applications.
ECON 6410 Health Economics I
For description, see PAM 6410.

## ECON 6480 Economic Analysis of the University <br> For description, see ILRLE 6480.

## ECON 6760 Decision Theory I (also COGST 4760, CS 5846, ECON 4760) <br> For description, see ECON 4760.

ECON 6770 Decision Theory II (also COGST 4770, CS 5847, ECON 4770)
For description, see ECON 4770.
ECON 6920 Health Economics II

## For description, see PAM 6920.

ECON 6990 Readings in Economics
Fall or spring. Variable credit.
Independent study.

## ECON 7030 Seminar in Peace Science

Fall. 4 credits.
Topics covered at an advanced level are: game theory, coalition theory, bargaining and negotiation processes, cooperative procedures, microbehavior models, macrosocial processes, and general systems analysis.

## ECON 7100 Stochastic Economics: Concepts and Techniques

Spring. 4 credits. Prerequisites: ECON 6090, 6100, 6130, 6140, 6190, and 6200. Reviews techniques that have been useful in developing stochastic models of economic behavior. Advanced graduate students contemplating work in economic theory and econometric theory gain exposure to current research.

## ECON 7170 Mathematical Economics

4 credits. Prerequisites: ECON 6090-6100
(or equivalent training in micro theory)
and MATH 4130-4140 (or equivalent
training in analysis).
The primary theme of this course is to explore the role of prices in achieving an efficient allocation of resources in dynamic economies. Some of the classical results on static equilibrium theory and welfare economics on attaining optimal allocation through decentralized organizations are examined through an axiomatic approach. Some basic issues on capital theory are also analyzed.

## [ECON 7180 Topics in Mathematical

 EconomicsSpring. 4 credits. Next offered 2011-2012.]

## ECON 7190 Advanced Topics in

 Econometrics IFall. 4 credits. Prerequisite: ECON 61906200 or permission of instructor. Covers advanced topics in econometrics, such as asymptotic estimation and test theory, robust estimation, Bayesian inference, advanced topics in time-series analysis, errors in variable and latent variable models, qualitative and limited dependent variables, aggregation, panel data, and duration models.

## ECON 7200 Advanced Topics in Econometrics II

Spring. 4 credits. Prerequisite: ECON 61906200 or permission of instructor. For description see ECON 7190.

## ECON 7230 Semi/Non Parametric Econometrics

Fall. 4 credits. Prerequisite: ECON 6190-
6200 or permission of instructor.
Analyzes the ways identification problems limit the conclusions that may be drawn in empirical economic research and studies how identified and partially identified parameters can be estimated. In the first part of the course, the focus is on nonparametric models. Ways data can be combined with weak assumptions to yield partial identification of population parameters are discussed.

ECON 7310 Monetary Economics I
Spring. 4 credits. Prerequisites: ECON 6140
or permission of instructor.
Covers advanced topics in monetary economics, macroeconomics, and economic growth-such as overlapping-generations, taxes and transfers denominated in money, transactions demand for money, multi-asset accumulation, exchange rates, and financial intermediation.

## ECON 7320 Monetary Economics II

Fall. 4 credits. Prerequisites: ECON 7310 or permission of instructor.
Covers advanced topics in monetary economics, macroeconomics, and economic growth-such as economic volatility, the "burden" of government debt, restrictions on government borrowing, dynamic optimization, endogenous growth theory, technological evolution, financial market frictions, and cyclical fluctuations.
ECON 7350 Public Finance: Resource Allocation and Fiscal Policy (also AEM 7350)
Fall. 4 credits.
Develops a mathematical and highly analytical understanding of the role of government in market economies and the fundamentals of public economics and related issues. Topics include generalizations and extensions of the fundamental theorems of welfare economics, in-depth analysis of social choice theory and the theory on implementation in economic environments, public goods and externalities and other forms of market failure associated with asymmetric information. The theoretical foundation for optimal direct and indirect taxation is also introduced along with the development of various consumer surplus measures and an application to benefit cost analysis. Topics of an applied nature vary from semester to semester depending on faculty research interests.

## ECON 7360 Public Finance: Resource Allocation and Fiscal Policy

Spring. 4 credits.
Spends a large part of the semester covering the revenue side of public finance. Topics include the impact of various types of taxes as well as the determination of optimal taxation. The impact of taxation on labor supply, savings, company finance and investment behavior, risk bearing, and portfolio choice are explored. Other topics include the interaction of taxation and inflation, tax evasion, tax incidence, social security, unemployment insurance, deficits, and interactions between different levels of government.

## ECON 7380 Public Choice

Spring. 4 credits. Prerequisites: ECON 6090, 6100.

This course has two parts. It begins with an introduction to economic theories of political decision making. Reviews the theory of voting, theories of political parties and party competition, theories of legislative decision making and interest group influence. Also discusses empirical evidence concerning the validity of these theories. The second part uses these theories to address a number of issues in public economics. Develops the theory of political failure, analyzes the performance of alternative political systems and discusses the problem of doing policy analysis, which takes into account political constraints.

## ECON 7400 Social and Economic Data

Spring. 4 credits.
For description, see ILRLE 7400.

## ECON 7420 Seminar in Labor

 Economics IFor description, see ILRLE 7450.

## ECON 7430 Seminar in Labor Economics II <br> For description, see ILRLE 7460.

ECON 7470 Economics of Education I For description, see ILRLE 7470 .

ECON 7471 Economics of Education II For description, see ILRLE 7471.
ECON 7480 Applied Econometrics I

## For description, see ILRLE 7410.

## ECON 7492 Applied Econometrics II

 For description, see ILRLE 7420 .
## ECON 7510 Industrial Organization and

 RegulationFall. 4 credits. Prerequisites: ECON 6090, 6100.

Focuses primarily on recent theoretical advances in the study of industrial organization. Topics include market structure, nonlinear pricing, quality, durability, location selection, repeated games, collusion, entry deterrence, managerial incentives, switching costs, government intervention, and R\&D/ patents. These topics are discussed in a gametheoretic context.

## ECON 7520 Industrial Organization and Regulation

Spring. 4 credits. Prerequisites: ECON 6090, 6100, 7510.
Rounds out some topics in the theory of industrial organization with the specific intent of addressing the empirical implications of the theory. Reviews empirical literature in the SCP paradigm and in the NEIO paradigm.

## ECON 7560 Noncooperative Game

 TheoryFall. 4 credits. Prerequisites: ECON 6090-
6100 and 6190.
Surveys equilibrium concepts for noncooperative games. Covers Nash equilibrium and a variety of equilibrium, refinements, including perfect equilibrium, proper equilibrium, sequential equilibrium and more. Pays attention to important special classes of games, including bargaining games, signalling games, and games of incomplete information. Most of the analysis is from the strict decision-theoretic point of view, but also surveys some models of bounded rationality in games, including games played by automata.

## ECON 7570 Economics of Imperfect Information

Spring. 4 credits. Prerequisites: ECON 6090-6100 and 6190.
Considers some major topics in the economics of uncertain information. Although the precise topics considered vary from year to year, subjects such as markets with asymmetric information, signalling theory, sequential choice theory, and record theory are discussed.

## ECON 7580 Behavioral Economics I

Fall, spring. 4 credits. Prerequisites:
economics graduate core or permission of instructor.
Explores the ways in which insights from psychology can be integrated into economic theory. Presents evidence on how human behavior systematically departs from the standard assumptions of Economics and how this can be incorporated into modeling techniques.

ECON 7585 Behavioral Economics II
Fall. 4 credits. Prerequisite: ECON 60906010 or permission of instructor Explores the ways in which insights and methods from psychology can be integrated into economics, covering additional topics not covered in ECON 7580. The course also discusses how to design and analyze economic laboratory experiments.

## ECON 7610 International Economics:

 Trade Theory and PolicyFall. 4 credits. Prerequisites: ECON 6090, 6100.

Surveys the sources of comparative advantage. Analyzes simple general equilibrium models to illustrate the direction, volume, and welfare effects of trade. Topics in game theory and econometrics as applied to international economics may be covered.

## ECON 7620 International Economics: International Finance and Open Economy Macroeconomics

Spring. 4 credits. Prerequisite: ECON 7610. Surveys the determination of exchange rates and theories of balance of payment adjustments. Explores open economy macroeconomics by analyzing models of monetary economies. Topics in monetary economics and econometrics as applied to international economics are covered.

## ECON 7640 International Trade and Foreign Investment

Spring. 4 credits. Prerequisites: economics graduate core.
The course will address new trade theory, introducing increasing returns, imperfect competition, and heterogeneous firms. A central part of the course will be patterns of foreign investments.

## ECON 7670 Topics in International

 FinanceFor description, see AEM 7670.
ECON 7700 Topics in Economic Development
For description, see AEM 6670.
ECON 7711 Empirical Methods for the Analysis of Household Survey Data: Applications to Nutrition, Health, and Poverty
For description, see NS 6853.

## ECON 7720 Economics of Development (also ILRLE 7490)

Spring. 4 credits. Prerequisites: first-year graduate economic theory and econometrics.
For description, see ILRLE 7490.

## ECON 7730 Economic Development

Fall. 4 credits. Prerequisites: ECON 6090, 6100 , and 6110.
Concerned with theoretical and applied works that seek to explain economic development, or lack thereof, in countries at low-income levels. Specific topics vary each semester.
ECON 7760 Computational Economics Spring. 4 credits. Prerequisites: ECON graduate CORE.
Computational economics is intended to teach students how to solve problems using a computer economic model that cannot be solved analytically. It should give students a strong background for applied and empirical research

## ECON 7840 Seminars in Advanced Economics <br> Fall and spring. 4 credits.

ECON 7850 Third-Year Research Seminar Fall. 4 credits.

## ENGLISH

E. Hanson, chair; D. Fried, director of undergraduate studies and honors (255-3492); A. Galloway, director of graduate studies (2557989); E. Anker, K. Attell, I. Balfour, F. Bogel, C. Boyce-Davies, J. Braddock, M. P. Brady, L. Brown, C. Chase, E. Cheyfitz, B. Correll, M. Crawford, J. Culler, S. Davis, L. Donaldson, G. Farred, D. Fried, A. Fulton, R. Gilbert, K. Gottschalk, T. Hill, M. Hite, W. Jones, M. Jonik, J. Juffer, R. Kalas, M. Koch, J. R. Lennon, P. Lorenz, J. Mann, B. Maxwell, K. McClane, M. McCoy, M. K. McCullough, S. Mohanty, R. Morgan, T. Murray, M. Pryse, E. Quinonez, M. Raskolnikov, N. Saccamano, S. Samuels, P. Sawyer, D. Schwarz, H. Shaw, L. VanClief-Stefanon, S. Vaughn,
H. Viramontes, S. Wong, D. Woubshet,
S. Zacher. Emeriti: M. H. Abrams, B. Adams,
J. Blackall, L. Fakundiny, L. Herrin, M. Jacobus, P. Janowitz, C. Kaske, A. Lurie, P. Marcus, D. McCall, J. McConkey, D. Mermin, R. Parker, S. Parrish, M. Radzinowicz, E. Rosenberg, S. Siegel, S. C. Strout, W. Wetherbee.

The Department of English offers a wide range of courses in English, American, and Anglophone literature as well as in creative writing, expository writing, and film analysis. Literature courses focus variously on close reading of texts, study of particular authors and genres, questions of critical theory and method, and the relationship of literary works to their historical contexts and to other disciplines. Writing courses typically employ the workshop method in which students develop their skills by responding to criticism of their work by their classmates as well as their instructors. Many students supplement their formal course work in English by attending public lectures and poetry readings sponsored by the department or by writing for campus literary magazines. The department seeks not only to foster critical analysis and lucid writing but also to teach students to think about the nature of language and to be alert to both the rigors and the pleasures of reading texts of diverse inspiration.

## First-Year Writing Seminars

As part of the university-wide First-Year Writing Seminars program administered by the John S. Knight Institute for Writing in the Disciplines, the department offers many onesemester courses dealing with various forms of writing (e.g., narrative, autobiographical, and expository), with the study of specific areas in English and American literature, and with the relation of literature to culture. Students may apply any of these courses to their first-year writing seminar requirement. Detailed course descriptions may be found in the first-year writing seminars program listings, available from college registrars in August for the fall semester and in November for the spring semester.
Freshmen interested in majoring in English are encouraged to take at least one of the department's seminars listed under ENGL 1270 Writing about Literature (formerly ENGL 2700,

2710,2720 ). These courses are open to all second-semester freshmen. They are also open, as space permits, to first-semester freshmen with scores of 700 or above on the CEEB College Placements Tests in English composition or literature, or 5 on the CEEB Advanced Placement Examination in English, as well as to students who have completed another first-year writing seminar.

## Courses for Nonmajors

For students majoring in fields other than English, the department provides a variety of courses at all levels. A number of courses at the 2000 level are open to qualified freshmen, and all are open to sophomores. Courses at the 3000 level are open to all sophomores, juniors, and seniors; they are also open to freshmen who have received the instructor's prior permission. The suitability of courses at the 4000 level for nonmajors depends in part on the course topics, which are subject to change from year to year. Permission of the instructor is sometimes required; prior consultation is always strongly advised.

## The Major in English

Students who major in English develop their own programs of study in consultation with their major advisors. Some choose to focus on a particular historical period or literary genre or to combine sustained work in creative writing with the study of literature. Others pursue interests in such areas as women's literature, African American literature, literature and the visual arts, or critical theory. The department recommends that students prepare themselves for the English major by taking one or more of its Gateway courses, two of which are required for the major, such as ENGL 2010 The English Literary Tradition I, ENGL 2030 Introduction to American Literatures: Beginnings to Civil War, or ENGL 2045 Major Poets. (The "ENGL" prefix identifies courses sponsored by the Department of English, all of which appear in the English section of Courses of Study or the department's supplementary lists of courses; it also identifies courses sponsored and taught by other academic units and cross-listed with English.) These courses concentrate on the skills basic to the English major and to much other academic work-responsive, sensitive reading and lucid, strong writing. ENGL 2800, 2810,2880 , and 2890 are also suitable preparations for the major and are open to students who have completed their first-year writing seminar requirement. ENGL 2010 and 2020, which together constitute a two-semester survey of major British writers, though not required, are strongly recommended for majors and prospective majors. ENGL 2010 and 2020 (unlike ENGL 2800, 2810, 2880, and 2890) are also "approved for the major" in the special sense of that phrase explained below.

To graduate with a major in English, students must complete with a grade of C or better 10 courses ( 40 credit hours) approved for the major. In addition, with the exception of 2000level courses in creative and expository writing (ENGL 2800, 2810, 2880, and 2890), all 2000-level ENGL courses are also approved for the major. Courses used to meet requirements for the English major may also be used to meet the distribution requirements in the College of Arts and Sciences. Many of these courses may be used to meet the college's "historical breadth" requirement as well. Of the 40 credits required to complete the major, 12 credits (three courses) must be from courses in which 50 percent or more of the material consists of literature originally written in English before 1800; 8 credits (two courses) must be Gateway courses (2000, 2010, 2020, 2030, 2040, 2045); 8 credits (two courses) must be at the 4000 level; and another 12 credits (three courses) must form an intellectually coherent "concentration." The 4000 -level and pre-1800 requirements may be satisfied only with ENGL courses, and ENGL 4930-4940, the Honors Essay Tutorial, may not be used to satisfy either one. Courses that satisfy the pre- 1800 requirement are so designated in Courses of Study. Many English majors use ENGL 2010 or ENGL 2030 to begin meeting this requirement since these courses provide an overview of earlier periods of British and American literatures and so enable students to make more informed choices of additional pre-1800 courses. (ENGL 2010 and ENGL 2030 may be used toward both the Gateway requirement and the pre-1800 requirement.) ENGL 2020 does not qualify as a pre-1800 course. Neither do courses offered by other departments unless they are crosslisted with English. Advanced courses in foreign literature may not be used to fulfill the pre-1800 requirement, but they may be used for English major credit provided they are included within the 12 -credit limit described below. The three-course concentration requirement may be satisfied with any courses approved for the major. The department's guide, "Majoring in English at Cornell" (available at www.arts.cornell.edu/english/_ lib/pdf/undr_english_major.pdf), suggests areas of concentration and offers examples of courses that fall within those areas, but majors define their own concentrations in consultation with their major advisors, who are members of the English faculty.
As many as 12 credits in appropriate courses offered by departments and programs other than English may be used to satisfy English major requirements. Courses in literature and creative writing offered by academic units representing neighboring or allied disciplines (German Studies, Romance Studies, Russian, Asian Studies, Classics, Comparative Literature, Africana Studies, the Society for the
Humanities, American Studies, Feminist, Gender, \& Sexuality Studies, Religious Studies, Asian American Studies, American Indian Studies, Latino Studies, and Theatre, Film, and Dance) are routinely counted toward the 40 hours of major credit provided they are appropriate for juniors or seniors, as are most courses at the 3000 level and above. English majors who are double majors may exercise this option even if all 12 credits are applied to their second major. All English majors are urged to take courses in which they read foreign works of literature in the original language, and for that reason 2000-level literature courses for which qualification is a
prerequisite (as well as more advanced foreign literature courses) may be counted toward the English major. Credit from other non-ENGL courses may be included within the 12 credits of nondepartmental courses approved for the major only when the student is able to demonstrate to the advisor's satisfaction their relevance to his or her individual program of study.

## Planning a Program of Study

Few students know from the moment they decide to pursue a major in English exactly what they wish to study. Moreover, it is natural for interests to change in the course of time. The effort of creating or discovering a coherent pattern in the courses selected is itself a valuable part of a literary (as well as liberal) education, and English majors are expected to discuss their overall program of study when seeking their advisors' approval of courses each semester. While the department leaves a great deal to the discretion of its individual majors and their academic advisors, it expects them to choose courses with an eye to breadth and variety on the one hand and focus and coherence on the other. Students with a special interest in developing their skills as writers of verse or prose will find a variety of workshop courses in expository and creative writing. As a rule a student may not enroll in more than one such course in any given semester, although exceptions are sometimes allowed where one of these is ENGL 2880 or 2890.
A number of English majors do part of their course work at a foreign institution, usually during their junior year; some spend a single semester away from campus, others an entire year. The Cornell Abroad office has information on a variety of programs at universities around the world. Many English majors study abroad in the United Kingdom and other English-speaking countries, but some choose other locations. As long as they continue to meet all college and department requirements or can complete them upon returning to Cornell, studying abroad poses no serious problems. Students spending their entire junior year abroad will be challenged to complete the department's Honors program since they will be unable to take the required Honors seminar in the junior year and should plan to take it in the spring semester of their sophomore year. Otherwise they will have to take it when they return as seniors. Students must make arrangements with the director of honors in English before leaving campus.
Credit for literature courses taken abroad can in most instances be applied to the 40 -hour minimum for the English major and to requirements like the concentration and pre1800 requirements. Approval of requests to apply credit for study abroad to the English major is granted by the DUS rather than the academic advisor, however, and students must confer with the DUS in advance of going abroad as well as on their return. The first conference includes a review of catalogue descriptions of courses the student expects to take while abroad (along with a few alternatives), the second a presentation of transcripts or equivalent documentation of successful completion of the work proposed, together with papers and exams.
No more than 16 credits per year, or 8 credits per semester, of non-Cornell credit may be applied to the English major. This restriction
applies to study abroad even when that study is conducted under Cornell auspices.

## The Major in English with Honors

Second-semester sophomores who have done superior work in English and related subjects are encouraged to seek admission to the departmental program leading to the degree of Bachelor of Arts with Honors in English. Following an interview with the director of honors, qualified students will be admitted provisionally to the program. During their junior year these students complete at least one Honors Seminar (ENGL 4910 in the fall, 4920 in the spring) and are encouraged to take an additional 4000-level English course in the area of their thesis topic. On the basis of the work in these and other English courses, provisional Honors candidates must select a thesis topic and secure a thesis advisor by the end of the junior year. A student who has been accepted by a thesis advisor and whose brief thesis proposal has been signed by the director of honors becomes a candidate for honors rather than a provisional candidate.

During the senior year, each candidate for honors in English enrolls in a yearlong tutorial (ENGL 4930-4940) with the faculty member chosen as thesis advisor. The year's work culminates in the submission of a substantial scholarly or critical essay to be judged by at least two members of the faculty. More information about the Honors Program may be found in a leaflet, "The Honors Program in English at Cornell," available in the English offices and on the department's website.

## First-Year Writing Seminars Recommended for Prospective Majors

ENGL 1270 Writing about Literature
Fall, spring, summer. 3 credits. Each sec limited to 18 students. Recommended for prospective majors in English. Designed for prospective English majors but is not counted as one of the 12 courses required for the English major.
Reading lists vary from section to section, but close, attentive, and imaginative reading and writing are central to all. Some sections may deal with fiction, poetry, or drama, or include a mix of literary kinds. By engaging in discussions and working with varied writing assignments, students will explore major modes and genres of English poetry and prose, and may learn about versification techniques, rhetorical strategies, performance as interpretation, and thematic and topical concerns. In the process students will expand the possibilities of their own writing. Sections that invite students to study and write critically about plays or films in a variety of dramatic idioms and cultural traditions may require attendance at screenings or at live productions by the Theatre Department.

## Critical Writing and Literary Nonfiction

ENGL 2880-2890 Expository Writing (LA-AS)
Fall, spring. 4 credits. Each sec limited to 18 students. Students must have completed their colleges' first-year writing requirements or have the permission of the instructor. S. Davis and staff. Website: http://courses.cit.cornell.edu/engl28802890/. This course does not satisfy requirements for the English major.

ENGLISH 2880-2890 offers guidance and an audience for students who wish to gain skill in expository writing-a common term for critical, reflective, investigative, and creative nonfiction. Each section provides a context for writing defined by a form of exposition, a disciplinary area, a practice, or a topic intimately related to the written medium. Course members will read in relevant published material and write and revise their own work regularly, while reviewing and responding to one another's. Since these seminar-sized courses depend on members' full participation, regular attendance and submission of written work are required. Students and instructors will confer individually throughout the term.
Fall 2010: Seminar 1. TV Nation: Television and Identity in America, D. Faulkner. Seminar 2. The Reflective Essay, K. Gottschalk. Seminar 3. Global Romance, M. Lakhi. Seminar 4. The Law and the Environment, M. Farrell. Seminar 5. Plotting History: Apocalyptic Fictions, S. Davis.

## [ENGL 3810 Reading as Writing, Writing as Reading (LA-AS)

Fall. 4 credits. Limited to 15 students. Prerequisite: permission of instructor based on a writing sample. Next offered 20112012. S. Davis.]
[ENGL 3860 Philosophic Fictions (LA-AS) Spring. 4 credits. Limited to 15 students. Prerequisite: permission of instructor based on a writing sample. Next offered 20112012. S. Davis.]
[ENGL 3880 The Art of the Essay (LA-AS) Spring. 4 credits. Limited to 15 students. By permission of instructor on the basis of writing samples. Interested students should submit one or more pieces of recent writing (prose) to the instructor before the beginning of the semester, preferably at pre-enrollment. Next offered 2011-2012.]

## Creative Writing

Students usually begin their work in Creative Writing with ENGL 2800 or 2810, and only after completion of the First-Year Writing Seminar requirement. Please note that either ENGL 2800 or ENGL 2810 is the recommended prerequisite for 3000-level creative writing courses. ENGL 2800 and 2810 may satisfy a distribution requirement in your college (please check with your college advisor). ENGL 3820-3830, 38403850, and 4800-4810 are approved for the English major.

## ENGL 2800-2810 Creative Writing (LA-AS)

Fall, spring, summer, winter. 3 credits. Limited to 18 students. Prerequisite: completion of the First-Year Writing Seminar requirement. Majors and prospective majors, please note: Although recommended for prospective English majors, ENGL 2800-2810 cannot be counted toward the 40 credits required for completion of the English major. It is a prerequisite for 3000-level courses in creative writing, which count toward the major. ENGL 2800 is not a prerequisite for ENGL 2810.)
An introductory course in the theory, practice, and reading of prose, poetry, and allied forms. Students are given the opportunity to try both prose and verse writing and may specialize in one or the other. Many of the class meetings are conducted as workshops.

## ENGL 3820-3830 Narrative Writing

 (LA-AS)3820, fall; 3830, spring. 4 credits each semester. Each sec limited to 15 students. Prerequisite: ENGL 2800 or 2810 and permission of instructor based on submission of a manuscript (bring manuscript to first day of class). Fall: sem 101, M. Koch; sem 102, E. Quinonez; spring, E. Quinonez, S. Vaughn.
The writing of fiction; study of models; analysis of students' work.

## ENGL 3840-3850 Verse Writing (LA-AS)

3840, fall or summer; 3850, spring. 4 credits. Each sec limited to 15 students. Prerequisite: ENGL 2800 or 2810 and permission of instructor based on submission of manuscript (bring manuscript on first day of class). Fall: sem 101, R. Morgan; sem 102, TBA; spring,
A. Fulton, L. Van Clief-Stefanon.

The writing of poetry; study of models; analysis of students' poems; personal conferences.

## ENGL 4800-4810 Seminar in Writing

 (LA-AS)4800, fall; 4810, spring. 4 credits each semester. Each sec limited to 15 students. Prerequisite: permission of instructor, normally on the basis of a manuscript. The manuscript should be submitted to the instructor no later than the first day of class. Previous enrollment in ENGL 2800 or 2810 and at least one 3000-level writing course recommended. Successful completion of one half of the 4800-4810 sequence does not guarantee enrollment in the other half; students must receive permission of the instructor to enroll in the second course. Fall: sem 101, TBA; sem
102, E. Quinonez; spring: J. Lennon and S. Vaughn.

Intended for those writers who have already gained a basic mastery of technique. Although ENGL 4800 is not a prerequisite for ENGL 4810, students normally enroll for both semesters and should be capable of a major project-a collection of stories or poems, a group of personal essays, or perhaps a novel-to be completed by the end of the second semester. Seminars are used for discussion of the students' manuscripts and published works that individual members have found of exceptional value.

## Gateway Courses: Introductions to Literary <br> Study

Two of these courses are required for English majors, and strongly suggested as the first courses in English taken with or after the First-Year Writing Seminar. They are recommended for all other students as introductions to literary study in English. Students may take Gateway courses in any order; lower-numbered Gateways are not prerequisites for higher-numbered Gateways.
ENGL 2000 Introduction to Criticism and Theory (LA-AS)
Fall. 4 credits. Gateway course, of which two are required of English majors. K. Attell.

An introductory survey of modern methodologies in criticism and theory. Readings include key texts from such schools as New Criticism, psychoanalysis,
structuralism, post-structuralism, Marxism, feminism, and postcolonial studies. The course gives students a solid foundation in the issues,
techniques, and vocabularies of advanced literary analysis. While literary questions are predominant throughout the semester, this course is nevertheless designed to be accessible and useful not only for English and literature majors (and prospective majors) but also for anyone interested in gaining a foundation in aesthetic and cultural analysis. The contemporary humanistic disciplines largely share a technical vocabulary, and this class provides undergraduates from various fields a firm grounding in the key concepts and issues of what has come to be called "theory."
ENGL 2010 The English Literary Tradition I \# (LA-AS)
Fall. 4 credits. Gateway course, of which two are required of English majors. ENGL 2010, not a prerequisite for 2020, may be used as one of the three pre-1800 courses required of English majors. R. Kalas.
An introduction to the study of English literature from its early history through the 17th century, emphasizing exceptional works and key periods of innovation. Readings will include Beowulf and Sir Gawain and the Green Knight in modern translation, selections from Chaucer's Canterbury Tales, More's Utopia, Book I of Spenser's Faerie Queene, some 16th-century sonnets, Shakespeare's King Lear, poems by Christopher Marlowe, Isabella Whitney, Mary Sidney, John Donne, Andrew Marvell, and George Herbert, and parts of Milton's Paradise Lost. We'll focus on the distinctive features of these works-their genre, meter, rhetoric, and style-while also considering what it means to think about literature as history. Class format will be lecture and discussion; short assignments will encourage close reading and experimentation with literary techniques.

## ENGL 2020 The English Literary

 Tradition II \# (LA-AS)Spring. 4 credits. Gateway course, of which two are required of Englisb majors. W. Jones.
One of the richest and most delightful traditions in world literature, the English literary tradition is also the foundation of all other literature written in English. You can bet that your favorite authors writing in English today grew up reading these classics of English literature. This course will survey 250 years of English poetry and prose (exclusive of the novel), ranging from the sex comedies and sparkling wit of the 17 th century to the solemn odes and serious reflection of the 20th. Lectures and discussion sections will stress historical shifts, relations between the works, and close reading, thereby providing an introduction to in-depth literary study. Authors will include Congreve, Swift, Pope, Wordsworth, Byron, the Brownings (Elizabeth and Robert), Tennyson, Yeats, Woolf, and others.

ENGL 2030 Introduction to American Literatures: Beginnings to Civil War (also AMST 2030) \# (LA-AS) Fall. 4 credits. Gateway course, of which two are required of English majors. May be used as one of the three pre1800 courses required of Englisb majors. L. Donaldson.
English 2030 introduces students to a wide range of North American literatures such as fiction, poetry, drama, political writing, autobiography, ethnography, sermons, songs, and storytelling. It covers the histories of these
genres from before European colonization to the U.S. Civil War. The course begins with Native American creation stories and ends with Herman Melville. Students will interpret genres and authors within their specific literary and social contexts and engage with voices not commonly heard in American literary histories-Olaudah Equiano and Nancy Ross, for example. Topics include European colonialism; slavery, race, and the making of North American literature; Native Americans-removal and resistance; women's literary production; the Enlightenment and revolution in North American colonies; and a special section on 18th-century natural histories.

## ENGL 2040 Introduction to American Literatures: The Civil War to the

 Present (also AMST 2040) (LA-AS) Spring. 4 credits. Gateway course, of which two are required of English majors. J. Braddock.This course will introduce students to American literature from the end of the Civil War to the present. We will consider a wide range of authors and literary movements while paying close attention to radical shifts in American life and culture in the past century and a half. We will ask: What traditions do American authors inherit and what new ones do they invent? How does this writing engage central issues of modern American culture such as race, immigration, globalization, and technology? The class will examine a variety of genres including poetry, novels, manifestos, autobiographies, legal tracts, and film. Authors include Walt Whitman, Emily Dickinson, Kate Chopin, T. S. Eliot, Ezra Pound, William Faulkner, Langston Hughes, Allen Ginsberg, Leslie Marmon Silko, Thomas Pynchon, Tony Kushner, Toni Morrison, and Junot Díaz.

## ENGL 2045 Major Poets (LA-AS)

Spring. 4 credits. Gateway course, of which two are required of English majors. J. Culler.
Intensive readings in the work of nine poets chosen to represent important periods, modes and assumptions about poetry. Poets to be studied may include William Shakespeare (the sonnets), Andrew Marvell, Alexander Pope, John Keats, Emily Dickinson, Walt Whitman, Robert Forest, W. H. Auden, and A. R. Ammons. No previous study of poetry is assumed

## ENGL 2050 Contemporary World

 Literature @ (LA-AS)Fall. 4 credits. Next offered 2011-2012. E. Anker.]

## Courses for Freshmen and Sophomores

These courses have no prerequisites and are open to freshmen and nonmajors as well as majors and prospective majors.
[ENGL 2060 The Great American Cornell Novel (also AMST 2060) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. M. Hite.]
[ENGL 2070 Introduction to Modern Poetry (LA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Gilbert.]

ENGL 2080 Shakespeare and the 20th and 21st Centuries (LA-AS)
Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. S. Davis.
What can we learn about Shakespeare's plays from their reception in the 20th and 21st centuries? What can we learn about modern cultures from their appropriations of these texts and of the Shakespeare mystique? We will study four or five plays and their adaptations in film and theater and explore the uses made of Shakespeare in education, advertising, and public culture and by the "Shakespeare industry" itself. For spring 2011, tentatively: Romeo and Juliet, Titus Andronicus, Hamlet, Taming of the Shrew, and Tempest, together with films or filmed performances directed by John Madden, Julie Taymor, Grigori Kozintsev, Michael Almereyda, and Fred Wilcox and the musical Kiss Me, Kate. See http://courses.cit.cornell.edu/ sad4449/2080.
[ENGL 2090 Introduction to Cultural Studies (CA-AS)
Fall. 4 credits. Next offered 2012-2013. J. Juffer.]

ENGL 2100 Medieval Romance: Voyage to the Otherworld \# (LA-AS)
Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. T. Hill.
The course will survey some medieval narratives concerned with representative voyages to the otherworld or with the impinging of the otherworld upon ordinary experience. The syllabus will normally include some representative Old Irish otherworld literature: selections from The Mabinogion; selections from the Lays of Marie de France; Chretian de Troye's Erec, Yvain, and Lancelot; and the Middle English Sir Gawain and the Green Knight. We will finish by looking at a few later otherworld romances, such as selections from J.R.R. Tolkien. All readings will be in modern English. Requirements: three brief (two to three typed pages) papers and a final exam designed to test the students reading.

ENGL 2150 The American Musical (also THETR 2150, AMST 2105, MUSIC 2250) (LA-AS)

Spring. 4 credits. N. Salvato.
For description, see THETR 2150.
ENGL 2160 Television (also AMST/FGSS/ FILM/THETR/VISST 2160) (LA-AS)
Fall. 4 credits. N. Salvato.
For description, see THETR 2160.
ENGL 2170 History of the English Language to 1300 (also LING 2217) \# (HA-AS)
Fall. 4 credits. W. Harbert.
For description, see LING 2217.
ENGL 2180 History of the English Language Since 1300 (also LING 2218) \# (HA-AS)

Spring. 4 credits. W. Harbert. For description, see LING 2218.

## ENGL 2270 Shakespeare (also THETR

 2770) \# (LA-AS)Fall. 4 credits. May be used as one of the three pre-1800 courses required of English majors. B. Correll.
This course aims to give students a good critical grounding in Shakespeare and Renaissance drama. We read 10 plays covering
the length of Shakespeare's career: comedies, history plays, and tragedies, including The Merchant of Venice, Twelfth Night, The Tempest, Othello, King Lear, Richard II, Henry IV Part One, and Henry V. Our study will include attention to dramatic forms, themes, and historical contexts, including early modern English theater history. The course combines lectures and hands-on work in weekly discussions. We will also view some film adaptations of Shakespeare.
[ENGL 2400 Introduction to Latino/a Literature (also AMST 2401, LSP 2400) (LA-AS)

Fall. 4 credits. Next offered 2011-2012. M. P. Brady.]
[ENGL 2510 20th-Century Women Writers (also AMST/FGSS 2510) (LA-AS) Fall. 4 credits. Next offered 2011-2012.]

ENGL 2511 Introduction to Women Writers (also FGSS 2510) (LA-AS)
Spring. 4 credits. K. McCullough.
What or who is a "woman writer"? What impact, if any, does gender have on writing? What questions are particularly urgent to these writers and what genres do they choose to use to explore them? Looking mostly at novels with the occasional foray into other genres, we will focus our broader exploration by a thematic focus on the relationships among individual, family, and community identities. How do the authors under discussion represent these relationships and to what extent do they represent them as shaped by vectors of identity such as nationality, region, race, gender, sexuality, class, and ethnicity? Authors under consideration may include Dorothy Allison, Alison Bechdel, Charlotte Brontë, Lan Cao, Cristina Garcia, Audre Lorde, Toni Morrison, Jean Rhys, and Virginia Woolf, among others

ENGL 2600 Introduction to American Indian Literatures of the United States (also AMST/AIS 2600) (LA-AS) Fall. 4 credits. E. Cheyfitz.
An introduction to U.S. American Indian literatures, both oral and written. The method of studying these literatures emphasizes historical, legal, and cultural contexts. In addition to examples of the oral tradition transcribed in writing, we study a variety of written genres from their beginnings in the late 18 th century including autobiography, the essay, poetry, and fiction. We begin with two translations from the oral tradition: Paul Radin's translation/compilation of Winnebago trickster narratives, and Paul Zolbrod's translation of the Diné bahane': The Navajo Creation Story; next, a range of Native authors from the 19th and 20th centuries, including William Apess, Sarah Winemucca, Zitkala-Sa, Mourning Dove, Black Elk, D'Arcy McNickle, N. Scott Momaday, Leslie Marmon Silko, James Welch, Luci Tapahonso, Simon Ortiz, Gerald Vizenor, Diane Glancy, Ray A. Young Bear, Sherman Alexie, and Debra Magpie Earling.
[ENGL 2620 Asian American Literature (also AAS/AMST 2620) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Wong.]

ENGL 2650 Introduction to African American Literature (also AMST 2650) (CA-AS)

Fall. 4 credits. D. Woubshet.
This course will introduce students to the African American literary tradition. Through aesthetic and contextual approaches, we will
consider how African American life and culture has defined and constituted the United States of America. From slave narratives to Hip-Hop music, we will trace the range of artistic conventions and cultural movements while paying close attention to broader historical shifts in American life over the past three centuries. We will ask: How do authors create and define a tradition? What are some of the recurring themes and motifs within this tradition? Authors will include: Phillis Wheatley, David Walker, Frederick Douglass, Ida B. Wells-Barnett, W.E.B. Du Bois, Zora Neal Hurston, Lorraine Hansberry, James Baldwin, Audre Lorde, Toni Morrison, and Paul Beatty.

## ENGL 2680 Culture and Politics of the 1960s (also AMST 2680) (CA-AS)

Spring. 4 credits. P. Sawyer.
Nearly half a century ago, the civil rights movement, the Cold War, and the Vietnam War stimulated critiques and alternative experiments in living that changed American society forever. What can the experiences of young "boomers" and others who lived through the 1960s teach a later generation living through a similar period of turmoil and hope? This interdisciplinary course combines an historical overview with the close reading of texts, concentrating on the topics of racial justice, war, the counterculture, the New Left, the women's movement, and the movement for gay and lesbian rights. Texts will include The Autobiography of Malcolm X, Wolfe's Electric Kool-Aid Acid Test, Vonnegut's Slaughterbouse-5, music of Dylan and Joplin, speeches of King, films, manifestos, memoirs, and poems. A research paper will explore the history of activism at Cornell during those years.

## ENGL 2730 Children's Literature (LA-AS)

Fall. 4 credits. M. P. Brady
An historical study of children's literature from the 17th century to the present, principally in Europe and America, which will explore changing literary forms in relation to the social history of childhood. Ranging from oral folktale to contemporary novelistic realism (with some glances at film narrative), major figures may include Perrault, Newbery, the Grimms, Andersen, Carroll, Alcott, Stevenson, Burnett, Kipling, the Disney studio, E. B. White, C. S. Lewis, Sendak, Silverstein, Mildred Taylor, and Bette Greene. We'll also encounter a variety of critical models-psychoanalytic materialist, feminist, structuralist-that scholars have employed to explain the variety and importance of children's literature. Finally, we will consider how the idea of "the child" has evolved over this period.

ENGL 2740 Scottish Literature \# (LA-AS)
Fall. 4 credits; may be taken for 3 or 4 credits; those choosing 4 credits will complete an additional writing project.
May be used as one of the three pre-
1800 courses required of English
majors. H. Shaw and T. Hill.
Although Scotland, which was long a separate nation, is now politically united with England, it preserves its distinctiveness. This course provides an introduction to Scottish literature, with special emphasis on the medieval period and the 18th through the 20th centuries. The course should appeal to those who wish to learn about their Scottish heritage, and also those who simply wish to encounter a remarkable national culture and the literature it has produced. Some of the texts will be
read in Scots, but no familiarity with Scots or earlier English is presumed. We welcome readers of literature who are not English majors.

## ENGL 2750 Poetry and Song (LA-AS)

Fall. 4 credits. R. Gilbert.
Does poetry scare you? If so, you're not alone Yet think about this: we all carry bits of poetry around with us, in the form of song lyrics. In this class we'll explore the meeting ground of these two major art forms, considering both similarities and differences between printed poems and lyrics. Our main focus will be on the intricacies of language and verse form that make for a great lyric, whether by Bob Dylan, Dolly Parton, or Stephen Sondheim. We'll also look at poems that aspire to the condition of song by such poets as William Blake, Walt Whitman, T. S. Eliot, and Langston Hughes. Our examples will be drawn from many genres, including folk ballads, blues, Broadway, country, rock, and rap.
[ENGL 2751 Literature, Sports, and Ideology (also ASRC 2505) (LA-AS) Fall. 3 credits. Next offered 2011-2012. G. Farred.]

ENGL 2760 Desire (also COML/FGSS 2760, THETR 2780) (LA-AS) Spring. 4 credits. E. Hanson.
"Language is a skin," the critic Roland Barthes once wrote: "I rub my language against the other. It is as if I had words instead of fingers, or fingers at the tip of my words. My language trembles with desire." Sexual desire has a history, even a literary history, which we will examine through an introductory survey of European dramatic literature from Plato and Aristophanes to Jean Genet and Caryl Churchill, as well as a survey of classic readings in Western sexual theory from the Ancient Greeks through Freud and Foucault to contemporary feminism and queer theory. Topics for discussion will include Greek pederasty, Christian mysticism, hysteria, sadomasochism, pornography, cybersex, and other performative pleasures.

## ENGL 2780 Body as Text: Pleasure and

 Danger (also FGSS 2780) (LA-AS)Fall. 4 credits. M. Raskolnikov.
We experience our bodies as so much a part of who we are that we take them for granted Yet the way we think about the body has a history of its own. This course looks at how the idea of "the body" gets constructed over time. How has the body come to have attributes called "gender," "sexuality," and "race"? Why have some bodies been seen as monstrous, perverted, and unholy, others as gorgeous, normal, and divine? What makes bodies pleasurable and dangerous? We'll find out by examining a broad range of evidence from the ancient era to the present day, including literature (Ovid, Kafka, Octavia Butler), philosophy (Plato, Descartes, Judith Butler), film (Freaks, Hedwig and the Angry Inch), and the history of science.

## ENGL 2901 Utopia: From Thomas More

 to Philip K. Dick (LA-AS)Spring. 4 credits. J. Mann.
A "utopia" is an imaginary world, a fantastical "no-place" that conveys important truths about the real world. This course surveys the literary genre of utopia from the Renaissance to today, focusing on writers who invent new worlds through fiction. In Thomas More's Utopia, we explore utopia's emergence in the 16th
century in response to European political upheaval and New World exploration, then turn to how British and American writers transform utopian visions in the following centuries. Finally, we consider how utopia is reworked in science fiction's paradoxical emphasis on both fantasy and realism. Topics include the politics of gender, technology in a perfect society, and the wildly inventive forms of utopian fiction by Shakespeare, Margaret Cavendish, Jonathan Swift, Aldous Huxley, Ursula LeGuin, and Philip K. Dick.

## ENGL 2920 Introduction to Visual

 Studies (also COML/VISST 2000) (LA-AS)Spring. 4 credits. I. Dadi.
For description, see VISST 2000
[ENGL 2960 Linguistic Theory and Poetic Structure (also ENGL 5850, LING 2285/5585) (LA-AS)
Spring. 4 credits. Next offered 2011-2012 J. Bowers.]

## Courses for Sophomores, Juniors, and Seniors

Courses at the 3000 level are open to sophomores, juniors, and seniors and to others with the permission of the instructor.

## [ENGL 3020 Literature and Theory

 (also ENGL 6020, COML 3020/6020) (LA-AS)Fall. 4 credits. Next offered 2011-2012. J. Culler.]
[ENGL 3080 Icelandic Family Sagas @ \# (LA-AS)
Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. Next offered 2012-2013. T. Hill.]

## ENGL 3110 Old English (also ENGL 6110)

 \# (LA-AS)Fall. 4 credits. May be used as one of the three pre-1800 courses required of English majors. T. Hill.
The course is intended as an introduction to the Old English language. We will begin with simple prose texts and proceed to poetic texts such as Maldon, The Wanderer, The Seafarer, and The Dream of the Rood. The primary aim of the course is to learn Old English, but we will discuss the literary issues the texts we cover present. There will be a mid-term and a final exam.

## ENGL 3115 Video and New Media: Art

 Theory, Politics (also COML 3115)Spring. 4 credits. T. Murray.
For description, see COML 3115

## ENGL 3120 Beowulf (also ENGL 6120) \#

 (LA-AS)Spring. 4 credits. Prerequisite: one semester's study of Old English or equivalent. May be used as one of the three pre- 1800 courses required of English majors. S. Zacher.
A close reading of Beowulf. Attention is given to relevant archaeological, literary, cultural, and linguistic issues.

## [ENGL 3160 Medieval Beasts, Bodies, and Boundaries \# (LA-AS) <br> Fall. 4 credits. Next offered 2012-2013. S. Zacher.]

ENGL 3190 Chaucer \# (LA-AS)
Spring. 4 credits. May be used as one of the three pre- 1800 courses required of English majors. M. Raskolnikov.
Chaucer became known as the "father of English poetry" before he was entirely cold in his grave. Why is what he wrote more than six hundred years ago still riveting for us today? It's not just because he is the granddaddy of this language and its literature; it's because what he wrote was funny, fierce, thoughtful, political, philosophical, and, oh yes, notoriously bawdy. We'll read some of Chaucer's brilliant early work, and then dig into his two greatest achievements: the epic Troilus and Crisyede, and The Canterbury Tales, his oft-censored panorama of medieval English life. Chaucer will be read in Middle English, which will prove surprisingly easy and pleasant.

## ENGL 3222 Studies in Renaissance

 Literature: English Renaissance Drama (also THETR 3222) \# (LA-AS)Fall. 4 credits. May be used as one of the three pre- 1800 courses required of English majors. J. Mann.
This course will introduce you to the history of English theater between 1590 and 1630, what is often called a golden age of popular drama. Widening our focus beyond the familiar works of Shakespeare, we will study a range of playwrights and theatrical genres, reading plays that feature adultery, incest, murder, dismemberment, and cross-dressing, to name only a few of the more salacious incidents. Over the course of the semester, you will learn about the conventions of writing and performance in a variety of theatrical spaces, as well as the social and political effects of the theater in the Elizabethan and Jacobean world. Assignments will feature creative as well as analytical approaches. Readings will include plays by Kyd, Marlowe, Shakespeare, Jonson, Cary, Middleton, Rowley, Dekker, Webster, and Ford.

## ENGL 3230 Renaissance Poetry \# (LA-AS)

Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. B. Correll.
This course is for anyone interested in or curious about poetry, regardless of background or preparation. At the heart of the course are Shakespeare, Sidney, Spenser, Donne, sonnets and other forms. But we include other authors and women writers (Whitney, Lok, Mary Sidney), who played important roles in early modern poetry. We read a range of poems and discuss the cultural questions they raise. If Renaissance poetry is not just about hearts, flowers, and Cupid, what is at stake for poets and readers? What cultural work does this poetry perform? What is the relationship between Renaissance lyric and early modern subject formation? Between intensely private sentiments and historical forces? The goal is to have some serious fun with very rich material.
ENGL 3240 Comparative Renaissance Drama: "Blood Politics" (also THETR 3240)

Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. P. Lorenz.
This course examines the problem of "blood" not only as a marker of racial, religious, and sexual difference but also as a dramatic player in the (early?) modern historical imagination.

How does a politics of blood appear on stage at a time when populations are being simultaneously expelled and colonized for reasons related to blood? How does drama (dis)figure an ideology of blood? In the course of trying to answer these questions, we will read plays by Shakespeare, Marlowe, Webster, Kyd, Cervantes, Lope de Vega, and Calderón. Topics include Honor, Revenge, Purity, the Body, Sexuality, Conversion, and Death

## [ENGL 3260 Spenser \# (LA-AS)

Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. Next offered 2012-2013. B. Correll.]
[ENGL 3270 Shakespeare \# (LA-AS) Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. Next offered 2011-2012. P. Lorenz.]

ENGL 3290 Milton \# (LA-AS)
Fall. 4 credits. May be used as one of the three pre-1800 courses required of English majors. R. Kalas.
This course places Milton in the context of the intellectual and political upheavals of the mid17th century English Revolution,
foregrounding his engagement with debates on religion, freedom, and regicide as well as his experience of revolution and reaction. Readings include selected short poems, Comus, Samson Agonistes, Paradise Regained, Paradise Lost, Areopagitica, The Doctrine and Discipline of Divorce, Eikonoklastes, and other polemical works.

ENGL 3300 Restoration and 18th-Century Literature \# (LA-AS)
Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. F. Bogel.
Close reading of texts in a variety of genres (poetry, fiction, drama, philosophy,
autobiography, essay) will be guided by such topics as the nature of satire, irony, and mock forms; the politics of gender and sexuality; the authority and fallibility of human knowledge; the rhetoric of 18th-century verse forms; the aesthetics of the sublime and the beautiful; the Enlightenment as an intellectual movement. Works by such writers as Rochester, Behn, Dryden, Wycherley, Swift, Pope, Cleland, Johnson, Boswell, Sterne, Kant, and Cowper.

## [ENGL 3330 The 18th-Century English

 Novel \# (LA-AS)Spring. 4 credits. May be used as one of the three pre-1800 courses required of English majors. Next offered 2011-2012. N. Saccamano.]
[ENGL 3350 Modern Western Drama, Modern Western Theater: Theory and Practice (also THETR 3350, VISST 3735) (LA-AS)

Fall. 4 credits. Next offered 2011-2012. N. Salvato.]

## ENGL 3390 Jane Austen \# (LA-AS)

Spring. 4 credits. H. Shaw.
It is a truth universally acknowledged, that a student who has read Jane Austen must be in want of excuses to continue that delicious experience. This course explores Austen's characters, culture, and narrative art against the backdrop of films, novels, and poems that resonate with her fiction. We will investigate Austen's alluring mystique, her importance in literary history, and her continuing attraction
in the 21st century. By immersing ourselves in her fictional worlds, we will enrich our experience of her novels and sharpen our awareness of the pleasures of reading.

ENGL 3400 Studies in Romantic Literature: The English Romantic Period \# (LA-AS)
Fall. 4 credits. I. Balfour.
This course takes up a wide array of canonical and not-so-canonical texts of the Romantic period with an eye to generic, aesthetic, and political difference(s). Lyric poetry, as well as poets' reflections on poetry (Blake,
Wordsworth, Coleridge, and more) will be the domain of most intense scrutiny but not to the exclusion of novels and autobiographical texts, fictional and real (Mary Shelley, Austen, De Quincey). Topics to include the sublime, the constitution of the "I," and how to write before and after a revolution.

## [ENGL 3450 The Victorians \# (LA-AS)

Spring. 4 credits. Next offered 2012-2013.]
ENGL 3480 Studies in Women's Literature: Feminist Literary Traditions (also AMST 3481, FGSS 3480) (LA-AS)

Spring. 4 credits. M. Crawford. Are there particular traits that distinguish women's literature? Given the great range of styles and themes, how do we begin to understand the specificity of women's literary traditions? How do women writers build upon and rewrite each other's work? This course will examine the issues of form and content that distinguish 20th- and 21st- century women's novels, poetry, and drama. The course is also a study of the complexity of gender, feminism, and women's cultural and political movements. The reading may include Margaret Edson's Wit, Virginia Woolf's To the Lighthouse, Zora Neale Hurston's Their Eyes Were Watching God, Sandra Cisneros' Woman Hollering Creek, Sylvia Plath's Collected Poems, Adrienne Rich's Diving into the Wreck, and Toni Morrison's Paradise

ENGL 3490 Shakespeare and Europe (also COML 3480) \# (LA-AS)
Fall. 4 credits. May be used as one of the three pre-1800 courses required of English majors. W. Kennedy.
For description, see COML 3480.

## ENGL 3500 The High Modernist Tradition

 (LA-AS)Spring. 4 credits. D. Schwarz
Critical study of major works by Hardy, Conrad, Forster, Lawrence, Joyce, Woolf, Eliot, Yeats, Wilde, Pound, and others. While the emphasis will be on close reading of individual texts, we shall place the authors and works within the context of literary, political, cultural, and intellectual history. The course will seek to define the development of literary modernism (mostly but not exclusively in England), and relate literary modernism in England to that in Europe and America as well as to other intellectual developments. We shall be especially interested in the relationship between modern literature and modern painting and sculpture; on occasion, we shall look at slides. Within the course material, students will be able to select the topics on which they write essays.
ENGL 3508 African American Literature: 1930s-Present (also ASRC 3508) (LA-AS)
Spring. 4 credits. R. Richardson.
For description, see ASRC 3508.

## ENGL 3510 Caribbean Literature (also

 ASRC/FGSS 3510) @ (LA-AS)Fall. 4 credits. C. Boyce Davies.
For description, see ASRC 3510.
[ENGL 3530 The Modern Indian Novel @ (LA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Mohanty.]
[ENGL 3550 Decadence (also COML/ FGSS 3550/6551, ENGL 6551) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. E. Hanson.]

## ENGL 3571 The Modern Irish Writers

 (CA-AS)Spring 4 credits. K. Attell.
This is a course on Irish writing of the modern period. In our readings over the semester (which will include some of the 20th century's greatest literary texts), we will cover the development of Irish writing from the Yeats-led Irish Revival of the century's early years through Joyce's high modernist virtuosity to the proto-postmodernisms of O'Brien and Beckett. Along the way we will also examine how Irish modernism raises fundamental questions about such things as the relation between language and national identity; the nature of modernism's "newness"; colonial, postcolonial, and "semicolonial" culture; the political uses of literature; and the contending forces of cosmopolitanism and nationalism in the modern period.
ENGL 3590 Consuming Passions: Media, Space, and the Body (also FGSS 3590) (CA-AS)

Spring. 4 credits. J. Juffer.
For description, see FGSS 3590.
[ENGL 3610 Studies in the Formation of U.S. Literature: Emerson to Melville (also AMST 3610) \# (LA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Fried.]

## ENGL 3620 Studies in American

 Literature After 1850: Literature of the American South (also AMST/ FGSS 3620) (LA-AS)Fall. 4 credits. M. Pryse.
What does it mean that some people still fly the Confederate flag while others vehemently protest it? How do Southern writers help us to understand sectional division and regional identity? Proposing that Southern history and culture embody fundamental social contradictions-about race, but also about gender and class-this course will consider black and white, male and female Southern writers from the Civil War to the pre-Civil Rights era and beyond. We will read firstperson narratives and novels by Harriet Jacobs, Mark Twain, Charles Chesnutt, Kate Chopin, Lillian Smith, Flannery O'Connor, Richard Wright, William Faulkner, and Alice Walker. Students will write short papers to be shared and a longer final paper.

## ENGL 3622 Appalachian Cultural Studies (also AMST/FGSS 3622) (LA-AS)

Spring. 4 credits. M. Pryse.
When Lester Flatt and Earl Scruggs wrote the theme song for The Beverly Hillbillies, did they contribute to stereotyping mountain people or did they focus national attention on regional identity? Appalachian writers, together with musicians, have worked to define their heritage while they explore the social, economic, and environmental tensions in the region. This course will interweave fiction by

Appalachian writers Rebecca Harding Davis, Cormac McCarthy, and Bobbie Ann Mason (among others) with literary journalism (Michael Schnayerson's Coal River), documentary film, Bluegrass music (Bill Monroe, Hazel Dickens), music cultural studies (Robert Cantwell's Bluegrass Breakdown), and recent legal briefs concerning the future of mountaintop removal coal mining. Students will write two short papers and one longer paper.
[ENGL 3630 Studies in U.S. Literature: The Age of Realism and Naturalism (also AMST/FGSS 3630) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. K. McCullough.]
[ENGL 3640 Studies in U.S. Literature After 1950: American Literature, the 1980s (also AMST 3640) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Woubshet.]

ENGL 3670 Studies in U.S. Fiction: Modern American Fiction (also AMST 3670) (LA-AS)

Fall. 4 credits. J. Braddock.
This course will survey some of the significant themes and movements preoccupying 20th-century fiction, such as the relation of technology and media to literature, popular writing, and the literature of prestige, immigration, and civil rights. The reading list may include works by Faulkner, Hurston, Cather, Fitzgerald, Stein, Hemingway, Nathanael West, Ralph Ellison, Thomas Pynchon, and Toni Morrison.

## ENGL 3700 The Victorian Novel \# (LA-AS)

Fall. 4 credits. D. Faulkner.
Jane Austen and zombies, A Christmas Carol in 3D, an orgy of PBS miniseries: why is the 19th century so un-dead? The plot of the British novel-sexual betrayal, pathological greed and revenge, the sadistic damage wrought on helpless children-reflects wrenching social and technological transformations whose global sweep rivals that of our own era's conflicts. Intertwining domestic and imperial spaces, realistic fiction embodied the most innovative attempt to grasp and contain such seismic shifts in an entertaining idiom for a rising mass readership. These works refract the cultural anxieties of the age and suggest sources of redemption. We can take pleasure in them even as we critically analyze how the Victorians live now. Likely authors include Austen, Dickens, Brontë, Eliot, Hardy, Conrad.

## ENGL 3703 Reading Joyce's Ulysses (LA-AS)

Fall. 4 credits. D. Schwarz. A thorough episode-by-episode study of the art and meaning of Joyce's masterwork Ulysses. We shall place Ulysses in the context of Joyce's canon, Irish culture, and literary modernism. We shall explore the relationship between Ulysses and other experiments in modernismespecially painting and sculpture-and show how Ulysses redefines the concepts of epic, hero, and reader. We shall examine Ulysses as a political novel-specifically, Joyce's response to Yeats and the Celtic Renaissance; Joyce's role in the debate about the direction of Irish politics after Parnell; and Joyce's response to British colonial occupation of Ireland. We shall also consider Ulysses as an urban novel in which Bloom, the marginalized Jew and outsider, is symptomatic of the kind of
alienation created by urban culture. No previous experience with Joyce is required.
[ENGL 3711 American Poetry to 1950 (also AMST 3711) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. R. Gilbert.]
[ENGL 3712 American Poetry Since 1950 (also AMST 3712) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Gilbert.]

## [ENGL 3720 Medieval and Renaissance

 Drama (also THETR 3720) \# (LA-AS) Spring. 4 credits. May be used as one of the three courses pre-1800 required of Englisb majors. Next offered 2011-2012. M. Raskolnikov.]ENGL 3721 Food, Gender, Culture (also AMST/FGSS 3720) (LA-AS)
Fall. 4 credits. K. McCullough.
For description, see FGSS 3720.
[ENGL 3730 Weird Science, Hard Poems (LA-AS)
Fall. 4 credits. Next offered 2011-2012. L. Van Clief-Stefanon.]
[ENGL 3731 Reading for Writers: Weird Stories (LA-AS)
Fall. 4 credits. Next offered 2011-2012. J. R. Lennon.]

## ENGL 3732 Reading for Writers (LA-AS)

Spring. 4 credits. E. Quinonez.
The bulk of this course will be reading novels, short stories, and poems. However, there will be many craft lessons discussing narrative techniques, especially those used in film. We will watch a clip and break the scene down to figure out how a director is manipulating the narrative to tell a story. Then we will see the same manipulation being pulled off, only this time within a different medium, on paper. Good storytelling is good storytelling, and the same narrative techniques or, better said, tricks that are used in film can be applied to our fiction.

## ENGL 3745 Fiction and Film Noir (also FILM 3745) (LA-AS)

Fall. 4 credits. I. Balfour.
Detectives, blondes, hired guns, cheap booze, and city streets "dark with something more than night": this course takes up examples of film noir and noir fiction, mostly from the 1940s and 1950s, often pairing a literary original with its filmic adaptation. We will be interested in the traffic between literature and film, as well as the specificity of the medium. Singular examples are read in the light of notions of "noir" as a genre and a style. Texts from Patricia Highsmith, Raymond Chandler, James Cain, and others are paired with films by Hitchcock, Hawks, the Coen Brothers, and more. Topics to include: corruption (governmental, individual), betrayal, guilt, the lures of ambiguity, the more or less mythical femme fatale, and other matters of life and death.

ENGL 3750 Studies in Drama and
Theatre: 20th-Century Drama: Theatres of Selfhood (also THETR 3750) (LA-AS)

Spring. 4 credits. P. Lorenz.
There is a long tradition of "discovering" what it means to be a human being in theater. From the tragedies of Sophocles and Shakespeare that were so important to Freud, through Schiller's understanding of "the stage as a moral institution," to the alienation effect
discovered and deployed there by Brecht, theater has long been a test-site of theory. In this course we follow this tradition, asking, in particular, how the modern stage has responded to the historical, political, philosophical, and aesthetic challenges of the 20th century. Reading includes plays and other texts by Chekhov, Pirandello, Lorca, Brecht, Artaud, Pinter, Soyinka, Müller, and Parks.
[ENGL 3751 Magical Realism Revisited (CA-AS)
Spring. 4 credits. Next offered 2012-2013. E. Quinonez.]

ENGL 3762 Law and Literature: The Jury as Audience
Fall. 4 credits. B. Meyler.
The jury is purportedly "the bulwark of democracy," but it has also been seen as the most potentially destabilizing component of the Anglo-American legal system. Literature, drama, and TV crime shows have helped to form these competing views of the jury. How and why have plays compared jurors with spectators? How were 19th-century trial reports like and unlike novels, and how did jurors read both? Has the alleged "CSI effect" really made contemporary American juries demand more forensic evidence? This course will explore these and related questions in historical and legal context. Works studied may include Shakespeare's Titus Andronicus, Daniel Defoe's Moll Flanders, Wilkie Collins's The Law and the Lady, Susan Glaspell's "A Jury of Her Peers," Anna Deavere Smith's Twilight: Los Angeles, and CSI.

## ENGL 3765 Literature of the Black

 Atlantic (also ASRC 3765) (LA-AS) Spring. 4 credits. D. Woubshet.This course will examine literature from the contemporary black Atlantic world, including Africa, the Caribbean, Europe, and North America. We will ask: what are the salient themes that define the writing of contemporary black authors? What are the different articulations of blackness that emerge in this wide constellation? What forms of difference-nationality, region, gender, sexuality, etc.-inform contemporary black identities? How are the different modes of globalization, such as satellite media, altering the intercourse between the various black Atlantic worlds? Authors will include Toni Morrison, Jamaica Kincaid, Thomas Glave, Edwidge Danticat, Derek Walcott, Isaac Julien, Ben Okri, Uzodinma Iweala, and Dinaw Mengistu.

## ENGL 3773 The Harlem Renaissance and the Black Arts Movement (also

 AMST 3773) (CA-AS)Spring. 4 credits. M. Crawford.
How do visual art, theater, music, poetry, and novels come together in particular cultural movements? How does the modernism of the 1920s and '30s differ from the experimentations that shaped the 1960s and '70s? How are artists influenced by social movements? How does art influence the very direction of social movements? This course will compare the 1920s and '30s Harlem Renaissance and the 1960s and '70s Black Arts movement. Both social movements produce a stunning interplay of words, images, music, dance, assimilation, and resistance. The selected artists may include Josephine Baker, Nella Larsen, Langston Hughes, Sun Ra, James Brown, Amiri Baraka, Gil Scott-Heron, Nikki Giovanni, Romare Bearden, and the AfriCobra collective.

ENGL 3790 Reading Nabokov (also RUSSL 3385) (LA-AS)
Fall. 4 credits. G. Shapiro.
For description, see RUSSL 3385.
ENGL 3801 Poetry and Poetics of the Americas (also COML/SPAN/LATA 3800, AMST 3820) (LA-AS)
Fall. 4 credits. J. Monroe.
For description, see COML 3800.
ENGL 3810 Reading as Writing (LA-AS)
See complete course description in section headed "Critical Writing and Literary Nonfiction."

ENGL 3820-3830 Narrative Writing (LA-AS)
See complete course description in section headed "Creative Writing."

ENGL 3840-3850 Verse Writing (LA-AS)
See complete course description in section headed "Creative Writing."

ENGL 3860 Philosophic Fictions (LA-AS)
See complete course description in section headed "Critical Writing and Literary Nonfiction."

ENGL 3880 The Art of the Essay (LA-AS)
See complete course description in section headed "Critical Writing and Literary Nonfiction."

ENGL 3980 Latina(o) Popular Culture (also LSP 3980, AMST 3981) (CA-AS)
Fall. 4 credits. M. P. Brady.
This course will explore Latino/a cultural work including music, film, websites, comics, television, lowriders, and art. We will consider how this work emerges in the context of U.S. engagements with Latin America and in the context of struggles for social and economic equality among ethnoracial groups in the United States. We will also study the relationship between cultural production, representation, and public policy. U.S. Latino/a history is strongly recommended as a prerequisite, but not required.

## Courses for Advanced Undergraduates

Courses at the 4000 level are open to juniors and seniors and to others by permission of instructor unless other prerequisites are noted

## ENGL 4020 Literature as Moral Inquiry

 (KCM-AS)Fall. 4 credits. S. Mohanty.
What can literary works, especially novels, tell us about moral issues? Should they be seen as suggesting a form of moral inquiry similar to the kind of philosophical discussion we get in, say, Aristotle's Nicomachean Ethics? Can reading philosophical works in ethics together with novels that deal with similar themes help us understand these themes better? This course is an attempt to answer these questions. We will read selections from Aristotle, Kant, Marx, and Nietzsche, and use these works to help us understand the nature of moral inquiry in novels like Eliot's Middlemarch, Coetzee's Disgrace, Morrison's Beloved, Woolf's Mrs. Dalloway, Conrad's Heart of Darkness, and Achebe's Things Fall Apart. Other writers we will most probably read include Nadine Gordimer, Doris Lessing, and Kazuo Ishiguro
[ENGL 4030 Studies in American Poetry: A. R. Ammons, John Ashbery, and Adrienne Rich (also AMST 4030) (LA-AS)
Fall. 4 credits. Next offered 2012-2013.
R. Gilbert.]
[ENGL 4050 The Politics of Contemporary Criticism (LA-AS)
Spring. 4 credits. Next offered 2012-2013. S. Mohanty.]

ENGL 4075 Secularism and Its Discontents (also RELST/GOVT/ SHUM 4845)
Fall. 4 credits. E. Anker.
For description, see SHUM 4845.
ENGL 4076 The Poetics of Capital (also SHUM 4841)
Fall. 4 credits. J. Clover.
For description, see SHUM 4841.

## ENGL 4077 Yellowface (also FILM/AAS/

 SHUM 4954, COML 4068)Spring. 4 credits. Y. Huang.
For description, see SHUM 4954.
ENGL 4090 Theories of Popular Culture (also ENGL 6090) (CA-AS)
Fall. 4 credits. J. Juffer.
Why study popular culture? Although it is often equated with mass culture and perceived to be unworthy of academic study, this course argues that popular culture is an important site for the production of both pleasure and politics. We consider a range of theoretical approaches and read a spectrum of cultural critics and theorists, from those who equate the popular with the "folk" and the marginalized to those who explore the highly mediated and commercialized aspects of the popular. We look across media and its sitestelevision, film, the porn industry, baseball, popular music, and Starbucks coffee shops. Studies of texts will be located in economic, political, and social contexts. Also, we ask what feelings of desire, pleasure, fear, and disgust does popular culture generate?
[ENGL 4140 Bodies of the Middle Ages: Embodiment, Incarnation, Performance (also FGSS 4140) \# (LA-AS)
Spring. 4 credits. May be used as one of the three pre- 1800 courses required of English majors. Next offered 2012-2013. M. Raskolnikov.]
[ENGL 4170 The Archaeology of the Text from Chaucer through the Renaissance (also ENGL 6170) \# (HA-AS)
Fall. 4 credits. May be used as one of the three pre- 1800 courses required of English majors. Next offered 2012-2013. A. Galloway.]

ENGL 4200 Renaissance Humanism (also ENGL 6240, COML 4520/6520) \# (LA-AS)
Spring. 4 credits. W. Kennedy.
For description, see COML 4520.
ENGL 4210 Shakespeare in (Con)Text (also THETR 4460, VISST 4546) \# (LA-AS)
Fall. 4 credits. B. Levitt.
For description, see THETR 4460.
[ENGL 4211 Advanced Seminar in the Renaissance: Literature, Science, and Renaissance Curiosities \# (LA-AS)
Fall. 4 credits. May be used as one of the three pre-1800 courses required of English majors. Next offered 2011-2012. J. Mann.]

## ENGL 4212 Literature and the Scientific

 Revolution in England \# (LA-AS)Spring. 4 credits. J. Mann.
"I trust nothing but on the faith of my eyes": Francis Bacon's declaration became a central tenet of philosophical inquiry during the 17 th century, as gentlemen and artisans began to collect specimens, dissect bodies, and survey the physical universe. This course explores how the new experimental "science" reverberated in imaginative productions in the age of Shakespeare and Milton. How did poetry and fiction find room for the growing domain of "fact"? Why did Englishmen focus this new scientific gaze on "curiosities" such as the human cadaver, the hermaphrodite, and the New World Indian? In surveying the major developments in English scientific thought before the Enlightenment, the interdisciplinary readings in this course will also introduce students to important literary and philosophical texts from the Renaissance.

## [ENGL 4270 Advanced Seminar in Shakespeare: Shakespeare and Marlowe (also THETR 4270) \#

 (LA-AS)Fall. 4 credits. Next offered 2011-2012. B. Correll.]

ENGL 4450 Text Analysis for Production: How to Get from the Text onto the Stage (also THETR 4450)
Spring. 4 credits. B. Levitt.
For description, see THETR 4450.
ENGL 4500 History of the Book \# (HA-AS)
Spring. 4 credits. K. Reagan. This course provides an overview of the book as a material and cultural artifact. Focusing on the era of the printed book (post-1450) in Europe and America, we examine the invention and spread of printing and publishing, and the evolution of book design, illustration, and binding. The course places an emphasis on practical tools for the identification and analysis of books and other printed artifacts, especially for literary students. Investigations and assignments are built around hands-on interaction with examples of Cornell Library's rare books, manuscripts, and related materials. This course meets in the Carl A. Kroch Library.

## ENGL 4507 Black Women Writers (also

 ASRC/FGSS 4507) (also LA-AS)Spring. 4 credits. C. Boyce Davies. For description, see ASRC 4507.

## [ENGL 4508 The Harlem Renaissance

 (also ASRC 4508) (LA-AS)Fall. 4 credits. Next offered 2011-2012. R. Richardson.]
[ENGL 4509 Toni Morrison's Novels (also ASRC 4509/6513)
Spring. 4 credits. Next offered 2011-2012. R. Richardson.]
[ENGL 4515 Ariosto, Rabelais, Spenser (also ENGL 6515, COML/ROMS 4515/6515) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. W. Kennedy.]
[ENGL 4530 20th-Century Women Writers of Color (also AAS/FGSS 4530) (LA-AS)
Fall. 4 credits. Next offered 2012-2013. S. Wong.]

ENGL 4580 Imagining the Holocaust (also COML 4830, GERST 4570, JWST 4580) (LA-AS)
Spring. 4 credits. D. Schwarz.
What is the role of the literary imagination in keeping the memory of the Holocaust alive for our culture? We shall examine major and widely read Holocaust narratives that have shaped the way we understand and respond to the Holocaust. We shall begin with first person reminiscences-Wiesel's Night, Levi's Survival at Auschwitz, and The Diary of Anne Frank-before turning to realistic fictions such as Kineally's Schindler's List (and Spielberg's film), Kertesz's Fateless, Kosinski's The Painted Bird, and Ozick's "The Shawl." We shall also read the mythopoeic vision of Schwarz-Bart's The Last of the Just, the illuminating distortions of Epstein's King of the Jews, the Kafkaesque parable of Appelfeld's Badenheim 1939, and the fantastic cartoons of Spiegelman's Maus books.

ENGL 4600 Melville (also AMST 4600) \# (LA-AS)
Fall. 4 credits. B. Maxwell. An American whose life and writing ranged over the globe, Herman Melville (in the estimation of C.L.R. James) "saw the tendency of things." Our study of the fiction and poetry will turn on some of those "things" of modernity that most obsessively engaged Melville's representational and critical capacities: slavery; illegitimate authority; exterminationist policy directed against American Indians; capitalism; orphanhood and homelessness; imperialism; the attempted occultation of women; the shifting terrain of male comradeship; and the ambivalent resort to religion. We will be interested in testing the premise that Melville charted the fault lines of his world with an "unenrolled" critical acuity unparalleled in United States literature.
[ENGL 4601 Riddles of Rhythm (LA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Fried.]
[ENGL 4610 The American Short Story: Where We've Been, Where We're Going (LA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Vaughn.]

ENGL 4620 The American Enlightenment (also AMST 4620)
Spring. 4 credits. May be used as one of the three pre- 1800 courses required of English majors. M. Jonik.
This course is an interdisciplinary examination of the ideas that shaped American civil, cultural, and intellectual life, from late Puritanism to the emergence of Transcendentalism. Whereas many scholars have primarily dwelt on the political, religious, or historical aspects of what has come to be called "The American Enlightenment," we will explore how transatlantic exchanges of philosophy, poetry, natural science, medicine, etc. both reveal new contexts for understanding it, and themselves continue to challenge notions of revolution, slavery, sovereignty, empire, conceptions of the "human" and human rights, the body, natural and mental philosophy. In addition to works from Newton, Locke, Rousseau, Burke, Edwards, Franklin, Jefferson, and Paine, we
will consider lesser-known texts from Cotton Mather, Cadwallader Colden, Samson Occam, Phillis Wheatley, and Olaudah Equiano.
ENGL 4631 Entering History, Entering Fiction: Gender, Race, and Nation in U.S. Fiction (also AMST/FGSS 4631) (LA-AS)
Fall. 4 credits. K. McCullough.
How have fictions of national identity been produced from diverse histories of the various peoples of the United States? Although categories of region, religion, and class figure in this national discourse, historically the terms of our internal difference have been understood primarily as those of ethnicity and race. In this course we will examine fiction and historical texts that engage in this conversation. We'll start by examining historical formations of categories of race and ethnicity, as well as some histories of entry of peoples into the United States. We'll also explore questions of gender's role in ethnic/ racial identity; of race and gender's impact on citizenship; and of history's role as a tool for cultural survival and transformation, for accommodation and resistance to dominant norms. Readings from Alcott, Chopin, Chesnutt, and others.
ENGL 4640 Gossip (also ENGL 6640, THETR 4440/6440) (also LA-AS)
Spring. 4 credits. N. Salvato.
For description, see THETR 4440.
ENGL 4660 James on Film (LA-AS)
Spring. 4 credits. D. Fried.
Henry James's psychologically probing tales of betrayal, delusion, and tragically misdirected freedom pose a powerful challenge for screen adaptation. Analysis of selected films based on James's novels involves close reading of these extraordinary texts as well as examination of screenplay form, verbal and visual styles of narrative, and larger questions of the expectations of moviegoers and readers. Study of James's aspirations as a dramatist, his writings on theater, photography, painting, and fiction, and controversies about the interpretation of the novels contribute to understanding how James's stories have been retold by filmmakers. Novels/films may include Daisy Miller, Washington Square/The Heiress, The Bostonians, The Turn of the Screw/The Innocents, and The Portrait of a Lady or The Wings of the Dove.

## [ENGL 4662 Contemporary American

 Indian Poets (also AMST 4662)
## (LA-AS)

Fall. 4 credits. Next offered 2011-2012.
E. Cheyfitz.]

ENGL 4671 International Cultural Studies 1970 to Present (also ASRC 4671)
Spring. 4 credits. G. Farred.
This course will explore the
internationalization of the field that marked Cultural Studies endeavors from the 1970s on, especially its articulation in sites such as Australia, the Far East (Hong Kong, among other centers) and, of course, the United States. How has the global reach of Cultural Studies changed how we think about culture, about the constructions of group identity, and about the social conditions in which artifacts are consumed and assigned value? The animating question for this course is: what is the standing of Cultural Studies for our moment? How can Cultural Studies provide us with the analytical tools for thinking about how we engage the world on an everyday basis?
[ENGL 4690 The Paranoid Style in Contemporary American Fiction and Film (LA-AS)
Spring. 4 credits. Next offered 2011-2012. K. Attell.]
[ENGL 4700 Senior Seminar in the Novel: Reading Joyce's Ulysses (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Schwarz.]
[ENGL 4701 Documentary Recording, Writing, and Film (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
J. Braddock.]
[ENGL 4725 Advanced Seminar in Postcolonial Literatures: Nation, Exile, and Migration in Postcolonial Literatures (LA-AS)
Spring. 4 credits. Next offered 2011-2012. E. Anker.]
[ENGL 4750 Advanced Seminar in the 20th Century: AIDS Literature (also AMST 4755, FGSS 4751)
Spring. 4 credits. Next offered 2012-2013 D. Woubshet.]
[ENGL 4791 Transgender and Transexuality (also FGSS 4791) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
M. Raskolnikov.]

ENGL 4800-4810 Seminar in Writing (LA-AS)
4800, fall; 4810, spring. 4 credits.
For description, see section "Creative Writing."
[ENGL 4820 Hamlet: The Seminar (also THETR 4470) \# (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
B. Levitt.]

ENGL 4880 Contemporary Poetry and Poetics (also COML 4860/6865) (LA-AS)
Spring 4 credits. J. Monroe.
For description, see COML 4860.
ENGL 4910 Honors Seminar I
Fall. 4 credits. Open to students in the Honors Program in English or related fields, or by permission of instructor. Sem. 1. Shakespeare: The Greek and Roman Plays. B. Correll. May be used as one of the three pre-1800 courses required of English majors.
Some of Shakespeare's most engaging dramas are about classical characters: Julius Caesar, Antony and Cleopatra, Coriolanus. In his Greek and Roman plays, Shakespeare brings classical heritage to his Renaissance audience; he also actively adapts it in provocative and innovative ways. These plays, from classical sources, come with big questions. Why do so many of Shakespeare's characters both represent classical authority and place themselves in conflict with it? How do Shakespeare's adaptive practices compare with other Renaissance playwrights? What is the relationship between these historical plays and their early modern settings? What do they contribute to issues of gender, sexuality, subject formation? We will read ten texts in the seminar and also include some film to see how contemporary filmmakers adapt Shakespeare's adaptations.
Sem. 102. 20th-Century Women Writers of Color. S. Wong (also AAS 4910, FGSS 4912)
In this course, we'll be reading literatureprimarily novels-produced by hemispheric

American women writers of the mid- to late 20th century. We will look at how these writings articulate concerns with language, home, mobility, and memory, and at how the work is informed by the specificities of gender, race, region, and class. Readings may include work by Leslie Marmon Silko, Sandra Cisneros, Theresa Hak Kyung Cha, Jamaica Kincaid, Gwendolyn Brooks, Ann Petry, Fae Myenne Ng, Carolivia Herron, Helena Maria Viramontes, and Shani Mootoo. Course requirements will include class presentations, short responses to the readings, and a longer research essay.

## ENGL 4920 Honors Seminar II

Spring. 4 credits. Open to students in the Honors Program in English or related fields, or by permission of instructor.
Sem. 1. Authentic Romantics. C. Chase.
Who are the "authentic" Romantics? Looking for an authentic voice when we read dates back to the Romantic period. In this seminar we will examine how the idea of authenticity appears in works by William Wordsworth, Percy Bysshe Shelley, John Keats, and a "preRomantic," Jean-Jacques Rousseau. Rousseau's Confessions subordinate the concept of truth versus falsehood to the concept of truth as authenticity. Wordsworth's autobiographical poem, The Prelude, aims at authentically representing "the growth of a poet's mind." Shelley and Keats pursue other conceptions of an authentic language. We will look closely at how these texts raise questions about the self and language. Three papers, developing skills necessary for writing an Honors thesis.
Sem 2. American Paranoia. K. Attell.
Following the lead of Richard Hofstadter's classic 1964 essay "The Paranoid Style in American Politics," this course will examine the "paranoid style" in contemporary American fiction and film. The paranoias and plots we will encounter vary considerably (personal paranoias, political conspiracies, governments turned enemy, surveillance technology run amok, apocalyptic-millennial paranoia. Yet when viewed together they seem to cohere as a distinct style within post-WWII American narrative. We will ask how paranoid style responds to the contemporary American context and how the fears dominating these narratives shape their aesthetic form. Why has paranoia arisen as such a distinctively American attitude? What is the paranoid afraid of? (Should we be paranoid, too?) Novels by Nabokov, Pynchon, Reed, Dick, DeLillo, Didion, Roth; films by Coppola, Romero, Bigelow, Baldwin.
ENGL 4930 Honors Essay Tutorial I
Fall or spring. 4 credits. Prerequisites: senior standing and permission of director of the Honors Program.

## ENGL 4940 Honors Essay Tutorial II

Fall or spring. 4 credits. Prerequisites: ENGL 4930 and permission of director of the Honors Program.

## ENGL 4950 Independent Study

Fall or spring. 2-4 credits. Prerequisites: permission of departmental advisor and director of undergraduate studies.

## Courses Primarily for Graduate Students

Permission of the instructor is a prerequisite for admission to courses numbered in the 6000 s . These are intended primarily for
graduate students, although qualified
undergraduates are sometimes admitted.
Undergraduates seeking admission to a 6000level course should consult the instructor. The list of courses given below is illustrative only; a definitive list, together with course descriptions and class meeting times, is published in a separate department brochure before course enrollment each semester.

## Graduate Courses in English 2010-2011

Fall
ENGL 6000 Colloquium for Entering Students
F. Bogel.

ENGL 6090 Theories of Popular Culture (also ENGL 4090) J. Juffer.

ENGL 6110 Old English (also ENGL 3110) T. Hill.

ENGL 6150 Piers Plowman and the Pearl Poet
M. Raskolnikov.

ENGL 6300 Aesthetics in the 18th Century (also COML 6300) N. Saccamano.

ENGL 6341 Aesthetic of Excess: PsychoPhilosophical Approaches to Technology (also COML 6341) T. Murray.

ENGL 6360 Comparative Modernisms/ Alternative Modernities: Postcolonial Approaches (also COML 6385) N. Melas.

ENGL 6385 The Fiction of Empire (also COML 6385)
W. Cohen.

ENGL 6520 Thinking Heidegger G. Farred.

ENGL 6614 The Archive of the 20th Century
J. Braddock.

ENGL 6632 Modern American Poetry (also AMST 6632)
R. Gilbert.

ENGL 6770 Seminar in Theatre: Theatre, Theory, Form
P. Lorenz.

## ENGL 6795 Lyric Genres

 D. Fried.ENGL 6999 Studies in African American Literature: Performance and African American Literature (also AMST 6999)
M. Crawford.

ENGL $\mathbf{7 8 0 0}$ MFA Seminar: Poetry R. Morgan.

ENGL 7801 MFA Seminar: Fiction S. Vaughn.

ENGL 7850 Reading for Writers: Weird Stories
J. Lennon.

## Spring

ENGL 6120 Beowulf (also ENGL 3120) S. Zacher.

ENGL 6240 Renaissance Humanism (also COML 4520/6520, ENGL 4200)
W. Kennedy.

## ENGL 6306 Figures of Thought: Africana Intellectuals (also ASRC 6306) <br> G. Farred. <br> ENGL 6390 Studies in Romantic Literature: Romanticism and Freedom <br> I. Balfour.

## ENGL 6511 Theorizing Diaspora (also ASRC 6511)

C. Boyce Davies.

ENGL 6612 Colonial American Literature (also AMST 6612)
E. Cheyfitz.

ENGL 6640 Gossip (also THETR 6640/4440, ENGL 4440)
N. Salvato.

## ENGL 6781 George Eliot

 H. Shaw.
## ENGL 6811 James Baldwin (also FGSS/ AMST 6811)

D. Woubshet.

## ENGL 6815 Poesis

 R. Kalas.ENGL 6820 Baudelaire and Hopkins (also COML 6840)
J. Culler.

## ENGL 6880 Contemporary Poetry and Poetics (also COML 6865) <br> J. Monroe.

## ENGL 6920 Neoformalist Theory and Practice <br> F. Bogel.

## ENGL 7810 MFA Seminar: Poetry A. Fulton.

ENGL $\mathbf{7 8 1 1}$ MFA Seminar: Fiction H. Viramontes.

ENGL 7850 Reading for Writers M. McCoy.

## FEMINIST, GENDER, \& SEXUALITY STUDIES

Joint faculty: Lourdes Benería (City and Regional Planning), Heidi Hoechst (English), Jane Juffer (English), Sherry Martin (Government), M. Kate McCullough (English), and Amy Villarejo (Theatre, Film, and Dance).

Core and cross-listing faculty: Annetta Alexandridis, Judith Bernstock, Francine Blau, Carole Boyce Davies, Mary Pat Brady, Judith Byfield, Debra Castillo, Derek Chang, Ken Cohen, Margo Crawford, Ileen DeVault, Ziad Fahmy, Shelley Feldman, Maria Fernandez, Cheryl Finley, Joanne Fortune, Durba Ghosh, Sabine Haenni, Ellis Hanson, Molly Hite, Cary Howie, Paul Hyams, Ayfer Karakya-Stump, Mary Katzenstein, Petrus Liu, Kathleen Long, Kathryn March, Laura Meixner, Suzanne Mettler, Lauren Monroe, Mary Beth Norton, Jacqueline Pak, Andrea Parrot, Judith Peraino, Lisa Pincus, Rachel Prentice, Sara Pritchard, Masha Raskolnikov, Riche Richardson, Margaret Rossiter, Nerissa Russell, Naoki Sakai, Nick Salvato, Shirley Samuels, Paul Sangren, Dawn Schrader, Suman Seth, Anna Marie Smith, Deborah Starr, Marie-Claire Vallois, Linda Van Buskirk, Mildred Warner, Sara Warner, Margaret Washington, Rachel Weil, Shelley Wong, Dagmawi Woubshet, Haiping Yan

## Introduction to the Program

The Feminist, Gender, \& Sexuality Studies Program (FGSS) is an interdisciplinary program that investigates how gender is embedded in cultural, social, and political formations. The study of gender and sexuality urges attention to the complex structures of power and inequality, tracing intersections and relationships among sexuality, race, class, age, ethnicity, and nationality. Founded in 1972 as Women's Studies, this program has been a home for innovative approaches to research in gender and sexuality studies, as well as a site for important theoretical and activist debates among feminists and cutting-edge research for scholars from across the humanities and social sciences.
The Feminist, Gender \& Sexuality Studies Program's course offerings are built around several assumptions about the study of gender and sexuality. First, understandings of sex, sexuality, and gender are neither universal nor immutable; to study them is to gain a fuller understanding of human behavior, culture, and society across times and places as well as to gain a sense of how these social
constructions shape us as individuals. Second, gender and sexuality are best understood when examined in relation with race, class, and nation, through understanding how social relations are structured by multiple facets of identity. Third, even the most current knowledge derived from the humanities, social sciences, and natural sciences is not impartial, objective, or neutral but instead emerges out of particular historical and political contexts. FGSS graduates are trained in critical thinking, analytic writing, and cultural competencies that enhance their lifelong personal and intellectual growth, as well as their professional development. Graduates of this program have gone on to work successfully in a wide variety of fields, including law, medicine, social policy, arts, psychology, and literature.

## Program Offerings

Feminist, Gender, \& Sexuality Studies (FGSS) offers an undergraduate major, an undergraduate minor, and a graduate minor. Undergraduate students in the College of Arts and Sciences who wish to major in FGSS may apply directly to the program. Undergraduate students in other colleges at Cornell will need to work out special arrangements and should speak to FGSS's director of undergraduate studies (DUS).

## The Undergraduate Major: FGSS

1. Prerequisite courses: Before applying to the major, the student must complete any two FGSS courses with a grade of B- or better. For FGSS courses that are crosslisted with another department, students may register through FGSS or the crosslisting department. Suggested entry-level courses include any FGSS course at the 2000 level, especially 2010 and 2020, both of which are required for completion of the major. FGSS courses at the 2000 level or above may count as both prerequisites and as part of the FGSS major. First-year writing seminars may count as prerequisites but not as part of the major.

## 2. Required course work:

a. A minimum of 36 credits in FGSS courses with a grade of C - or higher is required for the major. For FGSS courses that are
cross-listed, students may register through FGSS or the cross-listing department.
b. These 36 credits must include the following three courses:
FGSS 2010 Introduction to Feminist, Gender, and Sexuality Studies
FGSS 2020 Introduction to Feminist, Gender, and Sexuality Theories
FGSS 4000 Senior Seminar in Feminist, Gender, and Sexuality Studies
c. The 36 credits must also include at least one FGSS course with a significant focus on each of the following three categories: (Note: Although a given course may satisfy one, two, or even three of these categories, a given student must take at least two courses to fulfill this requirement):

- Lesbian, Gay, Bisexual, and Transgender (LGBT) studies
- Intersecting structures of oppression: race, ethnicity, and/or class (ISO)
- Global perspectives: Africa, Asia, Latin America, or Middle East, by itself or in a comparative or transnational framework (GLO)
A student with a double major may count up to three FGSS courses toward the FGSS major that she/he is simultaneously counting toward a second major.
The Honors Program: To graduate with honors, a student majoring in FGSS must complete a senior thesis under the supervision of an FGSS faculty member and defend that thesis orally before an honors committee. To be eligible, a student must have at least a cumulative 3.0 GPA in all course work and a 3.3 GPA in all courses applying to their FGSS major. Students interested in the honors program should consult the DUS late in the spring semester of their junior year, or very early in the fall semester of their senior year.


## The FGSS Undergraduate Minor

Undergraduate students in any college at Cornell may minor in Feminist, Gender, \& Sexuality Studies in conjunction with a major defined elsewhere in the university. The minor consists of five FGSS courses with a grade of C- or higher, through FGSS or the cross-listing department that are completed with a grade of C - or above, none of which may be counted toward the student's non-FGSS major. An exception to this rule may be made for students in the contract colleges, who may petition the FGSS DUS to count one course from their major toward the FGSS minor. Firstyear writing seminars may not be included within the five required courses. Students wishing to minor in FGSS should see the DUS. The five courses required for the FGSS Undergraduate Minor must include:

FGSS 2010 Introduction to Feminist, Gender, and Sexuality Studies

FGSS 2020 Introduction to Feminist, Gender, and Sexuality Theories

Any FGSS course that satisfies at least one of the three categories required for a major as defined above.

Any two additional FGSS courses of the student's choice.

## The LGBT Studies Undergraduate Minor

FGSS serves as home to the Lesbian, Gay, Bisexual, \& Transgender (LGBT) Studies Program, which offers an undergraduate minor as well as a graduate minor. The undergraduate minor consists of four courses For a complete listing of all courses that will fulfill this minor please see the LGBT Studies portion of this catalog.

## 1. First-Year Writing Seminars

FGSS 1060 FWS: Women and Writing (also ENGL 1060)
Fall and spring. 3 credits. Staff.

## 2. Courses

FGSS 2010 Introduction to Feminist, Gender, and Sexuality Studies (CA-AS)
Fall and spring. 4 credits. Fall, J. Juffer; spring, K. McCullough.
Feminist, Gender, \& Sexuality Studies is an interdisciplinary program focused on understanding the impact of gender and sexuality on the world around us and on the power hierarchies that structure it. This course focuses mainly on the experiences, historical conditions, and concerns of women as they are shaped by gender and sexuality both in the present and the past. Students read a variety of texts, personal narratives, historical documents, and cultural criticism across a range of disciplines. In doing so, students consider how larger structural systems of both privilege and oppression affect individuals' identities, experiences, and options, and simultaneously examine forms of agency and action taken by women in the face of these larger systems.

FGSS 2020 Introduction to Feminist, Gender, and Sexuality Theories (CA-AS)
Spring. 4 credits. H. Hoechst.
This course introduces students to the ways that scholars in different disciplines analyze power, inequalities, and subjectivity. It examines theoretical models for analyzing gender and sexuality at the intersections of class, race, ethnicity, religion, and other organizing constructs of modern societies. The course approaches theory as a mode of enquiry that aims to challenge and change cultural, social, and historical assumptions that constrict the ways that we think about and live gender and sexuality. The course investigates how scholars in different disciplines use theory as a tool for analyzing relations of power. It will pay particular attention to ongoing debates in contemporary feminist and queer theory.
FGSS 2090 Seminar in Early American History (also AMST/HIST 2090) \# (HA-AS)
Fall. 4 credits. M. B. Norton.
For description, see HIST 2090.
FGSS 2140 Biological Basis of Sex Differences (also BIOAP 2140, BSOC 2141) (PBS)

Fall. 3 credits. Offered alternate years. J. Fortune.

## FGSS 2160 Television (also AMST/ENGL/ FILM/THETR/VISST 2160) (LA-AS)

Fall. 4 credits. N. Salvato
For description, see THETR 2160.

## FGSS 2290 Intro to LGBT Studies (also

 FREN 2280)Fall. 4 credits. Conducted in English. Students with knowledge of French may take FREN 3000, which includes French disc sec, for an additional credit. Recommended for students considering minor in LGBT Studies. C. Howie.
This course serves to introduce students to the disciplines of lesbian, gay, bisexual, and transgender studies. We'll address categories such as gender, queerness, identity, desire, and kinship, and pay close attention to the texts, families, and traditions that articulate these categories. We'll read some of the classic texts of LGBT studies (such thinkers as Michel Foucault, Judith Butler, Eve Sedgwick, and Leo Bersani) alongside classic texts of LGBT literature (from France's earliest literary "lesbian," Madeleine de l'Aubespine, to more recent cultural phenomena such as Brokeback Mountain and Alison Bechdel's Fun Home).

## FGSS 2510 Introduction to Women

 Writers (also ENGL 2511) (LA-AS)Spring. 4 credits. K. McCullough.
For description, see ENGL 2511.
FGSS 2511 Black Women to 1900 (also AMST/HIST 2511) \# (HA-AS)
Fall. 4 credits. M. Washington.
For description, see HIST 2511.
FGSS 2512 Black Women in the 20th Century (also AMST/HIST 2512) (HA-AS)
Spring. 4 credits. M. Washington.
For description, see HIST 2512.
[FGSS 2730 Women in American Society, Past and Present (also AMST/HIST 2730) \# (HA-AS)

Fall. 4 credits. Next offered 2012-2013.
M. B. Norton.]

FGSS 2760 Desire (also COML/ENGL 2760, THETR 2780) (LA-AS)
Spring. 4 credits. E. Hanson.
For description, see ENGL 2760.
FGSS 2780 Body as Text: Pleasure and Danger (also ENGL 2780) (LA-AS)
Fall. 4 credits. M. Raskolnikov.
For description, see ENGL 2780.
[FGSS 2840 Sex, Gender, and Communication (also COMM 2840)
Fall. 3 credits. Next offered 2011-2012.
L. Van Buskirk.]
[FGSS 3070 African American Women in Slavery and Freedom (also AMST/ HIST 3030) \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. M. Washington.]

FGSS 3130 Special Topics in Drama and Performance (also ASRC/THETR 3130)

Fall and spring. 4 credits. Fall, S. Warner; spring, H. Yan.
For description, see THETR 3130.
FGSS 3210 Sex and Gender in CrossCultural Perspective (also ANTHR 3421) @ (SBA-AS)

Fall. 4 credits. K. March.
For description, see ANTHR 3421.
FGSS 3220 Women in Ancient Israel (also JWST 3620, NES/RELST 3720)
Fall. 4 credits. L. Monroe.
For description, see NES 3720.

FGSS 3221 Lives of Scientists and Engineers (also STS 3221) (HA-AS)
Spring. 4 credits. M. Rossiter.
For description, see STS 3221.
[FGSS 3250 Queer Performance (also THETR 3260) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. S. Warner.]
[FGSS 3370 Contemporary American Theater (also THETR/AMST 3370) (LA-AS)
Spring. 3 credits. Next offered 2011-2012. S. Warner.]
[FGSS 3440 Male and Female in Chinese Culture and Society (also ANTHR 3554) @ (SBA-AS)

Fall. 4 credits. Next offered 2012-2013. S. Sangren.]
[FGSS 3450 American Film (also AMST/ ENGL/FILM 3440, VISST 3645) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Haenni.]
[FGSS 3470 Asian American Women's History (also AAS/AMST/HIST 3470) (CA-AS)
Spring. 4 credits. Next offered 2012-2013.
D. Chang.]

FGSS 3480 Studies in Women's Literature: Modern Women's Literature (also ENGL 3480) (LA-AS)
Fall. 4 credits. M. Crawford.
For description, see ENGL 3480.
[FGSS 3500 Contemporary Issues in Women's Health (also PAM 3500) Spring. 3-5 variable credits. Next offered 2011-2012. A. Parrot.]

FGSS 3510 Caribbean Literature (also ASRC/ENGL 3510) @ (LA-AS)
Fall. 4 credits. C. Boyce Davies.
For description, see ASRC 3510.
FGSS 3530 Monsters A-X (also FREN/ COML 3530) \# (CA-AS)
Spring. 4 credits. K. Long.
For description, see FREN 3530.

## [FGSS 3550 Decadence (also COML/

 ENGL 3550) (LA-AS)Spring. 4 credits. Next offered 2011-2012.
E. Hanson.]

FGSS 3580 Theorizing Gender and Race in Asian Histories and Literatures (also ASIAN 3388, COML 3980) @ (CA-AS)
Fall. 4 credits. N. Sakai.
For description, see ASIAN 3388.
FGSS 3590 Consuming Passions: Media, Space, and the Body (also ENGL 3590) (CA-AS)

Spring. 4 credits. J. Juffer.
This course examines the intersections of gender, sexuality, space, and popular culture. Ranging across media-film, literature, television, and music-the class analyzes how these different forms represent and constitute gendered and sexed bodies. How does the Lifetime channel, for example, represent itself as a woman's space? Spike as a man's space? Are these distinctions breaking down, resulting in more hybrid genres? How do race, ethnicity, age, and class figure in? We connect media to sites of production, distribution, and consumption, such as the theater, the home, and cyberspace with particular emphasis on the affective and often passionate realm of
consumption. Questions of access are considered: which technologies have provided access to marginalized groups, and on what terms? What are the political possibilities of popular culture, and what are the intersections of politics and pleasure?

## FGSS 3620 Studies in American

 Literature after 1850: Literature of the American South (also AMST/ ENGL 3620) (LA-AS)Fall. 4 credits. M. Pryse.
For description, see ENGL 3620.

## FGSS 3622 Appalachian Cultural Studies

 (also AMST/ENGL 3622) (LA-AS)Spring. 4 credits. M. Pryse.
For description, see ENGL 3622.
[FGSS 3630 Age of Realism and Naturalism (also AMST/ENGL 3630) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. K. McCullough.]

FGSS 3680 Marriage and Sexuality in Medieval Europe (also HIST/RELST 3680) \# (HA-AS)

Fall. 4 credits. P. Hyams.
For description, see HIST 3680.

## FGSS 3720 Food, Gender, Culture (also

 ENGL 3721, AMST 3720) (LA-AS)Fall. 4 credits. K. McCullough.
In addition to nourishing the body, food operates as a cultural system that produces and reflects group and individual identities. In this class we will examine foodways-the behaviors and beliefs attached to the production, distribution, and consumption of food-to explore the way food practices help shape our sense of gender, race, sexual orientation, and national identity. In doing so we will focus primarily on literature and film but will also range into the fields of anthropology, sociology, and history. Some questions under discussion: How do factors such as gender, class, race, and religion shape the foods we eat and the circumstances in which we eat them? How do writers use the language of food to explore issues such as gender, sexuality, class, and race?

## FGSS 3742 Arab Women Writers (also COML/NES 3742)

Spring. 4 credits. D. Starr.
For description, see NES 3742.
[FGSS 3760 Impressionism in Society (also ARTH 3760, FREN 3610, VISST 3662) \# (CA-AS)

Spring. 4 credits. Next offered 2011-2012. L. Meixner.]

FGSS 3850 Gender and Sexual Minorities (also HD 3840)
Fall. 3 credits. K. Cohen.
For description, see HD 3840.
FGSS 3980 Latino/a Popular Culture (also ENGL/LSP 3980, AMST 3981)
Fall. 4 credits. M. P. Brady.
For description, see ENGL 3980.

## FGSS 3990/3991 Undergraduate

 Independent StudyFall and spring. 1-4 credits. Prerequisites: one course in Feminist, Gender, \&
Sexuality Studies and permission of a Feminist, Gender, \& Sexuality Studies faculty member. Staff.

FGSS 4000 Senior Seminar in Feminist, Gender, and Sexuality Studies
Fall. 4 credits. Prerequisite: requirement for and limited to Feminist, Gender, \& Sexuality Studies majors and undergraduate minors. S. Martin.
This course, loosely organized around technologies of reproduction, will examine how globalization and innovations in medicine and biotechnology change the ontology of the body to create new ethical dilemmas for feminists in law, policy, and the politics of everyday life. We will address questions such as: Do new biotechnologies free us from the limits of our bodies? How do they alter social relations? What "truths" does the human genome project tell us about ourselves and society? How does stem cell research fix and stretch the terms of gender and embodiment. Although the topic/focus of this course will vary with the instructor, it will always be treated as a broad capstone course for majors. Required for the Feminist, Gender, \& Sexuality Studies major.
[FGSS 4021 Bodies in Medicine, Science, and Culture (also BSOC/STS 4021) (CA-AS)
Spring. 4 credits. Next offered 2012-2013. R. Prentice.]

FGSS 4040 Women Artists (also ARTH 4610) (LA-AS)

Fall. 4 credits. J. Bernstock.
For description, see ARTH 4610.
FGSS 4051 Reproductive Health Policy (also PAM 4050)
Fall. 3 credits. A. Parrot.
For description, see PAM 4050.
FGSS 4100 Health and Survival Inequalities (also AIS/DSOC/SOC 4100) (SBA-AS)

Fall. 4 credits. A. Gonzales.
For description, see DSOC 4100.
[FGSS 4110 Devolution, Privatization, and the New Public Management (also AEM 4330, CRP 4120)
Fall. 4 credits. Next offered 2011-2012. M. Warner.]
[FGSS 4140 Bodies in the Middle Ages: Embodiment, Incarnation, Performance (also ENGL 4140) \# (LA-AS)
Spring. 4 credits. Next offered 2012-2013. M. Raskolnikov.]
[FGSS 4160 Gender and Sexuality in Southeast Asia (also ASIAN 4416, HIST 4160) @ (CA-AS)
Fall. 4 credits. Next offered 2012-2013.
T. Loos.]

FGSS 4220 New York Women (also STS 4221) (HA-AS)

Fall. 4 credits. M. Rossiter.
For description, see STS 4221.
[FGSS 4231 Gender and Technology (also BSOC/HIST/STS 4231) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Pritchard.]
[FGSS 4232 Images of Women in Antiquity (also ARTH 4232, CLASS 4732) \# (CA-AS)

Spring. 4 credits. Next offered 2011-2012. A. Alexandridis.]

FGSS 4235 Women and Music (also MUSIC 4232)
Spring. 4 credits. J. Peraino.
For description, see MUSIC 4232.
[FGSS 4270 Parody (also THETR 4200) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. N. Salvato.]

FGSS 4320 Sex in French (also FREN 4420)

Fall. 4 credits. C. Howie.
For description, see FREN 4420.
[FGSS 4330 The Female Dramatic Tradition (also THETR 4360) (LA-AS) Spring. 4 credits. Next offered 2011-2012. S. Warner.]

FGSS 4420 Gossip (also ENGL 4640, THETR 4440)
Spring. 4 credits. N. Salvato.
For description, see THETR 4440.
FGSS 4440 Historical Issues of Gender and Science (also STS 4441) (CA-AS)
Spring. 4 credits. M. Rossiter.
For description, see STS 4441.
FGSS 4460 Women in the Economy (also ILRLE 4450, ECON 4570)
Spring. 4 credits. F. Blau.
For description, see ILRLE 4450.
FGSS 4480 Global Perspectives on Violence against Women (also PAM 4440)

Fall. 3 credits. A. Parrot.
For description, see PAM 4440.
[FGSS 4507 Black Women Writers: International Dimensions (also ASRC 4507) (LA-AS)

Fall. 4 credits. Next offered 2011-2012.
C. Boyce Davies.]
[FGSS 4530 20th-Century American Women Writers of Color (also AAS/ AMST/ENGL 4530) (LA-AS)
Fall. 4 credits. Next offered 2012-2013. S. Wong.]
[FGSS 4610 Sexuality and the Law (also GOVT 4625) (KCM-AS)
Spring. 4 credits. Next offered 2011-2012. A. M. Smith.]
[FGSS 4630 Feminist Theory/Law and Society (also AMST 4590, GOVT 4635)

Fall. 4 credits. Next offered 2011-2012. A. M. Smith.]

FGSS 4631 Entering History, Entering Fiction: Gender, Race, and Nation in 19th- and 20th-Century U.S. Fiction (also AMST/ENGL 4631) (LA-AS)
Fall. 4 credits. K. McCullough.
For description, see ENGL 4631.
FGSS 4632 Women and Gender in Middle Eastern History (also NES 4630)
Fall. 4 credits. A. Karakya-Stump.
For description, see NES 4630.
[FGSS 4640 Women in the Modern Middle East (also HIST/NES 4642) @ (CA-AS) Spring. 4 credits. Next offered 2011-2012. Z. Fahmy.]
[FGSS 4750 Senior Seminar in the 20th Century: Narratives of Loss (AIDS) (also ENGL 4750, AMST 4755)
Spring. 4 credits. Next offered 2012-2013 D. Woubshet.]
[FGSS 4791 Transgender and Transexuality (also ENGL 4791) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. M. Raskolnikov.]

FGSS 4912 Honors Seminar I: 20th-Century Women Writers (also AAS/ENGL 4910)
Fall. 4 credits. S. Wong.
For description, see ENGL 4910.
[FGSS 4950 Gender, Power, and Authority in England: 1500-1800 (also HIST 4950) \# (CA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Weil.]

## FGSS 4990/4991 Senior Honors Thesis

Fall and spring. 1-8 credits. Prerequisite:
FGSS seniors only. Staff.
To graduate with honors, FGSS majors must complete a senior thesis under the supervision of an FGSS faculty member and defend that thesis orally before an honors committee. To be eligible for honors, students must have at least a cumulative GPA of 3.0 in all course work and a 3.3 average in all courses applying to their FGSS major. Students interested in the honors program should consult the DUS late in the spring semester of their junior year or very early in the fall semester of their senior
year.
[FGSS 6040 Passionate Politics: Affect, Protest, Performance (also THETR 6060)

Spring. 4 credits. Next offered 2011-2012. S. Warner.]
[FGSS 6050 Camp, Kitsch, and Trash (also ENGL 6510, THETR 6050)
Spring. 4 credits. Next offered 2011-2012. N. Salvato.]

## FGSS 6060 Moral Psychology and

 Education (also EDUC 6160)Fall. 3 credits. D. Schrader.
For description, see EDUC 6160.
[FGSS 6110 Devolution, Privatization, and the New Public Management (also AEM 6330, CRP 6120)
Fall. 4 credits. Next offered 2011-2012. M. Warner.]

FGSS 6170 Feminist Methodology (also GOVT 6423)
Spring. 4 credits. S. Martin.
A feminist lens of analysis disrupts traditional categories that frame the questions we ask with implications for the answers that we find and how we find them. A sample of readings across the disciplines will allow us to explore how feminist scholarship has led to the reframing of big questions while stretching the boundaries of traditional methodological frontiers. This course seeks to familiarize students with primarily qualitative methodological tools to be applied to individual research questions.

## FGSS 6180 Psychology of Adolescence

 in Case Study (also EDUC 6170)Spring. 3 credits. D. Schrader.
For description, see EDUC 6710.

## [FGSS 6207 Black Feminist Theories

 (also ASRC/ENGL 6207, COML 6465)Fall. 4 credits. Next offered 2011-2012.
C. Boyce Davies.]

## [FGSS 6232 Images of Women in

 Antiquity (also ARTH 6232, CLASS 7732)Spring. 4 credits. Next offered 2011-2012. A. Alexandridis.]

## [FGSS 6240 Epistemological

 Development and Reflective Thought (also EDUC 6140)Fall. 3 credits. Next offered 2011-2012.
D. Schrader.]
[FGSS 6304 Marriage and Divorce in the African Context (also ASRC 6304)
Fall. 4 credits. Next offered 2011-2012.
J. Byfield.]
[FGSS 6310 Gender and Culture (also ANTHR 6421)
Fall. 4 credits. Next offered 2012-2013. K. March.]
[FGSS 6330 The Female Dramatic Tradition (also THETR 6360)
Spring. 4 credits. Next offered 2011-2012. S. Warner.]

FGSS 6360 Comparative History of Women and Work (also ILRIC 6360)
Spring. 4 credits. I. DeVault.
For description, see ILRIC 6360.
[FGSS 6370 Parody (also THETR 6200)
Spring. 4 credits. Next offered 2011-2012.
N. Salvato.]
[FGSS 6400 Historical Issues of Gender and Science (also HIST 6410, STS 6401)

Fall. 4 credits. Next offered 2012-2013.
S. Seth.]

FGSS 6420 Gossip (also THETR 6460, ENGL 6640)
Spring. 4 credits. N. Salvato.
For description, see THETR 4440.
[FGSS 6470 The Theatricality of Gender, Philosophy, and French Literature (also FREN 6470)
Fall. 4 credits. Next offered 2011-2012. M. C. Vallois.]

FGSS 6510 Pan-Africanism and Feminism (also ASRC 6510)
Fall. 4 credits. C. Boyce Davies.
For description, see ASRC 6510.
[FGSS 6544 Gender and Politics (also GOVT 6544)
Fall. 4 credits. Next offered 2011-2012.
S. Martin and S. Mettler.]
[FGSS 6551 Decadence (also ENGL 6551) Spring. 4 credits. Next offered 2011-2012. E. Hanson.]

FGSS 6580 Theorizing Gender and Race in Asian Histories and Literatures (also ASIAN 6888, COML 6680)
Fall. 4 credits. N. Sakai.
For description, see ASIAN 6888.
[FGSS 6700 Gender and Age in Archaeology (also ANTHR/ARKEO 6269)

Spring. 4 credits. Next offered 2012-2013. N. Russell.]

FGSS 6811 James Baldwin (also AMST/ ENGL 6811)
Spring. 4 credits. D. Woubshet.

FGSS 6990 Topics in Feminist, Gender, and Sexuality Studies
Fall and spring. Variable credit. Staff. Independent reading course for graduate students on topics not covered in regularly scheduled courses. Students develop a course of readings in consultation with a faculty member in the field of Feminist, Gender, \& Sexuality Studies who has agreed to supervise the course work.

## FILM

See "Department of Theatre, Film, and Dance."

## FIRST-YEAR WRITING SEMINARS

For information about the requirements for writing seminars and descriptions of seminar offerings, see the John S. Knight Institute web site: www.arts.cornell.edu/knight_institute.

## FRENCH

See "Romance Studies."

## GERMAN STUDIES

L. Adelson; B. Buettner, associate language program director; P. Gilgen, director of graduate studies; A. Groos; P. U. Hohendahl; C. Hosea (Dutch); G. Lischke, language program director and director of undergraduate studies; G. Matthias; D. McBride; P. McBride; A. Schwarz, department chair; G. Waite. Emeritus: D. Bathrick, H. Deinert.

The Department of German Studies offers students a wide range of opportunities to explore the literature and culture of Germanspeaking countries, whether as part of their general education, a major in German Studies, a double major, or a German minor involving another discipline, or as preparation for graduate school or an international professional career. Courses are offered in German as well as in English; subjects range from medieval to contemporary literature and from film and visual culture to intellectual history, music, history of psychology, and feminist, gender, and sexuality studies.
The course offerings in German begin with GERST 1210-1220, 1230 (introductory language level). Students then continue with intermediate-level courses, which provide further grounding in the language and in German literature and cultural studies. GERST 2060 provides instruction for German in the culture of business, leading to certification. On the advanced level ( 3000 level or above), we offer thematically oriented courses that include intensive language work (3000-3200);
literature and culture study courses in
German, including the senior seminar; and seminars of interdisciplinary interest taught in English. Addressing a broad spectrum of topics in German culture, our courses appeal to German majors, minors, and other qualified students alike.
The department's offerings in English begin with a series of first-year writing seminars introducing various aspects of German
literature (e.g., the fairy tale and Romantic consciousness or 20th-century writers such as Kafka, Hesse, Mann, Brecht), theorists such as Marx, Nietzsche, and Freud, issues in mass culture and modernity, problems of German national identity/ies, and cinema and society. Courses in German and English at the 3000 and 4000 levels explore such topics as the Faust legend, aesthetics from Kant to Heidegger, city topographies, Freud and his legacy, opera from Mozart to Strauss, the German novel, literature and philosophy, political theory and cinema, the Frankfurt School, migration and globalization, and feminist theory. It may be possible to arrange a German section for courses taught in English, either informally or formally (for credit). Students are encouraged to discuss this possibility with instructors.

## Sequence of Courses

Courses in German:
Introductory level: GERST 1210-1220, after completion, placement into GERST 1230 or 2000

Intermediate level: GERST 2000
Upper intermediate level: GERST 2020, 2040, and 2060

Advanced level: GERST 3010, 3020, 3060, 3070, 3080, 3100, and 4100
Courses taught in German that are numbered 3000 through 3200 focus on primarily language study; courses taught in German that are numbered 3210 through 3500 focus on studying literature and other forms of cultural expression.
Courses in German or English: further 3000and 4000-level literature and culture courses (see course descriptions)

## Advanced Standing

Students with an AP score of 4 or better can be granted 3 credits in German depending on placement test results. Students with an AP score of 4 or better, an LPG score of 65 or higher, or an SAT II score of 690 or higher must take the CASE exam for placement in courses above GERST 2000. Students coming to Cornell with advanced standing in German and/or another subject are encouraged to consider a double major or minor and to discuss the options with the director of undergraduate studies as early as possible.

## Certificate in German Language Study

The Certificate in German Language Study is issued to recognize substantial language study beyond the GERST 2000 level in the
Department of German Studies. Students are awarded the certificate after passing three German Studies courses held in German with a grade of B or above. Two of these courses must be at the 3000 level or above. No more than two of the three courses can be taken with the S-U option. Applications for the language certificate may be picked up in the Department of German Studies (183 Goldwin Smith Hall) in February.

## Internships

The department works with the USA-Interns program to provide summer internships to qualified students with German companies and agencies. Interested students should contact the language program director, Gunhild Lischke (gl15@cornell.edu, G75

Goldwin Smith Hall, 255-0725), early in the fall semester.

## Majors in German Studies

The department offers two options for the major: German literature and culture, and German area studies. The latter is a more broadly defined sequence that includes work in related disciplines. The course of study in either major is designed to give students proficiency in reading, speaking, and writing in German, to acquaint them with German culture, and to help them develop skills in reading, analyzing, and discussing German texts in relevant disciplines with those goals in mind. The department also encourages study abroad. For both majors, there is a wide variety of courses co-sponsored with other departments (Comparative Literature; Government; History; Music; Theatre, Film, and Dance; Feminist, Gender, \& Sexuality Studies).

The department encourages double majors and makes every effort to accommodate prospective majors with a late start in German. Students interested in a major should consult the director of undergraduate studies, Gunhild Lischke, G75 Goldwin Smith Hall.

## German (Literature and Culture)

Students in this major select courses from the Department of German Studies and may use them to pursue individual interests in literature, film and visual culture, theater and performing arts, music, intellectual and political history, and gender studies, for example. Please consult with the director of undergraduate studies.

Admission: By the end of their sophomore year, prospective majors should have successfully completed GERST 2020, 2040, or 2060.

To complete the major, a student must:

1. Demonstrate competence in the German language by successful completion of two 3000-level courses with intensive language work (GERST 3000-3200) or the equivalent
2. Complete six courses in the Department of German Studies at the 3000 level or above. One of these must be GERST 4100 Senior Seminar.
3. Select a faculty advisor from the department.

## German Area Studies

Students select courses from the Department of German Studies as well as courses with a substantial German component from other departments, such as Comparative Literature Government; History; Music; Theatre, Film, and Dance; and Feminist, Gender, \& Sexuality Studies.

Admission: By the end of their sophomore year, prospective majors should have
successfully completed GERST 2020, 2040, or 2060.

To complete the major, a student must:

1. Demonstrate competence in the German language by successful completion of two 3000-level courses with intensive language work (GERST 3000-3200) or the equivalent.
2. Complete six courses with a substantial German component at the 3000 level or above. Three of these must be in the Department of German Studies, including GERST 4100 Senior Seminar.
3. Select a committee of one or more faculty advisors to help formulate a coherent program of study. One of the advisors must be from the Department of German Studies.

## Minor in German Studies

The undergraduate minor in German Studies is intended for students enrolled in any of the seven undergraduate colleges at Cornell who wish to gain a broad understanding of the culture, literature, and society of Germanspeaking countries while they are refining their language competence. The minor is designed to provide for breadth while permitting flexibility to emphasize areas of interest in German studies.

To declare the minor, students must have completed GERST 2000 or equivalent. Students must complete a minimum of four courses at the 2000 level and above selected from the offerings of the German Studies Department. At least one of these courses must be taught in German at the 3000 level or higher. One of the four courses may be from another department as long as it has a substantial German component. No more than one course per semester taken as part of a study abroad program may be counted toward the minor. GERST 4510-4520 Independent Study may not be counted at all.
Interested students in the German Minor should consult with the department's director of undergraduate studies, Gunhild Lischke, G75 Goldwin Smith Hall.

## Honors

Honors in German Studies are awarded for excellence in the major, which includes overall grade point average and completion of the honors thesis. Students are awarded either honors (cum laude), high honors (magna cum laude), or the highest honors (summa cum laude) in the program based on the honors advisors' evaluation of the level and the quality of the work completed toward the honors degree. The honors distinction will be noted on the student's official transcript and will also be indicated on the student's diploma.

Prerequisites for admission. Students must have upperclass standing, an overall GPA of a B or higher, and a GPA of 3.5 or higher in the major. Students must first consult with the director of undergraduate studies in German Studies regarding eligibility for the honors program.
Procedure. Students who wish to be considered for honors ideally should apply to the director of undergraduate studies no later than the second term of the junior year. Students who are off campus in their junior year must apply by the third week of classes in the first semester of their senior year. Students should secure the consent of a faculty member to serve as the director of both the reading course (GERST 4530) and the writing of a thesis (GERST 4540). With the help of their thesis advisor, students choose an area of special interest and identify at least one other faculty member who is willing to serve on the honors committee. An oral thesis defense concludes the process.

## Study Abroad in a German-Speaking Country

The Department of German Studies strongly supports study abroad as an opportunity for students to live and study in the German cultural context. The experience of living abroad promotes enduring personal growth, provides new intellectual perspectives through cultural immersion, and opens up academic and professional opportunities.
Students interested in studying abroad are encouraged to consider the Berlin Consortium, of which Cornell is a member. The program is run in conjunction with the Free University of Berlin and is of very high caliber. Six weeks of an intensive proseminar on German discourse and culture held at the Berlin Consortium center are followed by one or two semesters of study at the university.
Participants enroll in regular courses at the university. Assistance in finding internships between semesters may be available to students staying for an entire academic year. Four semesters of German language study are prerequisite for participating in the program; ideally the last of these courses should be at the 3000 level.
Students interested in this or other study abroad options in Germany, Austria, or Switzerland should consult the language program director, Gunhild Lischke (G75 Goldwin Smith Hall, 255-0725, gl15@cornell. edu).

## First-Year Writing Seminars

Consult the John S. Knight Institute brochure for course times, instructors, and descriptions.

## Courses Offered in German

## GERST 1210 Exploring German

## Contexts I

Fall or spring. 4 credits. Intended for students with no prior experience in German or language placement test (LPG) below 37, or SAT II below 370. G. Lischke, G. Matthias, and staff.

Students develop basic abilities in listening, reading, writing, and speaking German in meaningful contexts through interaction in small group activities. Course materials including videos, short articles, poems, and songs provide students with varied perspectives on German language, culture, and society.

## GERST 1220 Exploring German Contexts II

Fall or spring. 4 credits. Prerequisite:
GERST 1210, LPG 37-44, or SAT II 370-
450. G. Matthias, G. Lischke, and staff. Students build on their basic knowledge of German by engaging in intense and more sustained interaction in the language. Students learn more advanced language structures allowing them to express more complex ideas in German. Discussions, videos, and group activities address topics of relevance to the contemporary German-speaking world.

## GERST 1230 Expanding the German Dossier <br> Fall or spring. 4 credits. Successful

 completion of GERST 1210, 1220, and 1230 satisfies Option 2. Prerequisite: study of German and LPG 45-55 or SAT II 460-580. Staff.Students continue to develop their language skills by discussing a variety of cultural topics
and themes in the German-speaking world. The focus of the course is on expanding vocabulary, reviewing major grammar topics, developing effective reading strategies, improving listening comprehension, and working on writing skills. Work in small groups increases each student's opportunity to speak in German and provides for greater feedback and individual help.

## GERST 2000 Germany: Intercultural Context (CA-AS)

Fall or spring. 3 credits. Satisfies Option 1. Prerequisite: GERST 1230 or LPG 56-64 or SAT II 590-680, or placement by exam. Staff.
Content-based language course on the intermediate level. Students examine important aspects of present-day German culture while expanding and strengthening their reading, writing, and speaking skills in German. Materials for each topic are selected from a variety of sources (fiction, newspapers, magazines, and the Internet). Units address a variety of topics including studying at a German university, modern literature, Germany online, and Germany at the turn of the century. Oral and written work and individual and group presentations emphasize accurate and idiomatic expression in German. Successful completion of the course enables students to continue with more advanced courses in language, literature, and culture.

## GERST 2020 Literary Texts and Contexts

 (LA-AS)Fall. 3 credits. Satisfies Option 1. Prerequisite: GERST 2000 or equivalent or placement exam. Conducted in German. D. McBride.

Students in this intermediate course read and discuss a number of works belonging to different literary genres by major Germanspeaking authors such as Kafka, Walser, Brecht, Mann, Frisch, Dürrenmatt, Bachmann, and others. They explore questions of subjectivity and identity in modern society, of human existence as existence in language, and of the representation of history in literary texts. Activities and assignments focus on the development of reading competency in different literary genres, the improvement of writing skills including the accurate use of idiomatic expressions, the expansion of students' German vocabulary, and the systematic review of select topics in German grammar.
GERST 2040 Working with Texts (CA-AS) Fall or spring. 3 credits. Satisfies Option 1. Prerequisite: GERST 2000 or placement by exam (placement score and CASE). D. McBride.

Emphasis is on improving oral and written expression of idiomatic German. Enrichment of vocabulary and appropriate use of language in different conversational contexts and written genres. Material consists of readings in contemporary prose, articles on current events, videos, and group projects. Topics include awareness of culture, dependence of meaning on perspective, interviews with native German speakers, German news broadcasts, reading German newspapers on the Internet.

## GERST 2060 German in Business Culture

 (CA-AS)Spring. 3 credits. Satisfies Option 1.
Prerequisite: GERST 2000 or placement by examination placement score and CASE.
Students without previous knowledge of
business German are welcome. G. Lischke.

Students learn German and understand German business culture at the same time This German language course examines the German economic structure and its major components: industry, trade unions, the banking system, and the government. Participants learn about the business culture in Germany and how to be effective in a work environment, Germany's role within the European Union, the role of the Bundesbank, the importance of trade and globalization, and current economic issues in Germany. The materials consist of authentic documents from the German business world, TV footage, and a business German textbook. At the end of the course, the external Goethe Institut exam "Deutsch für den Beruf" is offered.
GERST 3010 Scenes of the Crime: German Mystery and Detective Fiction (LA-AS)
Fall. 4 credits. Satisfies Option 1. Prerequisite: GERST 2020, GERST 2040, GERST 2060, or equivalent or permission of instructor. Taught in German. This course may be counted toward the requirement for 3000-level language work in the major. P. Gilgen.
An exploration of German crime, detective, and mystery writing in texts ranging from the early 19th century to contemporary fiction. Authors to be studied may include: Kleist, E. T. A. Hoffmann, Dürrenmatt, Schatten, Süskind, Handke, Ören, Arjouni, Ani, and Glauser. In addition to exercising hermeneutic skills (and, by extension, that gray matter of which Sherlock Holmes and Hercule Poirot were so fond), this course aims at improving proficiency in aural and reading
comprehension, as well as speaking and writing skills, with emphasis on vocabulary expansion, advanced grammar review, and stylistic development. Recommended to students interested in a combined introduction to literature and high-level language training.

## GERST 3040 Nazi Culture Through the

 Lens (CA-AS)Fall. 4 credits. Satisfies Option 1.
Prerequisite: GERST 2020, 2040, 2060, or placement exam. L. Kelingos.
Examines the influences, contexts, critical and cultural responses, and legacies relevant to spectatorial cultural production in the Third Reich.

## GERST 3080 German Life Style 2.0

 (CA-AS)Spring. 4 credits. Satisfies Option 1.
Prerequisite: GERST 2020, GERST 2040, GERST 2060, or equivalent or permission of instructor. Taught in German. This course may be counted toward the requirement for 3000 -level language work in the major. G. Matthias.
In this course, we will encounter German culture of today in and through Web 2.0. No technical knowledge is required since, in the process, a solid base of knowledge concerning the use of media will be constructed. This knowledge will then be applied practically through discussing aspects of German culture visible in the WWW. The highlight of the course will be an intercultural encounter with a German Class from the University of Osnabrück using Web 2.0 applications. In the produced content, students will become part of the Web 2.0 in German through an intercultural discussion of German life visible in the World Wide Web (WWW).

## [GERST 3210 After the Fires: Divided

 Germany 1945-1989 (CA-AS)Fall. 4 credits. Satisfies Option 1. Taught in German. Next offered 2012-2013. L. Adelson.]
[GERST 3250 The Age of Goethe \# (LAAS)
Next offered 2011-2012. A. Groos.]
[GERST 3270 Too Much to See: German Literary and Visual Cultures, 19001933 (CA-AS)
Next offered 2011-2012. P. McBride.]
GERST 3430 How to Understand Understanding? Paul Celan's Poetry and Interpretation (also JWST 3430) (LA-AS)
Spring. 4 credits. Satisfies Option 1.
Prerequisites: any German course at 30003200 level or by placement exam. Taught in German. A. Glazova.
Paul Celan, arguably the most widely known poet writing in the German language after WWII, was once characterized by a hostile literary critic as the author of obscure, scandalously "hermetic" texts. Celan, however, insisted that his poems were open rather than hermetic. He believed his poetic task to consist in creating a language of witnessing: a language fit for preserving memories of the collective catastrophe. This language, with its rigorous structure, compact imagery, and surprising inner logic, poses a challenge to understanding, as it is "open for interpretation." Consequently, Celan's poems motivated many prominent thinkers and critics to seek new paradigms of interpretation. In this class, we will read Celan's poetic, prosaic, and theoretical texts in view of their literary, political, and historical significance. We will also read philosophical interpretations of Celan's texts, such as Jacques Derrida's "Shibboleth" and Maurice Blanchot's "The Last to Speak." Along with these thinkers, we will try, by way of reading Celan, to understand how we "understand" poetic texts. The language of reading, writing, and discussion in this seminar will be German.

## GERST 4100 Senior Seminar: Prize-

 Winning German Prose (LA-AS) Fall. 4 credits. Satisfies Option 1. Senior seminar, texts and discussion in German. Prerequisites: any 3000-level course in German or equivalent or permission of instructor. Open to all students with an adequate command of German.A. Schwarz.

This seminar will focus on German literary works written by the three recent Nobel Prize winners Grass, Jelinek, and Herta Mueller. We will discuss the texts and the criteria of winning such prestigious awards. We will also include winners of other important literary awards, such as the Buechner and Bachmann prizes. Questions and topics: Do these works have qualities, formats, or topics in common? Who decides about "quality" in literature? Should the writing of literary works be awarded? Can literature be judged?

## [GERST 4110 Literature of the Fantastic (LA-AS) <br> Next offered 2011-2012. P. McBride.]

## GERST 4170 Topics in German

 Philosophy (also PHIL 4240)Spring. 4 credits. M. Kosch.
For description, see PHIL 4240.

## [GERST 4180 New German Literature:

 After the Wall (LA-AS)Spring. 4 credits. Satisfies Option 1. Prerequisite: any 3000-level course taught in German, or equivalent, or permission of instructor. Required readings and discussion in German. Next offered 20112012. L. Adelson.]

## [GERST 4190 Vienna 1900 and the Challenge of Modernity (LA-AS)

Spring. 4 credits. Satisfies Option 1. Next offered 2011-2012. Taught in German. P. McBride.]

## [GERST 4420 Changing Worlds:

 Migration, Minorities, and German Literature (LA-AS)4 credits. Satisfies Option 1. Next offered 2012-2013. L. Adelson.]

## [GERST 4430 Love as Fiction. German

 Novellas from Three Centuries Spring. 4 credits. Satisfies Option 1. Conducted in German. Prerequisite: any course at 3000 level taught in German or equivalent or permission of instructor. Readings and discussions in German. Next offered 2012-2013. A. Schwarz.]
## Courses conducted in English

## GERST 2250 Genius and Madness in

 German Literature (LA-AS)Summer, taught in first three weeks of sixweek summer session. 3 credits. Taught in English. Does not count toward major or minor.
If you ever have thought that people of great achievement and ingenuity-such as great statesmen, artists, heroes, scientists-also exhibit a touch of madness, well, then you are not alone! Philosophers and poets for a few thousand years have contemplated the close kinship between madness and genius and have engaged in lively discussions about changing definitions of creativity as either ingenuity, inspiration, or insanity; as stemming from divine possession, originality, or fanatic enthusiasm. By reading philosophical and medical treatises, by examining texts of fiction and lyric poetry, as well as by including historical accounts, this course will find out when and why our culture decided to call a madman a genius and a genius mad. We shall trace the history of social and artistic transgression and analyze when and why a culture considers great talent as "too different," as "pathological," or as "un-normal." You shall read texts ranging from Antiquity to the 18th and 20th centuries and encounter authors from Germany, France, Britain, and the United States. Guest lecturers from various Humanities departments will expand our view on genius as either a human condition, an artistic invention or the delusive state of "madness."

## GERST 3542 Death of God (also FREN/

 HIST/JWST/RELST 3342) (HA-AS)Fall. 4. credits. C. Robcis.
For description, see HIST 3342.
[GERST 3550 Political Theory and Cinema (also COML 3300, FILM 3290, GOVT 3705) (CA-AS)
Spring. 4 credits. Next offered 2012-2013. G. Waite.]

## [GERST 3560 Metropolis: Urban Sites in

 LiteratureNext offered 2011-2012. A. Schwarz.]

## [GERST 3600 Words and Music (also MUSIC 3245) \# (LA-AS)

[GERST 3740 Opera and Culture (also MUSIC 3222) \# (LA-AS)
Next offered 2011-2012. A. Groos.]
[GERST 3770 The Art of the Historical Avant-Garde (also ARTH/VISST 3672, COML 3840, ROMS 3770) (LA-AS)
Spring. 4 credits. Prerequisite: any GERST 3000-3200-level course or equivalent. Next offered 2012-2013. P. McBride.]

## Advanced Undergraduate and Graduate Courses

[GERST 4050 Introduction to Medieval German Literature I \# (LA-AS)
4 credits. Next offered 2012-2013.
A. Groos.]
[GERST 4060 Introduction to Medieval German Literature II \# (LA-AS) 4 credits. Prerequisite: GERST 4050 or equivalent or permission of instructor. Anchor course for the medieval period. Next offered 2012-2013. A. Groos.]

## GERST 4070 Teaching German as a

 Foreign LanguageFall. 4 credits. Intended for graduate students preparing to teach German. G. Lischke.

Designed to familiarize students with current ways of thinking in the field of applied linguistics and language pedagogy. Introduces different concepts of foreign language methodology as well as presents and discusses various techniques as they can be implemented in the foreign language classroom. Special consideration is given to topics such as planning syllabi, writing classroom tests, and evaluating students' performance. Participants conduct an action research project.
[GERST 4090 Spinoza and the New Spinozism (also COML 4090, GOVT 4769, JWST 4790) (LA-AS)
Next offered 2011-2012. G. Waite.]
GERST 4150 Marx, Freud, Nietzsche (also COML 4250, GOVT 4735) \# (CA-AS)
Fall. 4 credits. Prerequisite: none. G. Waite. This is an introduction to the three "master thinkers" who have helped determine the discourses of modernity and post-modernity. We consider basic aspects of their work: (a) specific critical and historical analyses; (b) theoretical and methodological writings; (c) programs and manifestos; and (d) styles of argumentation, documentation, and persuasion. This also entails an introduction, for non-specialists, to essential problems of political economy, continental philosophy, psychology, and literary and cultural criticism. Second, we compare the underlying assumptions and the interpretive yields of the various disciplines and practices founded by Marx, Nietzsche, and Freud: historical materialism and communism, existentialism and power-knowledge analysis, and psychoanalysis, respectively. We also consider how these three writers have been fused into a single constellation, "Marx-Nietzsche-Freud," and how they have been interpreted by others, including L. Althusser, A. Badiou, A. Camus, H. Cixous, G. Deleuze, J. Derrida, M. Foucault, H.-G. Gadamer, M. Heidegger, L. Irigaray, K. Karatani, J. Lacan, P. Ricoeur, L. Strauss, S. Zizek. This is a lecture course but there will be plenty of time for discussion.

## GERST 4200 Faust: Close Reading

 (LA-AS)Spring. 4 credits. Conducted in English. G. Waite.

This is a close reading of Goethe's Faust (Parts I and II). Although our reading of Goethe's masterpiece inevitably is informed by contemporary theoretical concerns (including poststructuralism, deconstruction,
psychoanalysis, feminism, gender and sexuality studies, and Marxism) our approach will be primarily that of close reading. Each week the amount of reading will be very small (sometimes only 10 or 15 lines at most) but these lines we will read carefully.
Problems of translation will be crucial:
annotated editions of the text will be available in German and in English.

## [GERST 4240 The Totalitarian Order:

 Vision and Critique (also GOVT 4255) (CA-AS)Fall. 4 credits. Next offered 2011-2012. P. U. Hohendahl.]

## [GERST 4260 The Animal (also COML

 4240, ENGL 4260) (CA-AS)Next offered 2011-2012. P. Gilgen.]

## [GERST 4280 Genius and Madness in German Literature (LA-AS)

Next offered 2011-2012. Offered as GERST 2250 in summer 2010 to introduce students to German literature in a course surveying several centuries. Summer course will not count toward the German major requirements. A. Schwarz.]

## GERST 4310 Theory of Theatre and

 Drama (also THETR 4310/6310) \# (LA-AS)Fall. 4 credits. H. Yan.
For description, see THETR 4310/6310.
[GERST 4410 Introduction to Germanic Linguistics (also LING 4441) (HA-AS) Next offered 2011-2012.]
GERST 4510-4520 Independent Study 4510, fall; 4520, spring. 1-4 credits each semester. Prerequisite: permission of instructor.

## GERST 4530 Honors Research

Fall. Staff.
GERST 4540 Honors Thesis
Spring. 8 credits. Prerequisite: GERST 4530. Staff.
GERST 4570 Imagining the Holocaust (also COML 4830, ENGL/JWST 4580) (LA-AS)
Spring. 4 credits. D. Schwartz.
For description, see ENGL 4580.

## [GERST 4960 Theorizing the Public

 SphereNext offered 2012-2013. P. U. Hohendahl.]

## Graduate Courses

Note: For complete descriptions of courses numbered 6000 or above consult the appropriate instructor.

## [GERST 6030 Literature of Fascism and

 AntifascismFall. 4 credits. Next offered 2011-2012. P. McBride.]

GERST 6131 German Philosophical Texts (also PHIL 6030)
Fall and spring. 1-4 credits, variable. M. Kosch.

For description, see PHIL 6030.
[GERST 6140 The Man without Qualities and Theories of Narration (also COML 6141)
Spring. 4 credits. Next offered 2011-2012. P. McBride.]

## [GERST 6150 Jews in German Culture Since 1945

Spring. Next offered 2012-2013.
L. Adelson.]

## GERST 6160 Spaces of Literature (also COML 6130)

Spring. 4 credits. Discussion in English; texts available in both German and English. A. Schwarz.
The seminar will examine how space is represented in literary texts and pursue the question whether literary language can be connected to spatial features that are unique to prose, poetry and other poetic discourses. We shall review the tradition of literary representations of space by discussing topics such as "the aesthetics of space," "landscapeand garden architecture," "the sublime," "the relationship between corporeality and external worlds," "space and memory/commemoration," "distinctions between space, place, locale, psychic and physical spaces." Ranging from antiquity to contemporary literary and theoretical texts the seminar will approach "space" as a phenomenon that changes its shape with changing analytical or poetic approaches while simultaneously changing the shape of the inquiring or representing discourse. Other guiding questions will be: does literature take on spatial forms? Is poetic language dependent on spatial orientation? Does literature create space? Literature, philosophy, psychoanalysis will be the disciplinary spaces under discussion. Readings include Aristotle, Plato, Longinus, Kant, Goethe, Hölderlin, Novalis, E.T.A. Hoffmann, Stifter, Nietzsche, Benn, Heidegger, Freud, Rilke, Bernhard, Bachelard, Blanchot.
[GERST 6180 The Science of the Experience of Consciousness: Hegel's Phenomenology of Spirit (and Beyond) (also COML 6180)
Next offered 2011-2012. P. Gilgen.]

## [GERST 6190 Introduction to Systems

 Theory (also COML 6185)Fall. 4 credits. Next offered 2012-2013. P. Gilgen.]
[GERST 6200 Faust: Close Reading (also GERST 4200)
Fall. 4 credits. Limited to 15 students. Next offered 2011-2012. G. Waite.]
[GERST 6220 Cultural Pessimism and the Fin-de-Siècle
Next offered 2012-2013. P. McBride.]

## [GERST 6270 Baroque

Fall. 4 credits. Anchor course. Conducted in English. Next offered 2011-2012.
G. Waite.]

## [GERST 6290 The Enlightenment

Spring. 4 credits. Anchor course. Next
offered 2011-2012. P. U. Hohendahl.]
GERST 6300 Classicism and Idealism
Spring. 4 credits. Anchor course. Texts in German. P. U. Hohendahl.
An introduction to some of the major poetic and philosophical texts generally considered to be part of the period of German Classicism (1785-1805), while at the same time giving reasons to call into question notions of periodization and the canon, particularly as they have excluded women and lower social
classes. In addition to the basic problem of the appropriation of classic antiquity at a time marked by the transition to bourgeois modernity, special consideration will be given to the emergence of modern aesthetic theory as well as its impact on literary production and reception. Specifically the seminar will focus on the problem of subject formation in the context of modernity as it is expressed in the concept of Bildung. Special emphasis will be placed on the gendering of this concept. Readings will be taken from the works of Goethe, Herder, Humboldt, Kant, Moritz, and Schiller among others. While the main focus of the seminar will be on primary texts, we will also consider contemporary criticism of the concept of Classicism and its problems.

## GERST 6310-6320 Reading Academic

 German I and II6310, fall; 6320, spring. 3 credits each semester. Prerequisites: graduate standing; for GERST 6320, GERST 6310 or
equivalent. Staff.
Intended primarily for beginners with little or no previous German knowledge. Emphasis in 6310 on acquiring basic German reading skills. Emphasis in 6320 on development of the specialized vocabulary of student's field of study.

## [GERST 6340 German Romanticism

Spring. 4 credits. Next offered 2012-2013.
G. Waite.]

## [GERST 6370 19th-Century Fiction: The

 Realist ProjectSpring. 4 credits. Anchor course. Next offered 2012-2013. A. Schwarz.]
[GERST 6380 Readings of Recollection (also COML 6010)
Fall. 4 credits. Next offered 2013-2014. P. Gilgen.]

## [GERST 6390 Walter Benjamin: <br> Constellations of Thought

Spring. 4 credits. Texts in English and German. Discussions in English. Next offered 2011-2012. A. Schwarz.]
[GERST 6420 Operatic States: Imagining Community in Music-Drama (also MUSIC 7223)
Fall. 4 credits. Next offered 2012-2013. A. Groos.]

## GERST 6470 German Literature from

 1949 to 1989Fall. 4 credits. Prerequisite: reading
knowledge of German. P. Gilgen.
This seminar/anchor course will focus on German literature during the immediate aftermath of World War II, the period of the Cold War between 1949 and 1989, and the period from the fall of the Wall to the present. The point of the course will be to trace major themes and styles in German-speaking literature in Germany, Austria, and Switzerland in light of contemporaneous events of broad cultural and political significance. Individual texts will be examined in detail within their specific aesthetic, historical, and geopolitical contexts. The course will be organized comparatively around critical debates concerning such topics as: the social function of literature; programs and theories of literature; fictional representations of the immediate past; attempts by minority/majority voices to challenge and change the canon; writing and social change; questions concerning national cultural identities; literature in the age of the media system; the politics of postmodernity and postcolonialism.

Readings may include authors such as Theodor W. Adorno, Jean Améry, Alfred Andersch, Ingeborg Bachmann, Gottfried Benn, Max Bense, Thomas Bernhard, Marcel Beyer, Peter Bichsel, Heinrich Böll, Wolfgang Borchert, Johannes Bobrowski, Bertolt Brecht, Hermann Burger, Rolf Dieter Brinkmann, Elias Canetti, Paul Celan, Friedrich Dürrenmatt, Günter Eich, Hans Magnus Enzensberger, Max Frisch, Eugen Gomringer, Günter Grass, Reinhard P. Gruber, Durs Grünbein, Jürgen Habermas, Peter Handke, Martin Heidegger, Helmut Heißenbüttel, Wolfgang Hildesheimer, Peter Huchel, Thomas Hürlimann, Ernst Jandl, Karl Jaspers, Elfriede Jelinek, Ernst Jünger, Wladimir Kaminer, Sarah Kirsch, Thomas Kling, Ruth Klüger, Alexander Kluge, Wolfgang Koeppen, Christian Kracht, Thomas Mann, Friederike Mayröcker, Niklaus Meienberg, Gerhard Meier, Robert Menasse, Heiner Müller, Herta Müller, Adolf Muschg, Hans Erich Nossack, Emine Sevgi Özdamar, Oskar Pastior, Christoph Ransmayr, Arno Schmidt, Peter Schneider, W. G. Sebald, Verena Stefan, Botho Strauss, Marlene Streeruwitz, Yoko Tawada, Martin Walser, Peter Weiss, Urs Widmer, Christa Wolf, Feridun Zaimoglu.

## [GERST 6480 Critical Theory and

Literature: Lukács, Benjamin, Adorno Spring. 4 credits. Next offered 2012-2013. P. U. Hohendahl.]

## [GERST 6500 The Culture of Weimar

 GermanyFall. 4 credits. Next offered 2012-2013. P. McBride.]

## [GERST 6530 Opera

Next offered 2011-2012. A. Groos.]
[GERST 6560 Aesthetic Theory: The End of Art (also COML 6560)
Spring. 4 credits. Next offered 2011-2012. P. Gilgen.]

## [GERST 6580 Old High German, Old

 Saxon (also LING 6646)Spring. 4 credits. Next offered 2011-2012. W. Harbert.]

## GERST 6600 Visual Ideology (also ARTH/

 VISST 6060, COML 6600)Fall. 4 credits. G. Waite.
Some of the most powerful approaches to visual practices have come from outside or from the peripheries of the institution of art history and criticism. This seminar will analyze the interactions between academically sanctioned disciplines (such as iconography and connoisseurship) and innovations coming from philosophy, psychoanalysis, historiography, sociology, literary theory, mass media criticism, feminism, and Marxism. We will try especially to develop: (1) a general theory of "visual ideology" (the gender, social, racial, and class determinations on the production, consumption, and appropriation of visual artifacts under modern and postmodern conditions); and (2) contemporary theoretical practices that articulate these determinations. Examples will be drawn from the history of oil painting, architecture, city planning, photography, film, and other mass media.
[GERST 6620 Reassembling Culture: Montage and Collage in Weimar Germany
Spring. 4 credits. Next offered 2011-2012. P. McBride.]

GERST 6630 Nietzsche and Heidegger (also COML 6630)
Fall. 4 credits. G. Waite
This graduate seminar provides a basic introduction to the thinking of Nietzsche and Heidegger, and to the latter's interpretation and appropriation of the former. A major concern is the articulation of philosophy and politics, particularly in the case of Heidegger. We are also interested in the types of argumentation and styles of writing of both thinkers, including in light of the hypothesis that they were working in the ancient tradition of prudent exotericism, viz. that they never wrote exactly what they thought and that they intended their influence to come slightly beneath the level of conscious apprehension. We also consider their impact on the long list of intellectuals across the "Left-Center-Right" spectrum, including (depending on seminarparticipant interest): Adorno, Agamben, Bataille, Badiou, Bourdieu, Butler, Derrida, Deleuze, Foucault, Gadamer, Irigaray, Klossowski, Löwith, Marcuse, Rorty, Leo Strauss, Vattimo, Zupancic. The readings are provided in German (and French or Italian in some cases) and in English translations, when these exist. Discussion and papers in English. Students from all disciplines are welcome.

## [GERST 6650 Heidegger's Literature

 (also COML 6235)Fall. 4 credits. Next offered 2012-2013. A. Schwarz.]
[GERST 6680 Literature and the Uncanny Next offered 2011-2012. A. Schwarz.]

## [GERST 6710 Postcolonial Theory and

 German StudiesNext offered 2011-2012. L. Adelson.]
[GERST 6860 Althusser and Lacan (also COML 6860, GOVT 6795, FREN 6230)
Fall. 4 credits. Next offered 2013-2014. G. Waite.]

## GERST 6870 Theories of Ideology (also

 HIST 6470)Spring. 4 credits. C. Robcis.
For description, see HIST 6470.
[GERST 6890 The Aesthetic Theory of Adorno
Fall. 4 credits. Next offered 2011-2012. P. U. Hohendahl.]

## GERST 6940 Kant's Political Reason (also COML 6015, GOVT 6746, PHIL 6239)

Spring. 4 credits. P. Gilgen.
In this course, we will examine the political stakes of Kant's philosophical revolution. We will compare the political consequences of Kantian epistemology and ethics with Kant's writings that deal explicitly with questions of politics and political theory. The latter are, as is well known, considerably more tentative and less systematic. In addition, they pose some extremely difficult hermeneutic challenges. The main focus of our readings will be (1) Kant's position regarding political revolutions and (2) his theory of

## cosmopolitanism.

## [GERST 6960 Rites of Contact: Emergent

 German Literatures and Critical MethodSpring. 4 credits. Next offered 2011-2012. L. Adelson.]

GERST 7530-7540 Tutorial in German Literature
7530, fall; 7540, spring. 1-4 credits each semester. Prerequisite: permission of instructor.

## Dutch

DUTCH 1210-1220 Elementary/ Continuing Dutch
1210 (elementary), fall; 1220 (continuing), spring. 4 credits each semester.
Prerequisite: permission of instructor. C. Hosea.

Intensive practice in listening, speaking, reading, and writing basic Dutch in meaningful contexts. The course also offers insight into Dutch language, culture, and society.

DUTCH 2030 Intermediate Dutch
Fall. 3 credits. Satisfies Option 1.
Prerequisite: DUTCH 1220 or permission of instructor. Offered in Dutch. C. Hosea. Improved control of Dutch grammatical structures and vocabulary through guided conversation, discussions, compositions, reading, and film, drawing on all Dutch-

## speaking cultures.

## DUTCH 3000 Directed Studies

Spring. 1-4 credits, variable. Prerequisite: permission of instructor. Conducted in Dutch. C. Hosea.
Individualized advanced Dutch studies. Provides students with individualized programs which can be anything from advanced mastery in any or all skills to the mastery of Dutch for research, literature, and history in support of all disciplines.

## Swedish

SWED 1210 Elementary Swedish
Fall. 4 credits. Staff.
Participants gain fundamental Swedish language proficiency and functional communication skills, as well as cultural insights into Sweden and its Nordic context. Oral and written expression and skills in listening and reading are developed in an interactive immersion classroom, enriched by a textbook, additive multimedia and textual materials, as well as practical activities using web tools. Brief podcasts introduce issues of current interest, and participants explore Swedish or Scandinavian language, culture, and society in guided portfolios. Intended for students without prior experience in Swedish.

## SWED 1220 Continuing Swedish

Spring 4 credits. Prerequisite: SWED 1210 or equivalent Swedish language background. Staff.
Participants expand their proficiency in speaking, listening to, reading, and writing Swedish by working with online resources, texts, media, and cinema. The first part of the course is dedicated to topics such as leisure activities, education, government, community, seasonal festivities, and traditions. During the second half of the course, participants read and converse about level-appropriate fiction and engage with complementary materials. Particular attention is paid to functional oral and written communication, enrichment of language structures, and vocabulary (including developing an understanding of connotative meaning dimensions), and mastering authentic Swedish materials at the adequate proficiency level. The course continues to explore the culture and societal conditions of Swedishspeaking settings, while discovering the

Swedish-American experience. All instruction is in Swedish.

## SWED 2030 Intermediate Swedish <br> Fall. 3 credits. Satisfies Option 1.

Prerequisite: SWED 1220 or equivalent
Swedish language background. Staff.
By studying the Swedish language alongside cultural and societal content, participants further enhance their skills of the forms and functions of Swedish at the intermediate level, while enriching stylistic and expressive variation in their use of Swedish and strengthening their understanding of Sweden and its Nordic context. Topics of exploration and discussion may include Norse mythology, the Swedish popular music industry, history of the Scandinavian languages, corporate practices in Swedish-speaking contexts, contemporary diversification of Sweden, and Swedish design. An interactive classroom that fully immerses participants in the Swedish language is combined with reading a novel, media, film, music, selections from factual and literary texts (including Norwegian and Danish samples in original version), web activities, and virtual fieldwork. Participants are given opportunities to develop specialized interests in language and culture creatively in an online collaborative writing project and in guided portfolios.

## SWED 3000 Directed Studies

Fall. 1-4 credits, variable. Prerequisite: permission of instructor. Times TBA with instructor. C. Alm.
Directed study of Swedish (or Scandinavian) topics that address particular student needs in relation to their field of studies. Topics might include, but are not limited to, extending Swedish language skills, studying translation or linguistic aspects of the Swedish speech community, cinematic/literary themes or directors/authors, historical developments, or particular technological, entrepreneurial, or social issues. Interested students are encouraged to contact the instructor to determine a directed plan of study.

## GOVERNMENT

M. Evangelista, chair; R. Bensel, assoc. chair; C. Way, director of graduate studies; I. Kramnick, director of undergraduate studies; C. Anderson, S. Buck-Morss, V. Bunce, A. Carlson, D. Chutkow, P. Enns, G. FloresMacias, J. Frank, R. Herring, M. Jones-Correa, M. Katzenstein, P. Katzenstein, J. Kirshner, S. Kreps, T. J. Lowi, S. Martin, A. Mertha, S. Mettler, K. Morrison, Y. Orlov, D. Patel, T. Pepinsky, K. Roberts, D. Rubenstein, E. Sanders, M. Shefter, A. M. Smith, S. G. Tarrow, N. T. Uphoff, N. van de Walle, J. Weeks.

## Web site: government.arts.cornell.edu

"Government" is what Cornell calls a department that elsewhere might be termed political science. The focus of this discipline is power applied to public purposes. Some faculty concentrate on purposes, some on applications. Some engage in the close reading of great texts of political philosophy, while others analyze the behavior of powerwielders and publics in this and other societies. Government is divided into four subfields: U.S. politics, comparative politics (other nations), political theory (philosophy),
and international relations (transactions between nations).

## The Major

To be admitted to the major, a student must pass two Cornell government courses.
To complete the major, a student must:

1. pass two of the introductory government courses (GOVT 1111, 1313, 1615, 1817);
2. pass an additional course in one of the remaining subfields (American government, comparative government, political theory, or international relations). This course may be any course offered in the government department, including introductory courses, upper-level courses, or seminars but must be a minimum of 3 credits. Students are strongly advised to take at least one course in each of the four subfields;
3. accumulate an additional 28 credits of government course work at the 3000 level or above;
4. complete at least one seminar-style course in government that may be applied toward the 28 credits. These courses include those numbered 4000.XX to which students are admitted by application only; or other 4000-level GOVT courses in which no more than 15 students are enrolled.
5. accumulate 11 credits in upper-level courses in related fields (e.g., anthropology, economics, history, science and technology studies, psychology, and sociology). Upperlevel courses are usually courses numbered at the 3000 level or above (2000-level courses are not considered upper-level). Students should consult with their major advisor to choose appropriate courses. All choices of related courses must be approved by the major advisor or the director of undergraduate studies;
6. all courses used to fulfill a government major must be passed with a letter grade. No S-U grades accepted.
To summarize, a total of 10 government courses and three additional courses (11 credits) of upper-level related courses are required to complete the major. For more information about the government major, please visit our web site: government.arts. cornell.edu.

## Cornell in Washington Program.

Government majors may apply to the Cornell in Washington program to take courses and undertake a closely supervised externship during a fall or spring semester.
European Studies Minor. Government majors may elect to group some of their required and optional courses in the area of European studies, drawing from a wide variety of courses in relevant departments. Students are invited to consult Professors P. Katzenstein and S. G. Tarrow for advice on course selection and foreign study programs.
Model European Community Simulation. Undergraduates with an interest in the European Union, public affairs, or debating may participate in an annual European Union simulation held, on an alternating basis, in April at SUNY Brockport or in January in Brussels. The simulation provides an opportunity for participants, representing
politicians from the members states, to discuss issues and resolutions of current concern to the European Union.
To prepare for the simulation, a 2 -credit course is offered by the Department of Government each year (GOVT 4313 or 4323). Participation in the simulation is open only to those who register for this course. Anyone interested in participating or finding out more information should contact the Institute for European Studies at 120 Uris Hall, 255-7592.
International Relations Minor. See the description under "Special Programs and Interdisciplinary Studies."
Honors. Application to the honors program is made in the early spring of the second semester of a student's junior year. For more information about the honors program and an application form, please visit government. arts.cornell.edu.
First-Year Writing Seminars. Consult the John S. Knight Institute brochure for times, instructors, and descriptions.
Major Seminars. Fall or spring. 4 credits. These seminars, emphasizing important controversies in the discipline, cap the majors' experience. Thus preference in admission is given to majors over nonmajors and seniors over juniors. Topics and instructors change each semester. For more information, please visit "Guide to the Undergraduate Major in Government" on government.arts.cornell.edu/ undergraduate/program/\#seminars.
Course Subfields. Courses in the Department of Government are broken down into four subfields: American government, political theory, international relations, and comparative government. To determine in which category (or subfield) the following courses fall, please note the two-letter reference at the end of the descriptions. The key is as follows: $\mathrm{AM}=$ American, PT $=$ theory, $\mathrm{IR}=$ international relations, and $\mathrm{CO}=$ comparative.

## GOVT 1111 Introduction to American

 Government and Politics (SBA-AS)Spring and summer. 4 credits. T. Lowi. Introduction to government through the American experience. Concentrates on analysis of the institutions of government and politics as mechanisms of social control. (AM)

## GOVT 1313 Introduction to Comparative Government and Politics (SBA-AS)

Spring and summer. 4 credits. C. Anderson. This course will introduce students to comparative politics-the study of the political institutions and processes of countries around the world. Emphasis is on how to make meaningful comparisons between systems in different countries. The course will cover conditions for and workings of democracy, with an emphasis on how different kinds of democracies work. Course will provide a framework for comparison, and students will choose specific countries to compare. The United States will be considered in comparative perspective. Important topics to be covered include the vibrancy of democracy, the centrality of political and electoral institutions, the possibility of revolution, and the power of ethnicity.

## GOVT 1615 Introduction to Political Philosophy \# (HA-AS)

## Fall, winter, and summer. 4 credits.

I. Kramnick.

Survey of the development of Western political theory from Plato to the present. Readings from the works of the major theorists. Examination of the relevance of their ideas to contemporary politics. (PT)

## GOVT 1817 Introduction to International Relations (SBA-AS)

Fall and summer. 4 credits. P. Katzenstein Introduction to the basic concepts and practice of international politics. (IR)

## GOVT 1827 WIM Section: Introduction to

 International RelationsFall. 1 credit. Prerequisite: permission of instructor; GOVT 1817. Staff.
Special, writing-intensive section of GOVT 1817, designed to provide a small number of students the opportunity to practice and improve their writing skills as they learn about world politics. Students complete a series of papers and are expected to take an active part in class discussion. (IR)

## GOVT 2225 Controversies About Equality (also DSOC/ILROB/PAM/SOC 2220, PHIL 1905) (SBA-AS)

Fall. 4 credits. S. Morgan.
For description, see SOC 2220

## GOVT 2605 Social and Political Philosophy (also PHIL 2420)

 (KCM-AS)Fall. 4 credits. E. Taylor.
For description, see PHIL 2420.
[GOVT 2626 French Thought After May '68 (also COML/HIST 2331) (HA-AS)
Spring. 4 credits. Next offered 2013-2014. C. Robcis.]

GOVT 2716 Politics of Violence in 20th-Century Europe (also HIST 2711) (HA-AS)

Fall. 4 credits. H. Case.
For description, see HIST 2711.

## [GOVT 2729 Origins of the Social (also

 HIST 2330) (HA-AS)Spring. 4 credits. Next offered 2013-2014 C. Robcis.]
[GOVT 2747 History of Modern Middle East in 19th-20th Century (also JWST/NES 2674) @ \# (HA-AS)
Fall. 3 credits. Next offered 2011-2012. Z. Fahmy.]

## GOVT 2827 China and the World (also

 CAPS 2827) @ (CA-AS)Spring. 3 credits. A. Carlson.
Study of the dramatic rise of China through reviewing major developments in contemporary Chinese foreign policy since the establishment of the People's Republic of China (PRC), and concentrating more specifically on major developments in Chinese foreign policy during the 1980s and 1990s. Such a wide-ranging survey of Chinese foreign policy involves not only a consideration of the evolution of China's relations with its major bilateral partners but also an investigation of how China has defined its broader relationship with the international system. In addition, students are asked to consider which causal factors have been of primary importance in motivating Chinese behavior. (IR)

## GOVT 2947 Global Thinking (also PHIL

 1940) @ (KCM-AS)Spring. 4 credits. R. Miller.
For description, see PHIL 1940.

GOVT 3021 Social Movements in American Politics (also AMST 3021)

## (HA-AS)

Spring. 4 credits. E. Sanders.
Analyzing a variety of movements from the late 19th century to the present, this course seeks answers to the following questions: What social and political conditions gave rise to these movements? What determined success or failure (and how should those terms be defined)? How do social movements affect political processes and institutions (and vise versa)? What is their legacy in politics and in patterns of social interaction? The major movements analyzed are populism; progressivism; labor; socialism; women's suffrage, the contemporary gender equality movement; protest movements of the 1930s; civil rights; SDS and antiwar movements of the 1960s; environmentalism; the 1980s antinuclear (weapons) movement; gay rights; and Christian Evangelicals. Some theoretical works will be used, but most of our theoretical explorations will be inductively derived, from studies of actual movements and the difficulties they faced. (AM)

## [GOVT 3031 Imagining America (also

 AMST 3031) (CA-AS)Fall. 4 credits. Next offered 2011-2012. D. Rubenstein.]

GOVT 3063 Society and Party Politics (also SOC 3070) (SBA-AS)
Spring. 4 credits. S. Van Morgan.
For description, see SOC 3070.

## GOVT 3071 Introduction to Public Policy (SBA-AS)

Summer. 4 credits. Offered in Cornell in Washington Program. S. Jackson. Public policy is shaped by many forces. This course will enhance your ability to understand those forces and the policies that they produce. It will provide you with tools for thinking about, assessing, and evaluating those policies. And it will introduce you to the substantive core of several major issues in America today. The course will have three segments. In the first, we will examine the relevant institutions, interests, and ideologies which operate in the policy arena and the debates about the impact of these forces which engage students of the policy process. In the second, we will consider two different lenses through which we might peer to evaluate policies. In the third, we will discuss the main lines of debate in contemporary American politics concerning four substantive issues: crime and punishment, education, the economy and foreign trade, and foreign policy. The course will meet four days a week for one hour. Based on assigned readings, the class sessions will mix lectures, discussions, group activities, and guest speakers.
[GOVT 3091 Science in the American Polity (also AMST/STS 3911)

## (SBA-AS)

Spring. 4 credits. Next offered 2011-2012 Staff.
For description, see STS 3911.]
GOVT 3111 Urban Politics (also AMST 3111)(SBA-AS)

Spring. 4 credits. M. Shefter.
The major political actors, institutions, and political styles in large American cities: mayors, city councils, bureaucracies, ethnic and racial minorities, urban machine politics and the municipal reform movement. The implications of these political forces for
policies pertaining to urban poverty,
homelessness, and criminal justice.

## GOVT 3128 America's Changing Faces (also AMST 3128)

Summer. 2 credits. Offered in Cornell in
Washington Summer Program. S. Jackson. A new generation of leaders has emerged in America's political, economic, educational, and cultural institutions. Those leaders employ and explore in their work modern communications technologies such as the Internet. Thereby, they are changing both what is done and how things are done in the respective life spheres. This course explores the resulting changes in the nature of American life and asks questions about the interactions among the different realms of life. (AM)
GOVT 3131 The Nature, Functions, and Limits of Law (also LAW 4131) (CA-AS)
Spring. 4 credits. Prerequisite:
undergraduate standing. A. Riles.
For description, see LAW 4131
GOVT 3141 Prisons (also AMST 3141) (SBA-AS)
Fall, winter, and summer. 4 credits.
M. Katzenstein.

The United States stands alone among Western, industrialized countries with its persistent, high rates of incarceration, long sentences, and continued use of the death penalty. In order to pave the way toward the massive use of incarceration, ideas must develop about categories of people considered to be outlaws and about the relationship of these groups to those considered to be law-abiding. Our purpose in this course is to understand how social and political actors, through a range of categories and understandings involving ideas about rights, race, and responsibility, have enabled and/or deterred the rapid expansion of incarceration
GOVT 3150 The American Legal System: Its Nature, Functions, and Institutions (CA-AS)
Summer. 4 credits. Offered in New York

## City. C. Stewart.

For description, see Summer Session link www.sce.cornell.edu.

## GOVT 3161 The American Presidency

 (also AMST 3161) (SBA-AS)Fall. 4 credits. E. Sanders.
This course will explore and seek
explanations for the performance of the 20thto 21st-century presidency, focusing on its institutional and political development, recruitment process (nominations and elections), relationships to social groups, economic forces, and "political time", and foreign and domestic policy-making.

## [GOVT 3171 Campaigns and Elections

 (also AMST 3171) (SBA-AS)Fall. 4 credits. Prerequisite: GOVT 1111 or permission of instructor. Next offered 2011-2012. P. Enns.]

GOVT 3181 U.S. Congress (also AMST 3181) (SBA-AS)

Fall. 4 credits. M. Shefter.
The role of Congress in the American political system. Topics include: the political setting within which Congress operates, the structure of Congress, the salient features of the legislative process, and recent congressional behavior in a number of policy areas. (AM)

GOVT 3191 Racial and Ethnic Politics in the U.S. (also AMST/LSP 3191) (SBA-AS)
Fall. 4 credits. M. Jones-Correa In 1965 the landscape of American politics changed dramatically with the passage of the Voting Rights Act. That same year, Congress passed the Immigration Reform Act, which though little heralded at the time, arguably has had equally profound effects. This course will provide a general survey of minority politics in the United States, focusing on the effects of these two key pieces of legislation. The course will highlight the relationships between immigrants and minorities, electoral politics and protest politics, and between cooperation and competition within and among minority groups. The purpose of the course is not only to pinpoint the similarities and differences in the agendas and strategies adopted by racial and ethnic minority groups, but also to show how inextricably intertwined "minority" politics and American politics have been and continue to be.

## GOVT 3202 The U.S. Supreme Court and Crime (also AMST 3202)

Fall. 4 credits. D. Chutkow.
The Constitution and the Supreme Court have much to say about the power of government to investigate, detain, prosecute, sentence, and punish individuals for crime. This course examines the major legal decisions that shape constitutional law with respect to crime, and how the balance is struck between the presumption of innocence, the protection of the individual, and the government's duty to enforce the laws and ensure public safety.
[GOVT 3212 Public Opinion and Representation (SBA-AS)
Spring. 4 credits. Next offered 2011-2012. P. Enns.]

## [GOVT 3241 Inequality and American Democracy (also AMST 3241) (SBA-AS)

Fall. 4 credits. Next offered 2012-2013. S. Mettler.]

GOVT 3281 Constitutional Politics: The Supreme Court (also AMST 3281) (HA-AS)
Spring. 4 credits. D. Chutkow.
The course investigates the role of the Supreme Court in American politics and government. It traces the historical development of constitutional doctrine and the Court's institutional role in government. Discussed are major constitutional law decisions, their political contexts, and the social and behavioral factors that affect federal court jurisprudence.
GOVT 3293 Comparative Politics of Latin America (also DSOC/LATA 3290) @ (SBA-AS)
Fall. 4 credits. G. Flores-Macias. This course is designed as an introduction to political, economic, and social issues in 20th-century Latin America. Topics are organized chronologically, beginning with the process of industrialization and incorporation of the popular sectors in the 1930 s and 1940 s , and ending with the recent rise of the left to power in the region. Among the main issues covered are populism and corporatism, dependency theory and import-substitution industrialization, revolutions, the breakdown of democracy, military rule, democratic transitions, debt crisis and market reforms, social movements, and migration. Throughout
the semester, we will draw on examples from the entire region, but the course will focus on six main countries, namely Argentina, Brazil, Chile, Peru, Mexico, and Venezuela.
Knowledge of Spanish or Portuguese is not required.

## GOVT 3303 Politics of the Global North (also ILRIC 4330)

Fall and summer. 4 credits. L. Turner. For description, see ILRIC 4330. (CO)

## GOVT 3313 Middle Eastern Politics (also

 NES 3850) @ (CA-AS)Spring. 4 credits. D. Patel.
This course provides an introduction to contemporary Middle Eastern politics. The goal is to provide students with historical background and theoretical tools to answer the following core questions: (1) Why do authoritarian political systems persist in the Middle East more than they do elsewhere? (2) Why have Islamist groups become prominent opposition forces in and across some countries? (3) Why do some Middle Eastern countries suffer from high levels of political violence while others are spared? (4) What accounts for the region's current economic underdevelopment? (5) Would the adoption of Western-style political institutions improve governance and stability in the region? The course explicitly compares outcomes and explanations within the region, between the region and other world areas, and over time.

## [GOVT 3323 Modern European Politics

 (SBA-AS)Fall. 4 credits. Next offered 2011-2012. T. Zittel.]
[GOVT 3344 Islamic Politics (also NES 3844) @ (SBA-AS)

Fall. 4 credits. Next offered 2011-2012. D. Patel.]
[GOVT 3353 African Politics @ (SBA-AS) Fall. 4 credits. Next offered 2011-2012. N. van de Walle.]

## GOVT 3363 Postcommunist Transitions (SBA-AS)

Fall 4 credits. V. Bunce.
The focus of the course is on political and economic developments since the collapse of communism in the 29 states that make up Eastern Europe and Eurasia. Topics include why democracy has developed in some countries, but not others in the region; differences in economic performance across the region; the causes of inter-ethnic cooperation and conflict; and the role of the United States and the European Union in promoting democratic governance. The geographical focus will shift, depending upon the topic at hand.

## [GOVT 3383 Comparative Political

 Economy (SBA-AS)Spring. 4 credits. Next offered 2011-2012. C. Way.]

GOVT 3403 China Under Revolution and Reform (also CAPS 3403) @ (SBA-AS) Fall. 4 credits. A. Mertha.
This course provides a broad overview of the evolution of Chinese politics from the early part of the 20th century to the present. It is roughly divided into three sections. The first traces the formation and the progression of modern state and party institutions following the collapse of the Qing Dynasty in 1911, through the communist rise to power and into the Mao era (1949-1976), culminating in the
period of "opening up and reform" (1978present). The second part of the course examines China's institutional apparatus, focusing on mapping out the government, Party, and military bureaucracies; examining relations between Beijing and the localities; and on the institutionalization of these structures and processes over time. The third part of the course combines the insights of the course thus far to illuminate some of the current "hot button" issues facing the Chinese state and the world, combining politics and policy and examining the relationships between the two. No prior knowledge of China is required or expected.
GOVT 3413 Modern European Society and Politics (also SOC 3410) (SBA-AS)
Fall. 4 credits. S. Van Morgan.
This survey course provides an interdisciplinary overview of European social and political issues. Themes of the course will include, but will not be limited to, the political development of the nation-state, modes of governance, welfare state restructuring, party systems and elections, social movements, immigration and demography, culture and identity, external relations, and the special challenges posed by European political and economic integration. A series of background and contextual lectures will be complemented by presentations given by leading

## Europeanists.

## [GOVT 3427 Germany and Europe (SBA-AS)

Fall. 4 credits. Next offered 2011-2012. T. Zittel.]

## [GOVT 3437 Politics of the European

 Union (SBA-AS)Spring. 4 credits. Next offered 2011-2012.
T. Zittel.]

## GOVT 3443 Southeast Asian Politics

 (also ASIAN 3334) @ (HA-AS)Spring. 4 credits. T. Pepinsky.
This course will give students the historical background and theoretical tools to understand the politics of Southeast Asia, one of the world's most diverse and fascinating regions. The first part of the course traces Southeast Asia's political development from the colonial period to the present day, examining common themes such as decolonization, state building, war and insurgency, ethnic relations, and nationalism. The second part of the course focuses on key issues in contemporary Southeast Asian politics, including transitions to and away from democracy, representation and mass politics, corruption, economic development, globalization, regional politics, and civil violence. Our course will concentrate primarily but not exclusively on the six largest countries in the region-Burma, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam-using the comparative method to understand variation across time, across countries, and within countries.
GOVT 3463 Modern Japanese Politics (also ASIAN 3346, FGSS 3463) @ (SBA-AS)
Spring. 4 credits. S. Martin. In the 1980 s, Japan was number one. The consolidation of its postwar democracy and rapid economic growth offered an alternative political economic model for emerging democracies. By the 1990s, the economic bubble burst and provided momentum for
reforming the Japanese way of doing politics Whereas the U.S. sought to learn from Japan's success in the 1980s, we now seek to apply lessens from its failures to politically resolving our own economic crisis. This course examines the rise and fall of the " 1955 System" and Japan's ongoing struggle to reach a new political equilibrium through reforms aimed at producing a better democracy. These broad themes will be addressed through a close analysis of citizen engagement with the institutional framework in an increasingly global context.

## GOVT 3549 Capitalism Competition and Conflict in the Global Economy

 (SBA-AS)Fall 4 credits. P. Katzenstein.
Unemployed auto workers in Detroit and the wood stoves in New England signal an important change in America's relation to the world economy. This course characterizes these changes in a number of fields (trade, money, energy, technology), explains them as the result of the political choices of a declining imperial power that differs substantially from the choices of other states (Japan, Germany, Britain, France, the small European states, and Korea), and examines their consequences for America and international politics

## GOVT 3553 Issues Behind the News

Fall. 2 credits. Prerequisites: AEM/ECON 2300 or ANTHR 1400 or GOVT 1817 or GOVT 2947/PHIL 1940, or permission of instructor. J. Reppy.
This course will cover international current events as they unfold during the semester. Faculty from across the university will be invited to contextualize and deepen students' understanding of elections, wars, complex humanitarian emergencies, international agreements, global health issues, and other relevant international events that are in the news. The course will respond flexibly to unforeseen events. Special attention will be devoted to U.S. foreign policy issues and how U.S. foreign policies are formulated and implemented. The course will strive to expose students to different points of view on these issues. (IR)

## [GOVT 3605 Ideology (CA-AS)

Fall. 4 credits. Next offered 2011-2012. D. Rubenstein.]

## GOVT 3633 Politics and Culture (also

 SOC 2480) (HA-AS)Fall. 4 credits. M. Berezin.
For description, see SOC 2480

## GOVT 3635 Human Rights and Global

 Justice (also AMST 3635) \# (SBA-AS)Spring. 4 credits. A. M. Smith.
In this course, we will move between the study of (1) general concepts of justice and human rights: liberty rights; political rights; and social rights (such as the right to education); (2) concrete problems pertaining to the interpretation of international human rights agreements and U.S. constitutional law; and (3) contemporary moral/legal controversies, including the legal vulnerability of the homeless and unauthorized immigrant children, and our moral duties toward them; the legal status of enhanced interrogation techniques, including torture; the normative debates on multiculturalism, women's rights, and cosmopolitanism; and the moral obligations of citizens in the developed world
with respect to the least advantaged in the developing countries.

## [GOVT 3655 Politics and Literature (also AMST 3655) (LA-AS) <br> $$
\begin{aligned} & \text { Fall. } 4 \text { credits. Next offered 2011-2012. } \\ & \text { J. Frank.] } \end{aligned}
$$

[GOVT 3665 American Political Thought from Madison to Malcolm X (also AMST 3665, HIST 3160) \# (HA-AS) Fall. 4 credits. Next offered 2011-2012. I. Kramnick.]
[GOVT 3695 Marx and After \# (KCM-AS)
Fall. 4 credits. Next offered 2011-2012. S. Buck-Morss.

We will read the texts of Marx that set the agenda for a century of political and theoretical debate, and key essays that have built on his dialectical materialist theory in the 20th century.]

## [GOVT 3705 Political Theory and Cinema (also COML 3300, FILM 3290, GERST 3550) (CA-AS)

Spring. 4 credits. Next offered 2012-2013. G. Waite.]

## GOVT 3725 Ideology 2: Contemporary Continental Political Thought (also COML 3725) @ (CA-AS)

Fall. 4 credits. D. Rubenstein.
This semester we will be examining everyday life, space, sexuality and language in the works of primarily French philosophers of the 20th century. Topics will be the critique of everyday life (Lefebvre, de Certeau), consumer society (Baudrillard, Barthes),
psychogeography and situationalism (Debord, Vaneigem), sexuality (Barthes, Foucault, Deleuze and Guattari), language and postcolonialism (Derrida).

## [GOVT 3735 Political Freedom (also AMST 3735) \# (KCM-AS)

Spring. 4 credits. Next offered 2011-2012. J. Frank.]

## [GOVT 3847 Weapons of Mass

 Destruction @ (SBA-AS)Spring. 4 credits. Students enrolled in GOVT 3847 receive SBA-AS. Next offered 2011-2012. S. Kreps.]

## [GOVT 3857 American Foreign Policy

 (also CAPS 3857) (SBA-AS)Fall. 4 credits. Next offered 2011-2012. P. Katzenstein.

America is marked by multiple traditions and identities as well as a state on steroids, or imperium, and a nation on stilts, or civilization. These traits are reflected in its foreign policies. (IR)]

## GOVT 3867 The Causes of War (SBA-AS)

Fall. 4 credits. C. Way.
This course surveys leading theories of the causes of interstate war-that is, large-scale organized violence between the armed forces of states. Why is war a recurring feature of international politics? Are democracies more peaceful than other types of states, and if so what explains this "democratic peace"? Why do democratic publics seem to reward threats to use force by "rallying around the flag" in support of their governments? Does the inexorable pattern of the rise and fall of nations lead to cycles of great power wars throughout history? These and other questions will be examined in our survey of theories of war at three levels of analysis: the individual and small groups, domestic politics, and the international system. Topics include (1)
theoretical explanations for war; (2) evaluation of the evidence for the various explanations; (3) the impact of nuclear weapons on international politics; (4) ethics and warfare; (5) the uses and limitations of air power; (6) international terrorism. (IR)

## GOVT 3898 International Law (HA-AS)

Fall. 4 credits. Taught in Washington, D.C. Is international law a pious delusion, helpless in the face of real power? Or is public policy becoming so entangled in international standards that international law is now eroding national sovereignty? This course surveys the theoretical foundations and general history of international law since the 17 th century to highlight what is new in the doctrines and institutions by which it operates in the contemporary world. The course gives special attention to the relation between international and U.S. law and to the workings of international law in particular fields-including environmental and human rights protection, trade regulation, and control of terrorism. (IR)

## GOVT 3937 Introduction to Peace and

 Conflict Studies (SBA-AS)Spring and summer. 4 credits. S. Kreps. This course serves as an introduction to the study of war, peace, and peacemaking. We will study different theories of peace and war from a variety of disciplinary perspectives. The course will cover definitions of peace and war, causes of conflict, and modes of conflict prevention and resolution. The concepts will be applied to a range of historical and current conflicts. Students will prepare analyses of specific conflicts or instances of peacemaking for class presentation. (IR)

## GOVT 3944 Domestic Sources of Foreign

 Policy @ (SBA-AS)Spring. 4 credits. J. Weeks.
This course explores the relationship between domestic politics and foreign policy, studying how domestic political institutions, the media, misperceptions, moral values, and other
factors affect leaders' foreign policy decisions in a variety of countries and issue areas. (IR)

## [GOVT 3957 New Forces in International

 Politics (SBA-AS)Fall. 4 credits. Next offered 2011-2012. A. Carlson.]
[GOVT 3977 Israeli-Palestinian Conflict (also HIST/SOC 3970, JWST/NES 3697) @ (HA-AS)

Spring. 4 credits. Next offered 2011-2012. R. Brann.]
[GOVT 4032 Immigration and Politics Research Seminar (also AMST/LSP 4032) (SBA-AS)

Spring. 4 credits. Next offered 2011-2012. M. Jones-Correa.]
[GOVT 4041 American Political Development in the 20th Century (also AMST 4041, AMST/GOVT 6121) (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
E. Sanders.

Examines major political reform periods leading to policy change in economic regulation, social welfare, and national security policy.]
[GOVT 4051 The Postmodern Presidency: Election 2008 (also AMST 4305) (CA-AS)
Fall. 4 credits. Next offered 2012-2013. D. Rubenstein.]

GOVT 4061 Politics of Slow-Moving Crisis (also AMST 4061/6161, GOVT 6161) (SBA-AS)

Spring 4 credits. M. Jones-Correa. An interdisciplinary seminar focusing on the political response to "slow-moving policy crises" such as population growth/change (aging, immigration), water availability and global warming. Each of these areas involves a policy area where the need for policy coordination is clear but the pressures for coordination are not, since the consequences of policy action or inaction may be felt only years down the road, and the assessment of the risk posed by these threats is highly contested. How do politicians/societies successfully face up to the risks posed by slow-moving crises?

## GOVT 4112 The Politics of Change

 Spring. 4 credits. S. Mettler."Yes, we can!" President Barack Obama was elected amidst great hopes among Americans that the nation can, with good leadership, address pressing issues. In this course, we assess Obama's domestic policy agenda's prospects for success by considering the institutional and political context of recent years, the challenges and opportunities posed by existing policies, and past efforts to address key issues. In the first few weeks of the semester, students will learn about the institutional features of the relationship between the White House and Capitol Hill and the rise of partisan polarization in Congress in recent years. The body of the course will focus on prominent issue areas on which Obama aims to make a difference: taxes and inequality, health care, higher education, $\mathrm{K}-12$ education, and the environment. In each case, we will examine the issue in historical perspective by analyzing past reform efforts, and we will examine the Obama administration's record to date and consider the implications for success over the next few years. Students will have the opportunity to write in-depth research papers.
[GOVT 4142 Causes and Consequences of American Foreign Policy (also AMST 4142, GOVT/AMST 6142) (SBA-AS)
Fall. 4 credits. Next offered 2011-2012. E. Sanders.

What is the impact of U.S. foreign policy on the world, U.S. society, and political institutions? What are the forces that drive U.S foreign policy?]

## [GOVT 4222 Political Culture (also AMST

 4222)Spring. 4 credits. Next offered 2011-2012. R. Bensel.]
[GOVT 4231 The 1960s: Conceptualizing the Future from the Past (also AMST 4231) (CA-AS)

Fall. 4 credits. Next offered 2012-2013.
J. Kirshner and T. Lowi.]

## GOVT 4241 Contemporary American Politics (also AMST 4241, AMST/ GOVT 6291) (HA-AS)

Spring. 4 credits. M. Shefter.
Seminar analyzing some major changes in U.S electoral and group politics in recent decades. Topics include: partisan realignment, the new conservatism, racial cleavages, "identity politics," and democratic decline.

GOVT 4281 Government and Public Policy: An Introduction to Analysis and Criticism (also AMST 4281/6281, GOVT 7281) (SBA-AS)
Fall. 4 credits. T. J. Lowi.
Concentrates on history and criticism of U.S. policies and the politics associated with them. Particular attention is given to the origins and character of the regulatory state and the welfare system. (AM)

## [GOVT 4293 Politics of Science (also

 STS/BSOC 4291) (SBA-AS)Fall. 4 credits. Next offered 2011-2012. R. Herring.]

GOVT 4303 Biotechnology and Development (SBA-AS)
Spring. 4 credits. R. Herring. Of all the technological solutions to agronomic problems that have been proposed in the last few decades, none has created the level of backlash and controversy as those involving genetic biotechnology. Social protest and activist movements arise from ethical, cultural, religious, economic, environmental, and political stances with regard to the use of transgenic technologies, particularly in agricultural development in poor countries. In this course, we will explore the roots of these controversies and follow the logics and economics of their development and deployment. We will try to identify the fundamental underpinnings of various arguments for and against the use of transgenic crops as a tool for agricultural development. Discussions on selected topics and associated directed readings will be led by the course coordinators and invited speakers. Students will be assessed on their participation in discussions and on a written position paper in the subject area.
[GOVT 4374 States and Societies in the Middle East (also GOVT 6474, NES 4874/6874) @ (SBA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Patel.]

## GOVT 4403 War and the State @ \#

 (SBA-AS)Fall. 4 credits. G. Flores-Macias.
The goal of the course is to introduce students to the study of the nexus between violence and the creation of the modern state. It is intended to familiarize students with the role that war and other forms of violence have played in shaping the state in comparative perspective. Relying on the emergence of the modern state in Western Europe as a point of departure, the course studies the processes of state formation and state building in Africa, Asia, Eastern Europe, Latin America, and the Middle East.

## GOVT 4414 Political Violence in

 Cambodia and China @ (CA-AS)Fall. 4 credits. A. Mertha,
This course traces the evolution of political institutions and agency within the Chinese Communist Party and the Khmer Rouge in China and Cambodia, respectively. In this course we analyze the role of violence in state-building and state dissolution. We also employ a structured comparison between these political entities to examine and explain their similarities and differences. Finally, we look at the legacies of past political violence on these political systems today.
[GOVT 4585 American Political Thought (also AMST 4585, GOVT 6585) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
J. Frank.]
[GOVT 4616 Interpreting Race and Racism: Du Bois (also AMST 4616) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. A. M. Smith.

Seminar in critical race theory and the
contemporary implications of the
Reconstruction Amendments to the
Constitution, with a focus on the work of Du Bois.]
[GOVT 4625 Sexuality and the Law (also FGSS 4610/7620, GOVT 7625) (KCM-AS)
Spring. 4 credits. Next offered 2011-2012. A. M. Smith.]
[GOVT 4635 Feminist Theory/Law and Society (also AMST 4635) (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
A. M. Smith.

Feminist analysis of policy and legal issues central to gender justice: reproductive rights, HIV and AIDS, poverty policy, transnational women's advocacy, prisons, same-sex marriage, etc. (PT)]
[GOVT 4646 Derrida and Philosophy of Hospitality (also GOVT/COML 6675, HADM 5590) (CA-AS)
Fall. 4 credits except for HADM 5590,
which is 3 credits. Next offered 2012-2013.
D. Rubenstein and L. Shaffer.]

GOVT 4655 Contemporary Political Philosophy (also PHIL 4470) (KCM-AS)
Spring. 4 credits. R. Miller.
For description, see PHIL 4470.
[GOVT 4665 Islamism (also NES 4953) @
Fall. 4 credits. Prerequisite: graduate students or juniors and seniors who have taken GOVT 1615 or 3000 -level course in political theory. Next offered 2011-2012. S. Buck-Morss.]

GOVT 4705 Contemporary Reading of the Ancients (also COML 4750/6727, GOVT 6509) (CA-AS)
Fall. 4 credits. D. Rubenstein
This semester we will be examining two figures who serve as models of political militancy or resistance: Antigone and St. Paul. Readers of Antigone will include feminists such as Judith Butler and Luce Irigaray; democratic theorists Patchen Markell and Bonnie Honig; psychoanalytic and deconstructive theorists: Joan Copjec, Jacques Lacan, and Jacques Derrida. St. Paul will be read in relation to contemporary readers such as Taubes, Badiou, Agamben, Zizek, as well as Kristeva and Derrida concerning hospitality.
[GOVT 4715 Critical Reason, The Basics: Kant, Hegel, Marx, Adorno (also GERST 4710) (KCM-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Buck-Morss.]

GOVT 4735 Marx, Freud, Nietzsche (also COML 4250, GERST 4150) \# (CA-AS)
Fall. 4 credits. G. Waite.
For description, see GERST 4150.

## [GOVT 4769 Spinoza and the New

 Spinozism (also COML/GERST 4090, JWST 4790) (LA-AS)Fall. 4 credits. Next offered 2011-2012. G. Waite.]

## GOVT 4809 Politics of '70s Films (also

 AMST 4809) (SBA-AS)Spring. 4 credits. J. Kirshner.
The 10 years from 1967 to 1976 were an extraordinary time both in the history of American politics and in the history of American film. In the same period that the country was rocked by the Vietnam War, the feminist and civil rights movements, Watergate and economic crisis, the end of Hollywood censorship along with demographic and economic change in the industry ushered in what many call "the last golden age" of American film. In this class we study both film theory and political history to examine these remarkable films and the political context in which they were forged. The goal of the course is to take seriously both the films and their politics. (AM or PT)

## [GOVT 4817 International Conflict and

 Laws of War (SBA-AS)Spring. 4 credits. Next offered 2011-2012.
S. Kreps.]

## GOVT 4827 Unifying While Integrating:

 China in the World (also CAPS 4827, GOVT 6827) @ (HA-AS)Spring. 4 credits. A. Carlson.
Seminar intended to examine the increasingly complex relationship that has evolved between China and the rest of the international system during the 1980s and 1990s. Emphasizes the interrelated, yet often contradictory, challenges facing Beijing in regard to the task of furthering the cause of national unity while promoting policies of integration with international society and interdependence with the global economy. Concentrates especially on ongoing controversies over the rise of Chinese nationalism and the persistence of "minority nationalism" in many regions within China. (IR)

## [GOVT 4837 The Military and New

 Technology (also STS 4831) (SBA-AS) Fall. 4 credits. Next offered 2011-2012. Staff.For description, see STS 4831.]

## GOVT 4842 Political Ecology of

 Imagination (also ANTHR 4082, STS/ SHUM 4842)Fall. 4 credits. T. Heatherington.
For description, see SHUM 4842.
GOVT 4845 Secularism and Its Discontents (also ENGL 4075, SHUM 4845)

Fall. 4 credits. E. Anker.
For description, see SHUM 4845

## GOVT 4847 Realist Theories of

 International Relations (also GOVT 6847) (SBA-AS)Fall. 4 credits. J. Kirshner.
"Realism" is often invoked in international relations to mean many different things. By policymakers, it has been cited as a source of support-and opposition-to America's recent wars. By scholars, it is often used as a synonym for "structuralism," which it need not be. In this course, we will look closely at the tradition of realism in IR theory, both to find out exactly what realism does stand for, and in order to better understand world politics more generally.

GOVT 4862 Classics and Early America (also CLASS 4683, HIST 4861) \# (HA-AS)
Spring. 4 credits. H. Rawlings.
For description, see CLASS 4683.

## [GOVT 4877 Asian Security (also CAPS

 4870, GOVT 6877) @ (SBA-AS)Fall. 4 credits. Next offered 2011-2012. A. Carlson.]

## [GOVT 4917 Ethics in International

 Relations (KCM-AS)Spring. 4 credits. Next offered 2011-2012.
M. Evangelista.

This course examines current and historical issues in international relations from the perspective of international law, norms, and ethics.]

## GOVT 4949 Honors Seminar: Thesis

 Clarification and ResearchFall. 4 credits. Prerequisite: acceptance into honors program. E. Sanders.
Designed to support thesis writers in the honors program during the early stages of their research projects.

## GOVT 4959 Honors Thesis: Research and Writing

Spring. 4 credits. Prerequisite: successful completion of GOVT 4949. E. Sanders.
GOVT 4998 Politics and Policy: Theory, Research, and Practice (also ALS/ AMST/CAPS 4998, PAM 4060)
Fall, spring. Offered in Cornell in
Washington Program.
This required course forms the core of the Cornell in Washington program for students in the public policy option. The central course objective is to provide students with the instruction and guidance necessary to analyze and evaluate their own chosen issue in public policy. Toward that end, the course has three components: (1) weekly lectures providing background on the structures and processes of national politics and policy as well as training in research methodology; (2) student externships; and (3) individual research papers or projects. All three components interrelate so as to provide students with a strategy and framework for integrating classroom based learning, field experience and individual research.

## GOVT 4999 Undergraduate Independent

 StudyFall or spring. 1-4 credits.
One-on-one tutorial arranged by the student with a faculty member of his or her choosing. Open to government majors doing superior work, and it is the responsibility of the student to establish the research proposal and to find a faculty sponsor. Applicants for independent study must present a well-defined program of study that cannot be satisfied by pursuing courses in the regularly scheduled curriculum. No more than 4 credits of independent study may count toward fulfillment of the major. Students who elect to continue taking this course for more than one semester must select a new theme or subject each semester. Credit can be given only for work that results in a satisfactory amount of writing. Emphasis is on the capacity to subject a body of related readings to analysis and criticism. Keep in mind that independent study cannot be used to fulfill the seminar requirement. The application form for independent study is available in 210 White Hall and must be completed at the beginning of the semester in which the course is being taken.

## [GOVT 6019 Methods of Political

 Analysis IFall. 4 credits. Next offered 2011-2012. P. Enns.

Introduction to the quantitative analysis of political data, with an emphasis on probability theory, descriptive statistics, measures of association, and hypothesis testing.]

## GOVT 6029 Methods of Political

 Analysis IISpring. 4 credits. P. Enns.
This course focuses on Ordinary Least Squares regression, with an emphasis on OLS assumptions, diagnostics, and "solutions." The course also includes an introduction to statistical modeling and matrix algebra.

## GOVT 6031 Field Seminar in American

 PoliticsSpring. 4 credits. E. Sanders.
The major issues, approaches, and institutions of American government and the various subfields of American politics are introduced. The focus is on both substantive information and theoretical analysis, plus identification of big questions that have animated the field. (AM)
GOVT 6053 Comparative Method in International and Comparative Politics
Spring. 4 credits. D. Patel. An in-depth, graduate-level introduction to qualitative and comparative methods of political analysis, with special emphasis on the application of these methods in comparative and international politics. Through readings, discussions, and written assignments, students will explore strategies for concept formation, theory construction, and theory testing, using the craft and tools of comparative political analysis.

## GOVT 6067 Field Seminar in International Relations

Spring. 4 credits. S. Kreps.
General survey of the literature and propositions of the international relations field. Criteria are developed for judging theoretical propositions and are applied to the major findings. Participants are expected to do extensive reading in the literature as well as research. (IR)
GOVT 6072 Immigration and Immigrant Politics (also LSP 6072)
Spring. 4 credits. M. Jones-Correa. This course offers an exploration of readings in immigrant politics and immigration policy, with particular emphases on membership and citizenship, nativism, transnationalism, immigrant political incorporation and socialization, assimilation and immigration public policy. Readings will draw from both U.S. and comparative literatures on immigration.

## GOVT 6075 Field Seminar in Political

 Thought: The EnlightenmentFall. 4 credits. I. Kramnick.
The topic for the field seminar in political thought this year will be the Enlightenment. We will read and discuss central texts of 18th-century Enlightenment thought, including texts by Locke, Voltaire, Montesquieu, Rousseau, Condorcet, Hume, Smith, Burke, Paine, and Kant. We will explore the political dilemmas to which these Enlightenment texts responded-such as political theology, feudalism, and absolutist monarchy-and critically evaluate their attempts to establish a more secular, rational, and democratic form of
politics. Was there a single Enlightenment? How do we characterize it? How do we assess its political, moral, and philosophical legacies?

## [GOVT 6101 Political Identity: Race,

 Ethnicity, and NationalismFall. 4 credits. Next offered 2011-2012. M. Jones-Correa.]
[GOVT 6121 American Political Development in the 20th Century (also AMST 6121, AMST/GOVT 4041)
Fall. 4 credits. Next offered 2011-2012. E. Sanders

For description, see GOVT 4041.]
[GOVT 6132 The Politics of Inequality
Spring. 4 credits. Next offered 2011-2012.
S. Mettler.]
[GOVT 6142 Causes and Consequences of U.S. Foreign Policy (also AMST 4142/6142, GOVT 4142)
Fall. 4 credits. Next offered 2011-2012.
E. Sanders.

For description, see GOVT 4142.]

## [GOVT 6151 State and Economy in

 Comparative PerspectiveFall. 4 credits. Next offered 2012-2013.
R. Bensel.]

## GOVT 6171 Politics of Public Policy

Spring. 4 credits. S. Mettler
Much of the literature that comprises the field of policy analysis is characterized by antipathy to politics: scholars attempt to excise political battles and concerns from their studies in order to advance a "rational" portrayal of how policies do or should function. Yet, public policies are, themselves, inherently political. They are defined through political processes, designed and implemented in the context of political institutions, and they in turn shape the character of politics and public life. This course entails the examination and evaluation of a variety of approaches to policy analysis, all of which are united by their inclination to take politics seriously. Readings have been included that comprise variations of rational choice, institutionalist, historical, behavioral, and interpretivist analyses. The first part of the course examines different models of the policy process that may inform policy analysis. The second part of the course investigates policymaking processes and institutions and examines stages of the policy process, including public mobilization, policy definition, agenda setting, and policy design and implementation. Special attention is given to the American system, focusing on policymaking institutions, processes and outcomes in that context, but students who focus on other nations or international system may also find the course useful. The course concludes with an examination of how policies, once created, may in turn restructure political processes and shape policies adopted subsequently.

## [GOVT 6202 Political Culture (also AMST 6202)

Spring. 4 credits. Next offered 2011-2012. R. Bensel.]

## GOVT 6222 Political Participation

Fall. 4 credits. M. Jones-Correa.
This course is concerned with understanding how and under what conditions citizens seek to influence political elites through use, expansion, circumvention or subversion of existing channels of political participation. Cases from a variety of institutional contexts
over time will be used to examine how mediating institutions diminish and/or exacerbate social inequalities in the exercise of political voice. We will consider readings from both the United States and comparative contexts to examine and dominant conceptions in the political participation literature.

## GOVT 6274 People, Markets, and

 DemocracyFall. 4 credits. C. Anderson.
This seminar is designed to introduce Ph.D. students to some of the major topics, theoretical approaches, and empirical findings in the relationship between people, states, and markets in democracies. These include prominently the links between the economy and political behavior and between democratic politics and economic behavior.
GOVT 6291 Contemporary American Politics (also AMST 4241/6291, GOVT 4241)
Spring. 4 credits. M. Shefter.
For description, see GOVT 4241. (AM)

## [GOVT 6301 Institutions (also AMST

 6301)Fall. 4 credits. Next offered 2011-2012.
R. Bensel.]

## [GOVT 6324 Proseminar in Chinese

 PoliticsSpring. 4 credits. Next offered 2011-2012.
A. Mertha.]

## [GOVT 6334 Political Economy of Development

Fall. 4 credits. Next offered 2011-2012.
K. Roberts and K. Morrison.]

GOVT 6353 Field Seminar in

## Comparative Politics

Fall. 4 credits. K. Roberts and T. Pepinsky. This course provides a graduate-level survey of the field of comparative politics, introducing students to classic works as well as recent contributions that build upon those works. Readings will draw from leading theoretical approaches-including structural, institutional, rational choice, and cultural perspectives-and cover a broad range of substantive topics, such as democratization, authoritarianism, states and civil society, political economy, and political participation and representation.

## GOVT 6373 Seminar in Political Violence

Spring. 4 credits. A. Mertha.
This course broadly examines the causes, consequences, and processes of political violence. The course surveys various theoretical approaches while also examining the empirical literature on political violence. Cases will be drawn from all over the world, and we will also draw from history in order to contextualize our contemporary
conceptualizations of political violence.
[GOVT 6384 Democracy and the Media Spring. 4 credits. Next offered 2011-2012. T. Zittel.]

## [GOVT 6393 Comparative Political

 ParticipationFall. 4 credits. Next offered 2011-2012. S. Martin.]

## GOVT 6413 Revitalizing Labor: A

 Comparative Perspective (also ILRIC 6320)Spring. 4 credits. L. Turner.
For description, see ILRIC 6320.

GOVT 6423 Feminist Methodology (also FGSS 6170)
Spring. 4 credits. S. Martin.
For description, see FGSS 6170.

## [GOVT 6461 Public Opinion

Spring. 4 credits. Next offered 2011-2012. P. Enns.]

## [GOVT 6474 States and Societies in the

 Middle East (also GOVT 4374, NES 4874/6874)Spring. 4 credits. Next offered 2011-2012. D. Patel.]

## GOVT 6494 Agrarian Political Economy

Spring. 4 credits. R. Herring.
Comparative political economy of pre-
industrial and transitional societies, stressing alternative theories of dynamics of peasant society, rural development, environmental change and linkages to urban and industrial sectors and international system. We emphasize the impact of property systems and public law on human welfare and collective action. Theoretically, we explore the tensions between materialist political economy and competing interpretive frameworks.
GOVT 6509 Contemporary Readings of the Ancients
Fall 4 credits. D. Rubenstein.
For description, see GOVT 4705.
[GOVT 6523 Methods for Field Research
Fall. 4 credits. Next offered 2011-2012.
D. Patel.]

## [GOVT 6544 Gender and Politics (also

 FGSS 6544)Fall. 4 credits. Next offered 2011-2012.
S. Martin and S. Mettler.]

## [GOVT 6564 Comparative Political

 RepresentationFall. 4 credits. Next offered 2011-2012. T. Zittel.]
[GOVT 6585 American Political Thought (also AMST 6585, AMST/GOVT 4585) Spring. 4 credits. Next offered 2011-2012. J. Frank.

For description, see GOVT 4585.]

## [GOVT 6603 States and Social Movements (also SOC 6600)

Spring. 4 credits. Next offered 2011-2012. S. Tarrow.

This course is a broad examination of several types of contentious politics-social movements, civil wars, nationalist episodes and revolutions in different parts of the world. (CO)]
GOVT 6635 Education, Social Justice, and the Law (also AMST 6635)
Spring. 4 credits. A. M. Smith.
An interdisciplinary seminar that addresses political philosophy debates on the right to education, with special reference to school funding standards; and major court decisions on education equity issues, especially racial segregation; gender discrimination; affirmative action and voluntary integrative enrollment schemes; and state court litigation pertaining to the education amendments in the state constitutions. Our readings will be primarily drawn out of a casebook (e.g., Gee and Daniel, Law and Public Education), but we will also read several articles by normative political theorists, such as Elizabeth Anderson, Debra Satz, Harry Brighouse, and Adam Swift; as well as the work of litigators and education
policy experts, including Michael Rebell, Helen Ladd, and Richard Rothstein.

## [GOVT 6645 Democratic Theory (also

 AMST 6645)Fall. 4 credits. Next offered 2011-2012. J. Frank.]

## GOVT 6665 Media Theory (also COML

 6665)Spring. 4 credits. D. Rubenstein. Is there a singular French theorization of teletechnic? Or is what goes under the rubric of French theory a particular approach to the question of technology? We will examine this question in relation to several theorists who have written on film and photography, but also earlier technologies of writing, drawing, and painting. Authors will include Barthes, Baudrillard, Bourdieu, Deleuze, Derrida, Lacan, among others.
[GOVT 6675 Derrida and Philosophy of Hospitality (also GOVT 4646, HADM 5590, COML 6675)
Fall. 4 credits except for HADM, which is 3 credits. Next offered 2012-2013.
For description, see GOVT 4646.]
[GOVT 6695 Modern Social Theory I
Fall. 4 credits. Next offered 2012-2013. S. Buck-Morss.]
[GOVT 6705 Modern Social Theory II
Spring. 4 credits. Next offered 2012-2013. S. Buck-Morss.]

## [GOVT 6726 Psychoanalysis and

 IdeologySpring. 4 credits. Next offered 2011-2012. D. Rubenstein.]

GOVT 6746 Kant's Political Reason (also GERST 6940, COML 6015)
Spring. 4 credits. P. Gilgen.
For description. see GERST 6940.
[GOVT 6775 Language and Politics
Spring. 4 credits. Next offered 2011-2012. J. Frank.]

GOVT 6796 Justice and Equality (also PHIL 6996)
Fall. 4 credits. A. M. Smith.
A normative political theory seminar concentrating on the topics of distributive justice, equality, and critical race theory. We will begin with Rawls' Theory of Justice, and then examine various criticisms, especially those advanced by Nussbaum, Dworkin, Sen, Cohen, and Barry. In the 2010 version of this course, we will also focus on the philosophical debates pertaining to educational equity; our readings in this section of the course will include works by Elizabeth Anderson, Stephen Macedo, Deborah Satz, Harry Brighouse and Adam Swift, and critical race theorists Danielle Allen and Derrick Bell.

## [GOVT 6807 Topics in Comparative and International Political Economy

Spring. 4 credits. Next offered 2011-2012. T. Pepinsky.

Seminar covering current research on political economy, focusing on trade, finance, production, migration, development, welfare, and regime change.]

## GOVT 6827 Unifying While Integrating: China in the World (also CAPS/GOVT 4827) <br> Spring. 4 credits. A. Carlson. <br> For description, see GOVT 4827

# GOVT 6847 Realist Theories of International Relations (also GOVT 4847) <br> Fall. 4 credits. J. Kirshner. 

For description, see GOVT 4847.

## GOVT 6857 International Political

 EconomyFall. 4 credits. P. Katzenstein.
Exploration into a range of contemporary theories and research topics in the field of international political economy. The seminar covers different theoretical perspectives and a number of substantive problems. (IR)

## GOVT 6867 International Law, War, and

 Human RightsFall. 4 credits. M. Evangelista.
This course examines the role of international law in influencing states' behavior regarding issues related to war and human rights. It draws on literature in the fields of international relations and law to study such questions as: why states comply with international law; under what conditions legal norms become customary and widely accepted; under what conditions long-standing legal norms become undermined; and what is the relative influence in shaping the law of state practice, the efforts of non-state actors and popular movements, and the opinions of legal professionals? Much of the substantive focus of the course will be on the development of international humanitarian law and human-rights law, and the impact of the "War on Terror."

## GOVT 6897 International Security

Spring. 4 credits. J. Weeks.
This advanced graduate seminar introduces students to a variety of theoretical perspectives and empirical approaches related to international conflict, peace, and security. (IR)
GOVT 6927 Administration of Agriculture and Rural Development (also IARD 6060)

Spring. 4 credits. N. Uphoff and
T. W. Tucker.

## For description, see IARD 6030.

## GOVT 6999 CIPAs Weekly Colloquium

Fall, spring. 1 credit. S-U grades only. T. Lowi.

Colloquium is the weekly seminar series hosted by the Cornell Institute for Public Affairs (CIPA). It is also a required, 1-credit course for all CIPA Fellows and is graded S-U based on attendance. The colloquium series is a collaborative effort between the CIPA
Colloquium Committee and the faculty and staff of CIPA.

GOVT 7063 Labor in Global Cities (also ILRCB 7060)
Fall. 4 credits. L. Turner.
For description, see ILRCB 7060. (CO)

## GOVT 7073 Game Theory 1: Perfect

 InformationFall. 4 credits. K. Morrison.
This course introduces graduate students in political science to game theory, a tool for studying strategic interaction that is now used throughout the discipline. The first part of the course conveys the tools for solving games of perfect information. The second part is focused on some broad classes of problems about which the game theory learned in the first part of the class gives particularly useful insights. These include problems of collective action, as well as issues of credibility and commitment. The course requires only high-
school level mathematics, and no prior training in game theory or formal methods.

## GOVT 7074 Game Theory 2: Advanced

 TopicsSpring. 4 credits. Prerequisite: GOVT 7073 K. Morrison.

This is the second of two graduate courses on game theory in the government department. In the first half of this course, we will focus on advanced topics, including coalitional games, games of imperfect information, evolutionary games, and bargaining. The second half of the course will be focused on helping students develop their own models, using the techniques learned in both of the courses.

## GOVT 7281 Government and Public

 Policy (also AMST 4281/6281, GOVT 4281)Fall. 4 credits. T. J. Lowi.
For description, see GOVT 4281. (AM)
GOVT 7606 Jurisprudence and Normative Political Theory (also LAW 7393)
Fall. 4 credits. A. M. Smith.
A seminar for graduate students in the normative political theory field and law students. We will begin with Hart's classic work, The Concept of Law, and then consider Dworkin's criticisms. Then we will make a detour to the Rawls versus Sen debate to place "meta" questions pertaining to distributive justice, rights, and deliberation on the table. Returning to legal theory, we will consider Michelman's work on Rawls, social rights, and the constitution, and Cover's theory of plural nomian fields. Dworkin's confidence in the judiciary raises serious questions about the role of judicial review in a liberal democratic society; we will consider the critical approaches of Waldron, Tushnet, and Siegal in this regard. Finally, we will read several works from the critical race theory field; in the fall 2010 version of this course, we will concentrate on the writings of Derrick Bell.

## [GOVT 7625 Sexuality and the Law (also

 FGSS 4610/7620, GOVT 4625)Spring. 4 credits. Next offered 2011-2012.
A. M. Smith.

For description, see GOVT 4625.]

## GOVT 7999 Independent Study

Fall or spring. 4 credits. Not open to undergraduates. Undergraduates wishing to conduct supervised study should register for GOVT 4999.
Individualized readings and research for graduate students. Topics, readings, and writing requirements are designed through consultation between the student and the instructor. Graduate students in government who are looking to use this as an option to fulfill their course requirements should check with their chairs to be certain that the program of study is acceptable for this purpose. Applications must be completed and signed by the instructor and by the chairs of their special committees. They are available from, and must be returned to, the graduate assistant in 212 White Hall.

## GREEK

See "Department of Classics."

HEBREW
See "Department of Near Eastern Studies."

HIEROGLYPHIC EGYPTIAN
See "Department of Near Eastern Studies."

## HINDI-URDU

See "Department of Near Eastern Studies."

## HISTORY

B. Strauss, chair; T. R. Travers, director of graduate studies; J. Parmenter, director of undergraduate studies; E. Baptist, V. Caron, H. Case, D. Chang, J. Chen, Z. Chen, S. Cochran, D. Corpis, R. Craib, P. Dear, O. Falk, M. C. Garcia, D. Ghosh, S. Greene, T. J. Hinrichs, K. Hirano, I. Hull, P. Hyams, S. Kaplan, D. Lacapra, F. Logevall, T. Loos, D. Magaziner, J. Najemy, M. B. Norton, J. Parmenter, R. Polenberg, W. Provine,
H. Rawlings, E. Rebillard, C. Robcis, A. Sachs, B. Strauss, E. Tagliacozzo, T. R. Travers, C. Verhoeven, M. Washington, R. Weil, J. Weiss. Emeritus: D. Baugh, S. Blumin, J. John, M. Kammen, W. LaFeber, L. Moore, C. Peterson, W. Pinter, J. Silbey, F. Somkin, B. Tierney

The popularity of history among Cornell students is due to its usefulness as preparation for graduate, professional, or law school and for any career that requires critical thinking and good writing; the reputation of the faculty for scholarship, teaching, and advising; and most of all, the intrinsic interest of the discipline. A wide variety of introductory and advanced courses is offered. The department is particularly strong in ancient, medieval, and modern European history; in American, Latin American, and Asian history; and in the history of science.

## Advanced Placement

Students who pass the AP American and/or European History exam with a score of 4 or 5 have two options: (1) use the AP credits to fulfill the Arts and Sciences course credit requirements for graduation, or (2) take introductory American and/or European history courses.

## The Major

To complete the history major, a student must fulfill the requirements listed below:
Entry requirement: completion of any two history courses excluding first-year writing seminars.

1. Take nine history department courses (for either 3 or 4 credits each), completing all of them with a grade of C or better. (Courses taken for entry may count toward fulfilling the major.)
2. Of the total nine courses:
a. four must be in courses designated as outside U.S. history and
b. three must be in courses designated as history before 1800 .
Courses used to fulfill requirement (1) above may also be used to fulfill
requirement (2), in respect both to (a) and (b) if applicable. A course in American history before 1800 may be used to fulfill requirement (2b). A course before 1800 in a field other than American history can be used toward fulfillment of both requirements (2a) and (2b).
3. Two of the nine courses must be seminars, of which one must be a $4000-$ level seminar. HIST 4000, 4001, 4002, and service-learning 4000 -level courses may not be used to fulfill the 4000 -level seminar requirement.
Note: a single course may count to fulfill more than one of the requirements. For example, a course in medieval European history would count as both a course in history before 1800 and as a course outside of American history. A list of courses designated as "pre-1800" and "outside U.S. history" is posted at the History office ( 450 McGraw Hall) and on our website.

## Honors

The history department offers an honors program for students who wish to research and write a thesis during their senior year. In addition to writing the thesis, honors students must maintain a 3.5 average in their history courses, take HIST 4000 Honors Proseminar during their junior year plus an additional 4000-level seminar, preferably during their junior year, and complete 10 courses in history (for 3 or 4 credits each). During the second semester of the sophomore year or early in the junior year, interested students should speak to a faculty member or faculty advisor about the honors program.
Before the beginning of the senior year, the candidate presents, in conversation or in writing, a thesis proposal to an appropriate member of the faculty. The faculty member who approves the proposal ordinarily becomes the thesis supervisor. If for any reason it is necessary to change supervisors, this arrangement should be confirmed no later than the fourth week after the beginning of the candidate's senior year.

Honors candidates should register in HIST 4001, a seminar course in honors research. Any exceptions to this must be approved by the Honors Committee. HIST 4001 is a 4 -credit course that permits honors candidates to conduct research and to begin writing the honors essay in a seminar environment. At the end of the first semester of the senior year, as part of the requirements for HIST 4001, the student submits to the supervisor a 10 - to 15-page overview, or, alternatively, a preliminary draft of some part of the thesis along with an outline of the whole to the instructor of 4001 and to the student's supervisor. HIST 4002 is a 4 -credit seminar course that permits honors candidates to complete the honors essay and to demonstrate their understanding of the ways in which the themes explored in the thesis fit into a larger historical context.
The completed thesis is evaluated by three readers, including the supervisor and a first reader selected by the student, in consultation with his or her supervisor.
The text of the honors essay may not exceed 60 pages except by permission of the chair of the Honors Committee and the student's supervisor. Three copies are due during the third or fourth week of April. In May, each honors candidate is given an oral exam
administered by the supervisor; the exam focuses on the essay as well as the specific subfield of history in which the student has conducted research (e.g., Periclean Athens, 17th-century science, 19th-century American politics).
To qualify for a bachelor of arts degree with honors in history, a student must (1) sustain at least a 3.5 cumulative average in all history courses and (2) earn at least a cum laude grade on the honors essay and on the oral exam.
Note: History majors who wish both to study abroad (or in Cornell-in-Washington) and to enter the honors program should consult their advisors or the DUS as soon as possible after declaring a major. The department requires honors students to enroll in HIST 4000 before writing a thesis in their senior year, and only in exceptional cases are students allowed to enroll simultaneously in 4000 and 4001 (the first term of thesis-writing). So planning ahead is essential, especially if you intend to spend a full year abroad.
Cornell in Washington Program. History majors may apply to the Cornell in Washington program to take courses and undertake a closely supervised externship during a fall or spring semester.
Category Key: Courses in History are broken into different categories. To determine which category(s) a course falls in, please note the reference at the end of each course description. The key is as follows: $\mathrm{AF}=$ African History, $\mathrm{AM}=$ American History, $\mathrm{AS}=$ Asian History, $\mathrm{CO}=$ Comparative History, $\mathrm{EA}=$ Ancient European History, ER = Renaissance and Medieval History, EM = Modern European History, HS = History of Science, LA = Latin American History, NE = Near Eastern History, and HR $=$ Honors, Reading, and Research.

## First-Year Writing Seminars

[HIST 1141 First-Year Writing Seminar: Witchcraft in the Early Modern Atlantic World
Spring. 3 credits. Next offered 2011-2012. D. Corpis.]
[HIST 1230 First-Year Writing Seminar: Monstrous Births, Scheming Midwives: Childbirth in Europe 15001700
Fall. 3 credits. Next offered 2013-2014. R. Weil.]

## Introductory Courses

HIST 1240 Democracy and Its Discontents: Political Traditions in the United States (also AMST 1240) (HA-AS)
Summer. 3 credits. N. Salvatore. For description, see AMST 1240. (AM)

## HIST 1500 History of the Present (HA-AS)

Fall. 4 credits. D. Magaziner
The present is a confusing place. It is as big as the rise of China and India, as small as the phone in your pocket, as global as the worldwide movement for gay rights, as local as the immigrant family that just moved in next door. It is as abstract as devastating events a world away and as personal as evolving ethical norms about what is right and just and fair. History of the Present pauses time and asks "how did we get here?" Through fiction, film, and other media, we will explore how the past helps to explain the present.

Topics to be considered include
industrialization, the technology revolution, the evolution of marriage, consumerism, development, environmental ethics, humanitarianism, and what you had for breakfast this morning.

## HIST 1510 Introduction to Western Civilization \# (HA-AS)

Summer and fall. 4 credits. O. Falk. The West and its relations with the rest of the world are central topics today, but just what is the West and what is its history? This course surveys the history of the West from remote antiquity to the 16th century. We will consider developments in technology, economy, politics, religious institutions and faiths, cultural media and social ideals. Together, these themes add up to civilization in the west. We will acquaint ourselves with these dimensions of the past while seeking to acquire the basic skills professional historians use to learn about this past. (ER) (EM)

## HIST 1511 The Making of Europe (1500present) \# (HA-AS)

Summer and spring. 4 credits. C. Robcis How do we make sense of the recent controversies around Islam and the "veil" in France, the reform of the Welfare State in Great Britain, the anti-globalization protests in Davos, the rise of demagogic anti-immigrant parties from the Netherlands to Italy, or the fact that Swedes get more than thirty paid days off per year? This course seeks to answer these questions by exploring the history of modern Europe. Among other themes, we will discuss the Protestant Reformation, the rise of absolutism, the Enlightenment, the French Revolution, industrialism, colonialism, the Russian Revolution, the two world wars, decolonization and immigration, May '68, and the construction of the European Union. In conjunction, we will examine how modern ideologies (liberalism, Marxism, imperialism, conservatism, fascism, totalitarianism) were developed and challenged. Through a wide array of historical documents (fiction, letters, philosophy, treatises, manifestoes, films, and art), we will consider why "old Europe" is still relevant for us today. (EM)

## HIST 1530 Introduction to American

 History (also AMST 1530) \# (HA-AS)Fall and summer. 4 credits. HIST 1530 is not a prerequisite for HIST 1531
J. Parmenter.

This course introduces students to fundamental themes and trends in American history from the eve of the founding of European settlements in North America through the Civil War era. The course attends to issues of unity and diversity in American society, as well as the American nation's emerging role in the wider world. The course emphasizes comparisons between different regions, interactions between peoples of different cultures, and the impact of new political, economic, and social institutions on the lives of everyday people. Readings will be drawn from primary documents, assigned texts, and significant essays. Course assignments aim at developing students' ability to think and write critically and historically (AM)

## [HIST 1531 Introduction to American History, 1865-Present (also AMST

 1531) (HA-AS)Summer and spring. 4 credits. HIST 1530 is not a prerequisite for HIST 1531. Next offered 2011-2012. Staff.]

## HIST 1570 Fighting the Cold War at

 Home (HA-AS)Fall. 4 credits, Staff
This course considers the impact of the Cold War on life in the United States between 1945 and 1990. The political and ideological struggle between the United States and the Soviet Union played a decisive role in shaping the nation's political, cultural, and social life. This course considers the impact of the cold war on the nation, considering topics such as political anticommunism, spy scandals, McCarthyism, popular culture, suburbia, and the links between the Cold War and the American family We will consider a varied array of sources from the era, including books, films, magazine articles, detective novels, television shows, and popular music. (AM)

## HIST 1600 History of Law (HA-AS)

Spring. 4 credits. H. Case and
C. Verhoeven.

Topic for Spring 2011: Great Trials
Through discussion of a variety of high-profile and lesser-known trials throughout history, this course will examine a range of issues in the history of law and criminality. We will study the nature of demonstrative justice, the relationship between ideology and law in different societies, the politics of trials, and the relationship of trials to terror(ism) and social marginalization. A preliminary list of cases to be covered includes Socrates, Jesus Christ, the Inquisition, the Salem Witch Trials, the French Revolutionary Terror, assassins' trials, the Stalinist show trials, the war crimes trials at Nuremberg, culminating with more recent trials such as those of Charles Manson and Saddam Hussein

HIST 1620 Histories of the Future (also STS 1102) (CA-AS)
Fall. 3 credits. S. Seth.
For description, see STS 1102.

## HIST 1700 History of Exploration (also ASTRO 1700) (HA-AS)

Fall. 4 credits. M. B. Norton and S. Squyres From ancient Mediterranean seafarers to the Mars rovers, from Christopher Columbus to the Apollo astronauts, humans have for centuries explored the far reaches of our planet. Now we are venturing into the solar system and beyond. This course will examine the history of such human activity. Among the topics covered are motives for exploration, technological advances that assist exploration, obstacles that must be overcome, and positive and negative consequences of exploration. It is led by Steven Squyres of Astronomy and Mary Beth Norton of History; lecturers include a number of historians and a former director of the Shoals Marine Laboratory.

## HIST 1800 U.S. Immigration History (also AMST/LSP 1800) (HA-AS)

Spring. 4 credits. M. C. Garcia.
This course examines immigration as a major theme in U.S. history and culture. We will discuss immigration in different periods of our national history, from the early republican period to the present; and in different locations, from Boston and New York to San Diego, San Francisco, and Honolulu. We will also examine these migrations in a global context since they were part of a worldwide migration that affected millions of people Lectures, readings, and discussions will examine popular, legal, and political responses to immigration, as reflected in legislation and policy, as well as film, art, literature, and the print media. (AM)

HIST 1900 East Asia to 1800 (also ASIAN 1190) @ \# (HA-AS)

Spring. 4 credits. T. J. Hinrichs and K. Hirano.

Survey of East Asian history from antiquity to around 1800 . The primary purpose is to provide students with a basic literacy in East Asian history and cultures. Emphasis on comparison of phenomena between China and Japan, including state formation, barbarians and empire, roles of Confucianism and Buddhism, the emergence of new ruling classes, family and gender, peasant uprisings, urbanization and popular culture, and outlaws. (AS)

## HIST 1910 Introduction to Modern Asian History (also ASIAN 1191, CAPS 1910) @ (HA-AS)

Fall. 4 credits. S. Cochran and D. Ghosh This introductory course follows the history of Asia-Pacific from the 19th century to the present, focusing on relations of China, India, Japan, South, and Southeast Asia. This course is intended for students wanting a broad historical overview of what makes Asia distinctive and important in a global economy and in world politics. (AS)

## HIST 1941 The History of Science in

 Europe: From the Ancient Legacy to Isaac Newton (also BSOC/STS 1941) \# (HA-AS)Fall. 4 credits. P. Dear.
How did the approaches to knowledge of nature that developed in medieval and earlymodern Europe create an enterprise that associated the practical manipulation of nature with scientific truth? This course surveys intellectual approaches to the natural world from the theologically-shaped institutions of the Middle Ages to the Scientific Revolution of the 16th and 17th centuries. Ancient Greek authors such as Aristotle and Archimedes were used in diverse ways that came to usher in an era of European global expansion. By the late 17th century, a new kind of practically applicable science attempted to demonstrate Francis Bacon's famous claim that "knowledge is power." (HS)

## HIST 1942 The History of Science in Europe: Newton to Darwin; Darwin to Einstein (also BSOC/STS 1942) \#

 (HA-AS)Spring. 4 credits. P. Dear
What is modern science? And how did it get that way? This course examines the emergence of the dominant scientific worldview inherited by the 21st century, to trace how it, and its associated institutional practices, became established in largely European settings and contexts from the 18th to the early 20th centuries. It focuses on those broad conceptions of the universe and human knowledge that shaped a wide variety of scientific disciplines, as well as considering the twin views of science as "natural philosophy" and as practical tool. (HS)

## [HIST 1950 Colonial Latin America (also

 LATA 1950) @ \# (HA-AS)Fall. 4 credits. Next offered 2012-2013.
R. Craib.]

## HIST 1960 Modern Latin America (also

 LATA 1960) @ (HA-AS)Spring. 4 credits. R. Craib.
A survey of the social, political, cultural, and economic history of Latin America from roughly 1800 to the present. Primary aim is to develop a mental map of the history of Latin America-of prominent themes issues; of
historical eras and trajectories. Given the vastness of Latin America, and its somewhat arbitrary composition as an object of study, the approach of the course is thematic and chronological rather than regional. We will pay attention to a number of more specific and interconnected themes: the development of, and relationship between, economies and processes of state formation; the complex roles Britain and the United States have played in the region, but always with an appreciation for how Latin Americans have shaped their own histories and those of the United States and Britain; the ways in which non-elitesslaves, workers, peasants, among others-have shaped history; the politics of the production of history; and Latin America's "situatedness" in a broader world. Weekly readings include historical and theoretical works memoirs, speeches, documents, and novels. (LA)

## HIST 2001 Supervised Reading

Fall or spring. 2 credits. Prerequisite: junior or senior standing. Permission of instructor required. Staff. (HR)

## Sophomore Seminars

[HIST 2020 The Court, Crime, and the Constitution (also AMST 2022) (HA-AS)
Fall. 4 credits. Permission of instructor required. Next offered 2011-2012.
R. Polenberg.]

HIST 2021 America and the "Good War" Fall. 4 credits. Staff.
This course considers the impact of the Second World War on the politics, society, and culture of the United States. The focus is on the consequences of total war on the political economy, the social structure, and the cultural life of the nation. We will pay particular attention to how the most traumatic events of the war, including the Holocaust, the internment of Japanese-Americans, and the dropping of the atomic bombs, affected the American moral imagination. (AM)

## HIST 2041 Asian American Communities

 (also AAS/AMST 2041) (HA-AS)Spring. 4 credits. D. Chang.
This seminar offers an examination of Asian American communities in particular and, more generally an analysis of the idea of community. In part, we will use the community study as a lens to explore the development of Asian America. But we will also interrogate the very notion of community, focusing on community formation especially. (AM)

## [HIST 2061 Small Wars in Greece and Rome (also CLASS 2686) \# (HA-AS)

 Fall. 4 credits. Next offered 2013-2014. B. Strauss.]HIST 2070 The Occidental Tourist: Travel Writing and Orientalism in Southeast Asia (also ASIAN 2206/5507, HIST 5070) @ (CA-AS)

Fall. 4 credits. Prefer (but not required) that students have taken HIST 1910 or
3960. Letter grades only. T. Loos.

Travel can change our understanding of ourselves and the world. Throughout the course, we explore the connections between a writer's subjectivity and their experience of the world through their writing. We examine novels, diaries, short essays, and photographic collections by explorers, colonial officials, naturalists, and tourists who travel to and from

Southeast Asia. To the extent we can, we also read works about Europe and America written by Southeast Asians. In addition to attending to a writer's subjectivity as it is produced through writing about others, we also consider the historical, political, and economic conditions that make travel possible. We will examine how travel writing is inflected with assumptions about the cultural values, race, class, and gender of both travelers and their domestic audience, on the one hand, and the people and places they write about, on the other. We will write about our own travel experiences and photos even as we critique the travel writing genre. The course ends by questioning the role of the internet in the future of tourism and travel in Southeast Asia. (AS)

## HIST 2081 Deviants, Outcasts, and

 Others \# (HA-AS)Fall. 4 credits. D. Corpis.
This course will examine the practice of "microhistory" as a method for understanding early-modern European culture and society. Microhistory as a genre of history writing has been most strongly developed by earlymodern European historians and has largely dealt with the everyday lives of marginal but otherwise ordinary people-criminals, heretics, witches, lovers, peasants, and artisans. Students in this seminar will read exemplary contributions to the genre in an attempt to analyze the successes and shortcomings of this approach to history writing. Written assignments will ask students to theorize the relationship between everyday life and macrohistorical phenomena, to analyze specific microhistories, and to write their own microhistories based on primary sources such as memoirs and court cases. (EM)

HIST 2090 Seminar in Early American History (also AMST/FGSS 2090) \# (HA-AS)
Fall. 4 credits. M. B. Norton. Topic for Fall 2010: The Salem Witchcraft Crisis of 1692. Even though a myriad of books have been written about this endlessly fascinating episode in American history, many aspects of it remain unexplored. After reading some of the latest scholarship on the subject and viewing contemporary depictions of it, students will focus on interpreting and analyzing original documents covering some of the lesser-known aspects of the crisis (for example, the involvement of large numbers of people from Andover, Mass.). Students will have opportunity to contribute their final work to the Salem Digital Archive on the web. (AM)
[HIST 2110 Black Religious Traditions: Sacred and Secular (also AMST/ RELST 2110) (HA-AS)
Spring. 4 credits. Letter grades only. Next
offered 2011-2012. M. Washington.]
HIST 2111 Black History Topics Through Film (also AMST 2111) (HA-AS)
Spring. 4 credits. M. Washington.
In this course black history will be approached through the thematic prisms of feature films and documentaries, and throughout various readings that topically reflect crucial periods in the black experience in the Americas. Topics include civil rights, revolutionary nationalism, race relations, slave rebellion, black politics, emancipation struggles, the black middle class, and black poverty. (AM)

HIST 2142 Culture of the Middle Ages (also MEDVL 2130) \# (HA-AS)
Spring. 4 credits. P. Hyams
For description, see MEDVL 2130.

## HIST 2162 Genocidal Regimes in Europe

 (HA-AS)Fall. 4 credits. J. Weiss.
Investigation of the origins, ideology, and tactics of genocidal regimes, the actions of their targeted populations, and the responses of witnessing states and groups of citizens. (EM)

## [HIST 2170 Subversion as Foreign Policy

 (HA-AS)Fall. 4 credits. Next offered 2011-2012. T. Loos and R. Craib.]

## HIST 2177 Topics in the Ancient

 Mediterranean (also CLASS 2677) \# (HA-AS)Fall. 4 credits. Staff.
For description, see CLASS 2677. (EA)
[HIST 2180 Seminar on Genocide (HA-AS)
Fall. 4 credits. Permission of instructor required. Next offered 2011-2012. I. Hull.]
[HIST 2200 Travel in American History and Culture (also AMST 2200) (HA-AS)
Spring. 4 credits. Next offered 2012-2013 A. Sachs.]

HIST 2210 Pop Culture in China (also ASIAN 2210) @ (HA-AS)
Fall. 4 credits. T. J. Hinrichs.
Exploration of the popular culture, society, and religion of Late Imperial China through reading of The Journey to the West (also known as Xiyouji, Hsi you chi, or Monkey) in translation and of scholarly works. Study of historical contexts in which this work was produced, performed, and read. Consideration of the emergence of a realm of "popular culture" in comparative perspective. (AS)

## [HIST 2230 International Law (HA-AS)

Spring. 4 credits. Next offered 2012-2013 I. Hull.]

## HIST 2250 The United States-Mexico Border: History, Culture, Representation (also AMST/LSP 2250) (CA-AS)

Spring. 4 credits. M. C. Garcia. A writing-intensive, interdisciplinary sophomore seminar on the United StatesMexico border. The study of borders, and specifically of the United States-Mexico border, requires us to cross the disciplinary and methodological borders of academe itself. The proliferation of provocative writings on the border in recent years bears this assumption out: in no other field of study has the literature been so remarkably interdisciplinary; so methodologically eclectic; nor so theoretically provocative. This seminar intends to tap that literature to help students analyze and understand the histories, cultures and representations of the border that are so important to contemporary self-fashioning and policy-making in the United States and Mexico. Students can expect to write several papers of varying lengths that will develop their skills in historical research and textual criticism. (AM)

HIST 2271 Family Life in Renaissance Italy (also ITAL 2270) \# (HA-AS)
Spring. 4 credits. J. Najemy.
The seminar explores the structures and sentiments of family life in Renaissance Italy, from the 14 th to the 16 th century, through a combination of translated primary sources and modern studies. Chief among the primary sources are the 15th-century dialogues On the Family by the humanist Leon Battista Alberti, supplemented by diaries and memoirs, letters, sermons, and prescriptive writings by fathers, humanists, and churchmen. Among the topics to be investigated are the variety of family structures, marriage, sexual relations, wives and husbands, parents and children, families in politics, and family memory and commemoration in art and religious life. (ER)
[HIST 2272 Study of Terrorism (HA-AS)
Fall. 4 credits. Next offered 2013-2014. C. Verhoeven.]
[HIST 2273 Russian Revolutionary Intelligentsia (HA-AS)
Spring. 4 credits. Next offered 2012-2013. C. Verhoeven.]

HIST 2274 Late Imperial and Early Soviet Culture (HA-AS)
Spring. 4 credits. C. Verhoeven.
There is no prerequisite for this seminar, but it does (more or less) pick up where "The Russian Revolutionary Intelligentsia" (HIST 2273) leaves off. The period covered will span half a century, approximately from the early 1880s to the late 1920s. This means the course treats both Imperial and Soviet Russia and will try to think these two together under the general heading of "Russian modernity." What happened to the intelligentsia over the course of these turbulent years? How did modernization, revolution, war, and the construction of the world's first socialist society affect the intelligentsia's composition, political thought, literature, and art (including cinema)? Some of the topics to be covered include Marxist-Leninism, Anarchism, Terrorism, Symbolism, Futurism, and Constructivism. (EM)

## HIST 2280 Indian Ocean World (also ASIAN 2228) @ \# (HA-AS)

Fall. 4 credits. E. Tagliacozzo.
This course looks at the many intersecting histories of the Indian Ocean. The Indian Ocean was the first oceanic basin that supported large-scale cross-cultural contact for mankind. These warm tropical waters saw peoples from East Africa, the Middle East, the Indian Sub-Continent, and Southeast Asia all meet and mix over many centuries. The course will look at these histories of contact, spanning maritime studies, archaeological perspectives, winds and weather patterns (including the vital monsoons), religious migrations (including Buddhism, Christianity, and Islam), and the history of commerce (such as the Spice Trade). We will ask how the Indian Ocean became a crucial canvas for painting human history over vast, oceanic distances. Open to students interested in world history and its regional variants. (AS)
[HIST 2290 Jefferson and Lincoln: American Ideas about Freedom (HA-AS)
Spring. 4 credits. Priority given to underclassmen. Next offered 2011-2012. E. Baptist.]
[HIST 2300 Seminar in History and Memory @ (HA-AS)
Fall. 4 credits. Next offered 2013-2014. J. V. Koschmann.]

## [HIST 2308 Caribbean History (also

 ASRC 2308) @ (HA-AS)Fall. 3 credits. Next offered 2011-2012. J. Byfield.]
[HIST 2321 Introduction to Military History \# (HA-AS)
Fall. 4 credits. Next offered 2013-2014. B. Strauss.]
[HIST 2330 Origins of the Social (also GOVT 2729) (HA-AS)
Spring. 4 credits. Permission of instructor required. Next offered 2013-2014. C. Robcis.]
[HIST 2331 French Thought after May '68 (also COML 2331, GOVT 2626) (HA-AS)
Spring. 4 credits. Next offered 2013-2014. C. Robcis.]

HIST 2350 Antisemitism and the Crisis of Modernity (also JWST 2350) (HA-AS) Spring. 4 credits. V. Caron.
This course will examine the role of antisemitism in 19th- and 20th-century
European ideological, political, and socioeconomic developments. Attention will be paid to the way in which antisemitism illuminates the underside of European history, allowing us to see how anti-Jewish intolerance and prejudice becomes embedded in the worldviews of significant sectors of the European populations, culminating in the Holocaust. Topics will include the Christian roots of antisemitism and the extent to which modern antisemitism marks a break with the medieval past; the politicization of antisemitism by both Left and Right; the role of antisemitism in socioeconomic conflicts linked to the rise of capitalism; Jewish responses to antisemitism; antisemitism in the Nazi and Fascist revolutions; and contemporary interpretations of antisemitism. (EM)

## [HIST 2360 Native Peoples of the

 Northeast (also AMST 2360) \# (HA-AS)Spring. 4 credits. Next offered 2012-2013 J. Parmenter.]
[HIST 2380 Families in China since the 17th Century (also ASIAN 2238) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012. S. Cochran.]
[HIST 2390 Seminar in Iroquois History (also AIS/AMST 2390) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.

## J. Parmenter.]

[HIST 2410 Riot and Rebellion in 19th-Century Africa: The Birth of the Modern (also ASRC 2303) @ \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. S. Greene.]
[HIST 2411 Enslaved! Then and Now \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. S. Greene.]

HIST 2412 The White Image in the Black Mind (also ASRC 2307) @ (HA-AS)
Fall. 4 credits. S. Greene.

The course will explore a variety of historical, literary, and cinematic texts, produced by Africans, Asians and African Americans, that reveal as much about the producers of the texts as they do about "The European." (AF)
HIST 2413 Monuments, Museums, and Public History (also ASRC 2413) (HA-AS)
Spring. 4 credits. S. Greene. History museums and monuments to the past can be found in virtually every community and country. But who decides what to commemorate and what to ignore? Are exhibits suppose to reinforce or challenge common beliefs and understandings? Whose concerns should take priority when organizing exhibits, when deciding to erect a monument? What is a public historian and what is that person's role in all this? This course addresses these questions by exploring a select number of controversies that have swirled around famous monuments and museums in the United States and in places overseas (Europe, Africa, and/or Asia).
[HIST 2430 History of Things @ (HA-AS)
Spring. 4 credits. Next offered 2013-2014.
E. Tagliacozzo.]

HIST 2431 Postcolonial Memories and Politics of History @ (HA-AS)
Fall. 4 credits. K. Hirano.
Postcolonial studies, which seek to uncover and (re-)articulate repressed voices, memories, and experiences of colonized peoples around the world, have altered the way we understand history. They have brought about the recognition that the historical profession and its mode of knowledge production have been deeply complicit with colonial strategies of domination and violence. This new recognition challenges the normative understanding of history as a discipline devoted to the objective reconstruction of the past enabled by scrupulous efforts to gather data and facts. If historical knowledge is not as "objective" as assumed, it follows that "date" and "facts" are not free from values and subjective judgment. Nor can history reveal the truth about the past. Rather, data/facts themselves constitute a certain type of narrative (that is, they are always already value-ridden) and authors of history select facts and data according to their judgments and criteria in order to explain the causes, effects, processes, and consequences of events they study. In this seminar, by paying attention to this epistemological predicament of history, we will examine the relationship between history and colonialism, and try to imagine a critical and self-reflective mode of historical inquiry based on the insights of Postcolonial Studies. (AS)
[HIST 2461 Reading and Writing the African Diaspora (also ASRC 2309) @ (HA-AS)
Spring. 4 credits. Next offered 2013-2014. D. Magaziner.]

## HIST 2470 The Age of Charlemagne \#

 (HA-AS)Fall. 4 credits. P. Hyams.
Charlemagne (Charles the Great, 775-814) is still revered as "the Father of Europe." In his time as king of the Franks and then emperor of the West, we see for the first time with any clarity the shape of Europe as it would remain for a millennium and more, also of the structures and cultural mix that would characterize the West before there were a

France, Germany, or United Kingdom. The "Carolingian Renaissance" promoted a brief but fruitful burst of writings and artifacts, including an intimate if slippery Life of Charlemagne and much better documentation of the public and to an extent even the everyday life of the age. By reading primary sources in translation, students can grasp a pivotal moment in Western Civilization, see how historians construct their categories, and learn the limitations of the historical craft. (ER)
[HIST 2480 Ghosts and Legacies: The Construction of Public Memory (HA-AS)
Fall. 4 credits. Next offered 2011-2012. J. Weiss.]

## HIST 2492 Europe's Asia: Modern

 European Discourse on History and Subjectivity (also ASIAN 2292) (HA-AS)Spring. 4 credits. J. V. Koschmann. Integral to modern European philosophies of history and the human subject is an image of Asian societies (or the "Orient") as static and despotic. G. W. H. Hegel posited that China was the "childhood of history," a land where "nothing subjective is recognized." Marx tried to account for the apparent absence of historical change in India by developing the model of an "Asiatic mode of production," and Max Weber searched in vain through Chinese religion and ethics for an analogue to the Protestant ethic. In this seminar, we will consider the Hegelian, Marxian, and Weberian theses in some detail, and then turn to some more recent Western constructs of East Asia. Along the way, we will reflect critically upon intellectual history as an approach to the past, the epistemological and ideological functions of cultural opposites, the relationship between theories of history and the practice of imperialism, and other relevant questions. The seminar is meant to provide an open and nonthreatening context in which students can gain experience in the interpretation and analysis of complex texts that are not only difficult and problematical but of seminal importance in the ongoing process of human self-understanding. (AS)

## Lecture Courses

## HIST 2500 Technology in Society (also ECE/ENGRG 2500, STS 2501) (HA-AS)

Fall. 3 credits. R. Kline.
For description, see ENGRG 2500. (HS)

## [HIST 2510 Race and Popular Culture (also AMST 2501) (HA-AS)

Fall. 4 credits. Next offered 2011-2012. M. Washington.]

HIST 2511 Black Women to 1900 (also AMST/FGSS 2511) \# (HA-AS)
Fall. 4 credits. M. Washington. This course explores the social, cultural and communal lives of black women in North America, beginning with the transatlantic slave trade, and ending in 1900. Topics include Northern and Southern enslavement, first freedoms in the North, Southern emancipation, color consciousness, genercross racially and issues of class. (AM)

## HIST 2512 Black Women in the 20th Century (also AMST/FGSS 2512) (HA-AS)

Spring. 4 credits. M. Washington This course focuses on African American women in the 20th century. The experiences
of black women will be examined from a social, practical, communal, and gendered perspective. Topics include the Club Woman's movement, suffrage, work, family, black and white women and feminism, black women and radicalism, and the feminization of poverty. (AM)

## [HIST 2520 Modern East-Central Europe (HA-AS)

Fall. 4 credits. Next offered 2013-2014. H. Case.]

HIST 2530 Introduction to Islamic Civilization (also NES/RELST 2655) @ \# (HA-AS)
Fall. 3 credits. D. Powers
For description, see NES 2655. (NE)
[HIST 2540 African Encounters with Colonialism (also ASRC 2304) @ (HA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Magaziner.]
[HIST 2550 Race and Ethnicity in African History (also ASRC 2306) @ (HA-AS)
Spring. 4 credits. Next offered 2013-2014. S. Greene.]
[HIST 2560 War and Peace in Greece and Rome (also CLASS 2680) \# (HA-AS) Spring. 4 credits. Next offered 2013-2014. B. Strauss.]

HIST 2571 China Encounters the World (also ASIAN 2257, CAPS 2570) @ (HA-AS)
Fall. 4 credits. J. Chen.
This is a lecture and discussion course focusing on how China has encountered the world since the 17 th century, with an emphasis on the late 19th and 20th centuries In particular, it will analyze the age-old Chinese "Central Kingdom" conception and how the conception was challenged during modern times as the result of Western and Japanese incursion and China's inability to deal with the consequences of the incursion. It will further analyze the impact of the Chinese "victim mentality" in order to pursue a deeper understanding of why radical revolutions have dominated China's modern history. While the emphasis of this course is China's external relations, foreign policy issues will be examined in the context of China's political, economic and social developments in broader terms. The course's purpose is not just to impart information but also to cultivate a basic understanding of the significance of the Chinese experience in the age of worldwide modernization. Grade in this class will be calculated on the basis of class participation, quizzes, midterm and final exams, and one essay assignment. (AS)

## HIST 2580 Periclean Athens (also CLASS

 2676) \# (HA-AS)Fall. 4 credits. H. Rawlings
For description, see CLASS 2676. (EA)

## [HIST 2590 The Crusades @ \# (HA-AS)

 Spring. 4 credits. Next offered 2011-2012. P. Hyams.]
## HIST 2620 Medieval Sampler \# (CA-AS)

 Spring. 4 credits. P. HyamsThis course targets the intelligent student seeking an accelerated entrance to the formative period of Western Civilization during the Middle Ages. It therefore aims to convey what was significant in that area of the "West" that became Europe, between the end of the Roman Empire in the West and the

Renaissance, say 395-1450. Students may expect to gain a basic knowledge of the events and institutions of Medieval Christendom. The real and more ambitious goal is, however, to introduce some of the choicer aspects of the medieval world, those judged most likely to intrigue, delight, and satisfy. This Medieval Sampler is like a classic French hors d'oeuvre, in that it presents for the discriminating palate some of the very best dishes known to the chef. Among these dishes figure Beliefs, Gender and Power Relations, Economics (Greed and Subsistence), Arts and Entertainments (Architecture, Literature, Music, Painting), even some Deviance and Protest. There are some interesting assignments, too. (ER)

HIST 2640 Introduction to Asian American History (also AAS 2130, AMST 2640) (HA-AS)
Fall. 4 credits. D. Chang.
An introductory history of Chinese, Japanese, Asian Indians, Filipinos, and Koreans in the United States from the mid-19th century to the 1990s. Major themes include racism and resistance, labor migration, community formation, imperialism, and struggles for equality. (AM)
HIST 2650 Ancient Greece from Homer to Alexander the Great (also CLASS 2675) \# (HA-AS)

Spring. 4 credits. Open to freshmen. Staff. A survey of Greece from the earliest times to the end of the Classical period in the late fourth century bc. The course focuses on the Greek genius: its causes, its greatness, its defects, and its legacy. The Heroic Age, the city-state, ancient democracy, and the intellectual ferment of the Greek Enlightenment are the main topics of study. Readings in translation from Homer, Aristophanes, Sophocles, Herodotus, Thucydides, Plato, Aristotle, and from the evidence of ancient inscriptions, coins, art, and architecture. (EA)

HIST 2660 Everything You Know about Indians Is Wrong: Unlearning Native American History (also AIS/AMST 2660) \# (HA-AS)

Spring. 4 credits. J. Parmenter.
One thing many Americans think they know is their Indians: Pocahontas, the First Thanksgiving, fighting cowboys, reservation poverty, and casino riches. Under our very noses, however, Native American history has evolved into one of the most exciting, dynamic, and contentious fields of inquiry into America's past. It is now safer to assume, as Comanche historian Paul Chaat Smith has pointed out, that everything you know about Indians is in fact wrong. Most people have much to "unlearn" about Native American history before true learning can take place. This course aims to achieve that end by (re) introducing students to key themes and trends in the history of North America's indigenous nations. Employing an issues-oriented approach, the course stresses the ongoing complexity of Native American societies' engagements with varieties of settler colonialism since 1492 and dedicates itself to a concerted program of myth-busting. As such, the course will provide numerous opportunities for students to develop their critical thinking and reading skills. (AM)

HIST 2670 History of Rome I (also CLASS 2681) \# (HA-AS)

Fall. 4 credits. Staff.
For description, see CLASS 2681

## [HIST 2671 History of Rome II (also

 CLASS 2682) \# (HA-AS)Spring. 4 credits. HIST 2670 is not a prerequisite for HIST 2671. Next offered 2011-2012. E. Rebillard.]
[HIST 2672 History of Modern Egypt (also NES 2670) @ (HA-AS)
Spring. 3 credits. Next offered 2011-2012. Z. Fahmy.]
[HIST 2674 History of the Middle East: 19th-20th Centuries (also NES/JWST 2674, GOVT 2747) @ \# (HA-AS)
Fall. 3 credits. Next offered 2011-2012.
Z. Fahmy.]

HIST 2711 Politics of Violence in 20th-Century Europe (also GOVT 2716) (HA-AS)

Fall. 4 credits. H. Case.
This course provides a survey of Europe's 20th-century history with special emphasis on violence and its interpretation. Types of violence to be considered include warfare, terrorism, genocide, uprisings, and assassination, among others. Discussions of the First and Second World Wars and the political and ethnic clashes of the Cold War and decolonization will be supplemented by less familiar instances of violence in the European context. Lectures, readings and written assignments will focus on deciphering the various political motivations behind calls for and interpretations of violence. (EM)
[HIST 2720 The Atlantic World from Conquest to Revolution (also AMST 2720) \# (HA-AS)

Spring. 4 credits. Next offered 2013-2014. M. B. Norton and R. Weil.]
[HIST 2730 Women in American Society, Past and Present (also AMST/FGSS 2730) \# (HA-AS)

Spring. 4 credits. Next offered 2012-2013.
M. B. Norton.]

HIST 2740 Foodways: A Social History of Food and Eating \# (HA-AS)
Fall. 4 credits. S. Kaplan.
An interdisciplinary examination of the validity of the adage "woman/man is what she or he eats." Among the topics: food and social relations, food and identity, food and symbolic thought, food and the construction of the state, feast and famine, food and gender, the politics of food control, food and modernization, taste making, and food in religion and literature, food and sustainable development/environment.

## HIST 2750 History of Modern South Asia

 (also ASIAN 2275) @ \# (HA-AS)Spring. 4 credits. D. Ghosh.
This introductory course is a broad survey of the history of the Indian subcontinent from remnants of the Mughal empire through the end of the British empire into the postcolonial present. Prominent themes include the emergence of nonviolent protest, religious and regional identities, ethnic rivalries, social reform and the "woman question," deindustrialization, nationalism and the place of democracy and militarism in a region that includes two nuclear powers, India and Pakistan. (AS)
[HIST 2770 Getting Medieval I: The Early Middle Ages \# (HA-AS)
Fall. 4 credits. Fulfills prerequisite for HIST 2771. Next offered 2011-2012. O. Falk.]
[HIST 2771 Getting Medieval II: The Age of Cathedral, Cartel, and Crossbow \# (HA-AS)
Fall. 4 credits. Prerequisite: HIST 2620/HIST 2770 or permission of instructor. Next offered 2011-2012. O. Falk.]
HIST 2791 International Humanitarianism @ (HA-AS)
Spring. 4 credits. J. Weiss.
This course studies international humanitarian and human rights activities from their origins to the present. The ideological and social roots of humanitarian thought and action receive attention, as does the often-overlapping, sometimes conflictual relationship between humanitarianism and human rights advocacy. Case studies will include the anti-slavery movement, the activities of faith-based groups, biographical studies of pioneering individuals, and the international response to various genocides. (EM)
[HIST 2830 English History from AngloSaxon Times to 1485 \# (HA-AS) Spring. 4 credits. Next offered 2012-2013. P. Hyams.]
[HIST 2850 From Medievalism to Modernity: The History of Jews in Early Modern Europe, 1492 to 1789 (also JWST 2653, NES 2645) \# (HAAS)
Spring. 4 credits. V. Caron.
This course examines the history of European Jewry during the centuries of transition from the Middle Ages to the Modern Era. We examine the extent to which traditional Jewish life began to break down during this period and thus paved the way for the emergence of modern Jewry. Topics include the Spanish Expulsion of 1492; religious, intellectual, and socioeconomic dimensions of the Marrano dispersion, including Lurianic Kabbalah and the messianic movement of Shabbetai Zevi; the establishment of Jewish communities in the West; the end of the "Golden Age" of Polish Jewry and the rise of Hasidism; the changing economic and political role of Jews in the 17th and 18th centuries; and the impact of the Enlightenment. (EM)]
[HIST 2861 History of Zionism and the Birth of Israel @ (HA-AS)
Spring. 4 credits. Next offered 2012-2013. V. Caron.]

## HIST 2870 Evolution (also BIOEE 2070,

 STS 2871) (PBS)Summer and fall. 3 credits. W. Provine. For description, see BIOEE 2070. (HS)
HIST 2890 The United States-Vietnam War (also ASIAN 2298) @ (HA-AS)
Spring. 3 credits. K. Taylor.
For description, see ASIAN 2298.

## HIST 2891 Script and Culture in East

 Asia (also ASIAN 2209) @ \# (LA-AS)Fall. 3 credits. B. Rusk.
For description, see ASIAN 2209. (AS)
HIST 2910 Modern European Jewish History, 1789 to 1948 (also JWST 2900) (HA-AS)

Fall. 4 credits. V. Caron.
Jewish life in Europe experienced a profound transformation as a result of the process of Jewish emancipation which began at the end of
the 18th century. While emancipation offered Jews unprecedented social, economic and political opportunities, it also posed serious challenges to traditional Jewish life and values by making available new avenues of integration. This course will examine the ways in which Jewish and non-Jewish society responded to these new developments from the 18th century Enlightenment to the post-World War II era. Topics will include Jewish responses to emancipation, including assimilation and new varieties of religious accommodation; the development of modern antisemitism; the rise of Zionism and the creation of the state of Israel; the modernization of Eastern European Jewry; the impact of mass immigration; and the Nazi era. (EM)

## HIST 2920 Inventing an Information

 Society (also AMST/ECE/ENGRG 2980, STS 2921) (HA-AS)Spring. 3 credits. R. Kline.
For description, see ENGRG 2980. (AM)
[HIST 2940 History of China in Modern Times (also ASIAN 2294, CAPS 2940) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012. S. Cochran.]

## HIST 2960 East Asian Martial Arts (also ASIAN 2290) @ (HA-AS) <br> Fall. 4 credits. T. J. Hinrichs.

Exploration of the social, political, and cultural contexts of martial arts practice, and historical dynamics behind their transmission, transformation, and spread. Examination of the emergence of martial artists as popular figures, and martial arts as distinct sets of practices in China and Japan. Study of the modern re-invention of these practices, and of their transmission to other parts of the world. Investigation of a local martial arts school, and of the question, "What is East Asian about East Asian martial arts in Ithaca?" (AS)

## HIST 2969 Soviet History (HA-AS)

Fall. 4 credits. C. Verhoeven.
This course surveys the history of the world's first socialist society from its unlikely
beginnings in 1917 to its unexpected demise in 1991. Traditional topics such as the origins of the revolutions of 1917, Stalin's Terror, WW II, Khrushchev's Thaw, etc., will be covered, but lectures will emphasize the interaction between the political, socioeconomic, and especially the cultural spheres. A good deal of the materials we will study in this course will be drawn from the realm of literature, cinema, and art. (EM)
[HIST 2970 Imperial Russia: Peter the Great to the Revolution of 1917 \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. C. Verhoeven.]

## HIST 2971 Crisis of Authority \# (HA-AS)

Fall. 4 credits. D. Corpis.
This course offers an overview of the "early modern" period of European history (c. 15001800) by charting the shifts and changes in religion, culture, politics, and economics during the 16 th, 17 th, and 18 th centuries. Specific topics explored in weekly lectures will include the Reformation and CounterReformation, political centralization, intellectual fragmentation, the institutionalization of science, the Enlightenment, and political rebellion and revolution. In addition to focusing on some of the key developments in European history during this period, the design of the course
recognizes the necessity of locating European history within a broader geographic world, so we will also explore the question of European contacts with other cultures, colonial expansion, and Atlantic slavery. (EM)
[HIST 2981 Power, Culture, and Heterogeneity in Premodern Japan, 1200-1800 (also ASIAN 2295) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. K. Hirano.]

HIST 3002 Supervised Research
Fall and spring. 3 or 4 credits. Prerequisite: junior or senior standing. Permission of instructor required. Staff. (HR)
[HIST 3030 African American Women in Slavery and Freedom (also AMST 3030, FGSS 3070) \# (HA-AS)
Spring. 4 credits. Letter grades only. Next offered 2012-2013. M. Washington.]
[HIST 3050 Britain, 1660 to 1815 \# (HA-AS)
Fall. 4 credits. Next offered 2013-2014. R. Weil.]
[HIST 3080 History of Post-War Germany (1945 to Present) (HA-AS)
Fall. 4 credits. Next offered 2012-2013. I. Hull.]
[HIST 3100 British History, 1760-1870 (HA-AS)
Fall. 4 credits. Next offered 2011-2012. T. R. Travers.]
[HIST 3101 British History, 1870-Present (HA-AS)
Spring. 4 credits. Next offered 2011-2012 T. R. Travers.]

HIST 3140 History of American Foreign Policy, 1912 to the Present (also AMST/CAPS 3140) (HA-AS)
Spring. 4 credits. F. Logevall.
Students examine the emergence of the United States as a world power in the 20th century. The course focuses on the domestic sources of foreign policy and the assumptions of the major policy makers (Wilson through Clinton). Important themes include the American response to a revolutionary world since 1912, the role of American racial views in the making of foreign policy, and the increasingly dominant role of the president in the making of U.S. foreign policy. (AM)
[HIST 3150 Environmental History: The United States and Beyond (also AMST 3150) \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013 A. Sachs.]
[HIST 3160 American Political Thought: From Madison to Malcolm X (also AMST/GOVT 3665) \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. I. Kramnick.]
[HIST 3170 British-French North America (also AMST 3170) \# (HA-AS)
Fall. 4 credits. Next offered 2013-2014. J. Parmenter.]

HIST 3180 American Constitutional Development (also AMST 3180) (HA-AS)
Fall. 4 credits. R. Polenberg. Major issues in constitutional history. Topics include drafting the Constitution; the Bill of Rights; the Marshall era; the crises caused by slavery and emancipation; the rise of
substantive due process; Holmes, Brandeis, and freedom of speech; the New Deal and the Roosevelt "revolution"; the Warren Court, civil liberties, and civil rights; criminal justice and the right of privacy; abortion and affirmative action; the Court, the detainees, and the "war on terrorism." Course requirements: two takehome prelims and a take-home final. (AM)
[HIST 3181 Living in an Uncertain World: Science, Technology, and Risk (also STS 3181) (HA-AS)
Fall. 4 credits. Next offered 2011-2012 S. Pritchard.]

HIST 3200 The Viking Age \# (HA-AS)
Spring. 4 credits. O. Falk
This course aims to familiarize students with the history of Scandinavia, ca. 800-1100 ad. Although well known as a dramatic chapter in medieval history, this period remains enigmatic and often misunderstood. Our goal will be to set Norse history within its European context, observing similarities with processes elsewhere in the medieval world, the better to perceive what makes the Norse unique. We will examine the social, economic and political activities of the Norsemen in continental Scandinavia, in Western and Eastern Europe, and in the North Atlantic. (ER)

HIST 3210 Colonial North America to 1763 (also AMST 3210) \# (HA-AS)
Fall. 4 credits. M. B. Norton.
A survey of European settlement in North America and the Caribbean, emphasizing the interactions of Europeans, Indians, and Africans; economic development; gender relations; religious and political change; and the impact on the colonies of internal and external conflicts. (AM)

HIST 3232 History of Sports in the United States (HA-AS)
Summer. 4 credits. G. Kirsch An interdisciplinary study of the historical development of sports in the United States from the colonial period to the present, with emphasis on their social, political, economic, and cultural dimensions. (AM)

HIST 3240 Varieties of American Dissent, 1880-1900 (also AMST 3240) (HA-AS)

Spring. 4 credits. N. Salvatore
For description, see AMST 3240.
HIST 3250 Age of the American Revolution, 1754 to 1815 (also AMST 3250) \# (HA-AS)

Spring. 4 credits. M. B. Norton.
An examination of the process by which the 13 English colonies became an independent and united nation, with emphasis on political thought and practice, social and economic change, and cultural development. Attention will be paid to the impact of the American Revolution on women, Blacks, and Indians as well as on white males. (AM)

## HIST 3260 The British Empire (HA-AS)

Fall. 4 credits. T. R. Travers
This course considers how a small northern European kingdom acquired and then governed a vast global empire. Beginning with the navigators, pirates and settlers of the Elizabethan era, and ending with the process of decolonization after World War Two, we will explore the diverse character and effects of British imperialism in the Americas, in Asia in Africa, and the Pacific, and consider the legacies of the British empire in the contemporary world. (EM)
[HIST 3270 The Old South (also AMST 3270) \# (HA-AS)

Spring. 4 credits. Next offered 2011-2012. E. Baptist.]
[HIST 3290 Physical Sciences in the Modern Age (also STS 3301) (HA-AS) Fall. 4 credits. Next offered 2012-2013. S. Seth.]

HIST 3300 Japan from War to Prosperity (also ASIAN 3335) @ (HA-AS)
Fall. 4 credits. J. V. Koschmann.
An interpretation of Japanese history from the late 1920s to present, emphasizing mobilization for total war and its continuing legacies, technology and organized capitalism, relations with the United States and Asian neighbors, social integration and exclusion, historical representation and consciousness, and political dynamics.

HIST 3304 African American History: From the Age of Booker $\mathbf{T}$.
Washington to the Age of Barack
Obama (also ASRC 3304) (HA-AS)
Fall. 3 credits. R. Harris
For description, see ASRC 3304. (AF)
[HIST 3340 19th-Century European Culture and Intellectual History \# (HA-AS)
Fall. 4 credits. Next offered 2013-2014.
C. Robcis.]
[HIST 3341 20th-Century European Culture and Intellectual History (HA-AS)
Spring. 4 credits. Next offered 2013-2014. C. Robcis.]

HIST 3342 Death of God (also FREN/ JWST/RELST 3342, GERST 3542) (HA-AS)
Fall. 4 credits. C. Robcis.
This course will focus on European writers, philosophers, and social scientists who have attempted to grapple with "the death of God." In various ways, these thinkers have tried to re-imagine life without transcendence, ethics without universal, objective, and absolute values, existence without the certainty of man's centrality to the cosmic order. The class will focus on contextualization and close readings of each text. Authors might include Spinoza, Voltaire, Rousseau, Sade, Marx, Nietzsche, Dostoyevsky, Freud, Durkheim, Bataille, Heidegger, Camus, Sartre, Althusser, and Foucault. (EM)

HIST 3391 Seminar on American Relations with China (also ASIAN 3305, CAPS 3000) (HA-AS)
Fall. 4 credits. Offered in the Cornell in
Washington Program. R. Bush.
For description, see CAPS 3000. (AM) (AS)
[HIST 3400 Recent American History, 1925 to 1965 (also AMST 3400) (HA-AS)
Fall. 4 credits. Not open to freshmen. Next offered 2011-2012. Staff.]
[HIST 3410 Recent American History, 1965 to the Present (also AMST 3410) (HA-AS)

Spring. 4 credits. Next offered 2011-2012 Staff.]
[HIST 3420 History of Modern South Asia, 1700 to 1947: From the Mughals to Midnight (also ASIAN 3342) @ \# (HA-AS)

Fall. 4 credits. Next offered 2013-2014. D. Ghosh.]

## HIST 3430 American Civil War and

 Reconstruction, 1860 to 1877 (also AMST 3430) \# (HA-AS)Spring. 4 credits. E. Baptist.
A survey of the turning point of U.S. history: The Civil War (1861-1865) and its aftermath, Reconstruction (1865-1877). We will look at the causes, the coming, and the conduct, of the war, and the way in which it became a war for freedom. We will then follow the cause of freedom through the greatest slave rebellion in American history, and the attempts by formerly enslaved people to make freedom real in Reconstruction. And we will see how Reconstruction's tragic ending left questions open that are still not answered in U.S. society and politics. (AM)

## [HIST 3431 Obama and Lincoln (also AMST 3431) (HA-AS)

Fall. 4 credits. Next offered 2011-2012. E. Baptist.]

## [HIST 3450 Cultural and Intellectual Life of 19th-Century Americans (also

 AMST 3450) \# (HA-AS)Fall. 4 credits. Next offered 2012-2013. A. Sachs.]

## [HIST 3470 Asian American Women's

 History (also AAS/AMST/FGSS 3470) (CA-AS)Spring. 4 credits. Next offered 2012-2013. D. Chang.]

## [HIST 3481 Modern France: 1870 to the

 Present (HA-AS)Spring. 4 credits. Next offered 2013-2014. C. Robcis.]

HIST 3490 Renaissance England, 1485 to 1660 \# (HA-AS)
Spring. 4 credits. R. Weil.
This course will explore the crises of political, religious, and epistemological authority that plagued England in the 16th and 17th centuries. We will examine the political and cultural impact of the Protestant Reformation, the nature of Tudor despotism and Stuart absolutism, the construction of a rhetoric of political dissent around issues of sexuality and corruption, competing understandings of the social order and social control, the Puritan Revolution and the invention of liberalism. Emphasis on close reading of contemporary sources, from autobiography and drama to political theory. (EM)

## HIST 3500 The Italian Renaissance \# (HA-AS)

Spring. 4 credits. J. Najemy.
Why did Italian intellectuals between roughly
1300 and 1550 think of their age as a
"Renaissance"? This course explores the major intellectual, cultural, religious, and political developments in Italy from the political thought of Dante and Marsilius of Padua in the age of the communes, through the several stages of Italian Humanism's revival of ancient learning from Petrarch to Bruni, Alberti, Valla, and Pico, down to the crisis of both Italian liberty and the cult of antiquity in the generation of Machiavelli, Guicciardini and Castiglione. The course seeks to problematize the notion of a "Renaissance" in the period's ambivalent attitudes toward history, politics, learning, culture, gender, language, and the role of intellectuals in politics and society. Emphasis is placed on the close reading and interpretation of primary sources. (ER)

## [HIST 3510 Machiavelli \# (HA-AS)

Fall. 4 credits. Next offered 2011-2012.
J. Najemy.]
[HIST 3520 20th-Century East AsianAmerican Relations (also CAPS 3520) @ (HA-AS)

Spring. 4 credits. Next offered 2011-2012. J. Chen.]
[HIST 3570 Constructing State and Civil Society: Germany 1648-1870 \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. I. Hull.]

## [HIST 3580 Survey of German History,

 1890 to the Present (HA-AS)Spring. 4 credits. For freshmen, permission of instructor required. Next offered 20112012. I. Hull.]

HIST 3611 Conflicts and Transformations in Early Modern Japan, 1700-1890 (also HIST 6611, ASIAN 3361) @ (HA-AS)
Spring. 4 credits. K. Hirano.
This course explores Japan's tumultuous transformation from a samurai military government to a modern nation-state and its political and cultural implications for the present. It has been debated among both Japanese and American historians whether or not Japan's modern transformation is best understood as a "restoration (of imperial rule)" or as a "revolution." The choice of word as a descriptive category matters to the extent that it reveals one's perspective on this event. "Restoration" expresses the view that Japan's metamorphosis into a modern society was a relatively uneventful and smooth "transition" carried out by a handful leaders, whereas "revolution" recognizes Japan's experience as one of the great transformations in which people from different segments of society participated for various reasons and motives. In this class, we will examine this event as a revolution, thus paying close attention to a wide range of ideas, activisms, and practices such as samurai loyalism, peasant uprisings, popular culture, millenarianism, the exploration of western forms of knowledge and power, nation-state building and new ideologies of time (progress) and space (national identity). In other words, we seek to understand Japan's transformation as a fairly long, multifaceted, and widely participated process of intense intellectual and cultural criticism as well as social and political activism. In addition to primary and secondary texts, we will read a few important theoretical works on revolution/social transformation for the purpose of critically examining the history of the fall of the Tokugawa samurai regime and creation of a modern social order, called bakumatsu-ishin in Japan. (AS)

## [HIST 3625 Christianization/Roman World (also CLASS 3625) @ \# (HA-AS)

Fall. 4 credits. Next offered 2012-2013. E. Rebillard.]

HIST 3630 History of Battle \# (HA-AS)
Spring. 4 credits. B. Strauss and E. Baptist. A study of battle and its changing character from the ancient world to the present day. Topics include the soldier's experience, command and control, tactics; technology, organization, and the nation; logistics and supply, battle and military strategy, battle and civilians, memory, historiography.
[HIST 3644 Sages and Saints/Ancient World (also CLASS/RELST 3644) \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. E. Rebillard.]

HIST 3650 West Africa and the West: 1450-1850 (also ASRC 3302) @ \# (HA-AS)
Spring. 4 credits. S. Greene.
1450 marks the time when peoples, ideas, material goods, and beliefs began to move on a regular basis across the Atlantic, first between Africa and Europe, and then later between Africa, North and South America, and the Caribbean. This course examines these movements and explores how West Africans managed their relations with the West over a 400 -year period. (AF)
[HIST 3651 Law, Society, and Culture in the Middle East, 1200-1500 (also HIST 6651, NES 3551/6551) @ \# (CA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Powers.]

## HIST 3652 African Economic History

 (also ASRC 3652) @ \# (HA-AS)Fall. 4 credits. S. Greene.
What impact did Africa's involvement in the slave trade and its colonization by Europe have on its long-term economic health? What role have post-independence political decisions made within Africa and by multinational economic actors (the World Bank and the IMF, for example) had on altering the trajectory of Africa's economic history? Does China's recent heavy investment in Africa portend a movement away from or a continuation of Africa's economic underdevelopment? These questions and others will be addressed in this course. (AF)

## [HIST 3661 History of Southern Africa (also ASRC 3661) @ (HA-AS)

Fall. 4 credits. Next offered 2011-2012. D. Magaziner.]

HIST 3670 History of Modern Egypt (also NES 3670) @ (HA-AS)
Spring. 4 credits. Z. Fahmy.
For description, see NES 3670.

## HIST $\mathbf{3 6 8 0}$ Marriage and Sexuality in Medieval Europe (also FGSS/RELST 3680) \# (HA-AS)

Fall. 4 credits. Recommended: some prior knowledge of medieval European history. P. Hyams.

Few topics generate heat so readily as gender relations and sexuality. Behind the current controversies lie decisions made in the first Christian centuries, and firmed up in the course of the Middle Ages; these still affect all of us, believers and unbelievers alike. This course studies Western attempts to deal with the problem of sexuality up to about 1500 . The class will first clarify the church's normative rules of law and theology. Armed with this framework, it will then turn to more specific topics, including homosexuality, prostitution, rape/abduction and sexuality in medieval literature. The goal is to be able to compare the ideal model with the reality, and thus to assess the product the medieval church passed on to Western culture and ourselves. No formal prerequisite, though some prior knowledge of medieval European history is desirable. (ER)
HIST 3690 The History of Florence in the Time of the Republic, 1250 to 1530 \# (HA-AS)
Spring. 4 credits. J. Najemy.
This course explores the political, social, economic, and cultural history of Florence during the centuries (roughly 1250-1530) when it was an autonomous republic, one of
the birthplaces of constitutional government and modern political thought, a major economic power throughout Western Europe and the Mediterranean, and a center of intellectual and artistic innovation that did much to shape the culture and historical memory of the modern West. The course examines the society, institutions, conflicts, and ideas that animated this experience, from the origins of the republic and its political and class struggles to the causes and consequences of the rise to power in this republican context of the Medici family. Attention will focus on the attempts by Florentine writers-poets, chroniclers, humanists, and historians-to understand and represent their complex society. (ER)

## [HIST 3700 History of the Holocaust (also JWST 3700) (HA-AS) <br> Spring. 4 credits. Next offered 2011-2012. V. Caron.]

## HIST 3710 World War II in Europe (HA-AS)

Summer and fall. 4 credits. J. Weiss. The Second World War remains the single most important set of events shaping the contemporary world. The course deals with both the events of World War II as they shaped European and world history and the way those events were remembered and commemorated in postwar years. Lectures, screenings, and readings will examine: the role of wartime political leaders and military commanders; the experience of war and occupation for soldiers and civilians, including Resistance movements and collaborators; Nazi genocide; intellectual and cultural changes during the war, including the impact on literature and philosophy; strategic questions about the origins and conduct of the war; the concluding phases involving the Nuremberg Trials, the Yalta and Potsdam conferences, and the launching of the Cold War; and the representation of the war in subsequent films, literature, and political culture. (EM)

## HIST 3730 Law, Crime, and Society in Early Modern Europe \# (HA-AS)

Spring. 4 credits. D. Corpis.
This course will survey the development of law, legal institutions, definitions of crime, and practices of criminality from the 16 th to 18 th centuries. We often associate this period with extreme measures of law enforcement and repression, whether the persecution of converted Jews by the Inquisition or the witch burnings that raged through various parts of Europe in the 16th and 17 th centuries. Yet much of our common knowledge of law and crime in early modern European history consists of exaggerations, myths and misunderstandings. This course offers a corrective by exploring the historical contexts and meanings of law and crime in European society. Some of the themes covered in this course include the relationship between common law and Roman law, jurisdiction building and jurisdictional competition, the imposition of gender and sexual norms, heresy and witchcraft prosecutions, the sociology and anthropology of "criminal" subcultures, and the political process of "criminalization." (EM)

## [HIST 3731 Religion and Society in Early

 Modern Europe (also RELST 3731) (HA-AS)Spring. 4 credits. Next offered 2011-2012 D. Corpis.]
[HIST 3750 The African American Workers, 1865 to 1910: The Rural and Urban Experience (also ILRCB 3850) \# (HA-AS)

Fall. 3 credits. Junior or senior standing or permission of instructor. Next offered 2011-2012. N. Salvatore.]

## [HIST 3780 Topics in U.S. Women's

 History (also AMST 3708)Fall. 4 credits. Prerequisite: FGSS/HIST 2730 or 3030 , or permission of instructor Next offered 2012-2013. M. B. Norton.]
[HIST 3790 The First World War: Causes, Conduct, Consequences (HA-AS) Spring. 4 credits. Open to freshmen. Next offered 2012-2013. I. Hull.]

## HIST 3800 Latino America (also AMST

 3830, LSP 3800)Fall. 4 credits. M. C. Garcia
How would our understanding of U.S. history change if we began our national narrative in 16th-century New Mexico rather than 17th-century Virginia? What does U.S. history look like from the perspective of the colonized and the immigrant, the exile and the transnational? This course reframes our national history by examining pivotal events and themes in U.S. history from the perspective of different Latino populations. We will examine territorial expansion and empire, migration and nation building, industrialization and labor, and war and revolution in the "American experience" broadly defined to include americanos of Spanish, Mexican, Caribbean, and Central/South American ancestries. (AM)
HIST 3950 Premodern Southeast Asia (also ASIAN 3397/6697, HIST 6950) @ \# (HA-AS)
Fall. 4 credits. Open to undergraduates, both majors and nonmajors in history, and to graduate students, although with separate requirements. E. Tagliacozzo. This course examines Southeast Asia's history from earliest times up until the mid-18th century. The genesis of traditional kingdoms, the role of monumental architecture (such as Angkor in Cambodia and Borobodur in Indonesia), and the forging of maritime trade links across the region are all covered. Religion-both indigenous to Southeast Asia and the great imports of Hinduism, Buddhism Christianity, and Islam-are also surveyed in the various premodern polities that dotted Southeast Asia. This course questions the region's early connections with China, India, and Arabia, and asks what is indigenous about Southeast Asian history, and what has been borrowed over the centuries. Open to undergraduates, both majors and non-majors in History, and to graduate students, though with separate requirements. (AS)

HIST 3960 Southeast Asian History from the 18th Century (also ASIAN 3396) @ (HA-AS)
Spring. 4 credits. T. Loos and
E. Tagliacozzo.

Surveys the modern history of Southeast Asia with special attentions to colonialism, the Chinese diaspora, and sociocultural institutions. Considers global transformations that brought "the West" into people's lives in Southeast Asia. Focuses on the development of the modern nation-state, but also questions the narrative by incorporating groups that are typically excluded. Assigns primary texts in translation. (AS)

## Honors Courses

## HIST 4000 Honors Proseminar

Fall and spring. 4 credits. For prospective honors candidates in history. Permission of member of Honors Committee required.
Fall, C. Robcis; spring, P. Dear.
This course is an introduction to the theory, practice, and art of historical research and writing. The primary purpose of this seminar if to provide you with various tools to prepare you for the researching and writing of an honors thesis. We will learn to analyze the relationship between evidence and argument in historical writing; to critically assess the methods and possible biases in a piece of historical writing; to identify debates and sources relevant to a research problem; to use sources creatively; and to understand the various methodological issues associated with historical inquiry, analysis, and presentation. (HR)

## HIST 4001 Honors Guidance

Fall. 4 credits. Prerequisite: HIST 4000. Permission of instructor required. O. Falk. (HR)

## HIST 4002 Honors Research

Spring. 4 credits. Prerequisite: HIST 4000 Permission of instructor required. O Falk. (HR)

## Undergraduate Seminars

HIST 4030 History of the U.S. Senate in the 20th Century (also GOVT 4218) (HA-AS)
Fall and spring. 4 credits. Offered in
Cornell in Washington Program. B. Koed. This course will offer students an opportunity to view the process of shaping national debates from the perspective of the United States Senate. The modern Senate will serve as the point of reference for an inquiry into the development of the institution's powers under the Constitution during the past 200 years. Class readings, lectures and discussions will focus on the themes of continuity and change, the role of individual senators, and the institutional evolution of the Senate. In addition to general class reading and written examinations, each student will write a short paper and participate in an oral presentation. (AM)

## [HIST 4050 United States-Cuba Relations (also AMST/LATA/LSP 4050/6050, HIST 6050) (HA-AS)

Spring. 4 credits. Next offered 2012-2013 M. C. García.]
[HIST 4061 The New Cold War History (also HIST 6061) @ (HA-AS) Spring. 4 credits. Next offered 2012-2013. J. Chen.]
[HIST 4080 Feudalism and Chivalry: Secular Culture in Medieval France, 1000 to 1300 \# (HA-AS)
Fall. 4 credits. Recommended: HIST 2620. Next offered 2011-2012. P. Hyams.]
[HIST 4091 Contesting Identities in Modern Egypt (also NES 4605) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012. Z. Fahmy.]
[HIST 4100 Archipelago: Worlds of Indonesia (also ASIAN 4409/6617, HIST 6100) @ (HA-AS)
Spring. 4 credits. Open to undergraduates and graduate students, though with separate requirements. Limited to 15 students. Next offered 2012-2013. E. Tagliacozzo.]
[HIST 4101 Global Islam @ \# (HA-AS)
Spring. 4 credits. E. Tagliacozzo.
This course looks at Islam as a global phenomenon, both historically and in the contemporary world. We spend time on the genesis of Islam in the Middle East, but then make a cross the Muslim world in various weeks (in Africa, Turkey, Iran, Eurasia, Southeast Asia, East Asia) and to the West to see how Islam looks across global boundaries. The course tries to flesh out the diversity of Islam within the central message of this world religion. (AS)]

## [HIST 4111 Undergraduate Seminar:

 History of the American South (also AMST 4302) (HA-AS)Fall. 4 credits. Next offered 2011-2012. E. Baptist.]
[HIST 4120 The Scientific Revolution in Early-Modern Europe (also STS 4120) \# (HA-AS)

Spring. 4 credits. Next offered 2011-2012. P. Dear.]

## HIST 4122 Darwin and the Making of Histories (also BSOC/STS 4122) (HA-AS)

Fall. 4 credits. P. Dear and S. Seth. Who was Charles Darwin? What did he do, and how did he do it? And what did other people do with him? From Darwin's own time to ours, there have been many people, scientists as well as non-scientists, who have been eager to show that what they wanted to say had also been said by him. This has also meant that many things Darwin said have been selectively ignored when it seemed convenient. The power of a name is sometimes as great as that of an idea. This course will study what made Darwin possible in his own time, and how he became, then and now, an icon rather than just a Victorian naturalist. We will look at writings of Darwin himself, especially On the Origin of Species (1859), Descent of Man (1871), and his short autobiography, and attempt to understand what they meant in their own time, how Darwin came to write them, and how his contemporaries helped to shape their future. How did Victorian ideologies of gender, race, and class shape the production and reception of Darwin's work? We will also examine the growth of "Darwinism" as a set of broader social and cultural movements, particularly in Britain and the United States, including the work of Herbert Spencer, Francis Galton, Alfred Russel Wallace, Karl Pearson, and other 19th- and early-20th-century figures. Were eugenics movements examples or perversions of Darwinism? Finally, we will consider how Darwin's name has been used by more recent evolutionary biologists such as Steven Jay Gould, and by American anti-evolutionists. (HS)

## HIST 4150 Seminar in the History of

 Biology (also BIOEE 4670, BSOC/STS 4471) (PBS)Summer or fall. 4 credits. W. Provine. For description, see BIOEE 4670. (HS)
[HIST 4170 History of Jews in Modern France (also FREN 4130, JWST 4170) (HA-AS)
Spring. 4 credits. Permission of instructor required. Next offered 2011-2012.
V. Caron.]
[HIST 4171 The Holocaust: The Personal and the Political (also JWST 4171) (HA-AS)
Spring. 4 credits. V. Caron.
This seminar will examine several of the major debates in the study of the Holocaust by using a variety of types of historical and literary sources. In addition to secondary historical texts, we will focus on recapturing the personal dimension of the history of the Holocaust by using a variety of printed primary sources: memoirs and diaries; novels and short stories; and films. We will also attempt to assess the diverse vantage points offered by these different sorts of sources. Finally, we will examine the historical memory of the Holocaust. A film series will be associated with this course. (EM)]
[HIST 4200 Asian American Communities (also AAS 4240, AMST 4200) (HA-AS) Spring. 4 credits. Next offered 2011-2012. D. Chang.]
[HIST 4231 Gender and Technology (also BSOC/FGSS/STS 4231) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Pritchard.]

HIST 4251 Ethics, Race, Religion, and Health Policy (HA-AS)
Fall. 4 credits. Offered in Cornell in
Washington Program. A. Kraut. (AM)
[HIST 4260 The West and Beyond: Frontiers and Borders in American History and Culture (also AMST 4260) (HA-AS)

Spring. 4 credits. Priority given to junior and senior majors in History and American Studies. Next offered 2012-2013. A. Sachs.]

## [HIST 4261 Commodification and

 Consumerism in Historical Perspective: Sex, Rugs, Salt, and Coal (also AMST 4261) @ \# (HA-AS)Fall. 4 credits. Priority given to juniors and seniors majoring in history and American studies. Next offered 2011-2012. A. Sachs.]

## [HIST 4270 Reading the Africa Diaspora

 (HA-AS)Spring. 4 credits. Next offered 2013-2014. D. Magaziner.]
[HIST 4271 African Environmental History (also ASRC 4305) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Magaziner.]

HIST 4272 Apartheid and Its Afterlives (also ASRC 4272) (HA-AS)
Fall. 4 credits. D. Magaziner.
Apartheid-white minority rule in South
Africa-ended in 1994. Or did it? It began in 1948. Or in 1910. Or in 1652. This seminar interrogates the history, practice, and experience of white minority rule in South Africa, both before and after 1994. We will read memoirs, novels, and monographs, view movies, and critique and explore the contested politics and possibilities of modern South Africa. (AF)

HIST 4301 Black Leaders and Movements in African American History (also ASRC 4301)
Spring. 3 credits. R. Harris.
For description, see ASRC 4301. (AF)
[HIST 4310 Migrant Workers (also CRP 3850/5850, HIST 6310, ILRCB 4020, LSP 4310/6310) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Craib.]
[HIST 4360 Conflict Resolution in Medieval Europe \# (KCM-AS)
Spring. 4 credits. Next offered 2012-2013. P. Hyams.]

HIST 4390 Reconstruction and the New South (also AMST 4039, HIST 6391) \# (HA-AS)
Fall. 4 credits. Limited to juniors and seniors. M. Washington.
This course focuses on the American South in the 19th century as it made the transition from Reconstruction to new forms of social organization and patterns of race relations Reconstruction will be considered from a sociopolitical perspective, concentrating on the experiences of the freed people. The New South emphasis will include topics on labor relations, economic and political changes, new cultural alliances, the rise of agrarianism, and legalization of Jim Crow. (AM)
[HIST 4400 Undergraduate Seminar in Recent American History (also AMST 4400) (HA-AS)

Fall. 4 credits. Permission of instructor required. Next offered 2011-2012. R. Polenberg.]
[HIST 4411 Fourth-Century and Early History of Greece (also CLASS 4410) \# (HA-AS)
Fall. 4 credits. Next offered 2013-2014. B. Strauss.]
[HIST 4421 To Be Enslaved Then and Now (also ASRC 4306) \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. S. Greene.]

HIST 4428 Formation of the Field (also ASIAN 4428) @ (HA-AS)
Spring. 4 credits. N. Sakai.
For description, see ASIAN 4428.
HIST 4460 Strategy in World War II (HA-AS)
Spring. 4 credits. Permission of instructor required. J. Weiss.
Strategic decision-making in World War II. The course will be organized into a "task force" addressing crucial problems faced by the European-American Allies in World War II: the invasion of northwest Europe, strategic bombing tactics, the rescue of European Jews, and coordination with the Soviet Union. Individual presentations/papers followed by meetings to draft group reports. (EM)

## [HIST 4502 Power and Popular Culture in

 Early Modern Japan @ \# (HA-AS)Fall. 4 credits. Next offered 2011-2012. K. Hirano.]
[HIST 4520 History of the New Europe (HA-AS)
Fall. 4 credits. Next offered 2013-2014.
H. Case.]
[HIST 4560 Topics in Medieval Historiography (also HIST 6560) \# (HA-AS)
Spring. 4 credits. Permission of instructor required. Next offered 2013-2014. O. Falk.]
[HIST 4570 Seminar in European Fascism (HA-AS)
Fall. 4 credits. Permission of instructor required. Next offered 2011-2012. I. Hull.]

## HIST 4601 Toward a Prehistory of Terrorism (HA-AS)

Spring. 4 credits. O. Falk
This course puts contemporary terrorism in a long-term historical context. We will read modern theoreticians of terror and counterterrorism, as well as accounts by practitioners and witnesses. We will also look at premodern acts of fearsome violence. Does a current perspective on terrorism help us understand pre-modern ruthlessness in a new light? Can ancient and medieval texts
illuminate the current crisis of terror? (ER)

## HIST 4621 The Enlightenment (also HIST 6621) \# (HA-AS)

Fall. 4 credits. S. Kaplan.
An inquiry into the historical origins of European (especially French) political, social, and economic thought, beginning in the 1680 s, at the zenith of Louis XIV's absolutism, and culminating in the French Revolution a century later. Emphasis is on the relation of criticism and theory to actual social, economic, religious, and political conditions. An effort is made to assess the impact of enlightened thought on the 18th-century world and to weigh its implications for modern political discourse. Readings in translation from such authors as Bayle, Montesquieu, Voltaire, Rousseau, Diderot, Françoise de Graffigny, and others as well as from modern scholarly and polemical literature. (EM)
[HIST 4642 Women in the Modern Middle East (also NES 4642, FGSS 4640) @ (CA-AS)
Spring. 4 credits. Next offered 2011-2012. Z. Fahmy.]

HIST 4650 Reading and Viewing Modern China (also CAPS 4650, CHIN 4426/6625, HIST 6650) @
Spring. 4 credits. Satisfies Option 1.
Prerequisite: equivalent of three years
Mandarin instruction. Permission of instructor required. Z. Chen.
This course is designed to help graduate students and qualified undergraduate to conduct research on topics on modern Chinese history. To qualify to take the course, a student should have studied Chinese to the advanced level. It will concentrate on helping students develop the ability to read and interpret historical documents in Chinese. Altogether eight sets of original documents representing different events and periods are selected. Documentary films will also be shown in class to enhance students' understanding. While doing so, both linguistic and historical issues will be addressed and analyzed, so students will develop a better understanding of how to deal with some of the general challenges that they will be facing in conducting primary-source research on modern China. Class will be conducted in Chinese. (AS)
[HIST 4666 Mass Media and Identities in the Modern Middle East (also NES 4666) @ (CA-AS)

Fall. 4 credits. Next offered 2011-2012. Z. Fahmy.]

HIST 4680 Love and Sex in the Italian Renaissance (also ITAL 4680) \# (HA-AS)
Fall. 4 credits. J. Najemy.
An exploration of literary representations of love, sex, and eros in Renaissance Italy and attempts by secular governments and the Church to manage, discipline, and punish sexual transgression. Primary texts include Boccaccio's Decameron; selected 15th-century novelle; plays by Machiavelli (Mandragola, Clizia), Bibbiena (Calandria), and Pietro Aretino (The Master of the Horse); Giulia Bigolina's novel Urania; and Moderata Fonte's dialogue The Worth of Women. Secondary readings include studies of sexual crime, love across class boundaries, homosexuality, and lesbianism. (ER)
[HIST 4740 Topics in Modern European Intellectual and Cultural History: The Human and the Animal (also COML 4740, JWST 4674) (HA-AS)
Fall. 4 credits. Next offered 2011-2012. D. LaCapra.]

HIST 4741 Topics in Modern European Intellectual History: Trauma in Literature, History, and Film (also JWST 4675, COML 4741) (HA-AS)
Fall. 4 credits. D. LaCapra. Topic: Classics
in Modern European Intellectual History The seminar will be devoted to a reading of some classic texts in modern European intellectual history, including key works by Friedrich Nietzsche, Max Weber, Sigmund Freud, Martin Heidegger, Georges Bataille, Michel Foucault, Jacques Derrida, and Ludwig Wittgenstein. (EM)

## [HIST 4751 Science, Race, Colonialism

 (also STS 4751) (HA-AS)Spring. 4 credits. Next offered 2011-2012. S. Seth.]

## HIST 4850 Immigration Since 1965 (also

 AMST/LSP 4850) (HA-AS)Fall. 4 credits. Permission of instructor required. M. C. Garcia.
This seminar focuses on immigration to the United States since 1965. We will examine the various groups that have migrated to the United States; the immigration and refugee policy that has facilitated their entry; contemporary debates about immigration control; the transnational ties of immigrants to their homelands; guest workers programs; and the special needs of today's immigrant populations. Course requirements include participation in a service-learning project within the Ithaca/Tompkins County area that will be arranged in consultation with the professor and the Public Service Center. (AM)
[HIST 4851 Refugees (also AMST/LSP 4851) (HA-AS)

Spring. 4 credits. Permission of instructor required. Next offered 2011-2012.
M. C. Garcia.]

HIST 4861 Classics and Early America (also CLASS 4683, GOVT 4862) \# (HA-AS)
Spring. 4 credits. H. Rawlings. For description, see CLASS 4683.

HIST 4862 Seminar on the Ancient Mediterranean (also CLASS 4678) \# (HA-AS)
Spring. 4 credits. Staff.
For description, see CLASS 4678. (EA)
[HIST 4870 Seminar on Thailand (also ASIAN 6601, HIST 6870) @ (HA-AS)
Spring. 4 credits. Next offered 2012-2013.
T. Loos and T. Chaloemtiarana.]
[HIST 4900 New World Encounters, 1500 to 1800 (also AIS/AMST 4900) (HA-AS)
Fall. 4 credits. Next offered 2012-2013.
J. Parmenter.]

HIST 4920 India: Nation and Nationalism (also HIST 6921, ASIAN 4497) @ (HA-AS)
Spring. 4 credits. D. Ghosh.
This advanced seminar for undergraduates and graduate students explores how colonial India became a modern nation in the 20th century. This seminar begins the nationalist struggle for independence against British colonialism and ends with discourses about India's newfound economic power and nuclear authority. In following India's progress through the 20th century, we will turn to partition-the division of the subcontinent into India and Pakistan-and the challenges that India has faced in integrating women, lower caste groups, minorities, and Muslims into its citizenry. (AS)

## HIST 4930 Problems in Modern Chinese

 History (also ASIAN 4493/6693, HIST 6930 @ (HA-AS)Fall. 4 credits. Prerequisite: HIST 2940 or permission of instructor. S. Cochran. Conflicting interpretations of Chinese history during the late imperial period and the first half of the 20th century. (AS)
HIST 4931 Vitality and Power in China (also RELST/CAPS 4931, STS/BSOC 4911, ASIAN 4429, HIST 6931)
Spring. 4 credits. T. J. Hinrichs.
Chinese discourses have long linked the circulation of cosmic energies, political power, and bodily vitalities. In these models political order, spiritual cultivation, and health are achieved and enhanced through harmonizing these flows across the levels of Heaven-andEarth, state, and humankind. It is when these movements are blocked or out of synchrony that we find disordered climates, societies, and illness. In this course, we will examine the historical emergence and development of these models of politically resonant persons and bodily centered polities, reading across primary texts in translation from these otherwise often separated fields. For alternate frameworks of analysis as well as for comparative perspectives, we will also examine theories of power and embodiment from other cultures, including recent scholarship in anthropology and critical theory. (AS)

## [HIST 4950 Gender, Power, and Authority

 in England, 1600 to 1800 \# (CA-AS)Spring. 4 credits. Next offered 2011-2012. R. Weil.]

HIST 4951 Photography and Decolonial Imagination (also ART/ASRC/SHUM/ VISST 4951, COML 4067)
Spring. 4 credits. J. Bajorek.
For description, see SHUM 4951.
[HIST 4961 History of Medicine and Healing in China (also ASIAN 4469, BSOC/STS 4961, HIST 6961) @ \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012 T. J. Hinrichs.]
[HIST 4970 Jim Crow and Exclusion-Era America (also AAS 4970, AMST 4970/6970, HIST 6970) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Chang.]
[HIST 4990 Problems in Modern Chinese History (also ASIAN 4499/6694, HIST 6940) @ (HA-AS)

Spring. 4 credits. Prerequisite: HIST 2940 or permission of instructor. Next offered 2011-2012. S. Cochran.]

HIST 4997 Undergraduate Research Seminar (also AMST/CAPS 4997)
Fall and spring. 8 credits each semester.
Offered in Cornell in Washington Program. S. Jackson.

Intensive research and writing experience using the extensive resources of Washington D.C. (AM)

## Graduate Seminars

[HIST 5070 Graduate Seminar: The Occidental Tourist (also ASIAN 2206/5507, HIST 2070)
Fall. 4 credits. Next offered 2011-2012. T. Loos.]

HIST 6000 Graduate Research Seminar Spring. 4 credits. Staff.
This seminar is devoted entirely to the writing of a substantive research paper. Students will share research proposals, annotated bibliographies, outlines and portions of rough drafts. Class meetings will be devoted to discussing what students have produced, and general issues associated with constructing research papers. (HR)

HIST 6010 European History Colloquium
Fall and spring. 2 credits each semester.
Limited to graduate students. Fall,
D. LaCapra; spring, D. Corpis.

A research colloquium designed for European history graduate students. The colloquium will offer a forum for students to present papers and to discuss the work of visiting scholars. (EM)

## HIST 6020 Asian History Colloquium

 (also ASIAN 5599)Fall and spring. 2 credits. V. Koschmann. A forum for graduate students to present their work and discuss the work of others. (AS)

## HIST 6030 The Americas Colloquium

Fall and spring. 4 credits. E. Baptist.
A research colloquium designed for graduate students in U.S. and Latin American history. The colloquium will offer a forum for students to present papers and to discuss their work and that of occasional visiting scholars. (AM)

## HIST 6040 Colloquium in American History

Spring. 4 credits. Requirement for first- and second-year graduate students in U.S. history. M B. Norton.
Examination of major approaches, periods, issues, and modes of interpreting American history. Readings include recent "classics" of American scholarship from diverse sub fields and genres. (AM)
[HIST 6050 United States-Cuba Relations (also AMST/HIST/LSP 4050)
Spring. 4 credits. Next offered 2012-2013 M. C. García.]

## [HIST 6061 The New Cold War History

 (also HIST 4061)Spring. 4 credits. Next offered 2012-2013. J. Chen.]
[HIST 6100 Archipelago: Worlds of Indonesia (also ASIAN 4409/6617, HIST 4100)
Spring. 4 credits. Open to undergraduates and graduate students, although with separate requirements. Next offered 20122013. E. Tagliacozzo.]
[HIST 6102 Writing African American History
Fall. 4 credits. Next offered 2011-2012. M. Washington.]
[HIST 6110 Slavery in North America Spring. 4 credits. Next offered 2012-2013. M. Washington.]
[HIST 6140 Readings in Cultural Materialism: Theory and Practice Spring. 4 credits. Next offered 2013-2014. K. Hirano.]
[HIST 6150 The Past in the Present/The Present in the Past: Histories of Tokugawa Japan (also ASIAN 6615)
Fall. 4 credits. Next offered 2011-2012.
K. Hirano.]
[HIST 6160 Gender and Sexuality in Southeast Asia (also ASIAN 4416/6618, FGSS/HIST 4160)
Fall. 4 credits. Intended for graduate students. Letter grades only. Next offered 2013-2014. T. Loos.]
HIST 6181 Confluence: Environmental History and Science \& Technology Studies (also STS 6181)
Spring. 4 credits. S. Pritchard.
HIST 6190 History of Technology (also STS 6261)
Fall. 4 credits. R. Kline.
For description, see STS 6261.
[HIST 6240 Culture, Commodities, and Capitalism in Europe, 1500-1800
Spring. 4 credits. Next offered 2012-2013. D. Corpis.]
[HIST 6260 Graduate Seminar in the History of American Women
Fall. 4 credits. Next offered 2011-2012.
M. B. Norton.]
[HIST 6280 Graduate Seminar: 19th-Century U.S. History
Spring. 4 credits. Next offered 2012-2013. D. Chang.]
[HIST 6310 Migrant Workers (also CRP 3850/5850, HIST 4310, ILRCB 4020, LSP 4310/6310)
Spring. 4 credits. Next offered 2011-2012 R. Craib.]
[HIST 6350 The Writing of History
Spring. 4 credits. Next offered 2011-2012 A. Sachs.]

## HIST 6380 Modernity and Modernism

 East and WestFall. 4 credits. C. Verhoeven.
Graduate seminar on the history and
historiography of "modernity." What is
"modern"? Where and when is
"modernization"? And what is "modernism"?

The goal of the course is to become familiar with the predominant theories and concepts of the "modern" in the field of European history and to explore their applicability across the European continent, from West to East. (EM)

## [HIST 6390 Mao and the Chinese

 RevolutionFall. 4 credits. Next offered 2012-2013. J. Chen.]

HIST 6391 Reconstruction and the New South (also HIST/AMST 4039)
Fall. 4 credits. M. Washington.
For description, see HIST 4390. (AM)
[HIST 6410 Science, Technology, Gender: Historical Issues (also FGSS 6400, STS 6401)
Spring. 4 credits. Next offered 2012-2013. S. Seth.]
[HIST 6411 Fourth-Century and Early Hellenistic History of Greece (also CLASS 7681)
Fall. 4 credits. Next offered 2013-2014. B. Strauss.]

HIST 6470 Theories of Ideology (also FREN 6470, GERST 6870)
Spring. 4 credits. C. Robcis.
Why do people do the things they do? What is the relation between cognition and action, between knowing and doing? Are ideologies always historically specific or are they produced by more permanent structures? This graduate seminar will examine these questions by comparing various theories of ideology and subjectivity, with a special focus on Marxism, structuralism, and psychoanalysis. Readings will be both historical and theoretical (Marx, Freud, Althusser, Gramsci, Zizek, Arendt, Bourdieu, Butler, Deleuze, Fanon, Bersani, Mahmood, among others).
[HIST 6481 Seminar in Latin American History (also LATA 6481)
Fall. 4 credits. Next offered 2012-2013. R. Craib.]
[HIST 6510 India and British Political Thought c. 1600-1850
Spring. 4 credits. Next offered 2013-2014. T. R. Travers.]
[HIST 6560 Topics in Medieval Historiography (also HIST 4560)
Spring. 4 credits. Permission of instructor
required. Next offered 2011-2012. O. Falk.]
HIST 6611 Conflict and Transformation in Early Modern Japan, 1700-1890 (also HIST 3611, ASIAN 3361)
Spring. 4 credits. K. Hirano.
For description, see HIST 3611. (AS)
HIST 6621 The Enlightenment (also HIST 4621)

Fall. 4 credits. S. Kaplan.
For description, see HIST 4621. (EM)
HIST 6650 Reading and Viewing Modern China (also CHIN 4426/6626, HIST 4650)

Spring. 4 credits. Prerequisite: equivalent of three years Mandarin instruction.
Permission of instructor required. Z. Chen. For description, see HIST 4650. (AS)
[HIST 6651 Law, Society, and Culture in the Middle East, 1200-1500 (also HIST/NES 3651/6651)
Spring. 4 credits. Next offered 2011-2012. D. Powers.]

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[HIST 6720 Seminar in European Intellectual History (also COML 6720)
Fall. 4 credits. Next offered 2011-2012. D. LaCapra.]
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HIST 6730 Topics in Modern European Intellectual History (also COML 6730, JWST 6740)
Fall. 4 credits. D. LaCapra.
[HIST 6750 Genocidal Regimes
Fall. 4 credits. Next offered 2011-2012.
J. Weiss.]

## [HIST 6810 Intellectual History of Empire (also ASIAN 6681)

Spring. 4 credits. Next offered 2011-2012
J. V. Koschmann and N. Sakoi.]

## [HIST 6820 Topics on Indian Ocean

 StudiesSpring. 4 credits. Next offered 2012-2013
E. Tagliacozzo.]
[HIST 6830 Seminar in American Labor History (also ILRCB 7081)
Fall. 3 credits. Prerequisite: graduate standing. Next offered 2011-2012.
N. Salvatore.]
[HIST 6870 Seminar on Thailand (also ASIAN 6601, HIST 4870)
Spring. 4 credits. Next offered 2012-2013.
T. Loos and T. Chaloemtiarana.]

HIST 6921 India: Nation and Nationalism (also HIST 4920, ASIAN 4497)
Spring. 4 credits. D. Ghosh.
For description, see HIST 4920. (AS)
HIST 6930 Problems in Modern Chinese History (also ASIAN 4493/6693, HIST 4930)

Fall. 4 credits. S. Cochran.
For description, see HIST 4930. (AS)

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HIST 6931 Vitality and Power in China (also HIST/RELST/CAPS 4931, STS/ BSOC 4911, ASIAN 4429)
Spring. 4 credits. T. J. Hinrichs.
For description, see HIST 4931. (AS)
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## [HIST 6940 Problems in Modern Chinese History (also ASIAN 4499/6694, HIST 4990)

Fall. 4 credits. Prerequisite: HIST 2940 or permission of instructor. Next offered 2011-2012. S. Cochran.]

## HIST 6950 Premodern Southeast Asia

 (also ASIAN 3397, HIST 3950)Fall. 4 credits. E. Tagliacozzo.
For description, see HIST 3950. (AS)
HIST 6960 Southeast Asian History from the 18th Century (also ASIAN 6696)
Spring. 4 credits. T. Loos.
Surveys the modern history of Southeast Asia with special attentions to colonialism, the Chinese diaspora, and sociocultural institutions. Considers global transformations that brought "the West" into people's lives in Southeast Asia. Focuses on the development of the modern nation-state, but also questions the narrative by incorporating groups that are typically excluded. Assigns primary texts in translation. (AS)
[HIST 6961 History of Medicine and Healing in China (also ASIAN 4469, BSOC/HIST/STS 4961)
Spring. 4 credits. Next offered 2011-2012. T. J. Hinrichs.]
[HIST 6970 Jim Crow and Exclusion-Era America (also AAS/HIST 4970, AMST 4970/6970)
Fall. 4 credits. Next offered 2011-2012. D. Chang.]

HIST 6980 Seminar in Japanese Thought (also ASIAN 6698)
Spring. 4 credits. Prerequisite: reading
knowledge of Japanese. J. V. Koschmann. In spring 2011, this seminar will begin with the question of why rationalistic social theorists and planners in Japan in the era of mobilization for total war turned for inspiration to the works of Adam Smith and the idea of civil society. It then follows the work of those who came to be known as the Civil Society School into the post-World War II era. Along the way, we will reassess the notion of civil society in relation to Marxism, modernity and politics, including neoliberalism. (AS)

## HIST 7090 Introduction to the Graduate

 Study of HistoryFall. 4 credits. Requirement for first-year graduate students. J. V. Koschmann and T. R. Travers.

This course is designed to introduce entering graduate students to crucial issues and problems in historical methodology that cut across various areas of specialization. (HR)

## HIST 8004-8007 Supervised Reading

4 credits each semester. Prerequisite: graduate standing. Permission of instructor required. Staff. (HR)

## HISTORY OF ART

S. Samuels, chair; A. Alexandridis,
J. E. Bernstock, M. I. Dadi, M. Fernández,
C. Finley, S. Hassan, C. Lazzaro, K. McGowan, L. L. Meixner, A. Pan, J. Rickard, C. Robinson

The Department of the History of Art provides a broad range of introductory and advanced courses in art of Europe and the Americas, East and Southeast Asia, Africa, Native American art and Indigenous Studies from antiquity to the present.

## The Major

Department majors acquire a broad understanding of the history of art in several chronological and geographical areas: ancient, medieval, Renaissance, modern (Europe and the Americas), Southeast Asia, China, Japan, Latin America, and Africa. Additionally, majors practice a range of art historical methods and interpretive strategies, including connoisseurship, dendrochronology, feminism, iconography, semiotics, critical theory, and social history. Majors are encouraged to locate the history of art within allied humanities fields and the applied arts by taking courses in history, literature, history of architecture, and fine arts. The study of foreign languages is strongly encouraged.

## Requirements for the Major

Prospective majors should consult the director of undergraduate studies. Students wishing to declare a major in the history of art should have completed any two courses above the 1000 level at Cornell in the department by the end of their sophomore year and have received a grade of $B$ or above in both. Courses must be taken for a letter grade and must be at least a B- to count toward the
major. These courses count toward the total 44 credits. The major in the history of art requires 44 credits, 30 at the 3000 level or above. The core requirements are: proseminar; another seminar at the 4000 level or above; two courses on art from the following time periods: Ancient Europe, Medieval/Islamic, or Renaissance/Baroque (one course per time period); two courses on art from the three following geographical areas: Africa, Asia, or Latin America (one course per region); and two courses on modern/contemporary art in Europe and North America, including art from outside the Anglo-American tradition. In addition to the 44 credits, majors are required to take two courses, approved by their advisors, in areas related to the history of art.

## Honors

To become a candidate for the degree of bachelor of arts with honors in the history of art, a student must have a cumulative average of A- for all courses taken in the department and B+ in all arts and sciences courses. Application to write an honors thesis should be made to the director of undergraduate studies during the second semester of the junior year. Students are advised to enroll in ARTH 4997 Honors Research at this time. The application must include a summary of the proposed project, an endorsement by a faculty sponsor, and a copy of the student's transcript. In the senior year the honors candidate will include ARTH 4998 and 4999 in his or her course load. These courses address the research and writing of the senior thesis under the direction of the student's project advisor.

## Course Numbering System

1000-level courses are first-year writing seminars.
2000-level courses are introductions to the major subdivisions of Western art and art outside the West.
3000-level courses are intermediary courses addressing more specialized topics or epochs. 4000-level courses are seminars primarily for advanced undergraduates and graduate students.
6000-level courses are seminars primarily for graduate students.

## First-Year Writing Seminars

For first-year writing seminar offerings in the history of art, consult the John S. Knight Institute brochure for times, instructors, and descriptions. These courses may not be used to satisfy the distribution requirement or the major.

## Courses

ARTH 2000 Introduction to Visual Studies (also VISST/COML 2000, ENGL 2920) (LA-AS)
Spring. 4 credits. M. Fernandez.

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\text { For description, see VISST } 2000 .
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## ARTH 2019 Thinking Surrealisms (also

 COML 2200, VISST 2190) (LA-AS)Fall. 4 credits. B. Maxwell.
For description, see COML 2200.
ARTH 2200 Introduction to Art History: The Classical World (also ARKEO/ CLASS 2700) \# (HA-AS)
Fall. 4 credits. A. Alexandridis.
The course is an overview of the art and archaeology of the Greek and Roman world,
covering the sculpture, vase painting, and architecture of the ancient Greeks from the Geometric period through the Hellenistic, and the art of the Romans from the early Republic to the time of Constantine the Great.

## [ARTH 2227 Art and Archaeology in the Ancient Mediterranean World (also

 ARKEO 2728, CLASS 2727) \# (HA-AS)Fall. 3 credits. Next offered 2011-2012. For description, see CLASS 2727.]

ARTH 2350 Introduction to Art History: Islamic Art and Culture @ \# (HA-AS) Fall. 4 credits. C. Robinson.
Spanning the years between the advent of Islam as one of the world's great religions in the early 7th century AD and the end of the 14th century ad. Assignments will include two in-class and two take-home exams plus two shorter writing assignments.

## ARTH 2400 Introduction to Art History: Renaissance and Baroque Art (also

 VISST 2645) \# (HA-AS)Fall. 4 credits. Each student must enroll in a sec. C. Lazzaro.
A survey of major works of European artists from 1400 to 1700 , including all arts, with an emphasis on painting and on analysis of the artworks. As a frame for interpreting these works, we will emphasize the social, religious, and political contexts in which artists worked and the role of patrons in the creative process. The course will also serve as an introduction to the art historical approaches through which we interpret these works today.

## ARTH 2402 Survey of European Art:

 Renaissance to Modern \# (CA-AS)Summer only. 3 credits. D. Royce-Roll. The major traditions and movements in western European art from the Renaissance to the modern period. Painting, sculpture, and architecture with an emphasis on painting. Each Friday class meets at the Herbert F. Johnson Museum of Art with gallery talks and viewing of relevant works that supplement the previous four days of classroom lectures.
[ARTH 2500 Introduction to the History of Photography (CA-AS)
Fall. 4 credits. Next offered 2011-2012. I. Dadi.]

ARTH 2550 Introduction to Art History: Latin American Art (also LATA 2050)
Summer. 4 credits. M. Fernandez. Introduces students to Latin American art from antiquity to present and explores broad theoretical problems in the field. The art of local cultures (e.g., Maya, Aztec, and Inca) is discussed as well as episodes in the arts of colonial and modern Latin America. Topics include cultural confluence and the concept of style, the representation of national identity, art and political resistance, intersections of high art and popular culture and the applicability of specific modern, postmodern, and postcolonial theories to Latin American art.

## ARTH 2600 Introduction to Art History:

 The Modern Era (CA-AS)Spring. 4 credits. Not open to students who have taken ARTH 2601. Each student must enroll in a sec. J. Bemstock.
Considers modern art in a historical and cultural context, from painting associated with the French Revolution through American pop art. The emphasis is on major movements and artists: Neo-Classicism (David), Romanticism (Delacroix), Realism (Courbet), Impressionism
(Monet), Post-Impressionism (Van Gogh), Cubism (Picasso), Fauvism (Matisse),
Surrealism (Miro), Abstract Expressionism (Pollock), and Pop Art (Warhol). Different critical approaches are examined.

ARTH 2801 Script and Culture in East
Asia (also ASIAN 2209) @ \# (LA-AS) Asia (also ASIAN 2209) @ \# (LA-AS)
Fall. 4 credits. B. Rusk.
For description, see ASIAN 2209.
ARTH 3171 Architectural History of Washington, D.C. \# (HA-AS)
Fall or spring. 4 credits. Prerequisite:
students in Cornell in Washington
program; nonarchitects. Staff.
Historical and critical survey of the architecture of Washington. Attention is given to the periods, styles, architects, and clientspublic and private-of the notable buildings and to the urbanscape of the nation's capital. The vocabulary of architectural analysis and criticism is taught. Field trips required.

## ARTH 3230 Iconography of Greek Myth

 (also CLASS 3727) \# (HA-AS)Spring. 4 credits. A. Alexandridis. Myths are traditional tales. Their authority becomes apparent in that they were constantly adapted to changing social, political, cultural, etc. conditions. Although this seems to be a widely accepted definition so far, it is deeply influenced by Greek tradition. Not only is the term mythos (word, tale) Greek, but the ubiquity of Greek gods, heroes, and their deeds in ancient literature and material culture has given myths an importance they might not have had in other cultures. This class will give an overview of the most important Greek myths and mythological figures as depicted in Greek and Roman times. The chronological frame will range from the seventh century $B C$ to the third century ad. We will discuss the iconography of the Olympian gods and their escorts; of myths such as the loves of the gods; the battles between the Olympian Gods and the Giants, between Greeks and Amazons as well as between Lapiths and Centaurs; the Trojan War; the adventures of Odysseus; the heroic deeds of Heracles, Theseus and Perseus among others. By analyzing where and when mythological images were on display it will become clear how myths were adapted to their specific context as well as why certain myths were more often depicted or more popular than others.

## ARTH 3250 Introduction to

 Dendrochronology (also ARKEO 3090, CLASS 3750) \# (HA-AS)Fall. 4 credits. S. Manning.
For description, see CLASS 3750.

## [ARTH 3300 Romanesque and Early

 Gothic Art and Architecture: Europe and the Mediterranean, 900 to 1150 AD (also NES 3759) \# (LA-AS)Spring. 4 credits. Prerequisite: ARTH 2350 or ARTH 2355; freshmen enrollment with permission of instructor only. Next offered 2011-2012. C. Robinson.]

## ARTH 3419 Rembrandt and His Circle: Technologies of Vision (also VISST

 3419) \# (CA-AS)Fall. 4 credits. L. Pincus.
The variety of visual experience in
17th-century Dutch art is legion: still life, portraiture, self-portraiture, landscape, cityscape, genre, and architectural painting. New scientific technologies and trade routes, a robust economy, and bustling commerce also place their marks on the cultural and artistic
production in the Netherlands. In this course, we will dip into these multiple facets of the Dutch scene, but in critical rather than a general way, in order to assess Dutch "technologies of vision" in picturing and describing their world. Also important will be our inquiry into the context of Dutch art production: the social, economic, and political factors that made the Dutch art market so unusually vital.

## [ARTH 3440 Leonardo, Michelangelo, and

 Raphael (also VISST 3443) \# (HA-AS) Spring. 4 credits. Next offered 2011-2012. C. Lazzaro.]
## ARTH 3500 African American Art (also

 AMST/ASRC/VISST 3500) (LA-AS)Fall. 4 credits. C. Finley.
This course investigates the different forms of African-American visual artistic traditions in relation to their historical origins and sociocultural context from the early days of slavery to the present time. We start with an overview of African art and the experiences of the Middles Passage and slavery in relation to African-American traditions in the decorative arts including: pottery, architecture, ironwork, quilt making, and basketry. This is followed by a fine-art survey starting with the 18th and 19th centuries and continuing through the early-20th-century Harlem Renaissance up to the present. Certain issues related to AfricanAmerican arts and creativity such as improvisation, Black Aesthetic, and Pan Africanism also are explored. Slides, films, and filmstrips are used extensively to illustrate topics discussed. Visits to museums and relevant current exhibitions may be arranged.

## ARTH 3520 African American Cinema @

 (LA-AS)Fall. 4 credits. S. Hassan.
This course offers an overview of African cinema and filmmaking. It surveys historically the evolution of African cinema from its early days to the present. Through screening of selected African films, different trends within African cinema will be explored, such as "Return to the Sources" and the rediscovery of the pre-colonial past; the "Social Realist" narrative and critique of post-independence Africa; reconstructing the story of colonialism from the perspective of the colonized; and the entertainment genre. Techniques, style, and aesthetics of African cinema will also be discussed. The course offers a unique opportunity of looking at African culture and society, and at issues of social change, gender, class, tradition, and modernization through African eyes.

## ARTH 3605 U.S. Art from FDR to Reagan

 (also AMST 3605) (LA-AS)Fall. 4 credits. J. Bernstock
Considers the contextual features of American art from the 1930s through the late 1980s. Examines art in relation to contemporary politics, society and literature. A few of the developments on which the course focuses are: Abstract Expressionism, Pop Art, Earth Art, and Feminist Art. Examines various critical approaches.

[^2][ARTH 3650 History and Theory of Digital Art (also INFO 3660, VISST 3650)
(CA-AS)
Fall. 4 credits. Next offered 2011-2012.
M. Fernandez.

Students will examine the role of mechanical, electronic, and digital technologies in the arts of the late 20th and 21st centuries with emphasis on Europe and North America.]
[ARTH 3740 Painting 19th-Century America (also AMST/VISST 3740) \# (CA-AS)
Fall. 4 credits. Recommended: ARTH 2400.
Next offered 2011-2012. L. L. Meixner.]
[ARTH 3760 Impressionism in Society (also FREN 3610, VISST 3662) \# (CA-AS)
Spring. 4 credits. Not open to freshmen.
Next offered 2011-2012. L. L. Meixner.]
[ARTH 3672 The Art of the Historical Avant-Garde (also COML 3840, GERST/ROMS 3770, VISST 3672) (LA-AS)
Spring. 4 credits. Next offered 2012-2013 P. McBride.]
[ARTH 3800 Introduction to the Arts of China (also ASIAN 3383, ARKEO 3800) @ \# (LA-AS)

Fall. 4 credits. Next offered 2011-2012. A. Pan.

This course offers a survey of the art and culture of China, from the Neolithic period to the 20th century.]

ARTH 3820 Introduction to the Arts of Japan (also ASIAN 3381) @ \# (LA-AS)
Spring. 4 credits. A. Pan.
As an island nation east of the Asian continent, Japan developed a unique culture that reflects both continental and indigenous characteristics. This course examines pre- and post-contact with continental culture and the process of artistic acculturation and assimilation in successive periods of Japanese art history.

## ARTH 3850 The Arts of Southeast Asia (also ASIAN 3350, VISST 3696) @ \# (CA-AS)

Spring. 4 credits. K. McGowan. The arts of Southeast Asia will be studied in their social context, since art plays a role in most of the salient occasions in life in traditional societies. Special emphasis will be devoted to developments in Indonesia, Thailand, and Cambodia. Among topics covered will be the shadow puppet theater of Java, textiles, architecture, sculpture, and Bali's performance tradition.

## ARTH 3855 The House and the World: Architecture of Asia (also ASIAN 3394, VISST 3655) @ \# (HA-AS)

Fall. 4 credits. K. McGowan.
In many Asian societies, houses are regarded as having a vitality of their own. This course will examine the role of the house as a living organism in Asia. Houses also function as storehouses for material and immaterial wealth; artifacts such as textiles, jewelry, sculptures, and masks function within the house as ancestral heirlooms, conveying their own currents of life force, the power from which serving to blend with the vitality of the house. The indigenous architectural traditions of India, Vietnam, Thailand, Indonesia, and the Philippines will be examined. By studying the inhabited spaces of others, divining their technologies of construction and their applied symbologies, students will be provided with powerful tools for examining the visual skills
and sensibilities of other cultures.
ARTH 3915 Art in the Modern World (also ANTHR 3415) (CA-AS)
Summer only. 4 credits.
For description, see ANTHR 3415.

## Seminars

Courses at the 4000 to 6000 level are open to juniors and seniors, majors, and graduate students unless otherwise stated. All seminars involve the writing and presentation of research papers. Enrollment is limited to 15 students. Students may repeat courses that cover a different topic each semester.

## ARTH 4100 Proseminar (also VISST 4200,

 ARTH 6100) (HA-AS)Spring. 4 credits. Limited enrollment.
Prerequisite: history of art majors. Grads
should enroll in ARTH 6100. I. Dadi. Works of art have always engendered political, social, and cultural meanings. This seminar introduces the methods that art historians have engaged in, studying the objects and ideas that constitute the historiography of their discipline. Challenged and enlarged by cultural debates over issues of class, ethnicity, nationality, sexual orientation, and gender, the field of art history is expanding to incorporate problems of assessing quality of intention and reception along with authorship, of artistic production in place of artistic creation, and of Western-oriented attitudes to race in reference to orientalism and colonialism. Readings focus on historically situating methods and the implications of their cross-cultural application. Papers encourage students to put methods into practice, realizing in the process that subject matter is not an isolated choice to which methods are applied, but something that profoundly affects the approach the researcher brings to the writing of art history. In addition to the seminar meeting from 2:30 to $4: 30$, students are required to attend the Visual Culture Colloquium held on most Mondays from 5 to 6:30 p.m.

## ARTH 4107 The Museum and the Object

 (also VISST 4607) (CA-AS)Fall. 4 credits. Prerequisite: history of art majors; freshmen and sophomores by permission of instructor. All classes meet in Johnson Art Museum study gallery.
C. Finley.

Gives advanced students the opportunity to work directly with original objects from the collection in the Herbert F. Johnson Museum. Focuses on art and connoisseurship by questioning the ways quality is determined in works of art. Topics include methods of attribution, fakes and forgeries, technique and media, restoration and conservation, art education and theories of perception. Session leaders include the curatorial staff of the art museum.

## ARTH 4144 Responsive Environments

 (also ARTH 6144, VISST 4144/6144) (CA-AS)Spring. 4 credits. M. Fernandez.
This seminar will examine notions of interactivity, immersion, and responsiveness in works of art and architecture from the 1950s to present. Select historically significant works in traditional media, telematics, machine sculpture, interactive, and digital installation will be explored as well as more recent genres of artistic practice including interactive cinema, locative media, and video games. Theorizations of interactivity, addressing narrativity, performativity, embodiment,
"liveliness" and the sensual and affective engagement of the user with the work will be discussed, as will the relation of art and surveillance, and the relation of "high art" interactivity with popular techno-cultural forms. The relevance of these topics to architecture will be a recurrent theme.

## ARTH 4150 Intro to Critical Theory (also

 ARTH 6150, VISST 4150/6150) (CA-AS)Fall. 4 credits. M. Fernandez.
This seminar will introduce students to theoretical texts relevant to multiple areas in the history of art and visual culture. Readings will include classic texts in post-structural theory and more recent writings in new areas of theory and artistic practice including digital art, cyberfeminism, globalization, museums and museology, architecture in/as visual space, biotechnology and artificial life as well as issues in cognitive science and human computer interaction centering on space and embodiment. Occasionally, the seminar will focus on a single topic of convergence for these diverse areas.
[ARTH 4151 Topics in Media Arts (also ARTH 6151, VISST 4151/6151) (CAAS)

Spring. 4 credits. Next offered 2011-2012.
M. Fernandez.

Topic for spring 2012: Video Game Criticism.]
[ARTH 4155 Topics in Latin American Art (also ARTH 6155, VISST 4155/6155) @ \# (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
M. Fernandez.

Topic for fall 2011: Cosmopolitanism in Latin American Visual Cultures.]

## ARTH 4233/6233 Greek and Roman Art and Archaeology (also CLASS 4746/7746) \# (HA-AS)

Fall and spring. 4 credits. A. Alexandridis. Topic for fall 2010: Reproducing Greek and Roman Art
Topic for spring 2011: Death in the Roman Empire
[ARTH 4305 Looking for Love: Visual and Literary Cultures of Love in the Medieval Mediterranean 1100-1400 AD (also NES 4795) \# (LA-AS)
Spring. 4 credits. C. Robinson. Prerequisite: permission of instructor. Next offered 2011-2012.]
[ARTH 4331 Topics in Islamic Art (also ARTH 6331, NES 4731/6731) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
C. Robinson.]
[ARTH 4440 Constructing the Self in the 16th Century (also ARTH 6440) \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012.
C. Lazzaro.]

ARTH 4445 Nature, Cultural Landscape, and Gardens in Early Modern Europe (also ARTH 6445)
Fall. 4 credits. C. Lazzaro.
This seminar examines cultural understandings of nature in early modern Europe, especially Italy. It considers concepts of nature, as well as "second nature," "cultural landscape," and "pastoral." The cultural significance of plants, animals, and collections of natural objects is considered, as well as the role of gardens and alterations to the land in the formation of
national identity. The focus is on Italian gardens of the 16th and 17th centuries and some French gardens, especially the Versailles of King Louis XIV.

## [ARTH 4451 Prints and Visual Culture in

 Early Modern Europe (also VISST 4451, ARTH 6451) \# (HA-AS)Fall. 4 credits. Meets at the Johnson Museum. Next offered 2011-2012. C. Lazzaro.]

ARTH 4508 Exhibiting Cultures: Museums, Monuments, Representations, and Display (also ARTH 6508, ASRC 4504/6508, AMST 4508/6508) (CA-AS)
Spring. 4 credits. Graduate students should enroll in 6508. C. Finley.
This seminar explores the ways in which our contemporary understanding of art, history, and culture is constructed and informed by public display in museums, galleries, and the broader cultural landscape. Using a series of case studies, we consider issues of representation and display and the wider social context in which art and culture are presented. Topics include the "blockbuster" exhibition, cultural heritage museums, the effect of globalization on the museum industry, recent developments in the monument making and the UNESCO Slave Routes Project.

## ARTH 4509 Black Arts Movement (also ASRC 4505, AMST 4509) (CA-AS)

Summer. 4 credits. C. Finley.
This distance learning course examines the art, music, literature and film of African Americans during the 1960s. The Black Arts Movement was an explosive cultural flourishing that emerged in the United States in the wake of African liberation and decolonization movements abroad in Civil Rights and Black Power movements locally and internationally.

## ARTH 4526 Caribbean Dialogs: Online!

 (also VISST 4526) @ (CA-AS)Summer only. 4 credits. P. Archer-Straw. Using Caribbean art as a case study, the course explores themes such as new world history, colonialism, Diaspora, trauma, violence, and tourism. Through an understanding of basic cultural theory, class members come to see how perceptions of Caribbean culture are historically fluid and subject to variation as they are categorized and textualized. Similarly through active participation students are invited to question their own considerations of identity, culture, race and ethnicity. Caribbean Dialogs: Online! examines the imaginary, creative spirit of the region's artists to show ways that they are reconfiguring themselves to meet the needs of a changing world at once apprehensive but also charmed by black culture.

## ARTH 4570 Victorian Art (LA-AS)

Fall. 4 credits. C. Roach.
Surveys paintings, prints, and photographs of Victorian Britain, emphasizing exhibitions, audiences, reproduction, and images of contemporary life. Practitioners considered include J. M. W. Turner, John Everett Millais, William Henry Fox Talbot, Julia Margaret Cameron, Augustus Pugin, William Morris, and James McNeill Whistler, with readings by important authors from the period, including John Ruskin, Mary Elizabeth Braddon, and Charles Dickens.

ARTH 4600 Studies in Modern Art (also AMST 4610) (LA-AS)
Spring. 4 credits. J. Bernstock.
Topic for spring 2011: U.S. Art of the 1960 s
This class will examine the 1960 s as a decade of dramatic change in American art, paralleling the change in the American way of life. By 1960, many of the Post-war baby boomers were reaching adolescence, and led a movement away from the conservative lifestyle and attitudes of the 1950s. Minorities, women, and young people challenged the
Establishment in all realms. Art during the decade will be seen to start with a critique of consumerism through Pop art, and evolve toward a widespread questioning: of institutional authority, of gender and racial stereotypes, of our involvement in Vietnam, and of the modernist canon.

## ARTH 4602 Buildings and Bodies:

 Constructing Spaces in Early Modern Art (also ARTH 6602, VISST 4602/6602)Spring. 4 credits. L. Pincus.
What visual roots inform our modes of habitation? Our occupation of space and production of place are always constructed, never natural or given. This course investigates early modern depictions of built environments, from urban scale to domestic interior, from landscape, medieval pilgrimage routes, and the public arena to spaces of domesticity, creation, collection, and scientific inquiry. Issues explored will include the dialectic relation of inside/outside and the poetics of the box, boundary and containment, religious and profane space, the housing of gender, theaters of memory and anatomy, representations of light and visuality. As we study the social production of space Readings will include those by theorists Bachelard, de Certeau, Foucault, Lefebvre, Soja, and Tuan as well as those by art historians.

## ARTH 4610 Women Artists (also FGSS 4040) (LA-AS)

Fall. 4 credits. J. Bernstock.
This seminar examines both feminist art criticism and the work of women artists from antiquity to the present. We consider the works of the most prominent women artists from each period in relation to the changing roles of women in society. The artists covered include Jennifer Barlett, Artemisa Gentileschi, Elizabeth Vigee-Lebrun, Mary Cassatt, Kathe Kollwitz, Georgia O'Keefe, Louise Nevelson, Joan Mitchell, Judy Chicago, and Barbara Kruger.

## ARTH 4690 Comparative Modernities

 (also ARTH 6690, VISST 4641) @ (CA-AS)Fall. 4 credits. I. Dadi.
Since the late 19th century, the effects of capitalism across the globe have been profoundly transformative and have intensified with the demise of the older colonial empires, the rise of nationalism and independent states, and the onset of neoliberal globalization. These transformations are manifested in the domains of high art, mass culture and popular culture, yet remain inadequately studied. This seminar theorizes and explores non-Western modernist and postmodernist art practice in a comparative framework. Taught as a seminar, it assumes active participation by advanced undergraduate and graduate students who have a prior knowledge of Euro-American modernism and art history, and who wish to better understand the great artistic and visual transformations in the 20th century in a global context.
[ARTH 4695 Studies in Global Modern Art (also ARTH 6695) @ (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
I. Dadi.]

ARTH 4696/6696 The Art Market (also ARTH 6696) (LA-AS)
Spring. 4 credits. C. Finley.
This course will examine the history of the art market, from the 16 th century to the present.
[ARTH 4761 Art and Social Histories (also VISST 4761) (CA-AS)
Fall and spring. 4 credits. Permission of instructor required. Auditing not permitted. Not open to freshmen. Next offered 20112012. L. Meixner.]
[ARTH 4771 Indigenous Art, Film, and New Media: Anti-Colonial Strategies (also ARTH 6771, COML 4771/6771) (CA-AS)
Fall. 4 credits. Next offered 2011-2012. J. Rickard.

This course examines Indigenous art, new media, and film from three distinct interrelated perspectives of aesthetics/theory, technology, and history/culture.]
[ARTH 4815 Buddhist Arts of China (also ARTH 6815) @ \# (CA-AS)
Fall. 4 credits. Next offered 2011-2012. A. Pan.]
[ARTH 4818 Exhibition Seminar (also ARTH 6818) @ (CA-AS)
Fall. 4 credits. Next offered 2011-2012. A. Pan.

Students review past exhibitions and design a new exhibition based on the collection at the Herbert F. Johnson Museum of Art.]
ARTH 4855 Threads of Consequence: Textiles in South and Southeast Asia (also ASIAN 4487)
Spring. 4 credits. K. McGowan.
This seminar explores how patterned cloths serve as a symbolic medium, functioning on multiple levels of understanding and communication. As spun, dyed, and woven threads of consequence, textiles can be seen to enter into all phases of social, economic, political, religious, and performance processes, often assuming unusual properties and attributes. As bearers of talismanic messages, signifiers of rank, and as the recipients of influences from maritime trade and touristic demand, textiles are read between the folds of complex exchange mechanisms in South and Southeast Asia.
[ARTH 4858 Dancing the Stone: Body, Memory, and Architecture (also ASIAN 4456)
Spring. 4 credits. Prerequisite: permission of instructor. Next offered 2011-2012. K. McGowan.]

ARTH 4951 Photography and Decolonial Imagination (also SHUM/VISST 4951) Spring. 4 credits. Limited to 15 students. J. Bajorek.

For description, see SHUM 4951.

## ARTH 4953 The Political Lives of Things

 (also SHUM 4953)Spring. 4 credits. Limited to 15 students. A. Smith.

For description, see SHUM 4953.

## ARTH 4955 Sensation and Indigenous

 Intent (also SHUM/VISST 4955)Spring. 4 credits. Limited to 15 students. J. Rickard.

ARTH 4991 Independent Study
Fall. 1-4 credits; may be repeated for credit. Prerequisite: permission of department faculty member.
Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department

## ARTH 4992 Independent Study

Spring. 1-4 credits; may be repeated for credit. Prerequisite: permission of
department faculty member.
Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

## ARTH 4997 Honors Research

Fall or spring. 2 credits. S-U grades only. Staff.
The prospective honors student does rigorous independent readings supervised by a selected thesis advisor. By the end of the semester, an annotated bibliography and detailed outline of the thesis should be completed.

## ARTH 4998 Honors Work I

Fall. 4 credits. Intended for senior art history majors who have been admitted to the honors program.

## ARTH 4999 Honors Work II

Spring. 4 credits. Prerequisite: ARTH 4998. The student under faculty direction prepares a senior thesis.

ARTH 5991-5992 Supervised Reading 5991, fall; 5992, spring. 1-4 credits; may be repeated for credit. Prerequisite: graduate standing.

ARTH 5993-5994 Supervised Study 5993, fall; 5994, spring. 1-4 credits; may be repeated for credit. Prerequisite: graduate standing.

ARTH 6060 Visual Ideology (also COML/ GERST 6600, VISST 6060)
Spring. 4 credits. G. Waite.
For description, see GERST 6600.

## ARTH 6100 Proseminar (also ARTH 4100, VISST 4200)

Spring. 4 credits. Limited enrollment
Undergraduates should enroll in ARTH 4100. I. Dadi.

For description, see ARTH 4100.

## ARTH 6150 Intro to Critical Theory (also ARTH 4150, VISST 4150/6150)

Fall. 4 credits. M. Fernandez.
For description, see ARTH 4150
ARTH 6233 Greek and Roman Art and Archaeology (also ARTH 4233, CLASS 4746/7746)
Fall and spring. 4 credits. A. Alexandridis. For description, see ARTH 4233.

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ARTH 6252 Research Methods in Archaeology (also ARKEO/CLASS 7742)
Spring. 4 credits. S. Manning
For description, see CLASS 7742
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[ARTH 6331 Topics in Islamic Art (also ARTH 4331, NES 4731/6731)
Fall. 4 credits. Next offered 2011-2012. C. Robinson.]
[ARTH 6440 Constructing the Self in the 16th Century (also ARTH 4440)
Spring. 4 credits. Next offered 2011-2012 C. Lazzaro.]

ARTH 6445 Nature, Cultural Landscape, and Gardens in Early Modern Europe (also ARTH 4445)
Fall. 4 credits. C. Lazzaro.
For description, see ARTH 4445.

## ARTH 6508 Exhibiting Cultures:

 Museums, Monuments,Representation and Display (also AMST 4508/6508, ARTH 4508, ASRC 4504/6508)
Spring. 4 credits. Undergraduates should enroll in ARTH 4508. C. Finley.
For description, see ARTH 4508.
ARTH 6602 Buildings and Bodies: Constructing Spaces in Early Modern Art (also ARTH 4602, VISST 4602/6602)
Fall. 4 credits. L. Pincus
For description, see ARTH 4602
ARTH 6690 Comparative Modernities (also ARTH 4690, VISST 4641)
Fall. 4 credits. I. Dadi.
For description, see ARTH 4690.

## [ARTH 6695 Studies in Global Modern Art

 (also ARTH 4495)Fall. 4. credits. Next offered 2011-2012 I. Dadi.]
[ARTH 6696 The Art Market (also ARTH 4696)

Fall. 4 credits. Next offered 2011-2012. C. Finley.

For description, see ARTH 4696.]
[ARTH 6771 Indigenous Art, Film, and New Media: Anti-Colonial Strategies (also ANTHR 4771/6471, ARTH 4771, COML 4771/6771)
Fall. 4 credits. Next offered 2011-2012.
J. Rickard.

For description, see ARTH 4771.]

## [ARTH 6818 Exhibition Seminar (also

 ARTH 4818)Fall. 4 credits. Next offered 2011-2012. A. Pan.]

## HUMAN BIOLOGY PROGRAM

J. Haas, nutritional sciences, director (220 Savage Hall, 255-2665); A. C. Arcadi (anthropology), A. Clark (molecular biology and genetics); P. Cassano (nutritional sciences); B. Finlay (psychology); J. Fortune (physiology/ women's studies), R. Johnston (psychology), K. A. R. Kennedy (ecology and systematics/ anthropology), D. Levitsky (nutritional sciences), D. L. Pelletier (nutritional sciences), W. Provine (ecology and systematics/history), S. Robertson (human development), N. Russell (anthropology), R. Savin-Williams (human development), M. Small (anthropology)

Human biology integrates the methods and theories of many disciplines, such as biological anthropology, nutrition, neurobiology, physiology, psychology, demography, ecology, genetics, and paleontology into a
comprehensive study of biological diversity in Homo sapiens. A central focus of this interdisciplinary approach to the study of the human organism is an understanding of evolutionary processes that explain our biological variation through space and time. The curriculum of study seeks to educate future biological scientists to address the concerns of a society that is becoming more demanding of the scientific community to place its specialized biological knowledge in a
broad context. The human biology curriculum is of particular relevance to undergraduate students in premedical and predentistry programs, biological anthropology, nutrition, human development, ecology and evolutionary biology, psychology, physiology, genetics, and the health-related sciences. It serves to bring together students who have a common interest in humankind as defined from these diverse fields and to provide a forum for studentfaculty interaction on various topics relating to human evolution and biological diversity. Human biology is not a major but a curriculum of study that provides majors in various departments and colleges with a program for selecting elective courses that deal with the biology of the human species Students after their freshman year may develop a program of study in human biology while majoring in any one of a number of different departmental fields.

## Basic Requirements

The requirements for a program of study in human biology are designed to ensure sufficient background in physical sciences and mathematics to enable the student to pursue a wide range of interests in the fields of modern biological sciences, anthropology, and fields related to the evolution and biological diversity of the human species. Adjustments may be made in these requirements, depending on the student's academic background and affiliation with colleges and schools within the university.
The basic requirements are one year of introductory biology (BIOG 1101-1103 plus 1102-1104 or 1105-1106 or BIOG 1107-1108 offered during the eight-week Cornell Summer Session); one year of general chemistry (CHEM 2070-2080 or 2150-2160); one course of college mathematics (MATH 1110, 1106, or 1105 or equivalent); one course in genetics (BIOMG 2800 or 2810); one course in biochemistry (BIOMG 3300, 3310, 3320, or 3330 or NS 3200). It is recommended that students planning graduate study in biological anthropology, psychology, and related fields in the medical and nutritional sciences take a course in statistics. Students should consult their faculty advisor in human biology for help in selecting appropriate courses.
Elective courses should be taken that enable the student to acquire breadth in the subject matter of human biology outside of their departmental major. Therefore only 6 of the 15 human biology elective credits may also fulfill requirements for the major. Courses should be selected that also provide sufficient exposure to the integration of basic anatomical and physiological sciences with the behavior of individuals and groups within the context of evolutionary theory and ecology. The courses listed below are representative of the offerings in human biology and are included to assist the student in organizing a curriculum of study. They are organized into three groups that reflect the three levels of integration noted above: (1) human anatomy and physiology, (2) human behavior, and (3) human evolution and ecology. Students should choose at least one course from each of these areas of integration It is anticipated that the student will include in a program of study at least one of the
laboratory courses offered. It is expected that a student will take a minimum of 15 credits from among these courses.

There is no foreign language requirement for human biology beyond what is dictated by
specific departments and colleges. The requirements for the human biology curriculum are set alongside requirements of the undergraduate majors as these are defined by different departments. Students with independent majors may design their own programs of study under the guidelines provided by their college. Although a student may indicate an interest in human biology in the freshman year and be able to obtain early guidance from a faculty advisor representing the curriculum of study, it is more usual for students to establish their course programs in the first semester of the junior year. The student may request one of the faculty advisors in his or her department who is listed as faculty in human biology to be their principal advisor, or he or she may have an advisor in the department of the major and seek the advice of a human biology faculty advisor in matters pertaining to satisfaction of the requirements. In certain cases a faculty advisor may represent both the major and the curriculum of study in human biology.

## Courses

## Human Anatomy and Physiology

## ANSC 4100 Nutritional Physiology and Metabolism

Fall. 3 credits.
BIOAP 2140 Biological Basis of Sex Differences (also BSOC 2141, FGSS 2140)

Spring. 3 credits.
BIOAP 3110 Introductory Animal Physiology, Lectures (also BIOMS/ VETPH 3460)
Fall. 3 credits.
BIOAP 3190 Animal Physiology
Experimentation (also BIOMS 3190)
Fall. 4 credits.
BIOAP 4270 Fundamentals of Endocrinology (also ANSC 4270) Fall. 3 credits.
BIOAP 4580 Mammalian Physiology (also BIOMS 4580)
Spring. 3 credits.
BIOMG 4340 Applications of Molecular Biology to Medicine, Agriculture, and Industry
Fall. 3 credits.
BIOMG 4390 Molecular Basis of Human Disease
Fall. 3 credits.
BIOMG 4870 Human Genomics Fall. 3 credits.
BIOMI 3310 General Parasitology (also BIOMS 3310)
Spring. 2 credits.
BIOMI 4310 Medical Parasitology (also BIOMS 4310)
Fall. 2 credits.
BIOMS $\mathbf{3 1 5 0}$ Basic Immunology Fall. 3 credits.
FDSC 1500 Food Choices and Issues Spring. 2 credits.

FDSC 4270 Functional Foods and Nutraceuticals
Spring. 2 credits.

FSAD 4390 Biomedical Materials and Devices for Human Body Repair (also BME 5390)
Spring. 2-3 credits.
NS 1150 Nutrition, Health, and Society Fall. 3 credits.
NS 1220 Nutrition and the Life Cycle Spring. 3 credits.

NS 3150 Obesity and the Regulation of Body Weight (also PSYCH 3150) Spring. 3 credits.

NS 3220 Maternal and Child Nutrition Spring. 3 credits.
NS 3310 Physiological and Biochemical Bases of Human Nutrition
Spring. 4 credits.
NS 3410 Human Anatomy and Physiology Spring. 3 credits.

NS 3420 Human Anatomy and Physiology Laboratory
Spring. 2 credits.
NS 3610 Biopsychology of Normal and Abnormal Behavior (also PSYCH 3610)

Spring. 3 credits.
NS 4210 Nutrition for Sport and Exercise Summer. 3 credits.
NS 4310 Mineral Nutrition and Chronic Disease
Fall. 3 credits.
NS 4410 Nutrition and Disease
Fall. 4 credits.
NS 4750 Mechanisms Underlying Mammalian Developmental Defects (also BIOAP 4750)
Spring. 3 credits.
NS 6140 Topics in Maternal and Child Nutrition
Fall. 3 credits.
PSYCH 3220 Hormones and Behavior (also BIONB 3220)
Fall. 3 or 4 credits.
PSYCH 4250 Cognitive Neuroscience
Fall. 4 credits.

## Human Behavior

ANSC 1160 Animal Agriculture and Society: From Food to Medicine Fall. 4 credits.

ANTHR 3302 Anthropology of Everyday Life
Fall. 4 credits.
ANTHR 3305 Anthropology of Parenting Summer. 3 credits.
ANTHR 3390 Primate Behavior and Ecology
Spring. 4 credits.
ANTHR 4390 Topics in Biological Anthropology
Fall. 4 credits.
BIONB 3310 Human Social Behavior and Evolution
Spring. 3 credits.
BIONB 3920 Drugs and the Brain Fall. 4 credits.

BIONB 4205 Topics in Neurobiology and Behavior: Darwinian Medicine Seminar
Summer. 3 credits.
BIONB 4210 Effects of Aging on Sensory and Perceptual Systems (also PSYCH 4310/6310)
Fall. 3 or 4 credits.
BIONB 4270 Darwinian Medicine Fall. 4 credits.
BIONB 4280 Clinical Neurobiology Fall. 3 credits.
BIONB 4310 Genes and Behavior Spring. 3 credits.
BIONB 4960 Bioacoustic Signals in Animals and Man Fall. 3 credits.
BIOPL 2470 Plants and People Spring. 3 credits.
BIOPL 3480 The Healing Forest Spring. 2 credits.
BIOPL 3800 Strategies and Methods in Drug Discovery
Spring. 2 credits.
BIOPL 4420 Current Topics in Ethnobiology
Fall. 2 credits.
BSOC 2051 Ethical Issues in Health and Medicine (also STS 2051)
Fall. 4 credits.
DEA 3250 Human Factors: ErgonomicsAnthropometrics
Fall. 3 credits.
DEA 3500 Human Factors: The Ambient Environment
Spring. 3 credits.
DEA 4700 Applied Ergonomic Methods Spring. 3 credits.
HD 2200 The Human Brain and Mind: Biological Issues in Human Development (also COGST 2200)
Fall. 3 credits.
HD 3200 Human Developmental Neuropsychology
Spring. 3 credits.
HD 3440 Infant Behavior and Development
Fall. 3 credits.
HD 4240 Stress, Emotions, and Health Fall. 4 credits.
HD 4330 Developmental Cognitive Neurosciences (also COGST 4330) Spring. 3 credits.
HD 4570 Health and Social Behavior (also BSOC 4570)
Fall. 3 credits.
NS 2450 Social Science Perspectives on Food and Nutrition Fall. 3 credits.

NS 3470 Human Growth and Development: Biological and Behavioral Interactions (also BSOC 3471, HD 3470)
Spring. 3 credits.

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NS 3610 Biopsychology of Normal and Abnormal Behavior (also PSYCH 3610)
Fall. 3 credits.
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## NS 4570 Health, Poverty, and Inequality

 (also ECON 4740)Fall. 3 credits.
PAM 3800 Human Sexuality
Spring. 4 credits.
PLPA 4160 Microbes and Food: Contemporary Issues Affecting Humanity (also BSOC 4161)
Spring. 4 credits.
PSYCH 2230 Introduction to Biopsychology
Fall. 3 credits.
PSYCH 3260 Evolution of Human Behavior
Spring. 4 credits.
PSYCH 3320 Biopsychology of Learning and Memory (also BIONB 3280)
Spring. 3 credits.
PSYCH 4250 Cognitive Neuroscience (also BIONB 4230)
Fall. 4 credits.
PSYCH 4270 Evolution of Language (also COGST 4270)
Fall. 3 credits.
PSYCH 4380 Social Neuroscience Fall. 4 credits.
PSYCH 4400 To Sleep, Dream, and Remember
Fall. 4 credits.

## Human Evolution and Ecology

ANTHR 1300 Human Evolution: Genes, Behavior, and the Fossil Record Spring. 3 credits.
ANTHR 2200 Early People: The Archaeological and Fossil Record (also ARKEO 2200)
Spring. 3 credits.
ANTHR 3230 Humans and Animals Fall. 4 credits.
ANTHR 3305 Anthropology of Parenting Summer. 4 credits.

ANTHR 3390 Primate Behavior and Ecology
Spring. 4 credits.
ANTHR 4390 Topics in Biological Anthropology
Fall. 4 credits.
BIOEE 2070 Evolution (also HIST 2870, STS 2871)
Fall or summer. 3 credits.
BIOEE 2780 Evolutionary Biology
Fall or spring. 3 or 4 credits.
BIOEE 3710 Human Paleontology (also ANTHR 3710)
Fall. 4 credits.
BIOEE 4640 Macroevolution Spring. 4 credits.
BIOEE 4690 Food, Agriculture, and Society (also BSOC/STS 4691) Spring. 3 credits.

BIOEE 4790 Paleobiology (also EAS 4790)

Spring. 4 credits.
BIOMG 4810 Population Genetics Fall. 4 credits.

BIOMG 4840 Molecular Evolution Spring. 3 credits.

BIOMG 4870 Human Genomics Fall. 3 credits.
BIOMI 4310 Medical Parasitology (also BIOMS 4310)
Fall. 2 credits.
BTRY 4830 Quantitative Genomics and Genetics
Spring. 4 credits.
DSOC 2010 Population Dynamics (also SOC 2202)
Spring. 3 credits.
DSOC 2200 Sociology of Health of Ethnic Minorities (also LSP 2200)
Fall. 3 credits.
DSOC 4100 Health and Survival Inequalities (also SOC 4100)
Fall. 4 credits.
ENTOM 2100 Plagues and People (also BSOC 2100)
Fall 2 or 3 credits.
ENTOM 3070 Pesticides, the Environment, and Human Health Fall. 2 credits.
ENTOM 3520 Medical and Veterinary Entomology
Fall. 3 credits.
ENTOM 4100-4101 Malarial Interventions in Ghana
Fall/spring. 2 credits each semester.
NS 2060 Introduction to Global Health Spring. 3 credits.
NS 2750 Human Biology and Evolution (also ANTHR 2750)
Fall. 3 credits.
NS 3060 Nutritional Problems of Developing Nations
Fall. 3 credits.
NS 3350 Epidemiology in Context Spring. 3 credits.
NS 4130 Nutritional Genomics: Evolution and Environment
Spring. 2 credits.
NS 4500 Public Health Nutrition Spring. 2 credits.
NS 4600 Explorations in Global Health Spring. 3 credits.
NS 6520 Foundations of Epidemiology Spring. 3 credits.
PAM 4380 Economics of Public Health Fall. 3 credits.
PSYCH 3260 Evolution of Human Behavior Spring. 4 credits.
PSYCH 4270 Evolution of Language (also COGST 4270) Fall. 3 credits.

## HUNGARIAN

See "Department of Linguistics" and "Russian."

## INDEPENDENT MAJOR PROGRAM

J. Finlay, director, 55 Goldwin Smith Hall, 2555004.

The Independent Major Program is described in the introductory section of "College of Arts and Sciences."

## IM 3510 Independent Study

Fall or spring. 1-4 credits. Prerequisite:
permission of program director.
IM 4990 Honors Research
Fall or spring. 1-8 credits; max. of 8 credits may be earned for honors research.
Prerequisite: permission of program
director. Each participant must submit brief proposal approved by Honors Committee.

## INDONESIAN

See "Department of Asian Studies."

## INEQUALITY MINOR

363 Uris Hall
www.inequality.cornell.edu
254-8674
The study of inequality lies at the heart of current debates about segregation, affirmative action, the "glass ceiling," globalization, and any number of other contemporary policy issues. In recent years, public and scholarly interest in issues of inequality has intensified, not merely because of historic increases in income inequality in the United States and other advanced industrial countries, but also because inequalities of race, ethnicity, and gender are evolving in equally dramatic and complicated ways.
The inequality minor allows undergraduate students to supplement their studies for their major with a coherent program of courses oriented toward the study of inequality. Although Cornell University is a leading center of scholarship on poverty and inequality, this strength is necessarily distributed across many departments and colleges; an interdisciplinary minor thus allows students to combine these resources into an integrated program of study. The institutional home for the inequality minor is the Center for the Study of Inequality (located at 363 Uris Hall and at www. inequality.cornell.edu).
The inequality minor is appropriate for students interested in government service, policy work, and related jobs in nongovernmental organizations (NGOs) as well as students who wish to pursue post-graduate education in such fields as public policy, economics, government, law, history, psychology, sociology, anthropology, literature, and philosophy. In many of these fields, the study of inequality is becoming increasingly central and fundamental, and the inequality minor can therefore provide students with a valuable and unique foundation for further study.
The inequality minor is an interdisciplinary program that should be completed in conjunction with a major. The minor is open
o students enrolled in any of the seven Cornell undergraduate colleges. When the requirements of the minor are met, a certification is recorded on a student's academic record.

## Minor Requirements

The inequality minor exposes students to a breadth of approaches, methods, and topic areas while also allowing them to tailor a program to their particular interests. The requirements are as follows:

## 1. Overview Course

The required overview course may be selected from any of the eight courses listed below. When possible, the overview course should be completed early in the program, as it serves to define the field and to expose students to areas and topics that might be explored in future course work.

- Comparative Social Inequalities (DSOC 3700 and SOC 3710)
- Families and Social Inequality (PAM/SOC 4470)
- Income Distribution (ILRLE 4410 and ECON 4550)
- Organizations and Social Inequality (ILROB 6260)
- Racial and Ethnic Differentiation (PAM/ SOC 3370)
- Social Inequality (SOC 2208 and DSOC 2090)


## 2. Controversies About Inequality

(DSOC/ILROB/PAM/SOC 2220, GOVT 2225 , PHIL 1950)

This 3-credit course introduces students to current controversies in the study of inequality while facilitating interdisciplinary dialogue between concentrators and faculty members at Cornell University. Students are exposed to research on inequality under way at Cornell presented by guest lecturers and also participate in debates on pressing inequality-relevant issues (e.g., welfare reform, school vouchers, immigration policy, affirmative action).

## 3. Electives

In addition to the overview course and core course, students must select four electives from the list of qualified courses. This list can be viewed on the web site for the Center for the Study of Inequality, www.inequality cornell.edu. Although students may tailor their programs to match their interests, the electives and overview course must be distributed across at least three departments (thereby ensuring breadth in the analytic approaches that are represented).

## 4. Lectures and Seminars

The Center for the Study of Inequality (CSI) hosts occasional lectures and symposia, and minors are expected to attend them when possible. These events will be announced via e-mail and are also listed on the center web site, www.inequality.cornell.edu.

## Enrolling in the Minor

The web site for the Center for the Study of Inequality, www.inequality.cornell.edu, provides current information on the Inequality Minor. For students considering the minor, it
may be useful to schedule a meeting with the assistant to the director (inequality@cornell edu).

## Sample Programs

The inequality minor allows students considerable flexibility in devising programs that reflect their interests. As examples of possible programs, we have listed below sample tracks, each comprising a different set of possible electives. The first program listed below is a general track that provides an overview of the field, while the remaining nine programs are more specialized and focus on particular issues within the field. This sampling of programs is obviously illustrative and does not cover the entire wide range of interests that may be addressed within the minor.

## Globalization and Inequality

As a global economy takes hold, there has been increasing concern that economic inequalities will grow apace, especially NorthSouth inequalities between rich and poor countries. The countervailing "optimistic view" is that between-country disparities will in the long run wither away and render inequality an entirely internal, within-country affair. These and related lines of argumentation can be explored in courses that address such topics as trends in income inequality, theories of economic development, emerging patterns of international migration, and globalization and gender.

1. Overview Course (choose any one)
2. Controversies About Inequality (DSOC/ ILROB/PAM/SOC 2220, GOVT 2225, PHIL 1950)
3. Possible Electives (choose any four):

- Contemporary Controversies in the Global Economy (AEM 2000)
- Economic Development (ECON 3710)
- Education, Inequality, and Development (DSOC 3050)
- Food Policy for Developing Countries (AEM/NS 4450)
- Gender and Globalization (CRP 3650 and FGSS 3600)
- Gender and International Development (CRP/FGSS 6140)
- International Development (DSOC 2050 and SOC 2206)
- International Planning and Development Workshop (CRP 5076)
- Labor Markets and Income Distribution in Developing Countries (ILRIC/LATA 4350)
- Rural Areas in Metropolitan Society (DSOC 3360)
- Sex and Gender in Cross-Cultural Perspective (ANTHR 3421/6421 and FGSS 3210/6210)


## Social Policy and Inequality

In the modern period, inequalities generated in the market and through other social institutions are typically regarded as excessive, and the state is seen as the main tool for redistribution, discrimination abatement, equalization of life chances, and related forms of amelioration. The social policy and inequality track explores the role of the state
in generating and reducing inequalities of various kinds.

1. Overview Course (choose any one)
2. Controversies About Inequality (DSOC/ ILROB/PAM/SOC 2220, GOVT 2225, PHIL 1950)
3. Possible Electives (choose any four):

- Economic Analysis of the Welfare State (ECON 4600 and ILRLE 6420)
- Economics of the Public Sector (PAM 2040)
- Employment Discrimination and the Law (ILRCB 6840)
- Ethics, Public Policy in American Society (PAM 5310)
- Evolving Families: Challenges to Public Policy (PAM/SOC 3360)
- Families, Poverty, and Public Policy (PAM 3350)
- Health and Social Behavior (HD/SOC 4570)
- Human Resource Economics and Public Policy (ILRHR 3600)
- Introduction to Policy Analysis (PAM 2300)
- Introduction to Public Policy (GOVT 3071)
- Organizations and Social Inequality (ILROB 6260)
- Policy Analysis: Welfare Theory, Agriculture, and Trade (AEM 6300 and ECON 4300)
- Public Policy and the African American Urban Community (ASRC 4605)
- Research on Education Reform and Human Resource Policy (ILRHR 6601)
- Risk and Opportunity Factors in Childhood and Adolescence (HD 3530)
- Urban Politics (AMST/GOVT 3111)


## The Ethics of Inequality

Charges of social injustice are often charges of excessive inequality. What are the political philosophical, and legal debates that are relevant to such judgements? Under what conditions should rich countries assist poor ones? At what point should governments step in and redistribute income? When should parents pass on their wealth to their children? The ethics of inequality track examines the conditions under which inequalities might be deemed legitimate or illegitimate, evaluates prevailing inequalities and social policy as against this yardstick, and explores the larger role of values in popular and scholarly judgments about inequality.

1. Overview Course: Inequality, Diversity, and Justice (CRP/GOVT/SOC 2930, PHIL 1930)
2. Controversies About Inequality (DSOC/ ILROB/PAM/SOC 2220, GOVT 2225, PHIL 1950)
3. Possible Electives.

- Contemporary Moral Issues (PHIL 1450)
- Ethical Issues in Health and Medicine (BSOC/STS 2051)
- Ethics (PHIL 2410)
- Ethics and the Environment (BSOC/STS 2061 and PHIL 2460)
- Ethics at Work (ILRCB 4820)
- Ethics, Development, and Globalization (CRP 3011/6011)
- Feminism and Philosophy (FGSS/PHIL 2490)
- Liberty and Justice for All (ILRCB 4880)
- Modern Political Philosophy (GOVT 3625 and PHIL 3460)
- Values in Law, Economics, and Industrial Relations (ILRCB 6070)


## B. Social Science Classes (choose two)

Select courses in consultation with advisor (see list of electives below).

## Poverty and Economic Development

Over the past century, rich countries have of course become yet richer, while less developed countries remain burdened with massive poverty. The courses listed below examine the sources and causes of world poverty, the rise of global anti-inequality social movements, and the types of policy
interventions that might stimulate economic development and reduce poverty.

1. Overview Course (choose any one)
2. Controversies About Inequality (DSOC/ ILROB/PAM/SOC 2220, GOVT 2225, PHIL 1950)
3. Possible Electives (choose any four):

- Applied Economic Development (ECON 3720)
- Economic Development (ECON 3710)
- Families, Poverty, and Public Policy (PAM 3350)
- Gender and International Development (CRP/FGSS 6140)
- Health and Survival Inequalities (DSOC/ FGSS/SOC 4100)
- Health, Poverty, and Inequality: A Global Perspective (ECON 4740 and NS 4570)
- Issues in African Development (CRP 4770/6770)
- Labor Markets, Income Distribution, and Globalization: Perspectives on the Developing World (ILRIC 6350)
- Social Justice and the City: Preparation for Urban Fieldwork (CRP 3310)


## Social Movements and Inequality

The history of modern society may be seen in large part as a history of anti-inequality social movements (e.g., the Enlightenment, socialism, the union movement, the civil rights movement, feminism) interspersed with occasional inequality-inducing reactions (e.g., the post-socialist transition). The social movements track examines the causes, effects, and likely future of such social movements and the reactions they spawn.

1. Overview Course (choose any one)
2. Controversies About Inequality (DSOC/ ILROB/PAM 2220, GOVT 2225, PHIL 1950)
3. Possible Electives (choose any four):

- Comparative Labor Movements in Latin America (ILRIC 6310)
- Prisons (AMST/GOVT 3141)
- Revitalizing Labor: A Comparative Perspective (GOVT 6413 and ILRIC 6320)
- Social Movements (AIS/DSOC/LSP 3110)
- Social Movements in American Politics (AMST/GOVT 3021)
- States and Social Movements (GOVT 6603 and SOC 6600)
- Theories of Industrial Relations Systems (ILRCB 6060)
- Union Organizing (ILRCB 4000)
- Utopia in Theory and Practice (SOC 1150)


## Education and the Reproduction of Inequality

In the contemporary period, the study of inequality has increasingly turned on the study of formal education, as schools have become the main institutional locus for training and credentialing workers and for signaling potential employers about (putative) worker quality. The inequality and education track examines educational institutions and how they are organized, how they generate equality and inequality, and how possible institutional changes (e.g., vouchers, required testing) might affect the reproduction of inequalities.

1. Overview Course (choose any one)
2. Controversies About Inequality (DSOC/ ILROB/PAM/SOC 2220, GOVT 2225, PHIL 1950)
3. Possible Electives (choose any four):

- Education and Development in Africa (ASRC 6600)
- Education Innovation in Africa and the Diaspora (ASRC 4601 and EDUC 4590)
- Education, Inequality, and Development (DSOC 3050)
- Education, Technology, and Productivity (ILRHR 6950)
- Research on Education Reform and Human Resource Policy (ILRHR 6601)
- Schooling, Racial Inequality, and Public Policy in America (SOC 3570)
- Social and Political Context of American Education (AMST/EDUC 2710 and SOC 2710/5710)
- U.S. Education, Oppression, Resistance (ASRC 3604)


## Race and Ethnicity in Comparative Perspective

This program of study examines the many forms of racial and ethnic inequality as revealed across different times and places. When race and ethnicity are examined from an explicitly comparative perspective, it becomes possible to identify regularities and better understand the forces of competition, conflict, and subordination among ethnic and racial groups. The courses listed below address such issues as the causes of discrimination, the implications of residential segregation for inequality, the sources of ethnic and racial differences in income, the effects of anti-inequality reform efforts (e.g., affirmative action), and the possible futures of ethnic and racial stratification.

1. Overview Course (choose any one)
2. Controversies About Inequality (DSOC/ ILROB/PAM/SOC 2220, GOVT 2225, PHIL 1950)
3. Possible Electives (choose any four):

## General Courses

- Ethnicity and Identity Politics: An Anthropological Perspective (AAS 4790 and ANTHR 4749)
- Health and Survival Inequalities (DSOC/ FGSS/SOC 4100)
- Introduction to American Studies: New Approaches to Understanding American Diversity, the 20th Century (AMST 1110)
- Political Identity: Race, Ethnicity, and Nationalism (GOVT 6101)
- Prisons (GOVT/AMST 3141)
- Race and Public Policy (PAM/SOC 3370)
- Racial and Ethnic Politics (AMST/GOVT/ LSP 3191)
- Sociology of Health and Ethnic Minorities (DSOC/LSP 2200)


## Immigration and Ethnicity

- Immigration and a Changing America (DSOC 2750)
- Introduction to American Studies (AMST 1101)
- Population Dynamics (DSOC 2010 and SOC 2202)
- Race and Ethnicity (SOC 1104)
- Strangers and Citizens: Immigration and Labor in U.S. History (ILRCB 3020)


## Case Studies

- African American Social and Political Thought (ASRC 2601)
- African American Women in Slavery and Freedom (AMST/HIST 3030 and FGSS 3070)
- African American Women: 20th Century (AMST/FGSS/HIST 2120)
- Afro-American Historiography (AMST/ HIST 6101)
- Asians in the Americas: A Comparative Perspective (AAS 3030 and ANTHR 3703)
- Introduction to American Indian Studies: Indigenous North America to 1890 (AIS 1100 and AMST 1600)
- Introduction to Asian American History (AAS 2130 and AMST/HIST 2640)
- Introduction to Asian American Studies (AAS 1100)
- Latinos in the United States (DSOC/SOC 2650 and LSP 2010)
- Latinos in the United States: 1898 to the Present (AMST/HIST/LSP 2610)
- Latinos in the United States: Colonial Period to 1898 (AMST 2599 and HIST/LSP 2600)
- Politics and Social Change in Southern Africa (ASRC 4603)
- Public Policy and the African American Urban Community (ASRC 4605)
- The African American Workers, 1865 to 1910: The Rural and Urban Experience (HIST 3750 and ILRCB 3850)
- The African American Workers, 1910 to The Present: Race, Work, and the City (HIST 3760 and ILRCB 3860)


## Family and Inequality

- Black Families and the Socialization of Black Children (ASRC 1600)
- Cultural Sociology (SOC 6300)
- Economics of Family Policy (PAM 6250)
- Evolving Families: Challenges to Public Policy (PAM/SOC 3360)
- Politics and Culture (GOVT 3633 and SOC 2480)
- Social Gerontology: Aging and the Life Course (HD/SOC 2510)
- Women in the Economy (ECON 4750, FGSS 4460, and ILRLE 4450)
- Work and Family in Comparative Perspective (SOC 2203)


## INFORMATION SCIENCE

## The Major

Information Science (IS) is an interdisciplinary field that explores the design and use of information systems in a social context: the field studies the creation, representation, organization, application, and analysis of information in digital form. The focus of Information Science is on systems and their use rather than on the computing and communication technologies that underlie and sustain them. Moreover, Information Science examines the social, cultural, economic, historical, legal, and political contexts in which information systems are employed, both to inform the design of such systems and to understand their impact on individuals, social groups, and institutions.
Courses in the Information Science (IS) major are assigned to three area-based tracks:

Human-Centered Systems This area examines the relationship between humans and information, drawing from humancomputer interaction and cognitive science.

Information Systems This area examines the computer science problems of representing, organizing, storing, manipulating, and accessing digital information.

Social Systems This area studies the cultural, economic, historical, legal, political, and social contexts in which digital information is a major factor.
Students must complete a set of 11 core courses: one introductory course, four courses in mathematics and statistics, and two courses from each of the three IS area-based tracks. Students must also obtain depth in two tracks-a primary and a secondary track-that together best represent their interests. In particular, completion of the major requires four advanced courses from the selected primary track and three advanced courses from the secondary track

## Requirements

Core (11 courses)

1. Introductory (one course):

INFO 1300 Introductory Design and Programming for the Web
2. Math and Statistics (four courses): MATH 1110 Calculus I
either MATH 2310 Linear Algebra with
Applications or MATH 2210 Linear Algebra and Differential Equations
either INFO 2950 Mathematical Methods for Information Science or CS 2800 Discrete Structures

One of the following:
MATH 1710 Statistical Theory and Application in the Real World
HADM 2201 Hospitality Quantitative Analysis

AEM 2100 Introductory Statistics
PAM 2100 Introduction to Statistics
ENGRD 2700 Basic Engineering Probability and Statistics
BTRY 3010 Statistical Methods I
SOC 3010 Evaluating Statistical Evidence
CEE 3040 Uncertainty Analysis in Engineering
ILRST 3120 Applied Regression Methods
ECON 3190 Introduction to Statistics and Probability

PSYCH 3500 Statistics and Research Design
3. Human-Centered Systems (two courses): INFO 2140 Cognitive Psychology
INFO 2450 Communication and Technology
4. Information Systems (two courses)

CS 2110 Object-Oriented Programming and Data Structures*
*CS 2110 is an intermediate programming course that requires prior knowledge of Java. Students who have not learned Java can take CS 1130 after completing INFO 1300 and 2300 or they can take CS 1110
INFO 2300 Intermediate Design and
Programming for the Web
5. Social Systems (two courses):

INFO 2040 Networks
one of the following: INFO 2921 Inventing an Information Society, INFO 3200 New Media and Society, INFO 3561 Computing Cultures

Where options in the core courses exist, the choice will depend on the student's interests and planned advanced courses for the selected primary and secondary tracks.

## Tracks

Students must complete four advanced courses in their primary track and three advanced courses in their secondary track, selected from those listed below.

All courses in the major must be taken for a letter grade. Students must earn a C- or better in all courses used for the major.
Courses taken to satisfy the core course requirements may not be used to fulfill the track requirements.
Additional information on Information Science courses can be found below and in the "Computing and Information Science (CIS)" section of Courses of Study. Course information for all other courses in the major can be found in the relevant departments (e.g., AEM, CS, STS).

## Human-Centered Systems

INFO 3400 Psychology of Online Relationships PSYCH 3420 Human Perception: Applications to Computer Graphics, Art, and Visual Display*

INFO 3450 Human-Computer Interaction Design
INFO 3460 Online Communities
PSYCH 3470 Psychology of Visual Communications

INFO 3650 Technology and Collaboration
PSYCH 3800 Social Cognition*
PSYCH 4160 Modeling Perception and Cognition
INFO 4320 Introduction to Rapid Prototyping and Physical Computing $\dagger$
INFO 4400 Advanced Human-Computer Interaction Design

INFO 4450 Computer-Mediated Communication

INFO 4500 Language and Technology
DEA 4700 Applied Ergonomic Methods

* Students who take PSYCH 3420 may also count its prerequisite, PSYCH 2050, toward the Human-Centered Systems primary or secondary track requirements. Similarly, students who take PSYCH 3800 may also count PSYCH 2800 toward the HumanCentered Systems primary or secondary track requirements. At most, one of PSYCH 2050 or PSYCH 2800 can be counted toward the primary or secondary track requirements
$\dagger$ INFO 4320 may count toward the major as Human-Centered Systems or Information Systems but not both.


## Information Systems

INFO 3300 Data-Driven Web Applications
LING 4424 Computational Linguistics
INFO 4300 Information Retrieval
INFO 4307 Learning From Web Data
INFO 4302 Web Information Systems
CS 4320 Introduction to Database Systems
INFO 4320 Introduction to Rapid Prototyping and Physical Computing
CS 4620 Introduction to Computer Graphics CS 4700 Foundations of Artificial Intelligence LING 4474 Introduction to Natural Language Processing

COMM 4650 Mobile Communication in Public Life

ORIE 4740 Statistical Data Mining
CS 4780 Machine Learning
ORIE 4800 Information Technology
CS 5150 Software Engineering
CS 5430 System Security
INFO 5300 Architecture of Large-Scale Information Systems
CS 5780 Empirical Methods in Machine Learning and Data Mining
*INFO 4320 may count toward the major as Human-Centered Systems or Information Systems but not both.

## Social Systems

SOC 3040 Social Networks and Social
Processes
INFO 3200 New Media and Society
AEM 3220 Internet Strategy
INFO 3490 Media Technologies
INFO 3561 Computing Cultures
INFO 3660 History and Theory of Digital Art
ECON 3680 Game Theory* $\dagger$
STS 4111 Knowledge, Technology, and Property
INFO 4290 Copyright in a Digital Age
ORIE 4350 Introduction to Game Theory*
INFO 4144 Responsive Environments
SOC 4340 Online Social Media and
Information Networks
INFO 4470 Social and Economic Data
ECON 4760 Decision Theory I
ECON 4770 Decision Theory II
HADM 4489 The Law of the Internet and E-Commerce

INFO 5150 Culture, Law, and Politics of the Internet
*Only one of ORIE 4350 and ECON 3680 may be taken for IS credit.
$\dagger$ Students who take ECON 3860 may also count its prerequisite, ECON 3130, toward Social Systems.

## Admission

All potential affiliates are reviewed on a case-by-case basis relative to the following criteria:

- Completion of four core courses, one in each of the core course areas listed above (i.e., Math and Statistics, Human-Centered systems, Information Systems, and Social Systems). Courses must be taken for a letter grade.
- A grade of $C$ or better in each of the completed core courses with an overall GPA for these courses of 2.5 or more.
Courses used in the affiliation GPA computations may be repeated if the original course grade was below a C. The most recent grade will be used for all repeated courses.
Qualifying courses must be taken at Cornell.


## Honors

To qualify for departmental honors, students must apply by the end of their seventh semester and meet the GPA requirement:

- a cumulative GPA greater than or equal to 3.5

OR

- a cumulative GPA greater than or equal to 3.0 in addition to contributions to the Information Science Program through research or other means, as detailed in their application.
Students intending to pursue honors must complete the following course work in addition to their IS major courses:
- Three additional credit hours of IS course work at or above the 5000 level; (graded courses only; no seminars or 2-credit project courses)
- Six credit hours of INFO 4900 Independent Study and Research with one or more IS faculty members, spread over at least two semesters and with grades of A - or better; it is expected that the INFO 4900 research will result in a project report.

Latin designations (appended to the degree) are based on final cumulative GPA, as follows:

- cum laude, 3.50 or above
- magna cum laude, 3.75 or above
- summa cum laude, 4.00 or above


## The Minor

A minor in Information Science is also available to students in the College of Arts and Sciences, CALS, AAP (Architecture and Planning students only), Engineering, Human Ecology, Hotel, and ILR. The minor has been designed to ensure that students have substantial grounding in all three tracks: Human-Centered Systems, Information Systems, and Social Systems. Detailed information about the minor can be found in the CIS section of Courses of Study. Students are also referred to www.infosci.cornell.edu/ ugrad for the most up-to-date description of the minor and its requirements.

## Courses

For complete course descriptions, see the Information Science listings under Computing and Information Science (CIS).
INFO 1300 Introductory Design and Programming for the Web (also CS 1300)

Fall. 3 credits.
For description, see INFO 1300 in CIS section.

## INFO 2040 Networks (also CS 2850,

 ECON 2040, SOC 2090) (SBA-AS)Fall. 4 credits.
For description, see ECON 2040.
INFO 2140 Cognitive Psychology (also COGST 2140/6140, PSYCH 2140) (KCM-AS)
Spring. 4 credits. Limited to 175 students.
Prerequisite: sophomore standing.
For description, see PSYCH 2140.
INFO 2300 Intermediate Design and Programming for the Web (also CS 2300)

Spring. 3 credits. Prerequisite: INFO 1300 strongly recommended. Must be taken before INFO 3300 .
For description, see INFO 2300 in CIS section.
[INFO 2310 Topics in Web Programming and Design]

INFO 2450 Communication and Technology (also COMM 2450) (SBA-AS)
Fall, summer. 3 credits.
For description, see COMM 2450.
INFO 2921 Inventing an Information Society (also AMST/ECE/ENGRG 2980, HIST 2920, STS 2921) (HA-AS)
Spring. 3 credits.
For description, see ENGRG 2980.

## INFO 2950 Mathematical Methods for

 Information ScienceSpring. 4 credits. Corequisite: MATH 2310 or equivalent.
For description, see INFO 2950 in CIS section.

INFO 3200 New Media and Society (also COMM 3200) (CA-AS)
Spring. 3 credits.
For description, see COMM 3200.

## [INFO 3300 Data-Driven Web Applications

 (also CS 3300)Spring. 3 credits. Prerequisite: CS 2110 and (INFO 2300 or permission of instructor).
Next offered 2011-2012.
For description, see INFO 3300 in CIS section.]

## INFO 3400 Psychology of Online

Relationships (also COMM 3400)
Fall. 3 credits. Prerequisite: COMM/INFO 2450.

For description, see COMM 3400.
INFO 3450 Human-Computer Interaction Design (also COMM 3450)
Fall. 3 credits. Pre- or corequisite: INFO 2450.

For description, see COMM 3450.
INFO 3490 Media Technologies (also COMM 3490, STS 3491) (HA-AS)
Spring. 3 credits. Offered odd-numbered years.
For description, see COMM 3490.
INFO 3561 Computing Cultures (also COMM/VISST 3560, STS 3561) (CAAS)
Spring. 4 credits. No technical knowledge
of computer use presumed or required.
For description, see STS 3561.
INFO 3650 Technology and Collaboration (also COMM 3650)
Spring. 3 credits. Prerequisite: COMM/INFO 2450.

For description, see COMM 3650.
[INFO 3660 History and Theory of Digital Art (also ARTH/VISST 3650) (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
For description, see ARTH 3650.]

## INFO 4144 Responsive Environments

Spring. 4 credits.
For description, see ARTH 4144.
[INFO 4290 Copyright in the Digital Age (also COMM 4290) (CA-AS)
Fall. 3 credits. Offered odd-numbered
years; next offered 2011-2012.
For description, see COMM 4290.]
INFO 4300 Information Retrieval (also CS 4300)

Fall. 3 credits. Prerequisite: CS 2110 or equivalent.
For description, see INFO 4300 in CIS section.

## INFO 4302 Web Information Systems

 (also CS 4302)Spring. 3 credits. Prerequisites: CS 2110 and some familiarity with web site technology.
For description, see INFO 4302 in CIS section.
INFO 4307 Learning From Web Data
Fall. 3 credits. Prerequisites: CS 2110 and
INFO 2950, or graduate standing.
For description, see INFO 4307 in CIS section.

## INFO 4320 Introduction to Rapid

Prototyping and Physical Computing
Spring. 3 credits. Prerequisites: INFO 1300 or equivalent or permission of instructor.
Materials fee: $\$ 250$.
For description, see INFO 4320 in CIS section.

INFO 4400 Advanced Human-Computer Interaction Design (also COMM 4400)
Spring. 3 credits. Prerequisite: COMM/
INFO 3450.
For description, see COMM 4400.

## INFO 4450 Computer-Mediated

 Communication (also COMM 4450)Spring. 3 credits. Prerequisites: COMM/ INFO 2450.
For description, see COMM 4450.

## INFO 4470 Social and Economic Data

 (also ILRLE 4470)Spring. 4 credits. Prerequisites: one semester of calculus, IS statistics
requirement, at least one upper-level social
science course, or permission of instructor.
For description, see INFO 4470 in CIS section.

## INFO 4500 Language and Technology (also COMM 4500)

Spring. 3 credits. Prerequisite: COMM/
INFO 2450 or permission of instructor.
For description, see COMM 4500.

## INFO 4900 Independent Reading and

 ResearchFall, spring. 1-4 credits.
Independent reading and research for undergraduates.

## [INFO 5150 Culture, Law, and Politics of the Internet] <br> INFO 5300 The Architecture of LargeScale Information Systems (also CS 5300) <br> Spring. 4 credits. Prerequisite: CS/INFO 3300 or CS 4320. <br> For description, see INFO 5300 in CIS section.

## INFO 6140 Cognitive Psychology (also

 COGST 6140, PSYCH 2140/6140)Spring. 4 credits.
For description, see PSYCH 2140.

## INFO 6300 Advanced Language

 Technologies (also CS 6740)Fall. 3 credits. Prerequisite: permission of instructor. Neither CS/INFO 4300 nor CS
4740 are prerequisites.
For description, see CS 6740 in CIS section.

## INFO 6302 Web Information Systems

Spring. 3 credits. Prerequisites: CS 2110
and some familiarity with website
technology.
For description, see INFO 4302 in CIS section.

## INFO 6307 Learning From Web Data

Fall. 3 credits. Prerequisites: CS 2110 and
INFO 2950, or graduate standing.
For description, see INFO 4307 in CIS section.

## [INFO 6341 Information Technology in

 Sociocultural Context (also STS 6341)]INFO 6400 Human-Computer Interaction Design (also COMM 6400)
Spring. 3 credits. Prerequisite: graduate standing or permission of instructor.
For description, see COMM 6400.

## INFO 6450 Computer-Mediated

 Communication (also COMM 6450) Spring. 3 credits. Prerequisite: graduate standing or permission of instructor. For description, see COMM 6450.INFO 6500 Language and Technology (also COMM 6500)
Spring. 3 credits. Prerequisite: graduate standing or permission of instructor. For description, see COMM 6500.
[INFO 6648 Speech Synthesis (also LING 6648)

Spring. 4 credits. Prerequisite: LING 4401,
4419, or permission of instructor. Next
offered 2011-2012.
For description, see LING 6648.]

## INFO 6850 The Structure of Information

 Networks (also CS 6850)Spring. 4 credits. Prerequisite: CS 4820.
For description, see INFO 6850 in CIS section.

## INFO 7050 Graduate Seminar

Fall, spring. 1 credit.
For description, see INFO 7050 in CIS section.

## INFO 7090 IS Colloquium

Fall, spring. 1 credit. For staff, visitors, and graduate students interested in information science.

## INFO 7900 Independent Research

Fall, spring. Variable credit. Prerequisite: permission of an information science
faculty member.
Independent research for M.Eng. students and

## pre-A exam Ph.D. students.

## INFO 9900 Thesis Research

Fall, spring. Variable credit. Prerequisite:
permission of an information science
faculty member.
Thesis research for post-A exam Ph.D. students.

## ITALIAN

See "Department of Romance Studies."

## JAPANESE

See "Department of Asian Studies."

## JAVANESE

See "Department of Asian Studies."

## PROGRAM OF JEWISH STUDIES

D. Starr, director (Modern Hebrew and Arabic Literature; Critical Theory, Middle Eastern Film), L. Adelson (German-Jewish Literature and Culture), R. Brann (Judeo-Islamic Studies), V. Caron (Modern French and EuropeanJewish History), H. Case (History of Modern East-Central Europe), M. Diesing (Yiddish Language and Linguistics), Z. Fahmy (Modern Middle Eastern History), K. Haines-Eitzen (Early Judaism and Early Christianity), G. Herman (Jewish History, Culture, and Literature), R. Hoffmann (Holocaust Studies), P. Hohendahl (German Literature), P. Hyams (Medieval Jewish History), A. Kleinerman (Assyriology), D. LaCapra (Holocaust Studies), M. Migiel (Italian Literature), C. Monroe (Near Eastern Mediterranean Studies; Nautical Archaeology), L. Monroe (Hebrew Bible Studies), D. I. Owen (Ancient Near Eastern History and Archaeology; Assyriology; Biblical History and Archaeology), R. Polenberg (American-Jewish History), D. Powers (JudeoIslamic Studies), E. Rebillard (Jews in the Roman Empire), C. Robcis (European Cultural and Intellectual History), N. Scharf (Hebrew Language), D. Schwarz (Anglo-Jewish

Literature), E, Shapiro (Jews in American Literature and Film), G. Shapiro (Russian Jewry), S. Shoer (Hebrew Language), P. Stevens (curator), S. Zacher (Old and Middle English literature), J. Zorn (Biblical Archaeology). Emeritus: D. Bathrick, N. Furman, J. Porte, E. Rosenberg, Y. Szekely.

The Program of Jewish Studies was founded as an extension of the Department of Semitic Languages and Literatures, now the Department of Near Eastern Studies, in 1973 and attained status as an intercollegiate program in 1976.
The program has grown out of the conviction that Judaic civilization merits its own comprehensive and thorough treatment and that proper understanding of any culture is inconceivable without adequate knowledge of the language, literature, and history of the people that created it. Accordingly, the offerings in the areas of Jewish languages and literatures have been considerably expanded, and courses in ancient, medieval, and especially modern Jewish history and culture have been added to the program.
It is a broadly based, interdisciplinary program, bringing together faculty from various Cornell departments and colleges.
The Program of Jewish Studies supports teaching and research in the many areas of Jewish Studies. It is a secular, academic program, whose interests are diverse and cross-cultural. The program recognizes its special relationship to teaching and research in classical Judaica and Hebraica pursued by the members of the Department of Near Eastern Studies, with particular emphasis on the interrelationship between Judaism, Christianity, and Islam.
It presently enables students to obtain basic instruction and specialization in the fields of Semitic languages; the Hebrew Bible; medieval and modern Hebrew literature; ancient, medieval, and modern European and Middle Eastern Jewish history; and Holocaust studies. In some of these fields students may take courses on both graduate and undergraduate levels. Faculty throughout the university provide breadth to the program by offering courses in related areas of study.
For more information, please visit www.arts. cornell.edu/jwst/index.html.

## Courses Offered

JWST 1101-1102 Elementary Modern
Hebrew I and II (also NES 1101-1102)
1101, fall; 1102, spring. 4 credits. Letter grades only. S. Shoer.
For description, see NES 1101-1102.

## JWST 1103 Elementary Modern Hebrew

 III (also NES 1103)Fall. 4 credits. S. Shoer.
For description, see NES 1103.

## JWST 1104 Beginners Intensive Hebrew (also NES 1104) <br> Summer. 3 credits. S. Shoer. <br> For description, see NES 1104.

## JWST 1105 Hebrew Summer Follow-Up

(also NES 1105)
Fall. 1 credit. S. Shoer.
For description, see NES 1105.

JWST 2100 Intermediate Modern Hebrew: Special Topics in Hebrew (also NES 2100) @
Spring. 4 credits. Satisfies Option 1.
N. Scharf.

For description, see NES 2100.
JWST 2125 Mishnaic Hebrew (also NES 2125)

Spring. 3 credits. G. Herman.
For description, see NES 2125.
JWST 2271 Yiddish Linguistics (also LING 2241) (SBA-AS)
Fall. 4 credits. M. Diesing.
For description, see LING 2241.
JWST 2350 Antisemitism and Crisis Modernity (also HIST 2350) (HA-AS)
Fall. 4 credits. V. Caron.
For description, see HIST 2350.
JWST 2567 Daily Life in Ancient Egypt and Mesopotamia (also NES/ARKEO 2567) @ \# (CA-AS)

Fall. 3 credits. A. Kleinerman.
For description, see NES 2567.
[JWST 2611 Prophecy in Ancient Israel (also NES/RELST 2611)
Spring. 3 credits. Next offered 2011-2012.

> L. Monroe.]
[JWST 2629 Introduction to New Testament and Other Early Christian Literature (also NES 2629, RELST/ CLASS 2613) @ \# (HA-AS)
Spring. 3 credits. Next offered 2011-2012.
K. Haines-Eitzen.]

JWST 2644 Introduction to Judaism (also RELST/NES 2644) @ \# (HA-AS)
Spring. 3 credits. L. Monroe.
For description, see NES 2644.
JWST 2650 Ancient Iraq (also NES/ ARKEO 2650)
Spring. 3 credits. D. I. Owen.
For description, see NES 2650.
JWST 2651 Judaism, Christianity, and Islam (also COML 2310, RELST/NES 2651) @ \# (HA-AS)

Fall. 3 credits. K. Haines-Eitzen.
JWST 2661 Ancient Ships and SeafaringIntroduction to Nautical Archaeology (also ARKEO/NES 2661) @ \# (HA-AS)
Fall. 4 credits. C. Monroe.
For description, see NES 2661.
JWST 2668 Ancient Egyptian Civilization (also ARKEO/NES 2668) @ \# (HA-AS)
Spring 3 credits. C. Monroe
For description, see NES 2668.
[JWST 2674 History of the Modern Middle East: 19th-20th Centuries (also GOVT 2747, NES 2674) @ \# (HA-AS)
Fall. 3 credits. Next offered 2011-2012.
Z. Fahmy.]

JWST 2677 The Jewish Galilee in Late Antiquity (also ARKEO/NES/RELST 2677, CLASS 2637) @ \# (HA-AS)
Fall. 3 credits. G. Herman.
For description, see NES 2677.
JWST 2724 Introduction to the Hebrew Bible (also NES/RELST 2724) @ \# (LA-AS)
Fall. 3 credits. L. Monroe.
For description, see NES 2724.

JWST 2735 Jews and Arabs In Contact and Conflict (also NES 2735, COML 2450) @ (CA-AS)

Spring. 3 credits. D. Starr.
For description, see NES 2735
[JWST 2793 MiddIe Eastern Cinema (also FILM 2930, NES 2793, VISST 2193) @ (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Starr.]

JWST 2850 From Medievalism to Modernity (also HIST 2850) \# (HA-AS)
Spring. 4 credits. V. Caron.
For description, see HIST 2850.
JWST 2920 Modern European Jewish History 1789-1948 (also NES 2620, HIST 2910) (HA-AS)
Fall. 4 credits. V. Caron.
For description, see HIST 2910.
JWST 3101 Advanced Intermediate Modern Hebrew: Aspects of Israeli Society (also NES 3101) @ (CA-AS)
Fall. 4 credits. Satisfies Option 1.
N. Scharf.

For description, see NES 3101.
JWST 3102 Advanced Intermediate Hebrew II: Aspects of Israeli Culture (also NES 3102) @ (CA-AS)
Spring. 4 credits. Satisfies Option 1.
N. Scharf.

For description, see NES 3102.
[JWST 3103 Love, Wine, Death, and In Between (also NES 3103) @ \# (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Shoer.

For description, see NES 3103.]
JWST 3108 Intensive Conversational Hebrew II (also NES 3108)
Fall. 2 credits. Limited to 15 students.
Prerequisite: NES 3102, 3105, or permission
of instructor; non-native speakers only.
N. Scharf.

For description, see NES 3108.
JWST 3342 Death of God (also FREN/ HIST/RELST 3342, GERST 3542) (HA-AS)
Fall. 4 credits. C. Robcis.
For description, see HIST 3342.
JWST 3430 How to Understand Understanding? Paul Celan's Poetry and Interpretation (also GERST 3430) (LA-AS)
Spring. 4 credits. Satisfies Option 1.
A. Glazova.

For description, see GERST 3430.
JWST 3505 By the Rivers of Babylon (also ARKEO/NES/RELST 3505)
Spring. 4 credits. G. Herman.
For description, see NES 3505.
[JWST 3524/6524 Israelite Prophecy (also RELST/NES 3524) @ \# (LA-AS)
Spring. 4 credits. Next offered 2011-2012.
L. Monroe.

For description, see NES 3524.]
JWST 3588 Biblical Archaeology (also ARKEO/NES/RELST 3588) @ \# (CA-AS)
Spring. 4 credits. L. Monroe.
For description, see NES 3588.
[JWST 3619 Near Eastern Christianities, 50-650 ce (also NES/RELST 3619) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
K. Haines-Eitzen.]
[JWST 3629 Introduction to New Testament and Other Early Christian Literature (also NES/CLASS/RELST 3629)

Spring. 1 credit. Prerequisite: concurrent or past enrollment in NES 2629 or one year of ancient Greek. Next offered 2011-2012. K. Haines-Eitzen.]
JWST 3661 Sumerian Language and Culture I (also ARKEO/NES 3661/6661, JWST 6661) @ \# (HA-AS)
Fall. 4 credits. D. I. Owen.
For description, see NES 3661.
JWST 3662 Sumerian Language and Culture II (also NES/ARKEO 3662/6662)
Spring. 4 credits. D. I. Owen.
For description, see NES 3662.

## [JWST 3665 Ancient Iraq II (also ARKEO/

 NES 3665) \# (HA-AS)Fall. 4 credits. Next offered 2011-2012.
D. I. Owen.]

JWST 3690 History and Culture of Ur (also ARKEO/NES 3690) @ \# (HA-AS)
Fall. 4 credits. D. I. Owen.
For description, see NES 3690.
[JWST 3697 Israeli-Palestinian Conflict (also GOVT 3977, NES 3697, HIST/ SOC 3970) @ (HA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Brann.]

## [JWST 3700 History of the Holocaust

 (also HIST 3700) (HA-AS)Spring. 4 credits. Next offered 2011-2012.
V. Caron.

JWST 3720 Women in Ancient Israel (also NES/RELST 3720, FGSS 3220)
Fall. 4 credits. L. Monroe.
For description, see NES 3720.
[JWST 3799 Imagining the Other: Jews and Arabs in Contemporary Literature and Film (also COML/NES 3799) @ (LA-AS)

Fall. 4 credits. Next offered 2011-2012.
D. Starr.]
[JWST 4101 Modern Hebrew Literature (also NES 4101) @ (LA-AS)
Spring. 4 credits. Next offered 2011-2012.
D. Starr.]
[JWST 4102 Biblical Hebrew ProseGenesis (also NES/RELST 4102) @ \# (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
L. Monroe.]
[JWST 4170 History of Jews: Modern France (also HIST 4170) (HA-AS)
Spring. 4 credits. Next offered 2011-2012.
V. Caron.]
[JWST 4540 Maimonides and Averroes (also NES/RELST 4540, SPAN 4380) @ \# (CA-AS)
Spring. 4 credits. Next offered 2011-2012.
R. Brann.

For description, see NES 4540.]

## [JWST 4550 The World of the Phoenicians (also NES 4550) @ \# (CA-AS)

Spring. 4 credits. Next offered 2011-2012. C. Monroe.]

## JWST 4580 Imagining the Holocaust (also COML 4830, ENGL 4580,

 GERST 4570) (LA-AS)Spring. 4 credits. D. Schwarz.
For description, see ENGL 4580.

## JWST 4640 Suffering and the Early Christian Imagination (also NES/ RELST 4640) <br> Spring. 4 credits. K. Haines-Eitzen. For description, see NES 4640.

## [JWST 4644 Late Bronze Age World of Ugarit (also ARKEO/HIST/NES 4644, CLASS 4744/7744) @ \# (HA-AS)

Spring. 4 credits. Next offered 2011-2012. C. Monroe.

For description, see NES 4644.]

## JWST 4670 Wealth and Power in Early

 Civilizations (also NES 4670) @ \# (HA-AS)Fall. 4 credits. C. Monroe.
For description, see NES 4670.

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JWST 4675 Topics in Modern European
        Intellectual History: Trauma in
        Literature, History, and Film (also
        COML/HIST 4741/6730) (also HA-AS)
    Fall. }4\mathrm{ credits. D. LaCapra.
For description, see HIST 4741.
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## JWST 4738 Imagining the Mediterranean (also COML 4960, NES 4738) @ (LA-

``` AS)
Spring. 4 credits. G. Holst-Warhaft. For description, see NES 4738.
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## JWST 4755 Rabbinic Literature in

 Translation (also NES 4755, RELST 4755) @ \# (LA-AS)Fall. 4 credits. G. Herman.
For description, see NES 4755.

## [JWST 4784 Israeli Nation: Self and

 Literature (also NES 4784)Spring. 4 credits. Next offered 2011-2012. D. Starr.]

## JWST 4991-4992 Independent Study-

 UndergraduateFall and spring. Variable credit. Staff.

## JWST 6150 Jews in German Culture

 since 1945 (also GERST 6150)Spring. 4 credits. L. Adelson.
For description, see GERST 6150.

## JWST 6642 Topics in Ancient History (also HIST 6300, NES 6642, CLASS 7682) <br> Spring. 4 credits. E. Rebillard.

Topic: Sharing the City: Pagans, Jews and Christians in Late Antiquity. For description, see CLASS 7682.

## JOHN S. KNIGHT INSTITUTE FOR WRITING IN THE DISCIPLINES

The director of the John S. Knight Institute is Paul Lincoln Sawyer, professor in the
Department of English. Katherine Gottschalk, senior lecturer in the Department of English, is the director of First-Year Writing Seminars. The institute's offices are in 101 McGraw Hall, 255-4061.
T. Carrick (Writing Workshop), D. Evans (Writing Workshop), D. Faulkner (Writing Workshop), K. Hjortshoj (Writing in the Majors), J. Martin (Writing Workshop), J. Pierpont (Writing Workshop), E. Shapiro (Writing in the Majors).
The John S. Knight Institute helps to coordinate the teaching of writing in all undergraduate schools and colleges (the School of Industrial and Labor Relations; the School of Hotel Administration; and the colleges of Agriculture and Life Sciences; Architecture, Art, and Planning; Arts and Sciences; Engineering; and Human Ecology). The program administers writing seminars for first-year and upperclass students, disciplinebased seminars in its Writing in the Majors Program, tutorial writing classes, and seminars in the teaching of writing. More than 30 academic departments and programs participate in the program.

## First-Year Writing Seminars

For first-year students the Institute offers the First-Year Writing Seminars-more than 125 different courses in the humanities, social sciences, expressive arts, and sciences. Through introductory work in a particular field of study, seminars help students write good English expository prose-prose that, at its best, is characterized by clarity, coherence, intellectual force, and stylistic control. All seminars pursue this common aim through small classes and adherence to a programwide set of guidelines:

- Seminars should require at least six—and at most nine-formal essays on new topics, totaling 25-30 pages of polished prose.
- No fewer than three of the six to nine required essays should go through a process of development under the instructor's guidance (e.g., revision, peer review, responses to readings, conferences).
- All seminars should spend ample classroom time on work directly related to writing.
- Reading assignments in the course subject should be kept under ca. 75 pages per week to permit regular, concentrated work on writing.
- All students should meet in at least two individual conferences with the instructor.
Offerings change from semester to semester. Each semester's First-Year Writing Seminars are described on the web at www.arts.cornell. edu/knight_institute/FWS/FWS.htm.
First-Year Writing Seminars aim to ensure that students will enjoy the benefits of small classes. Instead of pre-enrolling in their writing courses, students request placement in one of five writing seminars by filling out an electronic ballot in August for the fall semester and in November for the spring semester. Over 95 percent receive one of their top three choices. After placement by ballot, students may change their writing seminars via electronic add and drop. Writing seminars may be added only during the first two weeks of each semester.
The colleges and the schools served by the Institute accept First-Year Writing Seminars in fulfillment of their individual graduation requirements in categories referred to
variously as "first-year writing," "oral and written expression," and the like. The Institute does not decide whether students may graduate: it makes courses available. Individual colleges and schools administer their own graduation requirements.
Currently, most undergraduate students are required to take two First-Year Writing Seminars. Architecture majors, however, need only one. Hotel students fulfill their requirement through HADM 1165 in one semester plus one First-Year Writing Seminar in the other. Agriculture and Life Sciences students can take First-Year Writing Seminars or choose from among a variety of other courses to fulfill their requirement.
All students who score 5 on the Princeton Advanced Placement Examination in English receive 3 credits. Such credits are awarded automatically; no application to the John S. Knight Institute or the Department of English is necessary. How these credits may be applied to first-year writing or other distribution requirements depends on the student's college and score. All students who score 5, except Architecture majors, may apply their 3 credits toward the writing requirements of their college. Of students who score 4, only Agriculture and Life Sciences students may apply their 3 credits toward the writing requirements of their college. Students should always consult their college registrars to be certain that they understand their writing requirements.
Students who have already taken a First-Year Writing Seminar, or who score 4 or 5 on the Princeton AP exam, or 700 or better on the English Composition or CEEB tests, may enroll, space permitting, in the following upper-level First-Year Writing Seminar: ENGL 1270.

Although there are no exemptions from college writing requirements, some students may fulfill all or part of their college's writing requirement through transfer credits or writing-course substitutions.
For work done at other institutions to be accepted as equivalent to First-Year Writing Seminars, students should demonstrate that they have done a reasonably equivalent amount of writing in a formal course (e.g., it is not sufficient to write one 30-page term paper.) Students in the College of Engineering and the College of Arts and Sciences must file an "application for transfer evaluation" to request writing credit for such courses; students in other colleges should consult their college registrars.
In unusual circumstances, upper-level students may petition to use a Cornell writing course other than a First-Year Writing Seminar to satisfy part of their writing requirement. The John S. Knight Institute must approve all such petitions in advance.
For information about the requirements for First-Year Writing Seminars and descriptions of seminar offerings, see the John S. Knight Institute web site at www.arts.cornell.edu/ knight_institute.

## ENGL 2880-2890 Expository Writing

Expository Writing helps students write with more confidence and skill in all disciplines. It is open to Cornell sophomores, juniors, and seniors who have completed their colleges' first-year writing requirements or have the permission of the instructor. ENGL 2880-2890
courses explore themes shaped by a genre or use of expository writing, by the common concerns of several disciplines, or by an interdisciplinary topic intimately related to the written medium. Although English department instructors make up roughly half the staff, the Knight Institute's involvement enables the course to extend and diversify its offerings in separately defined, 18 -member sections that appeal to the varied interests and needs of students in many areas of study. Students may choose among a variety of sections focusing on such themes as "A Boy Named Sue: Biology, Gender, and Sexual Orientation," "Urban Imaginings," and "TV Nation: Television and Identity in America." All staff are selected because their special interests and their training and experience in First-Year Writing Seminars promise original course design and superior performance.

## Teaching Writing

Each summer and fall, the institute offers instruction in the teaching of writing to new staff members in the First-Year Writing
Seminars and other interested instructors. Teaching Writing, offered in the summer or fall, is primarily a course for graduate students. The program also sponsors a summer apprenticeship program for a limited number of graduate students, and a summer seminar for faculty members interested in the teaching of writing.

## WRIT 7100 Teaching Writing

Summer and fall. 1 credit. S-U grades only. This course prepares graduate instructors of Cornell's First-Year Writing Seminars to teach courses that both introduce undergraduates to particular fields of study and help them develop writing skills they will need throughout their undergraduate careers. Seminar discussions and readings on pedagogical theories and practices provide an overview of the teaching of writing within a disciplinary context. Participants develop written assignments to be used in their own FirstYear Writing Seminars.

## Writing in the Majors

Spanning the humanities, social sciences, and sciences, the Knight Institute's upper-level, Writing in the Majors courses do not satisfy formal writing requirements, and faculty participation is entirely voluntary. While all Writing in the Majors courses include extensive writing, usually with guided revision, they also emphasize other forms of active, interactive learning essential to scholarship and careers in the disciplines. Writing in the Majors initiatives have included individual and collaborative research projects, collaborative writing, oral presentations, group oral exams, field studies, authentic student-designed laboratory experiments, debates, analytical and critical reading exercises, topical symposia, conversation groups, student-led discussions, poster sessions, and many kinds of informal writing, including online exchanges. Varying radically in design and size, from enrollments of fewer than 10 students to more than 300, Writing in the Majors courses over the past 20 years have involved collaboration with 175 faculty members and more than 350 graduate teaching assistants to enrich learning in 101 upper-level courses offered in 34 departments. Since 2007-2008, the Knight Institute has substantially increased the number of Writing in the Majors courses offered at the 2000 level. These courses are intended to provide students who are still in the early stages of
their academic careers with opportunities to engage with disciplinary subject matter through writing.
WRIT 7101 Writing in the Majors Seminar
Fall and spring. 1 credit. S-U grades only. Teaching assistants assigned to Writing in the Majors projects enroll in a six-week course on teaching strategies in advanced instruction.

## Writing Workshop

The John S. Knight Institute offers a First-Year Writing Seminar, "An Introduction to Writing in the University," for first-year students (or transfer students needing writing credit) through the Writing Workshop. This course is designed for students who have had little training in composition or who have serious difficulty with writing assignments.
WRIT 1370 and 1380 are graded S-U only, and students receiving a grade of $S$ are granted credit toward their college writing requirements. Students who think this course might be appropriate including non-native speakers of English scoring less than 600 on the Test of English as a Foreign Language (TOEFL) should attend the assessment sessions offered by the Writing Workshop during orientation week each fall. The workshop also offers a Walk-In Service (see below) to help students work on writing assignments. The workshop director is Joe Martin, senior lecturer in the Writing Workshop. The workshop offices are in 174 Rockefeller Hall, 255-6349.

## The Writing Walk-In Service

Through the Writing Walk-In Service, the Writing Workshop offers tutoring assistance in writing to any student who needs help with a writing project. The Writing Walk-In Service has tutors available during the academic year in 174 Rockefeller Hall and North and West Campus residential areas. The director is Tracy Carrick. For information, contact the Writing Workshop, 174 Rockefeller Hall, 255-6349.
WRIT 1011 Academic Writing
Summer. 3 credits. Not a First-Year Writing Seminar. (Will appear on transcript; does not count toward graduation). Prerequisite: placement by exam. Staff.
Academic writing with an emphasis on improving organization, grammar, vocabulary, and style through the writing and revision of short papers. Frequent individual conferences supplement class work. This course is suitable for students who are still in high school or have just graduated and whose schooling has been in languages other than English.

## WRIT 1370-1380, 1340 An Introduction

 to Writing in the University1370, fall; 1380, spring; 1340, summer. 3 credits each semester. A First-Year Writing Seminar. Limited to 12 students per sec in fall and spring, 6 in summer. Prerequisite: permission of instructor. S-U grades only. This writing seminar is designed for students who need more focused attention to master the expectations of academic writing. Emphasizes the analytic and argumentative writing and critical reading essential for university-level work. With small classes and weekly student/teacher conferences, each section is shaped to respond to the needs of students in that particular class.

WRIT 1390 Special Topics in Writing Fall and spring. 3 credits. Cannot fulfill writing or distribution requirements. Prerequisites: undergraduate standing; permission of instructor. S-U grades only. These courses allow students the opportunity to resolve significant writing challenges that have interfered with their academic progress Students must have ongoing writing projects on which to work. Instruction is in weekly tutorials. Interested students should go to 174 Rockefeller for more information.

## WRIT 7102 Graduate Writing Workshop

 Fall and spring. 3 credits. Limited to 10 students per sec. Prerequisites: graduate standing; permission of instructor. S-U grades only.This workshop gives graduate students the opportunity to resolve significant writing challenges that have interfered with their academic progress. Students must have ongoing writing projects to work on. Instruction is in weekly tutorials. Interested students should go to 174 Rockefeller Hall for further information.

## WRIT 7103 Work in Progress

Fall and spring. 3 credits. Limited to 10 students per sec. Prerequisites: graduate standing; permission of instructor. S-U grades only.
A writing seminar for graduate students who have substantial work in progress, such as professional articles, theses, or dissertations. In the first two weeks students discuss rhetorical and stylistic features of scholarly writing and methods of composing and revising, with relevant readings. Remaining weeks emphasize exchange and discussion of drafts, supplemented by individual conferences. The course goal is the improvement and completion of student writing projects.

## Courses in Community Literacy

Writing outreach has become an increasingly important feature of writing programs in various campuses. Cornell's rich opportunities in service learning are formed on the assumption that learning by doing has a valid place in a university curriculum; they include volunteer activities and for-credit courses that span colleges and departments, as well as a concentration in Public Service Scholarship, which is sponsored by the Public Service Center. The courses listed below all concern writing as an interaction with community members outside Cornell, in the form of oral interviews, mentoring, or other collaborative work. For other writing courses with outreach components, see the First-Year Writing Seminar WRIT 1400 Common Ground: Cornell and Ithaca Students in Collaboration and ENGL 2890.106 Fieldwriting: Telling Community Stories, a section of ENGL 2890 Expository Writing. For opportunities to receive training and practice as a writing tutor working with Cornell undergrads, contact Tracy Hamler Carrick, director of the Writing Walk-In Service.

## WRIT 4100 Learning Behind Bars

Fall and spring. 4 credits. P. Sawyer. A service learning course offered in conjunction with the Basic Writing course of the Prison Education Project. Course work includes tutoring inmates once a week at Auburn Correctional Facility in addition to regular class meetings at Cornell.

WRIT 4130 Service Learning and Democratic Citizenship: The Literature of Social Action and Social Vision
Spring. 3 credits. D. Evans.
To what extent is civic engagement fundamental to democratic citizenship? This course seeks to answer that question by exploring the components of service learning as a discipline and to strengthen the intellectual foundation of students who wish to incorporate civic engagement into their curriculum. Students will become familiar with the history of service learning, explore competing theories of social justice and social inequality, and develop a framework for social action that exists at the juncture of theory and practice. Readings will include texts by Dewey, Freire, bell hooks, Franklin, Jefferson, Thoreau, Addams, Baldwin, King, Dorothy Day, and Fanon. Weekly seminar papers as well as a term paper through which students develop their own philosophy of civic engagement.
WRIT 4180 Audio Documentary (KCM-AS)
Spring. 3 credits. A. Hammer.
For description, see LA 4180.

KHMER (CAMBODIAN)
See "Department of Asian Studies."

## KOREAN

See "Department of Asian Studies."

## LATIN AMERICAN STUDIES PROGRAM

190 Uris Hall
Debra Ann Castillo, Romance Studies;
Comparative Literature, Director, Latin American Studies; Lourdes Benería, City and Regional Planning; Bruno Bosteels, Romance Studies; Maria Lorena Cook, ILR, Collective Bargaining; Law and History; Raymond Craib, History; Martin De Santos, Development Sociology; Maria Fernandez, History of Art; Gary Fields, International Labor Relations; Economics; Gustavo Flores-Macias, Government; Maria Antonia Garcés, Romance Studies; Maria Cristina García, History; Frederic Gleach, Anthropology; William W. Goldsmith, City and Regional Planning; Angela Gonzales, Development Sociology; John S. Henderson, Anthropology; Luz Horne, Romance Studies; Eduardo Iñigo-Elias, Laboratory of Ornithology; Steven Kyle, Applied Economics and Management; Cecilia Lawless, Romance Studies; Jura Oliveira, Romance Studies; Pilar Parra, Human Ecology, Nutritional Science; Edmundo Paz Soldán, Romance Studies; Pedro David Perez, Applied Economics and Management; Mary Kay Redmond, Romance Studies; Kenneth Roberts, Government; Eloy Rodriguez, Plant Biology; Jeannine RoutierPucci, Romance Studies; Arturo Sanchez, City and Regional Planning; Vilma Santiago-Irizarry, Anthropology; Rebecca Stoltzfus, Nutrition; Monroe Weber-Shirk, Civil and Environmental Engineering; Stephen Younger, Human Ecology Nutritional Science.
Gerard Aching, Romance Studies; Jere Haas, Human Ecology, Nutritional Science; Director, Human Biology Program; Teresa Jordan, Earth and Atmospheric Sciences; David Lee, Applied

Economics Management; Alison Power, Ecology and Evolutionary Biology/Science \& Technology Studies; Dean, Graduate Programs in the Life Sciences; Roberto Sierra,
Department of Music, Composition; Amy
Villarejo, Comparative Literature; Jean-Pierre Habicht, Human Ecology, Epidemiology; Gretel Pelto, Human Ecology; Billie Jean Isbell, School of Continuing Education and Summer Sessions; Wendy Wolford, Development Sociology.
Cornell's Latin American Studies Program (LASP), founded in 1961, has become one of the nation's premier Latin American centers. Today, as part of the Mario Einaudi Center for International Studies, LASP provides a focus for all activities on the Cornell campus oriented toward Latin America. Latin Americanists are active in most of Cornell's colleges and schools, with diverse strengths including agricultural sciences, anthropology, art history, city and regional planning, government, history, labor relations, languages, literature and nutrition.
LASP's mission is to stimulate learning about Latin America by supporting Cornell's Latin America curriculum; nurturing faculty and student research; sponsoring events on and off campus; sponsoring visiting scholars from Latin America; and establishing relationships with universities and other institutions in Latin America. LASP offers a minor in Latin American Studies for undergraduate and graduate students, fellowships, summer programs, and more.

## Undergraduate Minor

The undergraduate minor in Latin American Studies is earned with a minimum of 15 credits in Latin American Studies courses and with acquired facility in Spanish or Portuguese. Language facility is demonstrated by successful completion of SPAN 2190 or PORT 2190 or the equivalent. Course selections must represent at least two fields, including one course at an advanced level. The complete list of approved courses is available at www.einaudi.cornell. edu/latinamerica/academics/student.asp. This list includes all LATA courses and others across colleges and schools with at least 50 percent Latin American content.

## $\overline{\text { Courses }}$

LATA 1950 Colonial Latin America (also HIST 1950) @ \# (HA-AS)
Fall 4 credits. R. Craib.
For description, see HIST 1950.

## LATA 1960 Modern Latin America (also

 HIST 1960) @ (HA-AS)Spring. 4 credits. R. Craib.
For description, see HIST 1960.

## LATA 2150 The Tradition of Rupture (also

 SPAN 2150) @ (LA-AS)Fall, spring. 4 credits. Fall: M. A. Garcés; spring: J. Pinet.
For description, see SPAN 2150.

## LATA 2170 Early Hispanic Modernities

 (also SPAN 2170) \# (LA-AS)Fall. 4 credits. M. A. Garcés.
For description, see SPAN 2170.

## LATA 2200 Perspectives on Latin

America (also SPAN 2200) @ (CA-AS)
Spring. 3 credits. B. Bosteels and C. Lawless.

For description, see SPAN 2200.

## LATA 2201 Perspectives on Brazil (also

 PORT 2280)Spring. 4 credits. G. Furtado.
For description, see PORT 2280.

## LATA 2240 Perspectives on the

 Caribbean (also ASRC/SPAN 2240) (CA-AS)Fall. 4 credits. G. Aching.
For description, see SPAN 2240.

## [LATA 2308 Caribbean History (also ASRC 2308) (HA-AS)

Fall. 4 credits. Next offered 2011-2012. J. Byfield.

For description, see ASRC 2308.]
LATA 3020 Spanish in the Disciplines (also SPAN 3020)
Fall and spring, 1 credit. Sections will be offered with the following courses in 20102011: GOVT 1313 (Spanish), HIST 1960 (Spanish), GOVT 3293 (Spanish), ECON 1120 (Spanish), GOVT 3293 (Portuguese). Staff.
For description see SPAN 3020.
LATA 3060 Intro to Hispanic Linguistics (also LING/SPAN 3060) (KCM-AS)
Fall. 4 credits. D. Cruz.
For description, see SPAN 3060.
LATA 3130 Latin American Forms of Colonial Possession (also ANTHR 3130) @ \# (CA-AS)

Fall. 4 credits. C. Garces.
For description, see ANTHR 3130.

## LATA 3256 Archaeology of the Andes

 (also ANTHR/ARKEO 3256) @ \# (HA-AS)Spring. 4 credits. J. Henderson.
For description, see ARKEO 3256.
LATA 3290 Comparative Politics of Latin America (also GOVT 3293) @ (SBA-AS)
Fall. 4 credits. K. Roberts.
For description, see GOVT 3293.

## LATA 3550 Ancient Mexico and Central

 America (also ANTHR/ARKEO 3255) (HA-AS)Fall. 4 credits. J. Henderson.
For description, see ARKEO 3255.
LATA 3734 Brazil: Many Cultures, One Nation (also ANTHR 3734) @ (CA-AS)
Spring. 4 credits. J. Fajans.
For description, see ANTHR 3734.
LATA 3760 Latino/Latin American Cities (also CRP 3760)
Fall. 3 credits. A. Sanchez.
For description, see CRP 3760.

## LATA 4010 Experience Latin America I

 (also IARD 4010)Fall. 2 credits. D. Castillo and T. Tucker. For description see IARD 4010.

LATA 4170 Shipwrecks, Disasters, Deliverance, and Capitalism (also SPAN/FREN 4170)
Fall. 4 credits. G. Aching
For description, see SPAN 4170.
[LATA 4310 Migrant Workers (also LSP/ HIST 4310) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Craib.

For description see LSP 4310.]
LATA 4335 The Mexican Revolution at 100: Politics, Economy, and Society (also ILRIC 4335)
Fall. 4 credits. M. Cook
For description, see ILRIC 4335.
LATA 4910 Latin American Literature and Mass Media (also SPAN 4910) (CA-AS)
Spring. 4 credits. E. Paz-Soldan.
For description, see SPAN 4910.

## LATA 4956 Transatlantic Decadence (also SHUM/SPAN 4956)

Spring. 4 credits. B. Bosteels.
For description, see SHUM 4956.

## LATA 4960 International Internship in Latin America

All semesters. 1-6 credits. D. Castillo. For description see IARD 4960.

## LATA 4970 Independent Study in LATA

All semesters. 1-3 credits. Staff.

## LATA 5190 Urban Theory and Spatial Development (also CRP 5190) <br> Spring. 3 credits. W. W. Goldsmith. <br> For description, see CRP 5190.

LATA 6000 Contemporary issues in LatinLatino America (also LSP 6000, ANTHR 6200)
Fall and spring. 1 credit. D. Castillo. An exploration of critical topics in the anthropology, art, economics, history, literature, political science, and sociology of Latin American and U.S. Latino contexts. Course features guest speakers from Cornell and other institutions.

## LATA 6010 Experience Latin America II

 (also IARD 6010)Spring. 3 credits. D. Castillo and T. Tucker. For description see IARD 6010.

## LATA 6256 Maya History (also ANTHR/ ARKEO 6256)

Fall. 4 credits. J. Henderson.
For description, see ANTHR 6256.

## LATA 6350 Labor Markets, Income Distribution, and Globalization: Perspectives on the Developing

 World (also ILRIC 6350)Spring. 4 credits. Prerequisite: ILRLE 2400 or ILRLE 5400 or ECON 3130. G. Fields.
For description, see ILRIC 6350.
[LATA 6481 Seminar in Latin American History (also HIST 6481)
Fall. 4 credits. Next offered 2012-2013. R. Craib.]

## LATA 6600 Brazilian Literature Since

 1850s (also PORT 6600)Fall. 4 credits. L. Horne.
For description, see PORT 6600.

## LATA 6740 Transformations in the Global South (also CRP 6740) <br> Spring. 4 credits. W. W. Goldsmith. <br> For description, see CRP 6740.

## LATA 6760 Latino/Latin American Cities (also CRP 6760) <br> Fall. 3 credits. A. Sanchez. <br> For description, see CRP 6760.

## LATA 6640 Borderwork (also SPAN/LSP

 6640, COML 6335, ASIA 6633)Fall. 4 credits. D. Castillo and A. Banerjee. For description, see COML 6335.

## LATINO STUDIES PROGRAM

434 Rockefeller Hall

## Undergraduate Minor

The Latino Studies Program offers an interdisciplinary undergraduate minor in Latino studies, with courses drawn from history, sociology, anthropology, literature, and language, but the program also cross-lists courses from other colleges.

- To complete the minor, students must take at least five courses (a minimum of 15 credits) in Latino Studies, including a core course, Latinos in the United States (DSOC 2650, LSP 2010, and SOC 2650/ AMST 2655), which is offered each spring semester.
- Students are required to include at least three courses from Groups I and II (one from each group, and another from either group). Of the three courses, two must be at the 3000 or 4000 level.
One elective course (see list below) can count toward the minor. Courses must be completed with a letter grade of C or above. Independent studies and first-year writing seminars do not count toward minor requirements. The list varies each semester in accordance with faculty schedules and visiting appointments.


## Group I: Humanities

LSP 2250 The United States-Mexico Border: History, Culture, Representation (also AMST/HIST 2250)
LSP 2400 Intro to Latina/o Literature (also AMST 2401, ENGL 2400)
LSP 2460 Contemporary Narratives by Latina Writers (also FGSS/SPAN 2460)
LSP 2480 Poetry of the Latina/o Experience (also SPAN 2480)
LSP 2600 Latinos in the United States: Colonial Period to 1898 (also AMST 2599, HIST 2600)
LSP 2610 Latinos in the United States: 1898 to the Present (also AMST/HIST 2610)
LSP 2640 Survey in U.S.-Latino Literature (also AMST 2641, ENGL 2640)
LSP 3800 Latino America (also HIST/AMST 3800)

LSP 3930 Contemporary Latino Writers (also SPAN 3980)
LSP 3980 Latina/o Popular Culture (also AMST 3981, ENGL 3780)
LSP 4130 Classics of Latina/o Literature (also SPAN 4130)
LSP 4301 Queering Latinidad (also ENGL/ AMST 4301)
LSP 4620 Senior Seminar in Latina/o Studies: Chicana Feminism in a Globalizing World (also ENGL 4620)

## Group II: Social Sciences

LSP 2010 Latinos in the United States (also DSOC/SOC 2650, AMST 2655)
LSP 2200 Sociology of Health and Ethnic Minorities (also DSOC 2200)
LSP 2300 Latino Communities (also AMST/ DSOC 2300)
LSP 2721 Anthropological Representation: Ethnographies on Latino Culture (also AMST/ANTHR 2721)
LSP 3180/ Politics of Community Development:
5180 Transnational Latinos and the U.S. City (also CRP 3180/5180)
LSP 3191 Racial and Ethnic Politics in the United States (also AMST/GOVT 3191)

LSP 3550 Latinos, Law, and Identity (also AMST/DSOC 3550)
LSP 3750 Comparative U.S. Racial and Ethnic Relations (also AMST/DSOC 3750)
LSP 3760/ Latino/Latin American Cities (also $6760 \quad$ CRP 3760/6760)
LSP 3777 The United States (also AMST/ ANTHR 3777)
LSP 3950/ Immigrant Entrepreneurship
6590 (also CRP 3111/6111)
LSP 4032 Immigration and Politics (also AMST/GOVT 4032)
LSP 4310/ Migrant Workers (also HIST
6310 4310/6310, ILRCB 4020)
LSP 4510 Multicultural Issues in Education (also AMST/EDUC 4510)
LSP 4520 Multicultural Issues in Secondary Education (also EDUC 4520)
LSP 6101 Political Identity: Race, Ethnicity, and Nationalism (also GOVT 6101)
LSP 6424 Ethnoracial Identity in Anthropology, Language, and Law (also ANTHR/AMST 6424, LAW 7231)

LSP 6460 Latino Language, Ideology, and Practice (also ANTHR 6460)

## Electives:

LSP 1101 Research Strategies in Latino and Africana Studies (also ASRC 1900)
LSP 1110 American Diversity: The 20th Century (also AAS/AMST 1110, HIST 1610)

LSP 1301 Introduction to World Music I: Africa and the Americas (also MUSIC 1301)
LSP 1800 Immigration in U.S. History (also HIST/AMST 1800)
LSP 2020 Spanish for Heritage Speakers (also SPAN 2000)
LSP 2410 Immigration and Ethnicity in 20th-Century United States (also AMST/HIST 2400)
LSP 3010 Hispanic Theater Production (also SPAN/LATA 3010)
LSP 3060 Intro to Hispanic Linguistics (also SPAN/LING 3060)
LSP 3551 Modern and Contemporary Latin American Art (also ARTH 3550, LATA 3680)

LSP 4050/6050 United States-Cuba Relations (also AMST/HIST/LATA 4050/6050)

LSP 4230 Borders (also COML 4230, SPAN 4900)

LSP 4850 Immigration Since 1965 (also AMST/ HIST 4850)

LSP 4851 Refugees (also HIST/AMST 4851)
LSP 6000 Contemporary Issues in Latino/Latin America (also LATA 6000)

LSP 6010 Crossing Borders: Migrations in Comparative Perspective
LSP 6072 Immigration and Immigrant Politics (also GOVT 6072)

LSP 6640 Borderworks (also SPAN 6640, COML 6335)
Other elective courses will be determined each semester.

## Graduate Minor

The Latino Studies Program at Cornell offers Latino Studies as a minor field in graduate studies. Graduate students select a faculty member from the field of Latino Studies to serve as a minor member on their special committee. Faculty expertise spans multiple fields, including anthropology, history, literature, law, sociology, government, education, planning, and human development, enabling students to develop programs that meet their specific interests.

Requirements: Students wishing to complete a graduate minor in Latino Studies need to formally register with the Latino Studies Program office, take an upper-level seminar as well as work intensively with a faculty member outside of their major field. Over the course of their study they will be expected to take two other Latino Studies graduate or advanced undergraduate courses outside of their major field. In lieu of available courses, the student and his or her minor field advisor might design a special project that culminates in a paper given at a conference or presented for publication. Each special project will require the approval of the director of graduate studies for the minor field.
www.gradschool.cornell.edu/fields.php?id=MF

## Library

The Latino Studies Program library in 432 Rockefeller Hall serves Cornell students, faculty, staff, and the wider local community, The library maintains print and media material pertinent to U.S. Latino issues including a collection of books, research material, archives, and films. The library and conference room also provide meeting space for more than 25 Latino student organizations.

## Courses

LSP 1101 Research Strategies in Latino and Africana Studies (also ASRC 1900)

Spring (half-semester course; starts 3/8/2011). 1 credit. T. Cosgrave and E. Acree.

The digital revolution has made an enormous amount of information available to research scholars, but discovering resources and using them effectively can be challenging. This course introduces students with research interests in Latino and Africana Studies to search strategies and methods for finding materials in various formats (e.g., digital, film,
and print) using information databases such as the library catalog, print and electronic indexes, and the World Wide Web. Instructors provide equal time for lecture and hands-on learning. Topics include government documents, statistics, subject-specific online databases, social sciences, the humanities, and electronic citation management.
LSP 1301 Introduction to World Music: Africa and the Americas (also MUSIC 1301) @ (CA-AS)

Spring. 3 credits. 1-hour disc. S. Pond. For description, see MUSIC 1301.

LSP 1800 Immigration in U.S. History (also HIST/AMST 1800) (HA-AS)
Spring. 4 credits. M. C. Garcia.
For description, see HIST 1800.
LSP 2010 Latinos in the United States (also DSOC/SOC 2650, AMST 2655) (SBA-AS)
Spring. 3 credits; 4-credit option available. H. Velez.

For description, see SOC 2650.
LSP 2020 Spanish for Heritage Speakers (also SPAN 2000)
Fall. 4 credits. D. Cruz de Jesus.
For description, see SPAN 2000.
LSP 2200 Sociology of Health and Ethnic Minorities (also DSOC 2200) (SBA-AS)
Fall. 3 credits. P. Parra.
Discusses the health status of minorities in the United States. Specifically explores intragroup diversity such as migration, economic status, and the influence of culture and the environment on health status and access to health care. Although special attention is given to Latino populations, discussion encompasses other minorities who face similar problems.
LSP 2250 United States-Mexico Border: History, Culture, Representation (also AMST/HIST 2250) (CA-AS)
Spring. 4 credits. M. C. Garcia.
For description, see HIST 2250.
[LSP 2300 Latino Communities (also AMST/DSOC 2300) (SBA-AS)
3 credits. Next offered 2011-2012. R. Mize. For description, see DSOC 2300.]
[LSP 2400 Intro to Latino Literature (also AMST 2401, ENGL 2400) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
M. P. Brady.]

LSP 2721 Anthropological Representation: Ethnographies on Latino Culture (also AMST/ANTHR 2721) (CA-AS)

Fall. 3 credits. V. Santiago-Irizarry. For description, see ANTHR 2721.
LSP 3010 Hispanic Theatre Production (also SPAN/LATA 3010)
Spring. 1-3 credits, variable. D. Castillo.
LSP 3060 Introduction to Spanish Linguistics (also SPAN/LING 3060) (KCM-AS)
Fall. 4 credits. D. Cruz de Jesus.
LSP 3180/5180 Politics of Community Development: Transnational Latino and the U.S. City (also CRP 3180/5180) (SBA-AS)
Spring. 3 credits. A. Sanchez.
For description, see CRP 3180/5180.

LSP 3191 Racial and Ethnic Politics (also AMST/GOVT 3191) (SBA-AS)
Fall. 4 credits. M. Jones-Correa.
LSP 3550 Latinos, Law, and Identity (also AMST/DSOC 3550) (SBA-AS)
Fall. 3 credits. R. Mize.
For description, see DSOC 3550.
LSP 3750 Comparative U.S. Racial and Ethnic Relations (also AMST/DSOC 3750) (SBA-AS)

Spring. 3 credits. R. Mize.
For description, see DSOC 3750.

## LSP 3760/6760 Latin/Latino American Cities (also CRP 3760/6760)

Fall. 3 credits. A. Sanchez.
For description, see CRP 3760/6760.

## [LSP 3777 The United States (also AMST/

 ANTHR 3777) (CA-AS)Fall. 4 credits. Next offered 2011-2012.
V. Santiago-Irizarry.]

LSP 3800 Latino America (also HIST/ AMST 3800)
Fall. 4 credits. M. C. Garcia.
For description, see HIST 3800.
LSP 3950/6590 Immigrant
Entrepreneurship, Markets, and the
Restructured U.S. City: The Latino
Case (also CRP 3111/6111) (SBA-AS)
Spring. 3 credits. A. Sanchez.
For description, see CRP 3850.04/5850.04.
LSP 3980 Latina/o Popular Culture (also AMST 3981, ENGL 3980) (CA-AS)
Fall. 4 credits. M. P. Brady.
For description, see ENGL 3980.
[LSP 4032 Immigration and Politics (also AMST/GOVT 4032) (SBA-AS)
4 credits. Next offered 2011-2012.
M. Jones-Correa.]
[LSP 4050 United States-Cuba Relations (also AMST/HIST/LATA 4050/6050) (HA-AS)
4 credits. Next offered 2012-2013.
M. C. Garcia.]

LSP 4200-4210 Undergraduate Independent Study
Fall and spring. 2-4 credits. Prerequisite: permission of instructor.
Guided independent study.

## [LSP 4301 Queering Latinidad (also ENGL/AMST 4301)

4 credits. Next offered 2012-2013.
M. P. Brady.]

## [LSP 4310/6310 Migrant Workers (also

 HIST 4310/6310, ILRCB 4020) (HA-AS)4 credits. Next offered 2011-2012. R. Craib.
Emphasis is on migrant farmworkers in the
United States, mostly from the Caribbean and mainland Latin America, with an increasing focus as the semester progresses on farmworkers in central and upstate New York. Course requirements: analytical essays, a final paper, and participation in a service-learning project that are arranged in conjunction with the instructor.]

## LSP 4510 Multicultural Issues in

 Education (also AMST/EDUC 4510) (SBA-AS)Spring. 3 credits. S. Villenas.
For description, see EDUC 4510.
LSP 4520 Multicultural Issues in
Secondary Education (also EDUC
4520)
Spring. 1 credit. S. Villenas.

LSP 4850 Immigration Since 1965 (also AMST/HIST 4850) (HA-AS)
Fall. 4 credits. Prerequisite: permission of instructor. M. C. Garcia.
For description, see HIST 4850.

## [LSP 4851 Refugees (also HIST/AMST 4851) (HA-AS)

4 credits. Next offered 2011-2012.
M. C. Garcia.]

LSP 6000 Contemporary Issues in Latino/ Latin America (also LATA 6000)
Fall. 1 credit. D. Castillo.
LSP 6010 Crossing Borders: Migration in Comparative Perspective (also ILRIC 6010)

Spring. 4 credits. M. Cook.
LSP 6072 Immigration and Immigrant
Politics (also GOVT 6072)
Spring. 4 credits. M. Jones-Correa.
LSP 6200-6210 Graduate Independent Study
Fall, spring. 2-4 credits. Prerequisite:
permission of instructor.
Guided independent study.
LSP 6424 Ethnoracial Identity in Anthropology, Language, and Law (also ANTHR 6424, LAW 7231)
Spring. 4 credits. V. Santiago-Irizarry.

## LSP 6640 Borderwork (also SPAN 6640, COML 6335)

Fall. 4 credits. D Castillo.

## LAW AND SOCIETY

Co-directors: M. Lynch (science and technology studies), 302 Rockefeller Hall, 2557294, mel27@cornell.edu, and R. Lieberwitz (ILR), 361 Ives Hall, 255-3289, rll5@cornell.edu
Advisers: G. Alexander (law), E. Anker
(English), D. Dunning (psychology),
M. Evangelista (government), C. Grumbach (Ethics \& Public Life Program), G. Hay (law), S. Hilgartner (science and technology studies), P. Hyams (history), M. E. Karns ILR),
M. Katzenstein (government), R. Miller (philosophy), M. B. Norton (history), D. Powers (Near East studies), A. Riles (law), V. Santiago-Irizarry (anthropology), E. Taylor (philosophy)
The Law and Society minor provides an opportunity for focused study of the interaction between law and society from an interdisciplinary perspective predominantly rooted in the social sciences and humanities: anthropology, comparative literature, economics, government, history, philosophy, psychology, science and technology studies, and sociology.
The Law and Society minor is open to all undergraduates. Though many of those who register for the minor have intentions of going on to law school or a law-related profession, Law and Society is not designed as a minor only for students interested in entering law school. The best candidates for the Law and Society minor are students interested in broader relations between legal institutions and historical and contemporary societies. This broader topic is, and should be, of interest to many students, regardless of whether they intend to enter the legal profession. A large selection of courses and on-campus events is available for completing
the minor. The benefits of a student's participation depend on the particular courses and events selected, and the effort and interest invested.

## Registration

To allow sufficient time for a coherent program of study to be developed and completed, students who have an interest in the law and society minor are required to register before the start of the second semester of their junior year. Under extenuating circumstances, late registrations may be accepted at the discretion of the directors, but only if the registrant has a plan already formulated for completing the minor's requirements. Late registrants can use the standard online registration form but should also submit the online completion plan at the time of registration. Information about, and forms required for, the law and society minor can be found at www.arts.cornell.edu/epl/ lawsociety.htm.
The law and society minor is administered by the Ethics and Public Life (EPL) office. For more information, consult the web site or contact the EPL administrative assistant at 218 Goldwin Smith Hall, epl@cornell.edu, 2558515.

## LESBIAN, GAY, BISEXUAL \& TRANSGENDER STUDIES

Faculty: Barbara Correll, Ileen DeVault, Jason Frank, J. Ellen Gainor, Sabine Haenni, Ellis Hanson, Cary Howie, Isabel Hull, Paul Hyams, Mary Katzenstein, Petrus Liu, Tamara Loos, Kathryn March, Kate McCullough, Timothy Murray, Mary Beth Norton, Judith Peraino, Masha Raskolnikov, Camille Robcis, Nick Salvato, Ritch Savin-Williams, Anna Marie Smith, Amy Villarejo, Sara Warner, Rachel Weil, Dagmawi Woubshet
Lesbian, Gay, Bisexual, \& Transgender (LGBT) Studies is devoted to the study of sexuality and its importance to the organization of social relations, literature, art, and embodied life. It is primarily concerned with the representations and lives of lesbian, gay, bisexual, and transgendered subjects, even as these subjects remain stubbornly and productively difficult to define once and for all. LGBT Studies is an interdisciplinary program, and it is likewise open to a variety of perspectives on the stability of its constituent identity categories.
Indeed, central to the curriculum is a sense that sexuality varies across time and place, serves political ends, and cannot be thought in isolation from gender, class, race, ethnicity, age, religion, and physical ability. LGBT Studies emphasizes both the diachronic differences in the constitution of sexualities (how sexuality is different in different historical periods) as well as the synchronic ones (how sexuality takes shape within particular texts, periods, or populations).
In addition to offering a graduate minor, the field of LGBT Studies offers an undergraduate minor, administered under the auspices of the Feminist, Gender \& Sexuality Studies Program and which consists of four courses from the list below. Students are welcome to petition for the use of courses not on the list; all petitions must be approved by the director of LGBT Studies.

## Courses

ANTHR 2400 Cultural Diversity and Contemporary Issues @ (SBA-AS)
Fall. 3 credits. Staff.
For description, see ANTHR 2400.
ANTHR 3421 Sex and Gender in CrossCultural Perspective (also FGSS 3210) @ (SBA-AS)

Fall. 4 credits. K. March.
For description, see ANTHR 3421.

## ENGL 2760 Desire (also COML/FGSS

 2760, THETR 2780) (LA-AS)Spring. 4 credits. E. Hanson.
For description, see ENGL 2760.
ENGL 2780 Body as Text: Pleasure and Danger (also FGSS 2780) (LA-AS)
Fall. 4 credits. M. Raskolnikov.
For description, see ENGL 2780.
[ENGL 3550/6551 Decadence (also COML/FGSS 3550/6551) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. E. Hanson.]
[ENGL 4750 Senior Seminar in the 20th Century: Narratives of Loss (AIDS) (also AMST 4755, FGSS 4750)
Spring. 4 credits. Next offered 2012-2013. D. Woubshet.]

## [ENGL 4791 Transgender and

 Transexuality (also FGSS 4791) (LA-AS)Fall. 4 credits. Next offered 2011-2012. M. Raskolnikov.]

ENGL 6811 Baldwin (also AMST/FGSS 6811)

Spring. 4 credits. D. Woubshet.
FGSS 2010 Introduction to Feminist, Gender, and Sexuality Studies (CA-AS)
Fall and spring. 4 credits. Fall, J. Juffer; spring, K. McCullough.
For description, see FGSS 2010.
FGSS 2020 Introduction to Feminist, Gender, and Sexuality Theories (CAAS)
Spring. 4 credits. H. Hoechst.
For description, see FGSS 2020.
FGSS 2290 Intro to LGBT Studies (also FREN 2280)
Fall. 4 credits. C. Howie.
For description, see FGSS 2290.

## FGSS 4000 Senior Seminar in Feminist,

 Gender, and Sexuality StudiesFall. 4 credits. S. Martin.
For description, see FGSS 4000.
[GOVT 4625 Sexuality and the Law (also FGSS 4610) (KCM-AS)
Spring. 4 credits. Next offered 2011-2012. A.M. Smith.]

HD 3840 Gender and Sexual Minorities (also FGSS 3850)
Fall. 3 credits. K. Cohen.
For description, see HD 3840.
[THETR 4200/6200 Parody (also FGSS 4270/6370) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. N. Salvato.]
[THETR 6050 Camp, Kitsch, and Trash (also ENGL 6510, FGSS 6050)
Spring. 4 credits. Next offered 2011-2012. N. Salvato.]

[THETR 6060 Passionate Politics: Affect, Protest, Performance (also FGSS 6040)<br>Spring. 4 credits. Next offered 2011-2012. S. Warner.]

## LINGUISTICS

ling.cornell.edu
D. Zec, chair (219 Morrill Hall); M. Weiss, director of graduate studies (218 Morrill Hall); W. Harbert, director of undergraduate studies (210 Morrill Hall); D. Abusch, J. Bowers, W. Browne, A. Cohn, M. Diesing, J. Hale, S. Hertz, A. Nussbaum, M. Rooth, C. Rosen, J. Whitman.

## Why Linguistics?

Linguistics, the systematic study of human language, lies at the crossroads of the humanities and the social sciences. Much of its appeal derives from the special combination of intuition and rigor that the analysis of language demands. The interests of the members of the Department of Linguistics and colleagues in other departments span most of the major subfields of linguistics: phonetics and phonology, the study of speech sounds; syntax, the study of how words are combined; semantics, the study of meaning; historical linguistics, the study of language change in time; and computational linguistics, the modeling of natural language in all its aspects from a computational perspective.
Studying linguistics is not a matter of studying many languages. Linguistics is a theoretical discipline with ties to such areas as cognitive psychology, philosophy, logic, computer science, and anthropology. Nonetheless, knowing particular languages in some depth can enhance understanding of the general properties of human language. Not
surprisingly, then, many students of linguistics owe their initial interest to a period of exposure to a foreign language, and those who come to linguistics by some other route find their knowledge about languages enriched and are often stimulated to embark on further foreign language study.
Students interested in learning more about linguistics and its relationship to other disciplines in the humanities and social sciences are encouraged to take LING 1101, a general overview, which is a prerequisite for most other courses in the field, or one of the first-year writing seminars offered in linguistics (on topics such as metaphor, language processing and disorders, English outside the box, and the language instinct). LING 1101 and our other introductory courses fulfill various Arts College distribution requirements. Most of our 1100- and 2200-level courses have no prerequisites. These cover various topics in linguistics (e.g., LING 1109 English Words: Histories and Mysteries, LING 2221 Language and Society, LING 2285 Linguistic Theory and Poetic Structure) or focus on the linguistics of a particular geographic region or historical development of particular languages (e.g., LING 2217 History of the English Language to 1300, LING 2218 History of the English Language Since 1300, LING 2241 Yiddish Linguistics).
Talks and discussions about linguistics are organized by Cornell's Undergraduate Linguistics Organization (the Underlings) and
the Linguistics Colloquium (organized by the Cornell Linguistic Circle and the department). These meetings are open to the university public, and anyone wishing to learn more about linguistics is most welcome to attend. Information about such events is posted on the department website.

## The Linguistics Major

For questions regarding the linguistics major, contact Professor Wayne Harbert, 210 Morrill Hall, 255-8441, (weh2@cornell.edu).
A. Prerequisites: LING 1101 plus one of the other Foundation Courses in B.
B. Foundation Courses: Majors must complete all of the following courses.
LING 1101 Introduction to Linguistics
LING 3302 Introduction to Phonetics and Phonology
LING 3303 Introduction to Syntax and

## Semantics

LING 3314 Historical Linguistics
C. Core Courses: Majors must complete three courses from the following list, chosen in consultation with their advisors.
LING 3333 Problems in Semantics
LING 4400 Language Typology
LING 4401 Phonology I
LING 4403 Syntax I
LING 4419 Phonetics I
LING 4421 Semantics I
LING 4423 Morphology
LING 4424 Computational Linguistics
LING 4425 Pragmatics
LING 4436 Language Development
LING 4474 Introduction to Natural Language Processing

## LING 6600 Field Methods

D. Elective Courses: Majors must complete three elective courses chosen in consultation with their advisors. These can be selected from among the remaining courses listed in the Core Courses category, or other courses in linguistics or another department with a substantial linguistic content, including courses on the linguistics of specific languages. Two of these must be at the 2200 level or higher. One must be at the 3300 level or higher.
E. Ancillary Skills Courses: Majors must complete two semesters of study in one or more of the following areas, selected in consultation with their advisors. This requirement is intended to equip them with practical skills relevant to their particular interests in linguistics. The Ancillary Skills Course requirement may be waived for students who are majoring in more than one field.
Statistics
Logic
Computer programming
Two semesters of study of a non-European or non-Indo-European language
Language teaching methodology
Two semesters of study beyond the level required by the Arts College of a language
relevant to the student's particular areas of interest
The Ancillary Skills course requirements may be waived for students with a second major or those with a concentration in Cognitive Science. Some substitutions to these standard requirements are possible after consultation with your advisor and approval by the director of undergraduate studies. The minimum grade for courses applied to the linguistics major is C .

## Honors

Many linguistics majors choose to write a senior honors thesis. Applications for honors should be made during the junior year or by the start of fall term of the senior year. Candidates for admission must have a 3.0 (B) average overall and should have a 3.5 average in linguistics courses. In addition to the regular requirements of the major, the candidate for honors will complete an honors thesis and take a final oral examination in defense of it. Students are expected to give an oral presentation on their thesis topic during the department's year-end undergraduate honors colloquium, and to deposit a copy of the final thesis with the department. The thesis is usually written during the senior year but may be started in the second term of the junior year when the student's program so warrants. The oral examination will be conducted by the honors committee, consisting of the thesis advisor and at least one other faculty member in linguistics. Members of other departments may serve as additional members if the topic makes this advisable. LING 4493 and 4494 may be taken in conjunction with thesis research and writing but are not required.

## First-Year Writing Seminars

For descriptions, consult the John S. Knight brochure for times, instructors, and descriptions.

## Courses

LING 1101 Introduction to Linguistics (KCM-AS)
Fall or spring. 4 credits each semester. Fall, S. Murray; spring, W. Harbert.

Overview of the science of language, especially its theoretical underpinnings, methods, and major findings. Areas covered include: the relation between sound and meaning in human languages, social variation in language, language change over time, universals of language, and the mental representation of linguistic knowledge. Students are introduced to a wide variety of language phenomena, drawn not only from languages resembling English, but also from many that appear to be quite unlike English, such as those native to the Americas, Africa, Asia, Australia, and the South Pacific.

## LING 1109 English Words: Histories and Mysteries (also CLASS 1699) \# (HA-AS)

Spring. 3 credits. A. Nussbaum. Where do the words we use come from? This course examines the history and structure of the English vocabulary from its distant IndoEuropean roots to the latest in technical jargon and slang. Topics include formal and semantic change, taboo and euphemism, borrowing, new words from old, "learned" English loans from Greek and Latin, slang, and society.

LING 1111 American Sign Language I Summer only. 4 credits. T. Galloway. Students with no previous background in American Sign Language (ASL) are introduced to the nature of a signed language and develop expressive and receptive skills in ASL Basic grammar and vocabulary are covered, including explanations of the fundamental parts of a sign, proper use of fingerspelling, and the significance of nonmanual features. Instruction is supplemented with videotexts allowing students to begin to explore the visual literature of the Deaf community in the United States-stories, poems, and jokes that are unique to Deaf culture. Readings and class discussions acquaint students with the causes of deafness, the historical development of ASL and its linguistic status, and characteristics of deaf education both throughout history and in the present day.

LING 1112 American Sign Language II Summer only. 4 credits. Prerequisite: LING
1111 or permission of instructor.
T. Galloway.

In this intermediate course, students continue to develop expressive and receptive fluency in ASL. Focus is on greater descriptive skill, developing intermediate-level narratives, and enhancing conversational ability. Advanced grammar and vocabulary is supplemented with further instruction in the linguistic structure of ASL. Readings, class discussions, and videotexts containing samples of the visual literature of the United States Deaf community continues students' investigation into American Deaf history and the shaping of modern Deaf culture.

LING 1131-1132 Elementary Sanskrit (also CLASS 1331-1332, SANSK 1131-1132)
1131, fall; 1132, spring. 4 credits each semester. A. Ruppel.
For description, see SANSK 1131-1132.
LING 1170 Introduction to Cognitive Science (also COGST 1101, CS 1710, PHIL 1910, PSYCH 1102) (KCM-AS)
Fall, summer. 3 credits. J. Hale.
For description, see COGST 1101.

## LING 2215 Psychology of Language (also COGST/PSYCH 2150) (KCM-AS)

Spring. 3 credits. M. Christiansen.
For description, see PSYCH 2150.
LING 2217 History of the English Language to 1300 (also ENGL 2170) \# (HA-AS)
Fall. 4 credits. W. Harbert
Explores the development of the English language from its Indo-European beginnings through the period of Early Middle English. Topics include linguistic reconstruction, changes in sound, vocabulary and grammatical structure, external influences, and Old and Early Middle English language and literature This course forms a sequence with LING 2218, but the two may be taken independently.

## LING 2218 History of the English Language since 1300 (also ENGL 2180) \# (HA-AS)

Spring. 4 credits. W. Harbert
Traces English from Chaucer to the present, including the development of standard English and dialects, and the rise of English as a world language.

[^3]This course examines themes in historical linguistics, language contact, and sociolinguistics, in the context of the complex linguistic history of the British Isles.

LING 2221 Language and Society (CAAS)
Fall. 4 credits. A. Cohn.
We will explore how language and society affect each other. How do class, age, ethnicity, gender, and geography affect the way people speak? Why are some ways of speaking considered prestigious and others stigmatized? How are power relations captured in language? How does national policy-e.g., "English-only" policies-affect both politics and language use? What are the linguistic issues behind the Ebonics debate? In this course we consider these questions both in the context of the United States and other parts of the world.

## [LING 2236 Introduction to Gaelic

Spring. 3 credits. Next offered 2012-2013. W. Harbert.

Introduction to the Scottish Gaelic language, with some discussion of its history, structure, and current status.]

## LING 2238 Introduction to Welsh

Fall. 3 credits. W. Harbert.
Introduction to the Welsh language, with discussion of its history, structure, and current status, and a brief introduction to Welsh literature.

## LING 2241 Yiddish Linguistics (also JWST 2271) (SBA-AS)

Fall. 3 credits. No previous knowledge of Yiddish required. M. Diesing. Yiddish language and linguistics, including aspects of its morphology, syntax, and phonology. Also the history of the Yiddish language, and sociolinguistic topics such as Yiddish as a minority language, and the influence of Yiddish on American English.

## [LING 2246/5546 Minority Languages and

 Linguistics (SBA-AS)Fall. 4 credits. Graduate students register under LING 5546. Next offered 2011-2012. W. Harbert.

Examines minority languages from linguistic, social, and political perspectives, including such issues as language death, language maintenance, bilingualism, language policy, and language rights.]

LING 2251-[2252] Intermediate Sanskrit (also CLASS 2351-2352, SANSK 2251-2252) @ \#
2251, fall; [2252], spring. 3 credits each semester. LING 2251 satisfies Option 1.
Fall, A. Nussbaum; spring, staff.
For description, see SANSK 2251-2252.

## LING 2261/4461 Introduction to Indo-

 European Linguistics (HA-AS)Fall. 4 credits. Graduate students register under LING 6661. A. Nussbaum.
An introduction to the phonology, morphology, and syntax of Proto-IndoEuropean and the chief historical developments of the daughter languages
[LING 2285/5585 Linguistic Theory and Poetic Structure (also ENGL 2960/5850) (LA-AS)
Spring. 4 credits. Graduate students register under LING 5585. Next offered 2011-2012. J. Bowers.

The aim of this course is to show how certain results of modern linguistics can usefully be
applied to the analysis and interpretation of poetry.]
LING 3040 Introduction to Italian Linguistics (also ITAL 3060) (KCM-AS)
Spring. 4 credits. T. Alkire.
For description, see ITAL 3060.

## LING 3060 Introduction to Hispanic Linguistics (also SPAN 3060) (KCM-AS)

Fall. 4 credits. D. Cruz de Jesus.
For description, see SPAN 3060.

## LING 3080 Introduction à la linguistique française (also FREN 3080) (KCM-AS) <br> Spring. 4 credits. T. Alkire.

For description, see FREN 3080.
[LING 3300 Field Methods for Undergraduates (KCM-AS)
Spring. 4 credits. Prerequisite: students should normally have completed (or be concurrently enrolled in) LING 3301, 3302, 3303, 3304. Next offered 2011-2012.
W. Harbert.

A hands-on course in which students gain experience in eliciting linguistic data from a native speaker of an unfamiliar language, organizing and analyzing those data and producing descriptions of the lexicon, phonetics, phonology, morphology, syntax, and texts in the language on the basis of them.]

LING 3302 Introduction to Phonetics and Phonology (KCM-AS)
Spring. 4 credits. Prerequisite: LING 1101
or permission of instructor. Staff.
This course is an introduction to both phonetics (the study of the physical properties of the sounds of human language) and phonology (the organization and patterning of those sounds). The first part of the course focuses on the main areas of phoneticsarticulation, acoustics and perception-and tools and skills used to study phonetics, such as production and perception of sounds, transcription using the International Phonetic Alphabet, and basic instrumental analysis of speech. In the second part of the course we consider the concepts of phonology, including rules and representations, and analysis of a sound system. We will do this through investigating the sound systems of English and a wide range of languages of the world.

## LING 3303 Introduction to Syntax and Semantics (KCM-AS)

Fall. 4 credits. Prerequisite: LING 1101 or permission of instructor. M. Diesing.
This course explores both syntax (how words and phrases are combined into sentences) and semantics (how the meanings of words, phrases, and sentences are interpreted). The course aims to give students to the ability to address questions regarding syntactic and semantic properties of languages in a rigorous and informed fashion. Topics covered include phrase structure, grammatical relations, transformations, semantic composition, modification, quantification, and the syntax/ semantics interface. Emphasis throughout the course is placed on forming and testing hypotheses.

LING 3308 Readings in Celtic Languages
Fall or spring, depending on demand. 1 credit. Prerequisite: permission of instructor. S-U grades only. W. Harbert. Reading/discussion groups in Welsh or Scottish Gaelic.
LING 3314 Introduction to Historical Linguistics \# (HA-AS)
Spring. 4 credits. Prerequisite: LING 1101 or permission of instructor. M. Weiss. Survey of the basic mechanisms of linguistic change, with examples from a variety of languages.

## LING 3315-3316 Old Norse

3315, fall; 3316, spring. 4 credits each semester. A. Hákonarson.
Old Norse is a collective term for the earliest North Germanic literary languages: Old Icelandic, Old Norwegian, Old Danish, and Old Swedish. The richly documented Old Icelandic is the center of attention, and the purpose is twofold: the students gain knowledge of an ancient North Germanic language, important from a linguistic point of view, and gain access to the medieval Icelandic (and Scandinavian) literature. 3315: The structure of Old Norse (Old Icelandic), phonology, and morphology, with reading of selections from the Prose-Edda, a 13th-century narrative based on the Eddaic poetry. 3316: Extensive reading of Old Norse texts, among them selections from some of the major Icelandic family sagas: Njals saga, Grettis saga, and Egils saga, as well as the whole Hrafnkels saga.

## LING [3321]-3322 History of the

 Romance Languages (also ROMS 3210-3220) \# (HA-AS)[3321], spring; 3322, fall. 4 credits each semester. Prerequisites: for LING 3321, LING 1101, or equivalent and qualification in any Romance language; for LING 3322, LING 3321, or permission of instructor. C. Rosen.
[3321 covers popular Latin speech, early documentary sources, Pan-Romance phonological changes, regional divergence, early external history, and non-Latin influences.] 3322 covers the shaping of Romance morphological systems, changes in the lexicon, medieval diglossia, and the emergence of Romance standards. 3321 and 3322 both include selected readings in the earliest Romance texts.

## LING 3332 Philosophy of Language (also PHIL 3710) <br> Spring. 4 credits. M. Eklund.

For description, see PHIL 3710.
[LING 3333 Problems in Semantics (also COGST 3330, PHIL 3700) (KCM-AS)
Fall. 4 credits. Prerequisite: logic or semantics course or permission of instructor. Next offered 2011-2012. D. Abusch.

Looks at problems in the semantic analysis of natural languages, critically examining work in linguistics and philosophy on particular topics of current interest.]

## LING 3390 Independent Study in

 LinguisticsFall or spring. 1-4 credits, variable.
Prerequisite: LING 1101 and permission of instructor. Staff.
Independent study of linguistics topics not covered in regular curriculum for undergrads.

## LING 4270 Entering a Virtual Linguistic Lab: New Cyber Tools for the Scientific Study of Language Acquisition (also HD 4270, COGST 4275)

Fall. 4 credits. Recommended prerequisites: HD 4370/PSYCH 4370/COGST 4500/LING 4450 and HD 3370/COGST 3370/LING
4436/PSYCH 4360; permission of instructor. B. Lust.

For description, see HD 4270.

## LING 4310 Topics in Cognitive Studies

 (also COGST/BIONB/PSYCH 4310)Fall. 4 credits. S. Edelman.
For description, see COGST 4310.
[LING 4400 Language Typology (KCM-AS)
Spring. 4 credits. Prerequisite: LING 1101.
Next offered 2011-2012. J. Whitman.
Studies a basic question of contemporary linguistics: in what ways do languages differ, and in what ways are they all alike? Efforts are made to formalize universals of syntax and to characterize the total repertory of constructions available to natural languages. Common morphological devices and their syntactic correlates are covered. Emphasis is on systems of case, agreement, and voice.]

## LING 4401-4402 Phonology I, II (KCM-AS)

4401, fall; 4402, spring. 4 credits each semester. Prerequisites: for LING 4401, LING 3302 or equivalent; for LING 4402,
LING 4401 or permission of instructor. Fall,

## D. Zec; spring, A. Cohn.

4401 provides a basic introduction to phonological theory. The first half of the course focuses on basic principles of phonology, patterns of sounds, and their representations. In the second half, the nature of syllable structure and feature representations are explored. 4402 provides further refinement of the issues investigated in 4401, focusing in particular on metrical theory, lexical phonology, autosegmental phonology, and prosodic morphology.
LING 4403-4404 Syntax I, II (KCM-AS)
4403, fall; 4404 , spring. 4 credits each
semester. Prerequisites: for LING 4403,
LING 3303; for LING 4404, LING 4403 or
permission of instructor. Fall, J. Bowers;
spring, staff.
4403 is an advanced introduction to syntactic theory within the principles and parameters/ minimalist frameworks. Topics include phrase structure, argument structure (unaccusative verbs, unergative verbs, double object constructions), principles of word order, and the binding theory. 4404 is a continuation of 4403 , focusing on syntactic dependencies, including the theory of control, an examination of locality constraints on movement, covert versus overt movement, and the syntax of quantification. The purpose of the course is to develop the background needed for independent syntactic research.

LING 4409 Structure of Italian (KCM-AS)
Fall. 4 credits. Prerequisites: LING 1101
and qualification in any Romance language. C. Rosen.
Survey of Italian syntax, using simple theoretical tools to bring hidden regularities to light. Topics include auxiliaries, modals, clitics, reflexive constructions, agreement, impersonal constructions, and causatives.
[LING 4411 History of the Japanese Language (also ASIAN 4411, JAPAN 4410) @ \# (HA-AS)

Fall. 4 credits. Prerequisite: reading knowledge of Japanese. Next offered 2011-2012. J. Whitman.
Overview of the history of the Japanese language followed by intensive examination of issues of interest to the participants. Students should have a reading knowledge of

## Japanese.]

[LING 4412 Linguistic Structure of Japanese (also ASIAN 4412) (KCM-AS)
Spring. 4 credits. Prerequisites: JAPAN 1102
or permission of instructor and LING 1101.
Next offered 2012-2013. J. Whitman.
Introduction to the linguistic study of
Japanese, with an emphasis on morphology

## and syntax.]

## LING 4416 Structure of the Arabic Language (also NES 4206) @ (KCM-AS) <br> Spring. 4 credits. J. Palmer. <br> For description, see NES 4206.

[LING 4417 History of the Russian Language (also RUSSA 4401) (HA-AS)
Spring. 4 credits. Prerequisite: permission
of instructor. Next offered 2011-2012.
W. Browne.

Phonological, morphological, and syntactic developments from Old Russian to modern Russian.]

## LING 4419 Phonetics I (KCM-AS)

Spring. 4 credits. Prerequisite: LING 3301
or permission of instructor. Staff.
Provides a basic introduction to the study of phonetics. Topics include anatomy and physiology of the speech production apparatus, transcription and production of some of the world's sounds, basic acoustics, computerized methods of speech analysis, acoustic characteristics of sounds, speech perception, speech synthesis, and stress and intonation.

## [LING 4420 Phonetics II (KCM-AS)

Spring. 4 credits. Prerequisite: LING 4419.
Next offered 2011-2012. Staff.
Continuation of Phonetics I, providing a more detailed survey of some areas in acoustic and articulatory phonetics. Topics include feature theory, vocal tract acoustics, quantal theory, speaker normalization, theories of speech perception, coarticulation, theories of speech production, and prosody. In addition, a number of "hands-on" projects are part of the course.]

## LING 4421 Semantics I (KCM-AS)

Fall. 4 credits. Prerequisite: LING 3303. D. Abusch.

Introduces methods for theorizing about meaning within generative grammar. These techniques allow the creation of grammars that pair syntactic structures with meanings. Students look at several empirical areas in detail, among them complementation (combining heads with their arguments), modification, conjunction, definite descriptions, relative clauses, traces, bound pronouns, and quantification. An introduction to logical and mathematical concepts used in linguistic semantics (e.g., set theory, functions and their types, and the lambda notation for naming linguistic meanings) is included in the course.

LING 4422 Semantics II (KCM-AS)
Spring. 4 credits. Prerequisite: LING 4421
or permission of instructor. M. Rooth. Uses the techniques introduced in Semantics I to analyze linguistic phenomena, including quantifier scope, ellipsis, and referential pronouns. Temporal and possible worlds semantics are introduced and used in the analysis of modality, tense, and belief sentences. The phenomena of presupposition, indefinite descriptions, and anaphora are analyzed in a dynamic compositional framework that formalizes the idea that sentence meaning effects a change in an information state.

## LING 4423 Morphology (KCM-AS)

Spring. 4 credits. Prerequisite: LING 1101
or permission of instructor. S. Murray. Addresses the basic issues in the study of words and their structures. Provides an introduction to different types of
morphological structures with examples from a wide range of languages.
LING 4424 Computational Linguistics (also COGST 4240, CS 3740) (MQR)
Fall. 4 credits. Recommended: previous
course work in linguistics or programming. M. Rooth.

Introduces methods for doing a language computationally, including parsing and representation of syntactic analyses; computational morphology; probabilistic grammars; feature constraint formalisms for syntax; treebank methodology.
LING 4425 Pragmatics (also PHIL 4720) (KCM-AS)
Spring. 4 credits. Prerequisite: LING 3303
or PHIL 2310, or permission of instructor. S. Murray.

Introduction to aspects of linguistic meaning that have to do with context and with the use of language.

## [LING 4427 Structure of Hungarian (also HUNGR 4427) (KCM-AS) HUNGR 4427) (KCM-AS)

Fall. 4 credits. Prerequisite: LING 1101.
Next offered 2011-2012. W. Browne.]
LING 4428/6628 Connectionist Psycholinguistics (also COGST 4280, PSYCH 4280/6280)
Fall. 3 credits. M. Christiansen.
For description, see PSYCH 4280.

## [LING 4430 Structure of Korean (also

 ASIAN/KOREA 4430) (KCM-AS)Spring. 4 credits. Prerequisite: KOREA 1102 or linguistics course. No previous knowledge of Korean required. Next offered 2012-2013. J. Whitman. Intensive examination of the syntax and phonology of a non-Indo-European language with the objective of testing principles of current linguistic theory.]

## [LING 4432 Middle Korean (also KRLIT 4432) @ \# (LA-AS)

Spring. 4 credits. Offered alternate years.
Prerequisite: KOREA 2202 or equivalent.
Next offered 2012-2013. J. Whitman. Introduction to the premodern Korean language. Focuses on the earliest bangeul texts of the 15 th century, but also introduces materials written in Korean using Chinese characters before the 15th century, including byangga. No previous background in linguistics is required, but students should have a command of written Korean of at least the third-year level.]

LING 4436 Language Development (also COGST/HD 3370, PSYCH 4360) (KCM-AS)
Spring. 4 credits. B. Lust.
For description, see COGST 3370.
[LING 4441 Introduction to Germanic Linguistics (also GERST 4410) (HA-AS)
Spring. 4 credits. Prerequisite: LING 1101 or permission of instructor. Next offered 2011-2012. W. Harbert.
Survey of major issues in historical Germanic linguistics.]
LING 4443 Linguistic Structure of Russian (also RUSSA 4403) (KCM-AS)
Fall. 4 credits. Prerequisites: reading
knowledge of Russian. W. Browne.
A synchronic analysis of the structure of modern Russian. This course deals primarily with phonology and its relation to morphology.

## LING 4450 Lab Course: Language

 Development (also COGST 4500, HD 4370)Fall. 2 credits. B. Lust.
For description, see HD 4370.
[LING 4451 Greek Comparative Grammar
(also GREEK 4411) (KCM-AS) (also GREEK 4411) (KCM-AS)
Fall. 4 credits. Next offered 2011-2012.
A. Nussbaum or staff.

For description, see GREEK 4411.]

## [LING 4452 Latin Comparative Grammar

 (also LATIN 4452) (KCM-AS)Fall. 4 credits. Next offered 2011-2012.
A. Nussbaum or staff.

For description, see LATIN 4452 .]
[LING 4453 Structure of Latin (also LATIN/ROMS 4453) \# (KCM-AS)
Fall. 4 credits. Prerequisite: a basic
knowledge of Latin forms and
constructions or some previous work in
Romance and/or general linguistics. Next
offered 2011-2012. A. Nussbaum or staff.
An analysis of the phonology, morphology, and syntax of Latin from a synchronic point of view.]

## [LING 4455 Greek Dialects (also GREEK

 4455) (KCM-AS)Fall. 4 credits. Next offered 2012-2013.
A. Nussbaum or staff.

For description, see GREEK 4455.]

## [LING 4456 Archaic Latin (also LATIN

 4456) \# (LA-AS)Spring. 4 credits. Next offered 2012-2013.
M. Weiss.

For description, see LATIN 4456.]
[LING 4457 Homeric Philology (also GREEK 4457) \# (LA-AS)
Spring. 4 credits. Next offered 2012-2013.
A. Nussbaum or staff.

For description, see GREEK 4457.]
[LING 4459 Mycenaean Greek (also
GREEK 4459) (LA-AS) GREEK 4459) (LA-AS)
Spring. 4 credits. Next offered 2012-2013.
A. Nussbaum or staff.

For description, see GREEK 4459.]
[LING 4460 Sanskrit Comparative Grammar (also CLASS 4490) (KCM-AS)
Fall. 4 credits. Prerequisite: reasonable familiarity with classical Sanskrit morphology. Next offered 2012-2013.
A. Nussbaum or staff.

Survey of the historical phonology and morphology of Sanskrit in relation to the Indo-Iranian and Indo-European comparative evidence.]

## LING 4474 Introduction to Natural

 Language Processing (also COGST/ CS 4740)Spring. 4 credits. C. Cardie.
For description, see CS 4740 .

## [LING 4476 Statistics for Linguists

Spring. 4 credits. Next offered 2011-2012. J. Hale.

Introduces distributions, sampling, and hypothesis testing as tools for linguistic research. Students learn to use appropriate software, and as time permits, craft predictive theories using probabilistic grammars and linear models. Only high math presupposed.]

## LING 4485 Topics in Computational

 Linguistics (MQR)Spring. 4 credits. J. Hale.
Laboratory course concerned with broadcoverage computational grammars, computational methodology for addressing linguistic questions, and programming and experimental environments for computational linguistics. Course work includes an experimental project.

## LING 4493 Honors Thesis Research

## Fall. 4 credits. Staff.

May be taken before or after LING 4494, or may be taken independently.

## LING 4494 Honors Thesis Research

Spring. 4 credits. Staff.
May be taken as a continuation of, or before, LING 4493.

## [LING 6600 Field Methods

Spring. 4 credits. Prerequisites: LING 4401, or 3302 and 4403 or 3303 , or permission of instructor. Next offered 2011-2012. Staff.
Elicitation, recording, and analysis of data from a native speaker of a non-Western language not generally known to students.]

## LING 6601 Topics in Phonological Theory

Fall. 4 credits, variable. Prerequisites: LING 4401 and one higher-level phonology course. A. Cohn.
Selected topics in current phonological theory.
[LING 6602 Topics in Morphology
Spring. 4 credits. Prerequisites: LING 4401 or 4403 or permission of instructor. Next offered 2012-2013. J. Bowers.
Selected topics in current morphological

## theory.]

## LING 6604 Research Workshop

Fall. 2 credits. Requirement for third-year
linguistics graduate students. S-U grades only. J. Bowers.
Provides a forum for presentation and
discussion of ongoing research, and
development of professional skills. Participants must enroll in a concurrent independent study with a special committee member, or a
relevant workshop.

## [LING 6606 Historical Syntax

Fall. 4 credits. Prerequisite: LING 4403.
Next offered 2012-2013. J. Whitman.]
[LING 6615 Topics in Semantics
Fall. 4 credits. Prerequisite: LING 4421 or permission of instructor. Next offered 2012-2013. M. Rooth.
Selected topics in semantic theory, focusing on recent literature.]

LING 6616 Topics in Syntactic Theory Spring. 4 credits, variable. Prerequisite:
LING 4404 or permission of instructor. Staff.
Examination of recent developments in syntactic theory, including "minimalist" approaches to phrase structure, derivations/ representations and the nature of economy conditions, and parametric differences.

## [LING 6617-6618 Hittite

6617, fall; 6618, spring. 4 credits each semester. Prerequisites: for LING 6617, permission of instructor; for LING 6618, LING 6617 or permission of instructor. Next offered 2012-2013. M. Weiss.
Introduction to the cuneiform writing system and the grammar of Hittite, followed by the reading of selected texts.]

## [LING 6619 Rigveda

Fall. 4 credits. Prerequisite: permission of instructor. Next offered 2012-2013. Staff.]

## LING 6623-6624 Old Irish I, II

6623, fall; 6624, spring. 4 credits each semester. Prerequisite: for LING 6624, LING
6623 or permission of instructor. M. Weiss. Introduction to the grammar of Old Irish. Reading from selected Old Irish glosses and prose works.

## [LING 6625 Middle Welsh

Spring. 4 credits. Prerequisite: permission of instructor. Next offered 2011-2012. W. Harbert.

Students develop a reading knowledge of Middle Welsh through translating selections from prose and poetry. No familiarity with Welsh is assumed.]

## LING 6628 Connectionist Psycholinguistics (also COGST/ PSYCH 4280)

Fall. 3 credits. M. Christiansen. For description, see PSYCH 4280.

## [LING 6633 Language Acquisition

 Seminar (also COGST/HD 6330)Fall. 1-4 credits. Prerequisite: LING 4436 or equivalent or permission of instructor. Next offered 2011-2012. B. Lust.
This seminar reviews and critiques current theoretical and experimental studies of first language acquisition, with a concentration on insights gained by cross-linguistic study of this area. Attention is also given to the development of research proposals.]

## [LING 6635-6636 Indo-European

## Workshop

6635, fall; 6636, spring. 4 credits each semester. Prerequisite: permission of instructor. Next offered 2011-2012. M. Weiss.

An assortment of subjects intended for students with previous training in IndoEuropean linguistics.]

## [LING 6645 Gothic

Fall. 4 credits. Prerequisite: LING 1101. Offered every three years; next offered 2012-2013. W. Harbert.
Linguistic structure of Gothic, with extensive readings of Gothic texts.]

## [LING 6646 Old High German, Old Saxon

 (also GERST 6580)Spring. 4 credits. Prerequisite: LING 1101.
Highly recommended: reading knowledge of Modern German. Offered every three years; next offered 2011-2012. W. Harbert. Combines a survey of the linguistic history and structure of Old High German and Old Saxon with extensive readings from the major documents in which they are recorded.]

## [LING 6648 Speech Synthesis (also INFO 6648)

Spring. 4 credits. Prerequisite: LING 4401, 4419, or permission of instructor. Offered alternate years; next offered 2011-2012. S. Hertz.

Investigates the nature of the acoustic structure of speech synthesis. The course may also be of interest to students in psychology, computer science, and cognitive science.]
[LING 6649 Structure of Old English (also ENGL 6170)
Fall. 4 credits. Prerequisite: LING 4441.
Offered every three years; next offered 2011-2012. W. Harbert.
Linguistic overview of Old English, with emphasis on phonology, morphology, and syntax.]

## LING 6662 Old Russian Texts (also RUSSA 6602)

Spring. 4 credits. Prerequisite: LING 6663. W. Browne.

Grammatical analysis and close reading of Old Russian texts.

## LING 6663 Old Church Slavonic (also RUSSA 6601)

Fall. 4 credits. Prerequisite: knowledge of Slavic or ancient Indo-European language. Prerequisite to LING 6662 and 6671.

## W. Browne.

Grammar and reading of basic texts.

## [LING 6671 Comparative Slavic

 Linguistics (also RUSSA 6651)Fall. 4 credits. Prerequisites: LING 6663 taken previously or simultaneously, or permission of instructor. Offered alternate
years; next offered 2011-2012. W. Browne. Sounds and forms of the Slavic languages and of prehistoric common Slavic; main historical developments leading to the modern languages.]

## LING 7701-7702 Directed Research

7701, fall; 7702, spring. 1-4 credits. Times
TBA. Staff.

## LING 7710-7720 Seminar

Fall or spring. Credit TBA.
Seminars are offered according to faculty interest and student demand. Recent topics include: semantics; computational linguistics; language acquisition; and the nature of the interfaces between phonetics, phonology, and syntax.

## MATHEMATICS

www.math.cornell.edu
L. Saloff-Coste, chair; A. Back, D. Barbasch, Y. Berest, L. Billera, K. Brown, X. Cao,
R. Connelly, R. K. Dennis, R. Durrett,
A. Frohmader, L. Gross, J. Guckenheimer, A. Hatcher, T. Healey, D. Henderson, T. Holm, J. Hubbard, M. Huntley, J. Hwang,
Y. Ilyashenko, P. Kahn, M. Kassabov,
A. Knutson, T. Matsamura, G. Michler, F. Moore, J. Moore, C. Muscalu, A. Nerode, M. Nussbaum, I. Peeva, R. Ramakrishna, R. Rand, T. Riley,
A. Schatz, S. Sen, R. A. Shore, R. Sjamaar (DGS), J. Smillie, B. Speh, M. E. Stillman, R. Strichartz, S. Strogatz, E. Swartz, M. Terrell, R. Terrell, W. Thurston, A. Vladimirsky, K. Vogtmann, L. Wahlbin (DUS), J. West. Emeritus: J. Bramble, S. Chase, M. Cohen, E. Dynkin, C. Earle, R. Farrell, H. Kesten, G. R. Livesay, M. Morley, L. E. Payne, M. Sweedler

Mathematics is the language of modern science; basic training in the discipline is essential for those who want to understand, as well as for those who want to take part in, the important scientific developments of our time. Acquaintance with mathematics is also extremely useful for students in the social sciences and valuable for anyone interested in the full range of human culture and the ways of knowing the universe in which we live.
The Department of Mathematics faculty has strong groups specializing in algebra, number theory, combinatorics, real and complex analysis, Lie groups, topology and geometry, logic, probability and statistics, mathematical physics, and applied mathematics. Related departments at Cornell have specialists in computer science and operations research. Courses in these topics can be integrated readily into the mathematics major.
The department offers a rich variety of undergraduate courses, and many of its beginning graduate courses are suitable for advanced undergraduates as well. Under some conditions, a student may carry out an independent reading and research project for college credit under the supervision of a faculty member.
Members of the department are available to discuss with students the appropriate course for their levels of ability and interest, and students are urged to avail themselves of this help. Students who want to take any of the courses numbered 3000 or above are invited to confer with the instructor before enrolling.

## Course Numbering System

The first digit of the course number indicates the level of the course: roughly, 1 and 2 indicate underclass courses; 3 and 4 , upperclass courses; 5, professional-level and mathematics education courses; 6 and 7, graduate courses. Within the MATH subject area, the second digit often indicates the subject matter: 0 , general; 1 and 2 , analysis; 3 and 4, algebra and combinatorics; 5 and 6, topology and geometry; 7 , probability and statistics; 8, logic; 9, other.

## Advanced Placement

Freshmen who have had some calculus should carefully read "Advanced Placement," p. 8. Those who have not taken an advanced placement exam should take a placement test at Cornell during fall orientation. For guidance in selecting an appropriate course, please
consult First Steps in Math, published on the Mathematics Department web site (www.math. cornell.edu) under "Courses."

## Major in Mathematics

The mathematics major adapts to a number of purposes. It can emphasize the theoretical or the applied. It can be appropriate for professionals and nonprofessionals alike, and can be broad or narrow. It can also be combined easily with serious study in another subject in the physical, biological, or social sciences by means of a double major and/or concentration. (See "Double Majors" below for more information.) Questions concerning the major should be brought to a member of the Mathematics Major Committee

## Prerequisites

Students are admitted to the major after successfully completing a semester of multivariable calculus and a semester of linear algebra. The department recommends either MATH 2210-2220 or 2230-2240 with grades of B - or better. Alternative prerequisites are MATH 1920 and 2940 with grades of B- or better or MATH 2130 and 2310 with grades of B+ or better. A 3- or 4-credit computer programming course with a grade of C - or better is also required for acceptance to the major. Eligible courses include: CS 1110, 1112, 1113, 1114, and 2110.

## Requirements

Students must complete nine courses, as described in items 1-3 below, under the following constraints:

- At least two of the MATH courses taken must be at the 4000 level (or above). (Students graduating before May 2011 are exempt from this constraint.)
- A course may be counted toward the major only if it is taken for a letter grade and a grade of C - or better is received for the course.
- No course may be used to satisfy more than one requirement for the major.
- 2-credit courses count as half courses.
- MATH courses numbered between 5000 and 5999 do not count toward the major.
Major advisors may make adjustments to the major requirements upon request from an advisee, provided the intent of the requirements is met. In particular, many suitable graduate courses are not listed here.

1. Two courses in algebra. Eligible courses are: MATH 4310 or 4330; MATH 4320 or 4340; MATH 4370; MATH 4500; MATH 3320; MATH 3360.
2. Two courses in analysis. Eligible courses are: MATH 3110, 3210, 3230, 4130, 4140, 4180, 4200, 4220, 4240, 4250 (also CS 4210), 4260 (also CS 4220), 4280.
3. Five further high-level mathematical courses. The seven alternatives $(a-g)$ below do not exhaust the possibilities. A mathematics major interested in a concentration in a subject different from those below may develop a suitable individual program in consultation with bis or her major advisor.

## a. Concentration in Mathematics:

i. Four additional MATH courses numbered 3000 or above. For students graduating in May 2011
or later, at least one of the four courses must be among the following geometry/topology courses: MATH 3560, 4500, 4510, 4520, 4530, 4540, 4550.
ii. One course dealing with mathematical models. Any course from outside mathematics with serious mathematical content and dealing with scientific matters Serious mathematical content includes, but is not limited to, extensive use of calculus or linear algebra. Eligible courses include any course from another department that would satisfy one of the concentrations, as well as CS 2110, MATH 3840/PHIL 3300, MATH 4810/PHIL 4310, MATH 4820/PHIL 4311, MATH 4830/PHIL 4312, PHYS 1116, PHYS 2208, PHYS 2213, and PHYS 2217. Other 1000-level physics courses and PHYS 2207 may not be used, but some courses in other fields may be accepted.
b. Concentration in Computer Science:

Five additional courses from (iii) and (iv) below, of which at least one is from (iii) and three are from (iv).
iii. MATH courses numbered 3000 or above.
iv. Computer science courses with significant mathematical content. Eligible courses are: CS 3220, 3810, 4110, 4210 (also MATH 4250), 4220 (also MATH 4260), 4520, 4620, 4700, 4740, 4780, 4812, 4820, 4830, 4850, and 4860.
c. Concentration in Economics: Five additional courses from (v), (vi), and (vii) below, as follows: one course from (v), three courses from (vi), and a fifth course from any of (v), (vi), or (vii).
v. MATH courses numbered 3000 or above.
vi. Economics courses with significant mathematical content. Eligible courses are: ECON 3190/6190, 3200/6200, 3250, 3680, 4160, 4190, 4760/6760, 4770/6770, 6090, 6100, 6110, 6130, 6140, 7170, 7180, 7480, 7490, 7560. Only two of the econometrics courses (3200/6200, $3250,7480,7490$ ) are allowed.
vii. Courses in operations research with significant mathematical content and dealing with material of interest in economics. Eligible courses are: ORIE 3300, 3310, 4320, 4350, 4600, 4710, 4740, 5600 and 5610 .
d. Concentration in Mathematical

Biology: Five additional courses from (viii) and (ix) below, with three courses from (viii) and two courses from (ix).
viii. Biology courses that have mathematical content or provide background necessary for work at the interface between biology and mathematics. Eligible courses are: BIOEE/MATH 3620, BIOEE 4600,

BIONB 4220, BTRY 4080, 4090, 4820, 4830, 4840.
ix. MATH courses numbered above 3000. Particularly appropriate are MATH 4200 and 4710.

## e. Concentration in Mathematical

Physics: Five additional courses from (x) and (xi) below, of which at least one is from (x) and three are from (xi).
x. MATH courses in analysis, geometry, algebra and combinatorics, probability and statistics, and mathematical logic. Eligible courses are: MATH 3110, 3210, 3230, 4010, 4130, 4140, 4200, 4180 or 4220, 4240, 4250 (also CS 4210), 4260 (also CS 4220), 4280, 4310 or 4330, 4320 or 4340, 4370, 4410, 4420, 4500, 4510, 4520, 4530, 4540, 4550, 4710, 4720, 4810, 4820, 4830, 4860.
xi. Physics courses that make significant use of advanced mathematics. Eligible courses are: PHYS 3314, 3316, 3318, 3323 , 3327, 3341, 4443, 4444, 4445, 4454, 4455, 4480, 4481.
f. Concentration in Operations

Research: Five additional courses
from (xii) and (xiii) below, of which at least one is from (xii) and three are from (xiii).
xii. MATH courses numbered 3000 or above.
xiii. Courses in operations research in which the primary focus involves mathematical techniques. Eligible courses are: ORIE 3300, 3310,
3500, 3510, 4150, 4300, 4320, 4330, 4350, 4360, 4370, 4520, 4540, 4600, 4630, 4710, 4740, 4850, 5600, 5610, and 5640 .
g. Concentration in Statistics: Five additional courses from (xiv), (xv), and (xvi) below, as follows:
xiv. Both MATH 4710 and 4720 .
xv. One additional MATH course numbered 3000 or above.
xvi. Two courses in other departments with significant content in probability and statistics, complementing (xv). Eligible courses are: BTRY 3020, 4790, 4820, 6020, 6030, 6040; ORIE 3510, 4520, 4540, 4600, 4630, 4710 (half course), 4740, 5600, 5610; ILRST 3120, 4100, 4110; and ECON 3200.
MATH 1710 is also recommended for students who have not had experience with real-world data, although it will not count toward any of the math major requirements. It should be taken or audited before or concurrent with MATH 4710.

## Double Majors

A double major with computer science, economics, or physics can be facilitated by the corresponding concentrations described above. The Departments of Computer Science and Economics permit double majors to use courses in the corresponding concentrations to satisfy the requirements of both majors. The Physics Department also permits double
counting, but only if the student completes the physics major with an inside concentration.
Students should consult the appropriate departments for any further conditions.

## Senior Thesis

A senior thesis can form a valuable part of a student's experience in the mathematics major It is intended to allow students to conduct an in-depth investigation not possible in regular course work. The work should be independent and creative. It can involve the solution of a serious mathematics problem, or it can be an expository work, or variants of these. Conducting independent research, paying careful attention to exposition in the finished written product, and the delivery of an optional oral presentation can have a lasting positive impact on a student's educational and professional future.

## Honors

The Department of Mathematics awards honors (cum laude) and high honors (magna cum laude and summa cum laude) to graduating mathematics majors who have performed outstandingly in the major program
The awards are determined by the Mathematics Major Committee in the latter part of the semester before graduation. The committee will primarily be looking for excellent performance in mathematics courses, particularly in challenging courses at the 4000 level or beyond. Participation in the honors seminar (MATH 4010) for one semester, or independent study at a high performance level can also contribute to honors. Students interested in any level of honors should consult their major advisors or a member of the Mathematics Major Committee concerning suitable courses. Outstanding performance in graduate classes or an excellent senior thesis can contribute to high honors.

## Teacher Education in Mathematics

For information on the various possibilities for students considering teaching mathematics in schools, go to www.math.cornell.edu/ Undergraduate/Teaching.

## Minor in Mathematics

The Mathematics Department is in the process of developing a minor in mathematics Information will be posted in the Undergraduate section of the Mathematics Department web site (www.math.cornell.edu) as it becomes available.

## Precalculus

Students who need to take Calculus I (MATH 1106 or 1110) but are lacking the necessary prerequisites may take MATH 1009 or 1101 to prepare. MATH 1009 does not carry credit toward graduation.

## Calculus and Linear Algebra

Students should consult their advisors and keep major prerequisites in mind when planning a suitable program. The following are general recommendations. Consult First Steps in Math (www.math.cornell.edu/Courses/ FSM) for more detail. The director of undergraduate studies will gladly meet with students to offer further advice

1. Students who expect to major in mathematics or a science for which a strong math background is recommended should take MATH 1110-1120 or MATH 1110-1220 and continue with MATH 2210-2220 or 2230-2240
2. MATH 1910-1920-2930-2940 is required for students in the engineering college and recommended by some advisors in fields strongly related to the mathematical and physical sciences, such as astronomy, computer science, physics, and physical chemistry.
3. MATH $1110-1120$ and 2130 or 2310 is a good choice for students who need to master the basic techniques of calculus but whose majors will not require a substantial amount of mathematics.
4. MATH 1110-2310 is an option for students who need some linear algebra but not a full year of calculus.
5. Students who are undecided about their future studies at Cornell but think they may involve a substantial amount of math, should keep their options open by taking Calculus I (MATH 1110 or AP credit), Calculus II (MATH 1120 or 1220 or AP credit), and Linear Algebra (MATH 2210). Multivariable Calculus (MATH 2220) would be the next step for students who are still leaning in the direction of a mathrelated major and may wish to take more advanced mathematics

Switching between calculus sequences is often difficult, especially at the 2000 level. Students should not attempt sucb a switch without consulting the director of undergraduate studies.

## Special-Purpose Sequences

Students who will take no more than two semesters of mathematics can gain a broader view of the subject by taking one semester of calculus and one non-calculus mathematics course. The following options are particularly useful for students in the life and social sciences and will satisfy the mathematics requirement for most medical schools

1. MATH $1105-1106$ provides a one-year introduction to the mathematical topics that are most useful to biologists and social scientists. (MATH 1110 may be substituted for MATH 1106.)
2. An introductory statistics course (MATH 1710, for example), taken before or after a semester of calculus (MATH 1106 or MATH 1110), teaches students how to work with data and can be more useful in some disciplines than a second semester of calculus.

Students who want two semesters of calculus are advised to take the first two semesters of one of the calculus sequences, but students with excellent performance in MATH 1106 may follow that course with MATH 1120 or 1220.

## Courses with Overlapping Content

Because the department offers many courses with overlapping content, students must choose their courses carefully to ensure that they will receive credit for each course they take. Listed below are groups of courses that have similar content. Students will receive credit for only one of the courses in each group.

MATH 1106, 1110
MATH 1120, 1220, 1910
MATH 1920, 2130, 2220, 2240
MATH 2210, 2230, 2310, 2940
MATH 3110, 4130
MATH 3230, 4280
MATH 4180, 4220
MATH 4310 and 4330
MATH 4320 and 4340
MATH 4710, ECON 3190, BTRY 4080
MATH 4720, ECON 3190, BTRY 4090
Note: Courses with overlapping content are not necessarily equivalent courses. Students are encouraged to consult a mathematics faculty member when choosing between them.

## Undergraduate Course Offerings

Please visit www.math.cornell.edu for further information and up-to-the-minute corrections. For guidance in selecting an appropriate course, please consult First Steps in Math, published on the mathematics department web site under "Courses."

Foundation courses: 1105, 1106, 1110, 1120, 1220, 1910, 1920, 2130, 2210, 2220, 2230, 2240, 2310, 2930, 2940

Mathematics Education: 4510
History of Mathematics: 4030
General and Liberal Arts Courses: 1300, 1340, 1350, 1710, 3040, 4010

Analysis: 3110, 3210, 4130, 4140, 4180
Algebra and Number Theory: 3320, 3360, 4310, 4320, 4330, 4340, 4370, 4500

Combinatorics: 4410, 4420, 4550
Geometry and Topology: 3560, 4500, 4510 4520, 4530, 4540

Probability and Statistics: 1710, 2710, 4710, 4720, 4740

Mathematical Logic: 2810, 3840, 4810, 4820, 4860
Applied Analysis and Differential Equations: 3230, 3620, 4200, 4220, 4240, 4250, 4260, 4280

## MATH 1006 Academic Support for MATH

 1106Spring. 1 transcript credit (will appear on transcript, does not count toward graduation). Credit may be used toward good academic standing for students in Architecture, Art, and Planning;
Engineering, Hotel Administration; and Human Ecology; but not for students in Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations
Reviews material presented in MATH 1106 lectures, provides problem-solving techniques and tips as well as prelim review. Provides further instruction for students who need reinforcement. Not a substitute for attending MATH 1106 lectures or discussions

## MATH 1009 Precalculus Mathematics

Summer. 3 transcript credits (will appear on transcript; does not count toward graduation).
Designed to prepare students for MATH 1110 Reviews algebra, trigonometry, logarithms, and exponentials.

MATH 1011 Academic Support for MATH 1110
Fall, spring. 1 transcript credit (will appear on transcript; does not count toward graduation). Credit may be used toward good academic standing for students in Architecture, Art, and Planning,
Engineering, Hotel Administration, and Human Ecology but not for students in Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations.
Reviews material presented in MATH 1110 lectures, provides problem-solving techniques and tips as well as prelim review. Provides further instruction for students who need reinforcement. Not a substitute for attending MATH 1110 lectures.

## MATH 1012 Academic Support for MATH 1120

Fall, spring. 1 transcript credit (will appear on transcript; does not count toward graduation). Credit may be used toward good academic standing for students in Architecture, Art, and Planning,
Engineering, Hotel Administration, and Human Ecology but not for students in Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations.
Reviews material presented in MATH 1120 lectures, provides problem-solving techniques and tips as well as prelim review. Provides further instruction for students who need reinforcement. Not a substitute for attending

## MATH 1120 lectures or discussions.

MATH 1101 Calculus Preparation Fall, spring. 1 credit. Due to an overlap in content, students will forfeit credit for MATH 1101 upon completion of MATH 1106 or 1110.
Introduces a wide variety of topics of algebra and trigonometry to prepare students for calculus. Emphasis is on the development of linear, polynomial, rational, trigonometric, exponential, and logarithmic functions. Due to the strong emphasis on graphing, students will have a better understanding of asymptotic behavior, limits, and their application to calculus. The course includes a brief graphical introduction to basic concepts of differential calculus, including limits, continuity, and the derivative. The calculus content of the course is similar to $1 / 3$ of the content covered in MATH 1106 and 1110.

## MATH 1102 Quantitative Methods for the

 Life SciencesFall. 1 credit. Due to an overlap in content, students will forfeit credit for MATH 1102 upon completion of MATH 1105 or an introductory statistics course (such as MATH 1710).
Introduces a variety of topics of algebra and prepares students for statistics and finite mathematics. Emphasis is on the development of linear, polynomial, exponential, and logarithmic functions and their applications to curve fitting. The course includes basic probability laws, descriptive statistics, linear regression, and discrete and continuous probability distributions. The probability and statistics content of the course is similar to $1 / 3$ of the content covered in MATH 1105 and various introductory statistics courses.

MATH 1105 Finite Mathematics for the Life and Social Sciences (MQR) Fall. 3 credits. Prerequisite: three years high school mathematics, including trigonometry and logarithms.
Introduction to linear algebra, probability, and Markov chains that develops the parts of the theory most relevant for applications. Specific topics include equations of lines, the method of least squares, solutions of linear systems, matrices; basic concepts of probability, permutations, combinations, binomial distribution, mean and variance, and the normal approximation to the binomial distribution. Examples from biology and the social sciences are used.

## MATH 1106 Calculus for the Life and

 Social Sciences (MQR)Spring. 3 credits. Prerequisite: three years of high school mathematics (including trigonometry and logarithms) or a precalculus course (e.g., MATH 1009 or 1101). For students planning to take MATH 1120, MATH 1110 is recommended rather than 1106. Students may not receive credit for both MATH 1106 and MATH 1110.

Introduction to differential and integral calculus, partial derivatives, elementary differential equations. Examples from biology and the social sciences are used.

## MATH 1110 Calculus I (MQR)

Fall, spring, summer. 4 credits. Prerequisite: three years of high school mathematics (including trigonometry and logarithms) or a precalculus course (e.g., MATH 1009 or
1101). Students may not receive credit
for both MATH 1110 and MATH 1106.
Topics include functions and graphs, limits and continuity, differentiation and integration of algebraic, trigonometric, inverse trig, logarithmic, and exponential functions; applications of differentiation, including graphing, max-min problems, tangent line approximation, implicit differentiation, and applications to the sciences; the mean value theorem; and antiderivatives, definite and indefinite integrals, the fundamental theorem of calculus, substitution in integration, the area under a curve. Graphing calculators are used, and their pitfalls are discussed, as applicable to the above topics. MATH 1110 can serve as a one-semester introduction to calculus or as part of a two-semester sequence in which it is followed by MATH 1120 or 1220 .

## MATH 1120 Calculus II (MQR)

Fall, spring. 4 credits. Prerequisite: MATH 1110 with grade of $C$ or better or excellent performance in MATH 1106. Those who do well in MATH 1110 and expect to major in mathematics or strongly mathematicsrelated field should take 1220 instead of 1120. Due to an overlap in content, students will receive credit for only one course in the following group:
MATH 1120, MATH 1220, MATH 1910. Focuses on integration: applications, including volumes and arc length; techniques of integration, approximate integration with error estimates, improper integrals, differential equations (separation of variables, initial conditions, systems, some applications). Also covers infinite sequences and series: definition and tests for convergence, power series, Taylor series with remainder, and parametric equations.

MATH 1220 Honors Calculus II (MQR)
Fall. 4 credits. Prerequisite: one semester of calculus with high performance or permission of department. Students planning to continue with MATH 2130 are advised to take 1120 instead of this course. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 1220, MATH 1120, MATH 1910.
Takes a more theoretical approach to calculus than MATH 1120. Topics include differentiation and integration of elementary transcendental functions, techniques of integration, applications, polar coordinates, infinite series, and complex numbers, as well as an introduction to proving theorems.

## [MATH 1300 Mathematical Explorations

 (MQR)3 credits. Next offered 2011-2012.
Emphasizes ideas and imagination rather than techniques and calculations. Homework involves students in actively investigating mathematical ideas. Topics vary. Some assessment through writing assignments.]

## MATH 1340 Mathematics and Politics (MQR)

Spring, summer. 3 credits.
We apply mathematical reasoning to some problems arising in the social sciences. We discuss game theory and its applications to political and historical conflicts. Power indices are introduced and used to analyze some political institutions. The problem of finding a fair election procedure to choose among three or more alternatives is analyzed.

## MATH 1350 The Art of Secret Writing (MQR)

Fall, summer. 3 credits. Prerequisite: three years high school mathematics. Examines classical and modern methods of message encryption, decryption, and cryptoanalysis. Mathematical tools are developed to describe these methods (modular arithmetic, probability, matrix arithmetic, number theory), and some of the fascinating history of the methods and people involved is presented.

## MATH 1600 Totally Awesome Mathematics

Spring. 2 credits. Prerequisite: one semester calculus. (AP credit is sufficient.) Mathematics is a broad and varied field that extends far beyond calculus and the high school curriculum. This course will introduce exciting mathematical topics to stretch your imagination and give you a feel for the great variety of problems that mathematicians study. Each week a different lecturer will present a new topic and fun problems for discussion. Topics will vary from year to year, but may include the following: encryption and number theory, non-Euclidean geometry, knots and surfaces, combinatorics of polyhedra, the Heisenberg Uncertainty Principle and signal processing, unsolvable problems and noncomputable functions, card shuffling and probability, symmetry and solutions of polynomial equations.

## MATH 1710 Statistical Theory and

 Application in the Real World (MQR)Fall, spring, summer. 4 credits. Prerequisite: high school mathematics. No previous familiarity with computers presumed. No credit if taken after ECON 3190, 3200, or 3210.

Introductory statistics course discussing techniques for analyzing data occurring in the real world and the mathematical and philosophical justification for these techniques. Topics include population and sample distributions, central limit theorem, statistical theories of point estimation, confidence intervals, testing hypotheses, the linear model, and the least squares estimator. The course concludes with a discussion of tests and estimates for regression and analysis of variance (if time permits). The computer is used to demonstrate some aspects of the theory, such as sampling distributions and the Central Limit Theorem. In the lab portion of the course, students learn and use computerbased methods for implementing the statistical methodology presented in the lectures.

MATH 1910 Calculus for Engineers (MQR) Fall, spring, summer. 4 credits. Prerequisite: three years high school mathematics including trigonometry and logarithms and at least one course in differential and integral calculus. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 1910, MATH 1120, MATH 1220.
Essentially a second course in calculus. Topics include techniques of integration, finding areas and volumes by integration, exponential growth, partial fractions, infinite sequences and series, and power series.

## MATH 1920 Multivariable Calculus for Engineers (MQR)

Fall, spring, summer. 4 credits. Prerequisite MATH 1910. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 1920, MATH 2130, MATH 2220, MATH 2240.
Introduction to multivariable calculus. Topics include partial derivatives, double and triple integrals, line integrals, vector fields, Green's theorem, Stokes' theorem, and the divergence theorem.

## MATH 2130 Calculus III (MQR)

Fall, spring. 4 credits. Prerequisite: MATH 1120,1220 , or 1910. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2130, MATH 1920, MATH 2220, MATH 2240.
Designed for students who wish to master the basic techniques of multivariable calculus, but whose major will not require a substantial amount of mathematics. Topics include vectors and vector-valued functions; multivariable and vector calculus including multiple and line integrals; first- and second-order differential equations with applications; systems of differential equations; and elementary partial differential equations. The course may emphasize different topics in the syllabus in different semesters, such as Green's theorem, Stokes' theorem, and the divergence theorem.

## MATH 2210 Linear Algebra (MQR)

Fall, spring. 4 credits. Prerequisite: two semesters of calculus with high performance or permission of department. Recommended for students who plan to major in mathematics or a related field. For a more applied version of this course, see
MATH 2310. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2210, MATH 2230, MATH 2310, MATH 2940.

Topics include vector algebra, linear transformations, matrices, determinants, orthogonality, eigenvalues, and eigenvectors Applications are made to linear differential equations.

MATH 2220 Multivariable Calculus (MQR)
Fall, spring. 4 credits. Prerequisite: MATH 2210. Recommended for students who plan to major in mathematics or a related field.
Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2220, MATH 1920, MATH 2130, MATH 2240. Differential and integral calculus of functions in several variables, line and surface integrals as well as the theorems of Green, Stokes, and Gauss.

## MATH 2230 Theoretical Linear Algebra

 and Calculus (MQR)Fall. 4 credits. Prerequisite: two semesters of calculus with grade of A- or better, or permission of instructor. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2230,
MATH 2210, MATH 2310, MATH 2940.
MATH 2230-2240 provides an integrated treatment of linear algebra and multivariable calculus designed for students who have been highly successful in their previous calculus courses. The material is presented at a higher theoretical level than in 2210-2220. Topics in 2230 include vectors, matrices, and linear transformations; differential calculus of functions of several variables; inverse and implicit function theorems; quadratic forms, extrema, and manifolds; multiple and iterated integrals.

## MATH 2240 Theoretical Linear Algebra and Calculus (MQR) <br> Spring. 4 credits. Prerequisite: MATH 2230. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2240,

 MATH 1920, MATH 2130, MATH 2220.Topics include vector fields; line integrals; differential forms and exterior derivative; work, flux, and density forms; integration of forms over parametrized domains; and Green's, Stokes', and divergence theorems.

## MATH 2310 Linear Algebra with Applications (MQR)

Fall, spring. 3 credits. Prerequisite: MATH 1110 or equivalent. Students who plan to major in mathematics should take MATH 2210 or 2940 . Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2310, MATH 2210, MATH 2230, MATH 2940.
Introduction to linear algebra for students who wish to focus on the practical applications of the subject. A wide range of applications are discussed and computer software may be used. The main topics are systems of linear equations, matrices, determinants, vector spaces, orthogonality, and eigenvalues. Typical applications are population models, input/ output models, least squares, and difference equations.

## [MATH 2710 A Second Course in

 Statistics (MQR)Fall. 4 credits. Prerequisite: two semesters of calculus (MATH 1110-1120 or equivalent) or permission of instructor. Recommended: an introductory statistics course such as AP statistics, MATH 1710, ILRST 2100, or similar. Next offered 20112012
Designed for students who wish to build on their knowledge of basic statistics to obtain a more modern and advanced perspective on the field.]

## MATH 2810 Deductive Logic (also PHIL 3310) (MQR) <br> Spring. 4 credits <br> For description, see PHIL 3310.

## MATH 2930 Differential Equations for Engineers (MQR)

Fall, spring, summer. 4 credits. Prerequisite: MATH 1920. Taking MATH 2930 and 2940 simultaneously is not recommended.
Introduction to ordinary and partial differential equations. Topics include: firstorder equations (separable, linear, homogeneous, exact); mathematical modeling (e.g., population growth, terminal velocity); qualitative methods (slope fields, phase plots, equilibria, and stability); numerical methods; second-order equations (method of undetermined coefficients, application to oscillations and resonance, boundary-value problems and eigenvalues); Fourier series; linear partial differential equations (heat flow, waves, the Laplace equation); and linear systems of ordinary differential equations

## MATH 2940 Linear Algebra for Engineers

 (MQR)Fall, spring, summer. 4 credits. Prerequisite: MATH 1920. Taking MATH 2930 and 2940 simultaneously is not recommended. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 2940,
MATH 2210, MATH 2230, MATH 2310. Linear algebra and its applications. Topics include matrices, determinants, vector spaces, eigenvalues and eigenvectors, orthogonality and inner product spaces; applications include brief introductions to difference equations, Markov chains, and systems of linear ordinary differential equations. May include computer use in solving problems.

## MATH $\mathbf{3 0 4 0}$ Prove It! (MQR)

Spring. 4 credits. Prerequisite: MATH 2210, 2230, 2940, or permission of instructor. In mathematics, the methodology of proof provides a central tool for confirming the validity of mathematical assertions, functioning much as the experimental method does in the physical sciences. In this course, students learn various methods of mathematical proof, starting with basic techniques in propositional and predicate calculus and in set theory and combinatorics, and then moving to applications and illustrations of these via topics in one or more of the three main pillars of mathematics: algebra, analysis, and geometry. Since cogent communication of mathematical ideas is important in the presentation of proofs, the course emphasizes clear, concise exposition This course is useful for all students who wish to improve their skills in mathematical proof and exposition, or who intend to study more advanced topics in mathematics.

MATH 3110 Introduction to Analysis (MQR)
Fall, spring. 4 credits. Prerequisites: MATH 2210-2220, 2230-2240, or 1920 and 2940.
Students may not receive credit for both MATH 3110 and MATH 4130 if either course is taken fall 2010 or later.
Provides a transition from calculus to real analysis. Topics include rigorous treatment of fundamental concepts in calculus: including limits and convergence of sequences and series, compact sets; continuity, uniform continuity and differentiability of functions. Emphasis is placed upon understanding and constructing mathematical proofs.

## MATH 3210 Manifolds and Differential Forms (MQR)

Fall. 4 credits. Prerequisites: multivariable calculus and linear algebra (e.g., MATH 2210-2220, 2230-2240, or 1920 and 2940). A manifold is a type of subset of Euclidean space that has a well-defined tangent space at every point. Such a set is amenable to the methods of multivariable calculus. After a review of some relevant calculus, this course investigates manifolds and the structures that they are endowed with, such as tangent vectors, boundaries, orientations, and differential forms. The notion of a differential form encompasses such ideas as surface and volume forms, the work exerted by a force, the flow of a fluid, and the curvature of a surface, space, or hyperspace. The course re-examines the integral theorems of vector calculus (Green, Gauss, and Stokes) in the light of differential forms and apply them to problems in partial differential equations, topology, fluid mechanics, and
electromagnetism.

## MATH 3230 Introduction to Differential

 Equations (MQR)Fall. 4 credits. Prerequisites: multivariable calculus and linear algebra (e.g., MATH 2210-2220, 2230-2240, or 1920 and 2940), or permission of instructor. Students may not receive credit for both MATH 3230 and MATH 4280.
Intended for students who want a brief onesemester introduction to the theory and techniques of both ordinary and partial differential equations. Topics for ordinary differential equations may include initial-value and two-point boundary value problems, the basic existence and uniqueness theorems, continuous dependence on data, stability of fix-points, numerical methods, special functions. Topics for partial differential equations may include the Poisson, heat and wave equations, boundary and initialboundary value problems, maximum principles, continuous dependence on data, separation of variables, Fourier series, Green's functions, numerical methods, transform methods.

## MATH 3320 Introduction to Number Theory (MQR)

Fall. 4 credits. Prerequisite: MATH 2210, 2230, 2310, or 2940.
An introductory course on number theory, the branch of algebra that studies the deeper properties of integers and their generalizations. Usually includes most of the following topics: the Euclidean algorithm, continued fractions, Pythagorean triples, Diophantine equations such as Pell's equation, congruences, quadratic reciprocity, binary quadratic forms, Gaussian integers, and factorization in quadratic number fields. May
include a brief introduction to Fermat's Last Theorem.

## MATH $\mathbf{3 3 6 0}$ Applicable Algebra (MQR)

Spring. 4 credits. Prerequisite: MATH 2210 , 2230, 2310, or 2940.
Introduction to the concepts and methods of abstract algebra and number theory that are of interest in applications. Covers the basic theory of groups, rings and fields and their applications to such areas as public-key cryptography, error-correcting codes, parallel computing, and experimental designs. Applications include the RSA cryptosystem and use of finite fields to construct errorcorrecting codes and Latin squares. Topics include elementary number theory, Euclidean algorithm, prime factorization, congruences, theorems of Fermat and Euler, elementary group theory, Chinese remainder theorem, factorization in the ring of polynomials, and classification of finite fields.

MATH 3560 Groups and Geometry (MQR)
Fall. 4 credits. Prerequisite: MATH 2210,
2230, 2310, or 2940. Prior knowledge of group theory is not a prerequisite. A geometric introduction to the algebraic theory of groups, through the study of symmetries of planar patterns and 3-dimensional regular polyhedra. Besides studying these algebraic and geometric objects themselves, the course also provides an introduction to abstract mathematical thinking and mathematical proofs, serving as a bridge to the more advanced 4000 -level courses. Abstract concepts covered include: axioms for groups; subgroups and quotient groups; isomorphisms and homomorphisms; conjugacy; group actions, orbits, and stabilizers. These are all illustrated concretely through the visual medium of geometry.

## MATH 3620 Dynamic Models in Biology

 (also BIOEE 3620) (MQR)Spring. 4 credits. Prerequisite: two majorslevel biology courses and completion of math requirements for biological sciences major or equivalent.
For description, see BIOEE 3620.
MATH 3840 Foundations of Mathematics (also PHIL 3300) (MQR)
Fall. 4 credits.
For description, see PHIL 3300.

## [MATH 4010 Honors Seminar: Topics in

 Modern Mathematics (MQR)Spring. 4 credits. Prerequisite: two
mathematics courses numbered 3000 or higher or permission of instructor. Next offered 2011-2012.
Participatory seminar aimed at introducing senior and junior mathematics majors to challenging problems and areas of modern mathematics. Helps students develop research and expository skills.]
[MATH 4030 History of Mathematics \# (MQR)
Spring. 4 credits. Prerequisite: two mathematics courses above 3000, or permission of instructor. Next offered 2011-2012.
Survey of the development of mathematics from antiquity to present, with an emphasis on the achievements, problems, and mathematical viewpoints of each period and the evolution of basic concepts.]

## MATH 4130 Honors Introduction to

 Analysis I (MQR)Fall, spring. 4 credits. Prerequisite: high level of performance in MATH 2210-2220, $2230-2240$, or 1920 and 2940 and familiarity with proofs. Students who do not intend to take MATH 4140 are encouraged to take MATH 4130 in the spring. Students may not receive credit for both MATH 3110 and MATH 4130 if either course is taken fall 2010 or later.
Introduction to the rigorous theory underlying calculus, covering the real number system and functions of one variable. Based entirely on proofs. The student is expected to know how to read and, to some extent, construct proofs before taking this course. Topics typically include construction of the real number system, properties of the real number system, continuous functions, differential and integral calculus of functions of one variable, sequences and series of functions.

## MATH 4140 Honors Introduction to

 Analysis II (MQR)Spring. 4 credits. Prerequisite: MATH 4130. Proof-based introduction to further topics in analysis. Topics may include the Lebesgue measure and integration, functions of several variables, differential calculus, implicit function theorem, infinite dimensional normed and metric spaces, Fourier series, ordinary differential equations.
MATH 4180 Introduction to the Theory of Functions of One Complex Variable (MQR)
Spring. 4 credits. Prerequisite: MATH $2230-$ 2240,3110 , or 4130 or permission of instructor. Students may not receive credit for both MATH 4180 and MATH 4220 if either course is taken fall

## 2010 or later.

Theoretical and rigorous introduction to complex variable theory. Topics include complex numbers, differential and integral calculus for functions of a complex variable including Cauchy's theorem and the calculus of residues, elements of conformal mapping. Students interested in the applications of complex analysis should consider MATH 4220.

## MATH 4200 Differential Equations and

 Dynamical Systems (MQR)Fall. 4 credits. Prerequisite: high level of performance in MATH 2210-2220, 22302240, 1920 and 2940, or permission of instructor.
Covers ordinary differential equations in one and higher dimensions: qualitative, analytic, and numerical methods. Emphasis is on differential equations as models and the implications of the theory for the behavior of the system being modeled and includes an introduction to bifurcations.

## MATH 4220 Applied Complex Analysis

 (MQR)Spring. 4 credits. Prerequisite: MATH 22102220, 2230-2240, 1920 and 2940, or 2130 and 2310. Undergraduates who plan to attend graduate school should take MATH 4180. Students may not receive credit for both MATH 4180 and MATH 4220 if either course is taken fall 2010 or later.
Covers complex variables, Fourier transforms, Laplace transforms and applications to partial differential equations. Additional topics may include an introduction to generalized functions.

MATH 4240 Wavelets and Fourier Series (MQR)
Spring. 4 credits. Prerequisite: MATH 22102220, 2230-2240, 1920 and 2940, or permission of instructor.
Both Fourier series and wavelets provide methods to represent or approximate general functions in terms of simple building blocks. Such representations have important consequences, both for pure mathematics and for applications. Fourier series use natural sinusoidal building blocks and may be used to help solve differential equations. Wavelets use artificial building blocks that have the advantage of localization in space. A full understanding of both topics requires a background involving Lebesgue integration theory and functional analysis. This course presents as much as possible on both topics without such formidable prerequisites. The emphasis is on clear statements of results and key ideas of proofs, working out examples, and applications. Related topics that may be included in the course: Fourier transforms, Heisenberg uncertainty principle, Shannon sampling theorem, and Poisson summation formula.

## MATH 4250 Numerical Analysis and

 Differential Equations (also CS 4210) (MQR)Fall. 4 credits. Prerequisites: MATH 2210 or 2940 or equivalent, one additional mathematics course numbered 3000 or above, and knowledge of programming. Introduction to the fundamentals of numerical analysis: error analysis, approximation, interpolation, numerical integration. In the second half of the course, the above are used to build approximate solvers for ordinary and partial differential equations. Strong emphasis is placed on understanding the advantages, disadvantages, and limits of applicability for all the covered techniques. Computer programming is required to test the theoretical concepts throughout the course. MATH 4250 (CS 4210) and MATH 4260 (CS 4220) provide a comprehensive introduction to numerical analysis; these classes can be taken independently from each other and in either order.

## MATH 4260 Numerical Analysis: Linear and Nonlinear Problems (also CS 4220) (MQR)

Spring. 4 credits. Prerequisites: MATH 2210 or 2940 or equivalent, one additional mathematics course numbered 3000 or above, and knowledge of programming. Introduction to the fundamentals of numerical linear algebra: direct and iterative methods for linear systems, eigenvalue problems, singular value decomposition. In the second half of the course, the above are used to build iterative methods for nonlinear systems and for multivariate optimization. Strong emphasis is placed on understanding the advantages, disadvantages, and limits of applicability for all the covered techniques. Computer programming is required to test the theoretical concepts throughout the course. MATH 4250 (CS 4210) and MATH 4260 (CS 4220) provide a comprehensive introduction to numerical analysis; these classes can be taken independently from each other and in either order.

MATH 4280 Introduction to Partial Differential Equations (MQR)
Spring. 4 credits. Prerequisite: MATH 22102220, 2230-2240, or 1920 and 2940, or permission of instructor. Students may not receive credit for both MATH 3230 and MATH 4280.
Topics are selected from first-order quasilinear equations, classification of second-order equations, with emphasis on maximum principles, existence, uniqueness, stability, Fourier series methods, approximation methods.

## MATH 4310 Linear Algebra (MQR)

Fall. 4 credits. Prerequisite: MATH 2210, 2230, 2310, or 2940. Undergraduates who plan to attend graduate school in mathematics should take MATH 4330-4340.
Students may not receive credit for both MATH 4310 and MATH 4330.
Introduction to linear algebra, including the study of vector spaces, linear transformations, matrices, and systems of linear equations. Additional topics are quadratic forms and inner product spaces, canonical forms for various classes of matrices and linear transformations.

## MATH 4320 Introduction to Algebra

 (MQR)Spring. 4 credits. Prerequisite: MATH 3320, 3360,4310 or 4330 , or permission of instructor. Undergraduates who plan to attend graduate school in mathematics should take MATH 4330-4340. Students may not receive credit for both MATH 4320 and MATH 4340.
Introduction to various topics in abstract algebra, including groups, rings, fields, factorization of polynomials and integers, congruences, and the structure of finitely generated abelian groups. Optional topics are modules over Euclidean domains and Sylow theorems.

MATH 4330 Honors Linear Algebra (MQR)
Fall. 4 credits. Prerequisite: high level of performance in MATH 2210, 2230, 2310, or
2940. Students may not receive credit
for both MATH 4310 and MATH 4330. Honors version of a course in advanced linear algebra, which treats the subject from an abstract and axiomatic viewpoint. Topics include vector spaces, linear transformations, polynomials, determinants, tensor and wedge products, canonical forms, inner product spaces, and bilinear forms. Emphasis is on understanding the theory of linear algebra; homework and exams include at least as many proofs as computational problems. For a less theoretical course that covers approximately the same subject matter, see MATH 4310.

## MATH 4340 Honors Introduction to Algebra (MQR)

Spring. 4 credits. Prerequisite: MATH 4330 or permission of instructor. Students may not receive credit for both MATH 4320 and MATH 4340.
Honors version of a course in abstract algebra, which treats the subject from an abstract and axiomatic viewpoint, including universal mapping properties. Topics include groups, groups acting on sets, Sylow theorems; rings, factorization: Euclidean rings, principal ideal domains and unique factorization domains, the structure of finitely generated modules over a principal ideal domain, fields, and Galois theory. The course emphasizes understanding the theory with proofs in both homework and exams. An optional computational component using the computer language GAP is available.

For a less theoretical course that covers similar subject matter, see MATH 4320.

## MATH 4370 Computational Algebra (MQR)

Spring. 4 credits. Prerequisite: linear
algebra (MATH 2940, or MATH 2210, or MATH 4310).
Introduction to Gröbner bases theory, which is the foundation of many algorithms in computational algebra. In this course, students learn how to compute a Gröbner basis for polynomials in many variables. Covers the following applications: solving systems of polynomial equations in many variables, solving diophantine equations in many variables, 3-colorable graphs, and integer programming. Such applications arise, for example, in computer science, engineering, economics, and physics.

## MATH 4410 Introduction to

 Combinatorics I (MQR)Fall. 4 credits. Prerequisite: MATH 2210, 2230, 2310, or 2940.
Combinatorics is the study of discrete structures that arise in a variety of areas, particularly in other areas of mathematics, computer science, and many areas of application. Central concerns are often to count objects having a particular property (e.g., trees) or to prove that certain structures exist (e.g., matchings of all vertices in a graph). The first semester of this sequence covers basic questions in graph theory, including extremal graph theory (how large must a graph be before one is guaranteed to have a certain subgraph) and Ramsey theory (which shows that large objects are forced to have structure). Variations on matching theory are discussed, including theorems of Dilworth, Hall, König, and Birkhoff, and an introduction to network flow theory. Methods of enumeration (inclusion/exclusion, Möbius inversion, and generating functions) are introduced and applied to the problems of counting permutations, partitions, and triangulations.

## [MATH 4420 Introduction to <br> Combinatorics II (MQR)

Spring. 4 credits. Prerequisite: MATH 2210, 2230, 2310, or 2940. Next offered 20112012.

Continues 4410, although formally independent. Latin squares, combinatorial designs, classical finite geometries and combinatorial geometries (matroids). Partially ordered sets, lattices, Möbius inversion. Polya counting theory.]

## MATH 4500 Matrix Groups (MQR)

Spring. 4 credits. Prerequisite: MATH 22102220, 2230-2240, or 1920 and 2940. An introduction to a topic that is central to mathematics and important in physics and engineering. The objects of study are certain classes of matrices, such as orthogonal, unitary, or symplectic matrices. These classes have both algebraic structure (groups) and geometric/ topological structure (manifolds). Thus the course will be a mixture of algebra and geometry/topology, with a little analysis as well. The topics will include Lie algebras (which are an extension of the notion of vector multiplication in three-dimensional space), the exponential mapping (a generalization of the exponential function of calculus), and representation theory (which studies the different ways in which groups can be represented by matrices). Concrete examples will be emphasized. Background not included in the prerequisites will be developed as needed.

MATH 4510 Euclidean and Spherical Geometry (MQR)
Fall. 4 credits. Prerequisite: MATH 2210, 2230,2310 , or 2940 , or permission of instructor.
Covers topics from Euclidean and spherical (non-Euclidean) geometry. Nonlecture, seminar-style course organized around student participation.

## [MATH 4520 Classical Geometries (MQR)

Spring. 4 credits. Prerequisite: MATH 2210, 2230,2310 , or 2940 , or permission of instructor. Next offered 2011-2012. Introduction to hyperbolic and projective geometry-the classical geometries that developed as Euclidean geometry was better understood.]

## MATH 4530 Introduction to Topology (MQR)

Fall. 4 credits. Prerequisite: MATH 2210, 2230,2310 , or 2940 , plus at least one mathematics course numbered 3000 or above, or permission of instructor. Topology may be described briefly as qualitative geometry. This course begins with basic point-set topology, including connectedness, compactness, and metric spaces. Later topics may include the classification of surfaces (such as the Klein bottle and Möbius band), elementary knot theory, or the fundamental group and covering spaces.
MATH 4540 Introduction to Differential Geometry (MQR)
Spring. 4 credits. Prerequisites: MATH 2210-2220, 2230-2240, or 2930-2940, plus at least one mathematics course numbered 3000 or above. MATH 4530 is not a prerequisite.
Differential geometry involves using calculus to study geometric concepts such as curvature and geodesics. This introductory course focuses on the differential geometry of curves and surfaces. It may also touch upon the higher-dimensional generalizations, Riemannian manifolds, which underlie the study of general relativity.

## MATH 4550 Applicable Geometry (MQR)

Spring. 4 credits. Prerequisite: good introduction to linear algebra (e.g., MATH $2210,2230,2310$, or 2940) or permission of instructor. Does not assume students know the meaning of all words in the following description.
Introduction to the theory of n-dimensional convex polytopes and polyhedra and some of its applications, with an in-depth treatment of the case of three dimensions. Discusses both combinatorial properties (such as face counts) as well as metric properties (such as rigidity). Covers theorems of Euler, Cauchy, and Steinitz, Voronoi diagrams and triangulations, convex hulls, cyclic polytopes, shellability and the upper-bound theorem. Relates these ideas to applications in tiling, linear inequalities and linear programming, structural rigidity, computational geometry, hyperplane arrangements, and zonotopes.

## MATH 4710 Basic Probability (MQR)

Fall. 4 credits. Prerequisites: one year of calculus. Recommended: some knowledge of multivariate calculus. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 4710, ECON 3190, BTRY 4080.
Introduction to probability theory, which prepares the student to take MATH 4720. The
course begins with basics: combinatorial probability, mean and variance, independence, conditional probability, and Bayes formula. Density and distribution functions and their properties are introduced. The law of large numbers and the central limit theorem are stated and their implications for statistics are discussed.

## MATH 4720 Statistics (MQR)

Spring. 4 credits. Prerequisites: MATH 4710 and knowledge of linear algebra (e.g., MATH 2210). Recommended: some knowledge of multivariable calculus. Due to an overlap in content, students will receive credit for only one course in the following group: MATH 4720,
ECON 3190, BTRY 4090.
Statistics have proved to be an important research tool in nearly all of the physical, biological, and social sciences. This course serves as an introduction to statistics for students who already have some background in calculus, linear algebra, and probability theory. Topics include parameter estimation, hypothesis testing, and linear regression. The course emphasizes both the mathematical theory of statistics and techniques for data analysis that are useful in solving scientific problems.
MATH 4740 Stochastic Processes (MQR)
Spring. 4 credits. Prerequisites: MATH 4710, BTRY 4080, ORIE 3600, or ECON 3190 and some knowledge of matrices
(multiplication and inverses).
A one-semester introduction to stochastic processes which develops the theory together with applications. The course will always cover Markov chains in discrete and continuous time and Poisson processes. Depending upon the interests of the instructor and the students, other topics may include queuing theory, martingales, Brownian motion, and option pricing. This course may be useful to graduate students in the biological sciences or other disciplines who encounter stochastic models in their work but who do not have the background for more advanced courses such as ORIE 6500.

## MATH 4810 Mathematical Logic (also PHIL 4310) (MQR)

Fall. 4 credits. Prerequisites: MATH 2220 or 2230 and preferably some additional course involving proofs in mathematics, computer science, or philosophy. First course in mathematical logic providing precise definitions of the language of mathematics and the notion of proof (propositional and predicate logic). The completeness theorem says that we have all the rules of proof we could ever have. The Gödel incompleteness theorem says that they are not enough to decide all statements even about arithmetic. The compactness theorem exploits the finiteness of proofs to show that theories have unintended (nonstandard) models. Possible additional topics: the mathematical definition of an algorithm and the existence of noncomputable functions; the basics of set theory to cardinality and the uncountability of the real numbers.

## MATH 4820 Topics in Logic (also PHIL 4311) (MQR)

Spring. 4 credits.
For description, see PHIL 4311.

MATH 4860 Applied Logic (also CS 4860) (MQR)
Fall. 4 credits. Prerequisites: MATH 22102220, 2230-2240, or 1920 and 2940; CS 2800 or equivalent (e.g., MATH 3320, 3360, 4320, 4340, or 4810); and additional course in mathematics or theoretical computer science.
Covers propositional and predicate logic; compactness and completeness by tableaux, natural deduction, and resolution. Other possible topics include equational logic; Herbrand Universes and unification; rewrite rules and equational logic, Knuth-Bendix method and the congruence-closure algorithm and lambda-calculus reduction strategies; topics in Prolog, LISP, ML, or Nuprl; and applications to expert systems and program verification.

## MATH 4900 Supervised Reading and

 ResearchFall, spring. 1-6 credits. Supervised reading and research by arrangement with individual professors. Not for material currently available in regularly scheduled courses.

## Professional-Level and Mathematics Education Courses

## MATH 5080 Mathematics for Secondary

 School TeachersFall, spring. 1-3 credits. Meets two
Saturdays per semester. Target audience: secondary mathematics teachers and others interested in issues related to teaching and learning secondary mathematics (e.g., mathematics pre-service teachers, mathematics undergraduate and graduate students, and mathematicians).
Examines principles underlying the content of the secondary school mathematics curriculum, including connections with the history of mathematics, technology, and mathematics education research. One credit is awarded for attending three of the four Saturday workshops per year (dates are posted at www.math.cornell.edu/Community/ community.html). Other credit options are available by permission of instructor for students completing additional work (e.g., independent study projects or presentations).

## Graduate Courses

Many of our graduate courses are topics courses for which descriptions are not included here; however, during each preenrollment period a schedule of graduate courses to be offered the following semester is posted at www.math.cornell.edu under "Courses." This web site includes course descriptions that are often more detailed than those included here, as well as a means for interested students to participate in the process of scheduling meeting times.

## MATH 6110 Real Analysis

Fall. 4 credits.
MATH 6110-6120 are the core analysis courses in the mathematics graduate program. 6110 covers measure and integration and functional analysis.

## MATH 6120 Complex Analysis

Spring. 4 credits.
MATH 6110-6120 are the core analysis courses in the mathematics graduate program. 6120 covers complex analysis, Fourier analysis, and distribution theory.

## [MATH 6130-6140 Topics in Analysis

 6130, fall; 6140, spring. 4 credits each. Next offered 2011-2012.]
## MATH 6170 Dynamical Systems

Fall. 4 credits. Generally offered every two years.
Topics include existence and uniqueness theorems for ODEs; Poincaré-Bendixon theorem and global properties of two dimensional flows; limit sets, nonwandering sets, chain recurrence, pseudo-orbits and structural stability; linearization at equilibrium points: stable manifold theorem and the Hartman-Grobman theorem; and generic properties: transversality theorem and the Kupka-Smale theorem. Examples include expanding maps and Anosov
diffeomorphisms; hyperbolicity: the horseshoe and the Birkhoff-Smale theorem on transversal homoclinic orbits; rotation numbers; Herman's theorem; and characterization of structurally stable systems.

## MATH 6180 Smooth Ergodic Theory

 Spring. 4 credits.Topics include invariant measures; entropy; Hausdorff dimension and related concepts; hyperbolic invariant sets: stable manifolds, Markov partitions and symbolic dynamics; equilibrium measures of hyperbolic attractors; ergodic theorems; Pesin theory: stable manifolds of nonhyperbolic systems; Liapunov exponents; and relations between entropy, exponents, and dimensions.

## [MATH 6190-6200 Partial Differential <br> \section*{Equations}

6190, fall; 6200, spring. 4 credits each semester. Next offered 2011-2012. Covers basic theory of partial differential equations.]

## MATH 6210 Measure Theory and Lebesgue Integration <br> Fall. 4 credits.

Covers measure theory, integration, and Lp spaces.

## MATH 6220 Applied Functional Analysis

Spring. 4 credits.
Covers basic theory of Hilbert and Banach spaces and operations on them. Applications.

## MATH 6280 Complex Dynamical Systems

Fall. 4 credits. Prerequisite: MATH 4180. Various topics in the dynamics of analytic mappings in one complex variable, such as: Julia and Fatou sets, the Mandelbrot set, Mañé-Sad-Sullivan's theorem on structural stability. Also covers: local theory, including repulsive cycles and the Yoccoz inequality, parabolic points and Ecalle-Voronin invariants, Siegel disks and Yoccoz's proof of the Siegel Brjuno theorem; quasi-conformal mappings and surgery: Sullivan's theorem on nonwandering domains, polynomial-like mappings and renormalization, Shishikura's construction of Hermann rings; puzzles, tableaux and local connectivity problems; and Thurston's topological characterization of rational functions, the spider algorithm, and mating of polynomials.

## MATH 6310 Algebra

Fall. 4 credits. Assumes familiarity with material of standard undergraduate course in abstract algebra.
MATH 6310-6320 are the core algebra courses in the mathematics graduate program. 6310 covers group theory, especially finite groups; rings and modules; ideal theory in commutative rings; arithmetic and factorization
in principal ideal domains and unique factorization domains; introduction to field theory; tensor products and multilinear algebra. (Optional topic: introduction to affine algebraic geometry.)

## MATH 6320 Algebra

Spring. 4 credits. Prerequisite: MATH 6310. MATH 6310-6320 are the core algebra courses in the mathematics graduate program. 6320 covers Galois theory, representation theory of finite groups, introduction to homological algebra. Familiarity with the material of a standard undergraduate course in abstract algebra will be assumed.

## [MATH 6330 Noncommutative Algebra

4 credits. Next offered 2011-2012.
Covers Wedderburn structure theorem, Brauer group, and group cohomology.]

## MATH 6340 Commutative Algebra

Spring. 4 credits.
Covers Dedekind domains, primary
decomposition, Hilbert basis theorem, and local rings.

## MATH 6490 Lie Algebras

Fall. 4 credits.
Topics include nilpotent, solvable and reductive Lie algebras; enveloping algebras; root systems; Coxeter groups; and classification of simple algebras.

## [MATH 6500 Lie Groups

4 credits. Next offered 2011-2012. Topics include topological groups, Lie groups; relation between Lie groups and Lie algebras; exponential map, homogeneous manifolds; and invariant differential operators.]

## MATH 6510 Algebraic Topology

Spring. 4 credits.
One of the core topology courses in the mathematics graduate program. An introductory study of certain geometric processes for associating algebraic objects such as groups to topological spaces. The most important of these are homology groups and homotopy groups, especially the first homotopy group or fundamental group, with the related notions of covering spaces and group actions. The development of homology theory focuses on verification of the Eilenberg-Steenrod axioms and on effective methods of calculation such as simplicial and cellular homology and Mayer-Vietoris sequences. If time permits, the cohomology ring of a space may be introduced.

## MATH 6520 Differentiable Manifolds I

Fall. 4 credits. Prerequisites: advanced calculus, linear algebra (MATH 4310), point-set topology (MATH 4530).
One of the core topology courses in the mathematics graduate program. Introduction to geometry and topology from a differentiable viewpoint, suitable for beginning graduate students. The objects of study are manifolds and differentiable maps. The collection of all tangent vectors to a manifold forms the tangent bundle, and a section of the tangent bundle is a vector field. Alternatively, vector fields can be viewed as first-order differential operators. Students study flows of vector fields and prove the Frobenius integrability theorem. In the presence of a Riemannian metric, the notions of parallel transport, curvature, and geodesics are development. Students examine the tensor calculus and the exterior differential calculus and prove Stokes' theorem. If time permits, de

Rham cohomology, Morse theory, or other optional topics are introduced.

## [MATH 6530 Differentiable Manifolds II

Spring. Prerequisites: MATH 6520 or
equivalent. Next offered 2011-2012.
Advanced topics from differential geometry and differential topology selected by instructor. Examples of eligible topics include transversality, cobordism, Morse theory, classification of vector bundles and principal bundles, characteristic classes, microlocal analysis, conformal geometry, geometric analysis and partial differential equations, and Atiyah-Singer index theorem.]

## MATH 6610 Geometric Topology

Spring. 4 credits.
Introduction to some of the more geometric aspects of topology and its connections with group theory. Possible topics include surface theory, 3-manifolds, knot theory, geometric and combinatorial group theory, hyperbolic groups, and hyperbolic manifolds.

## [MATH 6620 Riemannian Geometry

Spring. 4 credits. Next offered 2011-2012. This introductory course covers basic materials of Riemannian geometry, starting from connections and curvatures, ending with a discussion of the relations between topology and geometry of positive (or negative) curvatures.]

## MATH 6710 Probability Theory I

Fall. 4 credits. Prerequisite: knowledge of Lebesgue integration theory, at least on real line. (Students can learn this material by taking parts of MATH 4130-4140 or 6210.)

A mathematically rigorous course in probability theory which uses measure theory but begins with the basic definitions of independence and expected value in that context. Law of large numbers, Poisson and central limit theorems, and random walks.

## MATH 6720 Probability Theory II

Spring. 4 credits. Prerequisite: MATH 6710. Conditional expectation, martingales, Brownian motion. Other topics such as Markov chains, ergodic theory, and stochastic calculus depending on time and interests of the instructor.

## MATH 6740 Introduction to Mathematical

 StatisticsSpring. 4 credits. Prerequisites: MATH 6710
(measure theoretic probability) and ORIE
6700, or permission of instructor.
Topics include an introduction to the theory of point estimation, hypothesis testing and confidence intervals, consistency, efficiency, and the method of maximum likelihood. Basic concepts of decision theory are discussed; the key role of the sufficiency principle is highlighted and applications are given for finding Bayesian, minimax, and unbiased optimal decisions. Modern computer-intensive methods like the bootstrap receive some attention, as do simulation methods involving Markov chains. The parallel development of some concepts of machine learning is exemplified by classification algorithms. An optional section may include nonparametric curve estimation and elements of large sample asymptotics.

## MATH 6810 Logic

Spring. 4 credits.
Covers basic topics in mathematical logic, including propositional and predicate calculus; formal number theory and recursive functions; completeness and incompleteness theorems, compactness and Skolem-Loewenheim theorems. Other topics as time permits.
MATH 7110-7120 Seminar in Analysis
7110, fall; 7120, spring. 4 credits.

## [MATH 7130 Functional Analysis

Spring. 4 credits. Next offered 2011-2012. Covers topological vector spaces, Banach and Hilbert spaces, and Banach algebras. Additional topics selected by instructor.]

## MATH $\mathbf{7 1 5 0}$ Fourier Analysis

Spring. 4 credits.

## [MATH 7170 Applied Dynamical Systems (also TAM 7760)

4 credits. Recommended: TAM 6750, MATH 6170, or equivalent. Next offered 20112012.

Applied topics in dynamical systems theory: bifurcations, normal forms, complex invariant sets, numerical methods, multiple time scale systems, symmetric systems, biological and physical examples.]

## MATH 7290 Seminar on Scientific Computing and Numerics (also CS 7290) <br> Fall, spring. 1 credit.

For description, see CS 7290.
MATH 7310-7320 Seminar in Algebra 7310, fall; 7320 , spring. 4 credits each semester.

## MATH 7350 Topics in Algebra

Fall. 4 credits.
Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.

## MATH 7370 Algebraic Number Theory

 Fall. 4 credits.
## MATH $\mathbf{7 3 9 0}$ Topics in Algebra

Fall, spring. 4 credits.
Selection of advanced topics from algebra, algebraic number theory, and algebraic

## geometry. Content varies.

## MATH $\mathbf{7 4 0 0}$ Homological Algebra

 Spring. 4 credits.MATH 7510-7520 Berstein Seminar in Topology
7510, fall; 7520, spring. 4 credits each semester.

## [MATH 7530 Algebraic Topology II

Fall. 4 credits. Next offered 2011-2012. Continuation of 6510 . The standard topics most years are cohomology, cup products, Poincaré duality, and homotopy groups. Other possible topics include fiber bundles, fibrations, vector bundles, and characteristic classes. May sometimes be taught from a differential forms viewpoint.]

## MATH 7550-7560 Topology and

 Geometric Group Theory Seminar 7550 , fall; 7560 , spring. 4 credits each semester.
## MATH 7570-7580 Topics in Topology

 7570, fall; 7580, spring. 4 credits each semester.Selection of advanced topics from modern algebraic, differential, and geometric topology. Content varies.
MATH 7610-7620 Seminar in Geometry 7610, fall; 7620, spring. 4 credits each semester.

## MATH 7670 Algebraic Geometry

 Spring. 4 credits.
## MATH 7710-7720 Seminar in Probability

 and Statistics7710, fall; 7720, spring. 4 credits each semester.
[MATH $\mathbf{7 7 4 0}$ Statistical Learning Theory
Fall. 4 credits. Prerequisites: basic mathematical statistics (MATH 6740 or equivalent) and measure theoretic probability (MATH 6710). Next offered 2011-2012.
The course aims to present the developing interface between machine learning theory and statistics. Topics are classification and pattern recognition, support vector machines, neural networks, tree methods, and boosting.]

## MATH 7750 Statistical Theories Applicable to Genomics

Fall. 4 credits.
Focuses on statistical concepts useful in genomics (e.g., microarray data analysis) that involve a large number of populations. Topics include multiple testing and closed testing (the cornerstone of multiple testing), family-wise error rate, false discovery rate (FDR) of Benjamini and Hochberg, and Storey's papers relating to pFDR . Also discusses the shrinkage technique or the Empirical Bayes approach, equivalent to the BLUP in a random effect model, which is a powerful technique, taking advantage of a large number of populations. A related technique, which allows use of the same data to select and make inferences for the selected populations (or genes), is discussed. If time permits, there may be some lectures about permutation tests,
bootstrapping, and QTL identification.

## MATH 7770-[7780] Stochastic Processes

7770, fall; 7780, spring. 4 credits each
semester. 7780 next offered 2011-2012.
MATH 7810-7820 Seminar in Logic
7810, fall; 7820, spring. 4 credits each semester.

## [MATH 7830 Model Theory

Spring. 4 credits. Next offered 2011-2012. Introduction to model theory at the level of the books by Hodges or Chang and Keisler.]

## MATH 7840 Recursion Theory

Fall. 4 credits.
Covers theory of effectively computable functions; classification of recursively enumerable sets; degrees of recursive unsolvability; applications to logic; hierarchies; recursive functions of ordinals and higher type objects; generalized recursion theory.

## MATH 7870 Set Theory

Spring. 4 credits.
First course in axiomatic set theory at the level of the book by Kunen.

## [MATH 7880 Topics in Applied Logic

Fall. 4 credits. Next offered 2011-2012. Applications of mathematical logic. Recent topics: automata theory, automatic structures, automatic theorem proving, formal semantics of programming and specification languages, linear logic, constructivism/intuitionism, nonstandard analysis.]

## MATH 7900 Supervised Reading and Research

Fall, spring. 1-6 credits.

## MEDIEVAL STUDIES

O. Falk, director; F. M. Ahl, K. Bowes, R. Brann, C. Brittain, E. W. Browne,
A. S. Galloway, A. B. Groos, K. Haines-Eitzen,
W. E. Harbert, T. D. Hill, T. J. Hinrichs,
C. Howie, P. R. Hyams, W. J. Kennedy,
S. MacDonald, S. Manning, M. Migiel,
J. M. Najemy, J. A. Peraino, S. Pinet,
D. S. Powers, M. Raskolnikov, E. Rebillard, C. Robinson, W. Sayers, S. M. Toorawa, D. X. Warner, M. L. Weiss, S. Zacher. Emeritus: A. M. Colby-Hall, J. J. John, C. V. Kaske, P. I. Kuniholm, S. Senderovich, W. Wetherbee.

## Undergraduate Study in Medieval Studies

Undergraduate students may pursue an undergraduate minor in medieval studies, for which they must complete five courses at the 2000 level or above in at least two different disciplines, of which up to two may also count toward their major. Students should seek out an advisor, and may wish to consult with the director. Those completing a minor will receive a notification on their transcripts and a certificate signed by the director and the dean of the college; students who are completing undergraduate minors are currently eligible for the Miller Scholarship offered by the Telluride Association, funding a year at the Central European University in Budapest, Hungary.
Students derive many other benefits from pursuing such a minor, as they do from taking courses in medieval cultures, languages, and literature generally. The Medieval Studies Program houses a lively undergraduate association, Quodlibet, which arranges frequent lectures on medieval topics and an annual celebratory reading of prose and poetry in many medieval languages. Cornell's students and scholars pursuing varied interests in these many realms constitute a strong and supportive community. Course work in medieval studies enhances the student's enjoyment and understanding of the artistic and material relics of the Middle Ages: Gregorian chant, illuminated manuscripts and stained glass windows, Gothic cathedrals, Crusader castles, and picturesque towns cramped within ancient walls. The student will discover the serious realities involved in, and shaped by, Arthurian tales of knights and ladies, dungeons, dragons, and other marvels. Students can analyze and appreciate the horrors of the Black Death, triumphs in courtly love and pitched battle, swords and scimitars, caliphs and popes, fear of demons and djinns, and angels. The period saw many of the foundational choices that have, for good and ill, made the world what it is today. Many of our current challenges in the fields of law, human rights, attitudes toward power, authority, gender relations, and sexual mores
derive from the ways in which these and other questions were formulated a millennium ago. Many of the courses listed by the Medieval Studies Program pertain specifically to these fields, as well as to the interdisciplinary combinations for which the program is noted.

## Medieval Languages

Medieval texts (like all others) become most lively and informative when read in the original, and Cornell fortunately offers many courses for students interested in acquiring the relevant skills: Medieval Latin, Old English, Middle English, Gothic, Old Saxon, Old High German, Middle High German, Old NorseIcelandic, Old Irish, Middle Welsh, Old Occitan (Provençal), Old French, Medieval Spanish, Medieval Italian, Old Russian, Old Church Slavonic, Classical Arabic, Medieval Hebrew, Classical Chinese, and Classical Japanese.

Some medieval languages require study of a modern language (e.g., French for Old Occitan and Old French) or a classical language (Classical Latin for Medieval Latin) as background. Students interested in an undergraduate minor in medieval studies should begin the study of a medieval language as early as possible, so that they may be able to study texts in the original before they graduate. Students are advised to consult the sponsoring departments for information about the prerequisites for various medieval languages

## Graduate Study

The Medieval Studies Program offers both an interdisciplinary and a literary comparative Ph.D. in medieval studies. Disciplinary fields of concentration offered within the Field of medieval studies are medieval archaeology, medieval history, medieval history of art, medieval literature, medieval music, medieval philology and linguistics, and medieval philosophy. Information about the graduate program in medieval studies is available from the field coordinator (medievalst@cornell.edu), and at Cornucopia, the program's web site (www.arts.cornell.edu/medieval)

## Medieval Studies Courses: Graduate and Undergraduate

Courses in various aspects of medieval studies are offered every year in several cooperating departments, including Art History, Asian Studies, Classics, Comparative Literature, English, German Studies, History, Linguistics, Music, Near Eastern Studies, Philosophy, Romance Studies, Russian Literature, and by the Society for the Humanities. For descriptions, please see the home department. The current year's offerings are:

## ARTH 2350 Introduction to Art History: Islamic Art and Culture (also NES 2747)

Fall. 4 credits. C. Robinson

## ASIAN 2271 China's Literary Heritage:

 An Introduction in TranslationFall. 3 credits. D. X. Warner.
CHLIT 3307 Readings in Classical Chinese Literature
Spring. 4 credits. D. X. Warner
CHLIT 4418 Medieval Chinese Narrative Tales
Spring. 4 credits. D. X. Warner

CLASS 3603 Medieval to Renaissance in Greek Literature (also COML 3825, NES 3705)
Fall. 4 credits. K. Yiavis
CLASS 3750 Introduction to Dendrochronology (also ARTH 3250, ARKEO 3090)
Fall. 4 credits. S. Manning.
CLASS 7742 Research Methods in Archaeology (also ARTH 6252, ARKEO 7742)
Spring. 4 credits. S. Manning.
ENGL 2100 Medieval Romance: Voyage to the Otherworld
Spring. 4 credits. T. Hill.
ENGL 2740 Scottish Literature and Culture
Fall. 3-4 credits. T. Hill and H. Shaw
ENGL 3110/6110 Old English
Fall. 4 credits. T. Hill.
ENGL 3120/6120 Beowulf
Spring. 4 credits. S. Zacher.

## ENGL 3190 Chaucer

Spring. 4 credits. M. Raskolnikov.
ENGL 4500 History of the Book Fall. 4 credits. K. Reagan.

ENGL 6150 Piers Plowman and the Works of the Pearl-poet
Fall. 4 credits. M. Raskolnikov.
FREN 4420 Sex in French (also FGSS 4320)

Fall. 4 credits. C. Howie.
FREN 6770 Four Literary Theologians Spring. 4 credits. C. Howie.

HIST 1900 East Asia to 1800 (also ASIAN 1900)

Spring. 4 credits. T. J. Hinrichs.
HIST 2470 The Age of Charlemagne Fall. 4 credits. P. Hyams

HIST 3500 The Italian Renaissance (also ITAL 3500)
Fall. 4 credits. J. Najemy.
HIST 3680 Marriage and Sexuality in Medieval Europe (also FGSS/RELST 3680)

Fall. 4 credits. P. Hyams.
HIST 4680 The Family in Renaissance Italy (also ITAL 4680)
Fall. 4 credits. J. Najemy.
HIST 4931/6931 Vitality and Power in China (also ASIAN/CAPS/BSOC 4931)
Spring. 4 credits. T. J. Hinrichs.
ITAL 4450/6450 Boccaccio
Fall. 4 credits. M. Migiel.
LING 2217 History of the English Language to 1300 (also ENGL 2170)
Fall. 4 credits. W. Harbert.
LING 2218 History of the English Language since 1300 (also ENGL 2180)

Spring. 4 credits. W. Harbert.
LING 2238 Introduction to Welsh Fall. 3 credits. W. Harbert

LING 3315-3316 Old Norse I and II 3315 , fall; 3316, spring. 4 credits each semester. Staff.

LING 6623-6624 Old Irish I and II 6623 , fall; 6624 , spring. 4 credits each semester. M. Weiss.

LING 6662 Old Russian Texts (also RUSSA 6602)
Spring. 4 credits. W. Browne.
LING 6663 Old Church Slavonic (also RUSSA 6601)
Fall. 4 credits. W. Browne.
MEDVL 2130 Cultures of the Middle Ages (also HIST 2142) \# (HA-AS)
Spring. 4 credits. P. Hyams.
This course introduces intriguing and important samples of literary, and other writings--some of them very nonliterary!created before 1500 in terms of the cultures in which each was written. Authors, works, and genres vary with individual instructors but may include poetry and history writing, epic and drama, originally in Latin, French, Old English, Middle English, and Italian, along with secondary reading to help students explore the texts and the world that produced them. No previous knowledge of this material is required, but regular writing, and some forms of research, are. This year's course (Spring 2011) will focus on Feudalism, a simple model of what today's democracies are not, and Magna Carta, 1215, one of the foundations of our Western freedoms.
[MEDVL 4103/6103 Survey of Medieval Latin Literature (also LATIN 4213/7213) \# (LA-AS)
Fall. 4 credits. Next offered 2012-2013 This survey is designed to introduce students to characteristic genres and discourses of Medieval Latin.]
[MEDVL 4201/6201 Topics in Medieval Latin Literature (also LATIN 4223/7223) \# (LA-AS)
Spring. 4 credits. Next offered 2012-2013.]
MEDVL 6102 Latin Paleography (also LATIN 7222)
Fall. 4 credits. Staff.
This course will engage several facets of the complex and fascinating history of Western writing and handwritten texts. We will, in part, follow a chronological survey of different scripts from antiquity through to the age of the printing press. Students will learn to recognize, to localize, and to date different script-types, and they will become familiar with conventions of detailed codicological description. But our interests are deeper than technical description alone. We will explore the cultural and social environments in which texts were written and copied. And we will examine other larger issues, such as the transmission and editing of texts and how the material composition of texts informs interpretations and meanings. Further, we will consider the history of writing and reading in the context of the ongoing digital revolution: What do past textual forms, such as we will be studying in detail, tell us about modern digital media? What light can modern media shed on historical texts? What is the future of texts, writing, and reading?

## MEDVL 7777 Medieval Studies

Proseminar
Fall. 2 credits. Staff.
This course is designed to introduce graduate students to some of the bibliography and approaches available for studying the Middle Ages.

MEDVL 8010 Directed Study-Individual
Fall and spring. 1-4 credits. Staff.
MEDVL 8020 Directed Study-Group Fall and spring. 1-4 credits. Staff.

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NES 2125 Mishnaic Hebrew (also JWST 2125)
Spring. 3 credits. G. Herman.
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NES 2212 Qur'an and Commentary Spring. 4 credits. D. Powers.
NES 2587 Great Books of Islamic Culture
Spring. 3 credits. S. Toorawa.
NES 2655 Introduction to Islamic Civilization (also HIST 2530, RELST 2655)

Fall. 3 credits. D. Powers.

## NES 2677 The Jewish Galilee in Late Antiquity (also JWST/RELST 2677)

Fall. 3 credits. G. Herman.

## NES 3505 By the Rivers of Babylon (also JWST/RELST 3505) <br> Spring. 4 credits. G. Herman.

NES 3555 Science Fiction: Medieval and
Modern
Fall. 4 credits. S. Toorawa.
NES 3587 Qur'an and Its Interpreters (also RELST 3587)
Fall. 4 credits. D. Powers.
NES 3723/6723 The Arabian Nights: Then and Now
Spring. 4 credits. S. Toorawa.
NES 4640 Suffering in the Early Christian Imagination: Apocalypticism, Gnosticism, and Asceticism (also RELST 4640)
Spring. 4 credits. K. Haines-Eitzen.
NES 4717/6717 Medieval Arabic Poetry Fall. 4 credits. S. Toorawa.
NES 4755 Rabbinic Literature in Translation (also JWST/RELST 4755)
Fall. 4 credits. G. Herman.
PHIL 3210 Medieval Philosophy (also RELST 3150)
Fall. 4 credits. G. Pini.
PHIL 6210 Seminar in Medieval Philosophy
Fall. 4 credits. G. Pini.
SHUM 4846 Classical Indian Poetry and
Comparative Poetics (also ASIAN Comparative Poetics (also ASIAN 4446)

Fall. 4 credits. L. McCrea.
SHUM 4952 Exotic Scents: Cross-Cultural Aesthetics of Smell (also ASIAN 4495)

Spring. 4 credits. J. McHugh.
SPAN 2170 Early Hispanic Modernities: Readings in Medieval and Early Modern Iberian and SpanishAmerican Literatures
Fall. 4 credits. S. Pinet.
SPAN 4040 The Task of the Cleric Spring. 4 credits. S. Pinet.
SPAN 4790 Seven Deadly Sins
Fall. 4 credits. S. Pinet.

## MUSIC

R. Sierra, chair; X. Bjerken, director of undergraduate studies (331 Lincoln Hall, 2553425); N. Zaslaw, director of graduate studies (128 Lincoln Hall, 255-4279); B. Boettcher, K. Ernste, T. Feeney, A. Groos, J. HainesEitzen, R. Harris-Warrick, M. Hatch,
C. Johnston Turner, J. Kellock, C. Kim, J. Lin,
P. Merrill, C. Miller, J. Pepinsky, J. Peraino,
S. Pond, A. Richards, S. Stucky, S. Tucker,
J. Webster, M. Yampolsky, D. Yearsley.

Emeritus: M. Bilson, J. Hsu, K. Husa,
S. Monosoff, R. Palmer, D. Rosen, T. Sokol,
M. Stith

Office: 255-4097
Web site: www.music.cornell.edu

## Musical Performance and Concerts

Musical performance is an integral part of Cornell's cultural life and an essential part of its undergraduate academic programs in music. The department encourages musicmaking through its offerings in individual instruction and through musical organizations and ensembles that are directed and trained by members of the faculty. Students from all colleges and departments of the university join with music majors in all of these ensembles:
Vocal ensembles
Chamber Singers
Chorale
Chorus
Glee Club
World Music Choir
Instrumental ensembles
Chamber Music Ensembles
Chamber Orchestra
Symphony Orchestra
Jazz Ensembles
Jazz Combos
Chamber Winds
Wind Ensemble
Wind Symphony
Gamelan Ensemble
Middle Eastern Music Ensemble
World Drum and Dance Ensemble
Steel Band
Percussion Ensemble
Information about requirements, rehearsal hours, and conditions for academic credit can be found in the following listings for the Department of Music. Announcements of auditions are posted during registration each fall semester and, where appropriate, each spring semester as well.
The university is also home to many studentrun musical organizations not affiliated with the Department of Music, including the Big Red Marching Band and Big Red Pep Band, and several a cappella groups. Information is available directly from each group.
The Department of Music and the Faculty Committee on Music sponsor more than 100 formal and informal concerts each year by Cornell's ensembles, faculty, and students and by distinguished visiting artists. The great majority of these concerts are free and open to the public. Lectures and concerts are listed at www.music.cornell.edu. Additional information is available through the events office (255-4760).

## Nonmajors

In addition to its performing, instructional, and concert activities, the department offers numerous courses for nonmajors, many of which carry no prerequisites and presuppose
no previous formal training in music. Consult the following course listings, and for further information consult Professor X. Bjerken, director of undergraduate studies (255-3425), or the department office, 101 Lincoln Hall (255-4097).

## The Minor

For those non-majors across the university whose involvement with the music department forms an essential aspect of their
undergraduate study, the undergraduate minor in Music gives both formal recognition and structural coherence to their musical studies. The Music minor is designed to provide for breadth by requiring involvement in each of the three principal subdisciplines (music theory, music history, and musical performance), while at the same time permitting enough flexibility that each student can emphasize the area or areas that interest him or her most.

The following courses are required to fulfill the undergraduate minor in Music:

1. One course in music theory: MUSIC 1101 ( 3 credits), 1105 ( 3 credits), or 2101/2103 ( 5 credits), 3111 ( 3 credits), 3112 (3 credits), 3113 ( 3 credits), 3115 ( 3 credits). A student given Advanced Standing in place of MUSIC 2101/2103 should take a higher-numbered theory course; placement alone cannot fulfill this requirement.
2. One course in music history and culture, drawn from courses listed in Courses of Study as Music in History and Culture (3 credits) and those listed as Music History Courses for Majors and Qualified NonMajors (3-4 credits).
3. Four credits in performance, drawn from those courses listed as Musical Instruction (i.e., private lessons in voice or another instrument), or Musical Organizations and Ensembles, or both. Since these are 1- and 2-credit courses, students may achieve their total of 4 credits in various ways: two semesters of 2 -credit lessons, four semesters of 1-credit ensembles, or a combination of the two.
4. In addition to these $10-13$ credits, an additional 8 credits of elective courses from any Music subdiscipline, including Electroacoustic Music, of which at least 3 credits must be in a classroom (not performance) course.

## The Major

The major carries the study of music to an advanced level through the integration of performance, music theory, and music history. It is designed to accommodate both students who are oriented toward eventual graduate or professional work in music and those who wish to take a more general approach, often in conjunction with a major in another department.
Students contemplating a major in music should arrange for placement examinations and advising in the department as early as possible, preferably during the freshman orientation period. Information is available from the director of undergraduate studies. Prerequisites for admission to the major are completion of MUSIC 2102 and 2104, preferably by the end of the freshman year, with an overall grade of B- or better in each course. In consultation with the director of
undergraduate studies, students are expected to have chosen an advisor from among the department faculty before acceptance into the major; admission to the major is decided by the faculty as a whole. Students majoring in music then design their course of study with their advisor

Music majors must complete the Core Curriculum plus at least two electives. The electives allow students to focus in specific areas, such as composition, performance, jazz studies, vernacular music, Western art music, or Asian music. Students may, however choose electives that reflect a more broadly based study. Those intending to pursue graduate study or professional work in music are advised to take further courses in addition to the two required electives
The Core Curriculum consists of courses:

1. in music theory: MUSIC 3101, 3102, 3103, 3104
2. in music history: MUSIC 3201, 3202, 3211, 4211
3. in performance: four semesters of participation in a musical organization or ensemble sponsored by the department of music (MUSIC 3602 through 3634 and 4601 through 4651)
Electives: at least 8 credits from the following:
4. in music theory: courses among the theory listings above 3104
5. in music history: MUSIC 3222 through 3901, or 4301 and above.
6. in performance: MUSIC 3502 or 4501

Honors. The honors program in music is intended to provide special distinction for the department's ablest undergraduate majors. Qualified students are invited to become candidates by the faculty in the second semester of their junior year. As soon as possible thereafter, the student forms a committee of three or more faculty members to guide and evaluate the honors work. In their senior year, candidates enroll in MUSIC 4911-4912 with the chair of the honors committee as instructor. Candidates are encouraged to formulate programs that allow them to demonstrate their musical and scholarly abilities, culminating in an honors thesis, composition, or recital, to be presented not later than April 1 of the senior year. An oral examination on the honors project will be administered by the candidate's committee not later than April 20. The level of honors conferred is based primarily on the candidate's performance in the honors program, and secondarily on the candidate's overall record in departmental courses and activities

## Computing in the Arts Undergraduate Minor

A minor in Computing in the Arts with an emphasis on music is available both to music majors and to students majoring in other subjects. For more information, please consult www.cis.cornell.edu/ComputingArts, or contact the director, Professor Graeme Bailey.

## Distribution Requirement

College of Arts and Sciences students may apply either one or two music department courses toward the distribution requirement in Literature and the Arts (LA) or Cultural Analysis (CA), as noted. Neither first-year
seminars nor advanced placement credit count toward this requirement.

If one music course is counted for distribution, it must carry at least 3 credits, and it may not be in musical performance (MUSIC 3501, 3502, or 4501) or in organizations and ensembles (MUSIC 3601 through 3634 and 4601 through 4651). Any two of the 2 -credit courses MUSIC 3112, 3113 , 3114 count as one course for this purpose.

If two music courses are counted for distribution in LA, they must total at least 6 credits, and at least one of the courses must be academic (as described in the preceding paragraph), not performance-oriented. The second "course," however, may comprise either up to 4 credits earned in performance (MUSIC 3501, 3502, or 4501 ) or up to 4 credits earned in organizations and ensembles (MUSIC 3602 through 3634 and 4601 through 4651), but not both.

## Facilities

Music Library. The Sidney Cox Library of Music and Dance in Lincoln Hall has an excellent collection containing periodicals, books, scores, parts, sound and video recordings, microforms, rare materials, and electronic resources. Its depth and breadth serve the needs of a wide variety of users on the campus and its listening and video viewing facilities are open to all members of the Cornell community.
Concert Halls. The Department of Music sponsors more than 100 concerts annually. Cornell's principal concert halls are Bailey Hall Auditorium (about 1,400 seats), Sage Chapel (about 800), and Barnes Hall Auditorium (about 280).

## Rehearsal Spaces and Practice Rooms.

 Departmental ensembles rehearse primarily in Lincoln Hall, Barnes Hall, and Sage Chapel. Twenty-six studios in Lincoln Hall are available for individual practice by pianists, vocalists, and instrumentalists who are members of the Cornell community. Of these, seven have grand pianos, six have upright pianos, and two have percussion instruments.For information about access to the practice rooms, see www.music.cornell.edu/ performing/practice-rooms or contact the department office.

Instruments. Six concert grand pianos are available for performances in the various concert halls, plus several historical keyboard instruments, including fortepianos,
harpsichords, and clavichords. Four distinctive organs are available to qualified individuals for lessons and practice. In addition, the music department owns a limited number of string, wind, and percussion instruments that may be rented by members of the department's ensembles

## Cornell Electroacoustic Music Center

(CEMC). The Cornell Electroacoustic Music Center comprises four project studios, a 14 -workstation teaching lab in the Music Library, and a primary multichannel studio Several live performance and recording rigs are also available, from hand-held to solid state. A combination of commercial and opensource software solutions service an array of student and faculty interests, including sound manipulation and sound spatialization, live performance, multimedia, intelligent music systems (adaptive and algorithmic
composition), music notation, sound art and experimentation, and high-resolution recording. The center operates its own web server with space for web hosting, data backup, and remote login. CEMC's facilities are state-of-the-art and can accommodate almost any creative inclination.

## Courses

## Music Theory

Students contemplating the music major are strongly advised to take MUSIC 2101, 2102, 2103, and 2104 in the freshman year; in any case MUSIC 2102 and 2104 must be completed no later than the end of the sophomore year.

## MUSIC 1100 Elements of Musica

 NotationFall or spring, weeks $2-5.1$ credit
Corequisite: any 3-credit music course and permission of instructor. Staff.
This four-week course, given at the beginning of each semester, fulfills the requirement of basic pitch, rhythm, and score-reading skills needed for some introductory courses and 2000-level courses with prerequisites.

MUSIC 1101 Fundamentals of Music (LA-AS)
Spring. 3 credits. No previous training in music required. M. Hatch.
An introduction to the theory of music from around the world: the structures of melody and rhythm (pulse, meter, scales, modes, texture, timbre, harmony, form) and the influences of audiences, music technologies (including instruments), reasons, and contexts for music making on instrumental and vocal music from classical, folk, traditional, and popular music of Asia, Africa, Europe, and the Americas Extensive listening and video examples.

## MUSIC 1105 Introduction to Music

 Theory (LA-AS)Fall. 3 credits. Recommended: experience in reading music; students may take MUSIC 1100 concurrently. J. Webster.
An elementary, self-contained introduction to the theory of Western tonal music
Fundamental musical techniques, theoretical concepts, and their application. Intervals, scales, triads; basic concepts of tonality and form; analysis of representative works Coverage primarily of "classical" (concert) music, with some attention to popular music and jazz.

## MUSIC 1466 Physics of Musical Sound (also PHYS 1204) (PBS) <br> Spring. 3 credits. K. Selby.

For description, see PHYS 1204.
MUSIC 2101 Tonal Theory I (LA-AS)
Fall. 3 credits. Prerequisites: admission by departmental diagnostic exam and concurrent enrollment in or previous credit for MUSIC 2103, or equivalent. Intended for students expecting to major in music and other qualified students. D. Yearsley. Detailed study of the fundamental elements of modal and tonal music: rhythm, scales, intervals, triads; melodic principles and twopart counterpoint; diatonic harmony and four-part voice leading; basic formal structures. Study engages different repertories, including Western art music as well as non-Western and popular traditions.

MUSIC 2102 Tonal Theory II (LA-AS)
Spring. 3 credits. Prerequisites: MUSIC 2101 and 2103 or equivalent; concurrent enrollment in or previous credit for MUSIC 2104. Intended for students expecting to major in music and other qualified students. A grade of B- or better in MUSIC 2102 is required for admission to music major. R. Sierra.
Continued study of voice leading and harmonic progression, including diatonic modulation; analysis of binary and ternary forms as well as jazz, blues, and pop phrase models.

## MUSIC 2103 Musicianship I

Fall. 2 credits. Pre- or corequisite: MUSIC 2101. Intended for students expecting to major in music and other qualified students. Staff.
Sight singing: diatonic melodies in treble, alto, and bass clefs. Keyboard: scales, triads, seventh chords, short diatonic chord progressions. Dictation: intervals, rhythms; short diatonic melodies; short diatonic chorale phrases. Score reading: two parts using treble, alto, and bass clefs. Musical terms: tempo markings and rhythmic terminology.

## MUSIC 2104 Musicianship II

Spring. 2 credits. Pre- or corequisite:
MUSIC 2102. Intended for students expecting to major in music and other qualified students. A grade of B- or better in MUSIC 2104, and failure in no individual musicianship components of the course, are required for admission to the music
major. R. Sierra.
Sight singing: longer melodies in three clefs, including diatonic modulation. Keyboard: diatonic chord progressions and sequences. Dictation: intervals, rhythms; longer melodies; chorale phrases with diatonic modulation. Score reading: three parts using treble, alto, and bass clefs. Transcriptions of pop, jazz, and other genres.
MUSIC 3101 Tonal Theory III (LA-AS)
Fall. 3 credits. Prerequisites: MUSIC 2102
and 2104 or equivalent. Corequisite:
MUSIC 3103. D. Yearsley.
Continuation of diatonic and introduction to chromatic harmony; species counterpoint; composition in small forms.
MUSIC 3102 Tonal Theory IV (LA-AS)
Spring. 3 credits. Prerequisites: MUSIC 3101 and 3103 or equivalent. Corequisite:
MUSIC 3104. Staff.
Study of and composition in larger forms, including sonata form; systematic study of chromatic harmony, voice-leading, and modulation; composition in chromatic style.

## MUSIC 3103 Musicianship III

Fall. 2 credits. Pre- or corequisite: MUSIC
3101. D. Yearsley.

Sight singing: melodies with chromaticism in treble, alto, tenor, and bass clefs. Keyboard: diatonic modulation, chromatic chords. Dictation: melodies with modulation; chorale phrases with secondary dominants and other chromatic chords. Score reading: four parts using treble, alto, tenor, and bass clefs. Musical terms: orchestral ranges, terms, clefs, and transpositions.

## MUSIC 3104 Musicianship IV

Spring. 2 credits. Pre- or corequisite: MUSIC 3102. Staff.
Sight singing: melodies in four clefs, including modality and chromatic modulation. Keyboard:
chromatic sequences, chromatic modulations, improvised modulations employing diatonic pivot chords. Dictation: intervals, rhythms, short melodies, and short, diatonic chorale phrases. Score reading: four parts, including transposing instruments. Musical terms: other terms in French, German, and Italian.

## [MUSIC 3111 Jazz Improvisation I

Fall. 3 credits. Prerequisite: MUSIC 2101 or permission of instructor. Next offered 2011-2012. P. Merrill. An introduction to fundamental jazz theory, technique, and applied skills.]

## MUSIC 3112 Jazz Improvisation II

Fall. 3 credits. Prerequisite: MUSIC 3111. P. Merrill.
Continuation of jazz theory, technique, and applied skills.

## [MUSIC 3113 Jazz Improvisation III

Spring. 3 credits. Prerequisite: MUSIC 3112. Next offered 2012-2013. P. Merrill.
Class work and assignments emphasize Coltrane and post-Coltrane harmony, advanced rhythmic development, augmented vocabulary, and an introduction to playing "free."]

## [MUSIC 3115 Jazz Piano

Spring. 3 credits. Prerequisite: MUSIC 2101 or permission of instructor. Next offered 2011-2012. P. Merrill.
An introduction to jazz keyboard technique, intended primarily for jazz instrumentalists with little or no keyboard experience and pianists with little or no jazz experience.]
[MUSIC 4101 Counterpoint \# (LA-AS)
Spring. 4 credits. Prerequisite: MUSIC 2101 or permission of instructor. Next offered 2011-2012. S. Stucky.]

## [MUSIC 4102 Topics in Music Analysis

 (also MUSIC 6101) (LA-AS)Spring. 4 credits. Prerequisite: MUSIC 2101 or permission of instructor. Next offered 2011-2012. J. Webster.]
[MUSIC 4103 Topics in Post-Tonal Theory and Analysis (also MUSIC 7102) (LA-AS)
Spring. 4 credits. Prerequisites: MUSIC 3102 and 3104. Next offered 2011-2012. Staff.]

## [MUSIC 4121 Conducting (LA-AS)

Fall. 4 credits. Prerequisite: MUSIC 3101 or equivalent. Next offered 2011-2012. C. Johnston Turner.

Covers fundamentals of score reading, score analysis, rehearsal procedures, and conducting technique; instrumental and choral contexts.]

## Music in History and Culture

## [MUSIC 1201 Hildegard to Handel \#

 (LA-AS)Fall. 3 credits. Prerequisite: ability to read music or concurrent enrollment in MUSIC 1100. Next offered 2011-2012. R. HarrisWarrick.
The main trends in Western music from the beginnings of musical staff notation in the 10th century to the mid-18th century. Emphasis on the evolution of musical styles and the changing social, cultural, economic, and political conditions that gave rise to those styles. Topics include Gregorian chant, organum, Ars nova, Renaissance polyphony, the invention of opera, and the rise of instrumental music.]

MUSIC 1202 Monteverdi to Minimalism \# (LA-AS)
Fall. 3 credits. Prerequisite: ability to read music or concurrent enrollment in MUSIC 1100 or successful completion of another college-level music course. N Zaslaw. A synoptic romp through the history of Western art music from the late Renaissance to the day before yesterday. Works emphasized: Monteverdi's Orfeo (1607), Handel's Messiab (1742), Mozart's Don Giovanni (1787), Beethoven's Ninth Symphony (1824), Berlioz's Symphonie fantastique (1830), Wagner's Das Rheingold (1876), Stravinsky's Rite of Spring (1913), Bartok's Concerto for Orchestra (1943), the sinfonias of Roberto Sierra, and new works commissioned by and for the class.
MUSIC 1301 Introduction to World Music I: Africa and the Americas (also LSP 1301) @ (CA-AS)

Spring. 3 credits. No previous training in music required. S. Pond.
This course centers on folk, popular, and traditional musical genres of the Western Hemisphere, particularly the African diaspora. It examines both the elements of musical styles and the features of society that influence music. Listening and writing assignments are major components of the course.
[MUSIC 1302 Introduction to World Music II: Asia (also ASIAN 1192) @ (CA-AS) Spring. 3 credits. No previous training in music required. Next offered 2011-2012. M. Hatch.

An exploration of folk, popular, and traditional musical genres from South, Southeast, and East Asia.]
[MUSIC 1311 Popular Music in America: A Historical Survey (also AMST 1311) \# (LA-AS)

Spring. 3 credits. Next offered 2011-2012. S. Pond.

This is a general introductory course addressing the broad range of styles described as popular music, as it has developed in the United States.]

## MUSIC 1312 History of Rock Music (also

 AMST 1312) (LA-AS)Spring. 3 credits. No previous training in music required. J. Peraino.
This course examines the development and cultural significance of rock music from its origins in blues, gospel, and Tin Pan Alley up to alternative rock and hip hop. The course concludes with the year 2000.

## MUSIC 1313 A Survey of Jazz (also

 AMST 1313) (LA-AS)Fall. 3 credits. No previous training in music required. S. Pond.
This course addresses jazz from two perspectives: the various sounds of jazz, as well as the historical streams-musical and cultural-that have contributed to its development. Listening and writing assignments are major components of the course.
MUSIC 1341 Gamelan in Indonesian History and Cultures (also ASIAN 2245, VISST 2744) @ (LA-AS)
Fall or spring. 3 credits. Prerequisite: permission of instructor. No previous knowledge of musical notation or performance experience necessary.

## C. Miller.

An introduction to Indonesia through its art. Elementary techniques of performance on the Indonesian gamelan; a general introduction to Indonesian history and cultures, and the sociocultural contexts for the arts there.

Several short papers and one longer research report are required. Instruction by visiting Balinese musician.

## [MUSIC 2221 Bach and Handel \# (LA-AS)

Spring. 3 credits. Prerequisite: any 3-credit music course or permission of instructor. Next offered 2011-2012. D. Yearsley.
Both composers created oeuvres of
incomparable richness and diversity. By
examining in depth selected masterpieces, this course hopes to offer new perspectives on the continued relevance and vital rewards of their music, both instrumental and vocal, sacred and secular.]

## [MUSIC 2222 Haydn and Mozart \# (LA-AS)

Fall. 3 credits. Prerequisite: any 3-credit music course or permission of instructor. Next offered 2012-2013. J. Webster. A survey of the lives, works, and historical roles of Joseph Haydn and Wolfgang Amadeus Mozart.]

## [MUSIC 2223 Beethoven \# (LA-AS)

Fall. 3 credits. Prerequisite: any 3-credit music course or permission of instructor.
Next offered 2011-2012. J. Webster. A survey of Beethoven's life, works, and influence. While the primary focus is his musical style and its development, the course also covers social-cultural factors and the psychology and reception of genius.]

## [MUSIC 2224 Mozart in History, History

 in Mozart \# (HA-AS)Spring. 3 credits. Prerequisite: ability to read music or concurrent enrollment in MUSIC 1100 or successful completion of another college-level music course. Next offered 2012-2013. N. Zaslaw.
An exploration of the phenomenon that is Wolfgang Amadè Mozart, using historical documents to contextualize his life and works while using the extensive documentation of his life and works to learn about history.]

## [MUSIC 2231 Musical Romantics \#

 (LA-AS)Spring. 3 credits. Prerequisite: ability to read music or concurrent enrollment in MUSIC 1100. Next offered 2011-2012. Staff.]

## MUSIC 2241 Opera (also THETR 2730) \#

 (LA-AS)Fall. 3 credits. No prerequisite. R. HarrisWarrick.
Opera has been enthralling audiences for 400 years; this course explores the multiple facets of its appeal. Using seven operas as the focus-chosen from different periods, national traditions, and styles-the class will examine the texts that have been turned into operas, the musical conventions that have guided composers (or against which they have worked), and the decisions directors make when they put operas on stage. Each work will be seen as well as heard-either in a special screening or, at least once in the semester, in a live performance. Students who have a strong background in music may wish to also enroll in MUSIC 3901, which involves an extra class-period per week where the music is discussed in greater detail. Permission of the instructor is required.

## [MUSIC 2242 The Orchestra and Its

 Music \# (LA-AS)Spring. 3 credits. Prerequisite: any 3-credit music course or permission of instructor. Next offered 2011-2012. N. Zaslaw.

The music of, and the social structures supporting, large instrumental ensembles in the Western world from the 16th century to the present.]

## MUSIC 2245 Choral Music

Spring. 3 credits. Prerequisite: ability to read music or permission of instructor. R. Harris-Warrick.

This course takes a thematic approach to studying a cross-section of works composed for group singing over several centuries and cultures: sacred music; folk traditions; amateur music-making; and music as a marker of social identity. Repertoire for the course will be integrated with local concert offerings and student-generated topics will be included in the curriculum.

## MUSIC 2303 Music and Human Life

 Spring. 3 credits. E. Bates.An introduction to the study of music in crosscultural perspective, through an exploration of three themes: the perception and cognition of music; the construction and contestation of nationalism, race, ethnicity, and folklore; and the effect of paradigm shifts in musical and non-musical technologies on music, musical instruments and society. Through this course, students will develop skills in doing ethnographic writing about music and culture.

## MUSIC 3303 Discovering Hip-Hop:

 Research and the Cornell Hip-Hop Collection (also AMST 3303) (CA-AS) Spring. 3 credits. Limited to 15 students. Prerequisite: permission of instructor. S. Pond.The course addresses research issues and methodologies through the lens of Cornell's Hip-Hop Collection, a gift of collector and author Johan Kugelberg, which is housed in Cornell Library's Division of Rare and Manuscript Collections. The collection features a significant archive on the history of hip-hop and rap music, documenting its emergence in the Bronx in the 1970s and early 1980s. It includes sound recordings, a key photographic archive, textile art, books, magazines, and more than five hundred original flyers. The course provides students opportunities to gain new insights into hip-hop culture, while also introducing them to research and curatorial methodologies and goals.

## MUSIC 3305 Music of Egypt and Turkey

Spring. 4 credits. E. Bates.
In this seminar we begin with the
contemporary music cultures of Egypt and Turkey as our point of departure. The course has units on music fundamentals (systems of melody, meter, and musical form); popular music genres and their relation to folkloric/ traditional arts, recording industries, and mass media industries centered in Cairo and Istanbul; and folklore, nationalism and the politics of language, religion, and ethnicity. Does not require extensive background in music reading/performance.

## MUSIC 3513 Music and Choreography

 (also DANCE 3530) (LA-AS)Fall. 3 credits. Attendance at dance
concerts and music concerts required. A. Fogelsanger.

For description, see DANCE 3530.

## MUSIC 4125 Musical Avant-Gardes (also SHUM 4843)

Fall. 4 credits. Limited to 15 students. A. McGraw.

For description, see SHUM 4843.

## MUSIC 4303 Music, Technology, and Society (also SHUM 4303, MUSIC 7303)

Fall. 4 credits. E. Bates.
A general framework for students of all music disciplines to study music and technology in different socio-historical contexts. Topics include acoustics, technologies of the voice, piano manufacturing, electronic instruments and electronic music genres, audio engineering (classical, rock and non-Western musics), and internet-connected "virtual" musical collaborations. In addition to readings and writings about musical-sociotechnological issues, the course will involve a substantial hands-on component.

## [MUSIC 4511 Early Dance (also DANCE

 4399)Fall. 1 credit; may be repeated for credit.
Next offered 2012-2013. R. L. and
R. M. Harris-Warrick.

Topic: Baroque Dance. Introduces students to the basic movement vocabulary of dances from Western Europe during the Baroque period.]

## Music History Courses for Majors and Qualified Nonmajors

MUSIC 2207 Survey of Western Music I \# (HA-AS)
Fall. 4 credits. Pre- or corequisite: MUSIC
2101/2103 or permission of instructor. J. Peraino.

A survey of Western music and its social contexts from the beginning of notation (circa 900) to 1700 . Topics include sacred chant, secular song, polyphony, madrigals, early opera, and the development of independent instrumental music. The course emphasizes listening and comprehension of genres and styles, and is intended for music majors and qualified nonmajors.
MUSIC 2208 Survey of Western Music II \# (HA-AS)
Spring. 4 credits. Pre- or corequisite:
MUSIC 2102/2104 or permission of
instructor. Staff.
A survey of Western music and its social contexts from 1700 to the present. Topics include the decline of church music, the rise of public concerts and opera, the evolution of the orchestra, and modernism in the 20th century. The course, which emphasizes listening and comprehension of genres and styles, is intended for music majors and qualified nonmajors.

## MUSIC 3211 Proseminar in Musicology

 (LA-AS)Spring. 4 credits. Prerequisite: MUSIC 32013202. D. Yearsley.

Introduction to methods in musicology, including historiography, criticism, approaches to vernacular and non-western musics, and gender studies.

## [MUSIC 3222 Opera and Culture (also

 GERST/THETR 3740) \# (LA-AS)Spring. 4 credits. Prerequisite: any 3-credit music course or proficiency in German or Italian. Next offered 2011-2012. A. Groos.]

## [MUSIC 3231 Topics in Western Art Music to 1750

Fall. 4 credits. Prerequisite: MUSIC 2102 or permission of instructor. Next offered 2011-2012. Staff.]

MUSIC 3232 Topics in Western Art Music 1750-Present
Spring. 4 credits. Prerequisite: MUSIC 2102
or permission of instructor. N. Zaslaw.
Case studies in the history of program music, broadly defined as instrumental music meant to signify ideas, moods, narratives, or images outside of itself.

## [MUSIC 3245 Words and Music (also GERST 3600) \# (LA-AS)

Spring. 4 credits. Next offered 2012-2013.
A. Groos.

For description, see GERST 3600.]

## MUSIC 3301 Topics in Popular Music and

 Jazz (LA-AS)Fall. 4 credits. Prerequisite: MUSIC
2102/2104 or permission of instructor. J. Peraino.

Topic for Fall 2010: The Beatles and their World. The course will focus on the music of the Beatles and its relationship to American and British culture in the 1960 s and today. Topics include considerations of race and gender in their early cover songs and their rise to fame; the influence of the counter-culture, drugs, and other musicians on their music and image; the emergence of concept albums and the influence of classical music; and current reception of their music in academic and popular writing. Intended for music majors and qualified non-majors.

## MUSIC 3901 Supplemental Study in Music History

Fall or spring. 1 credit. Prerequisite: MUSIC 2101 or permission of instructor.
Corequisite: enrollment in an approved 1000- or 2000-level 3-credit music history course. Staff.
Intended primarily for music majors, this option allows students enrolled in an approved 1000- or 2000-level 3-credit music history course to study the material at a more advanced level through supplementary reading, discussion, and writing, by arrangement with the professor. Advanced study of various topics in music history. Students enrolling in MUSIC 3901 also register for an approved 2000-level music history course and pursue independent research and writing projects.

## [MUSIC 4181 Psychology of Music (also

 PSYCH 4180/6180) (KCM-AS)Fall. 3 or 4 credits, depending on whether student elects to do an independent project. Next offered 2011-2012. C. L. Krumhansl.

For description, see PSYCH 4180.]

## [MUSIC 4211 Senior Seminar

Fall. 4 credits. Prerequisite: MUSIC 3211.
Next offered 2011-2012. N. Zaslaw.
The possibilities and limitations of the study of historical performance practices. An investigation of one controversial aspect of the performance of music from each of the traditional music-historical periods of Western music, finishing with a comparative study of historical changes in the performance of Indonesian gamelan music.]
[MUSIC 4222 Music and Monstrous Imaginings \# (LA-AS)
Spring. 4 credits. Prerequisite: ability to follow a musical score. Next offered 20122013. A. Richards.

Explores the monstrous and fantastical in musical, literary, and visual culture around 1800. Topics include theory of Fantastic, Uncanny, Gothic, and Grotesque.]
[MUSIC 4231 Music and Queer Identity (CA-AS)
Spring. 4 credits. Next offered 2012-2013.
J. Peraino.]

## MUSIC 4232 Women and Music (also

 FGSS 4235) (CA-AS)Spring. 4 credits. J. Peraino.
This course examines music as a discourse of gender, with a particular focus on women's participation in Western European and American musical traditions (including classical and popular music). Topics include women as composers and performers, as muses and Sirens, as metaphor, and as theoretical construct. This class will also survey feminist musicology.

## MUSIC 4244 The Organ in Western

 Culture \# (LA-AS)Fall. 4 credits. Prerequisite: permission of instructor. A. Richards and D. Yearsley. This course surveys the history of the organ from Antiquity until the present. A technological and architectural marvel, the organ has the oldest and broadest repertoire of any Western instruments. Among the topics crucial to the organ's history are its use and status in the Christian church; the development of keyboards, pedals, stops, and various forms of pipes; the disparate national traditions in playing and building; and its unique modes of performance with all four limbs. Our reading, listening, and discussions will range from the earliest repertoire of the 14th century, through the epoch-making works of J. S. Bach, to contemporary developments. The course will include not only an in-depth examination of music and literature for and about the instrument, but will also involve work with the reconstruction now nearing completion in Anabel Taylor Chapel of the famed organ from 1708 in Berlin's Charlottenburg Castle Church.
MUSIC 4301 Introduction to Ethnomusicology (also MUSIC 6301) @ (SBA-AS)
Spring. 4 credits. M. Hatch.
For description, see MUSIC 6301.

## Music Composition

MUSIC 1421 Introduction to Computer Music (LA-AS)
Fall. 3 credits. Limited enrollment.
Recommended: ability to read music.
K. Ernste.

A composition-based introduction to computer hardware and software for digital sound and digital media. Fundamentals of MIDI sequencing and other techniques for producing electroacoustic music. Each student creates several short compositions.
MUSIC 1465 Computing in the Arts (also CS/CIS/ENGRI 1610, FILM 1750, PSYCH 1650) (LA-AS)
Fall. 3 credits. G. Bailey.
For description, see CS 1610.
MUSIC 2421 Computers in Music Performance (LA-AS)
Spring. 3 credits. Limited enrollment. K. Ernste.

A course in live performance and real-time, interactive sound manipulation techniques.

## [MUSIC 3421 Scoring the Moving Image

 (LA-AS)Spring. 4 credits. Limited enrollment. Next offered 2011-2012. K. Ernste.

A course in composing music for multimedia: film, animation, theater, dance, art, design, and/or games. MUSIC 3421 is appropriate as a continuation for those who have taken MUSIC 1421 or 2421 , but is open to others by permission.]
MUSIC 3431 Sound Design and Digital Audio (also DANCE/THETR 3680) (LA-AS)
Fall and spring. 3 credits. W. Cross. For description, see THETR 3680.
[MUSIC 3441 Interactive Performance Technology (also DANCE 3560, THETR 3690) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
W. Cross and A. Fogelsanger.

For description, see THETR 3690.]
MUSIC 3501, 3502, and 4501 Individual Instruction in Musical Composition Analogously to private instruction in performance, Cornell faculty members and outside instructors offer private instruction in musical composition. Students may register for these courses in successive semesters or year although individual instruction may not be available during semester where classroom composition courses are offered simultaneously. The faculty members authorized to supervise composition study, both within Cornell and outside, are K. Ernste, P. Merrill, R. Sierra, and S. Stucky. Prerequisites: satisfactory completion of MUSIC 2102 and 2104. Auditions: Students must present a portfolio of previous compositions to assist faculty in determining placement. For more information about individual instruction, see the section titled Musical Instruction.
MUSIC 4111 Composition (LA-AS)
Spring. 4 credits. Prerequisite: MUSIC 3101 or permission of instructor. S. Stucky. Principles of composition, approached through traditional forms (variation, sonata) and through the imitation of specific 20th-century styles. May be taken more than once for credit, by permission and if taught by a different instructor.
MUSIC 4122 Orchestration (LA-AS)
Spring. 4 credits. Prerequisite: MUSIC 3101 or permission of instructor. S. Stucky. Orchestration based on 19th- and 20th-century models.

## MUSIC 4123 Jazz Arranging (LA-AS)

Fall. 4 credits. Prerequisite: MUSIC 3111 or permission of instructor. P. Merrill. A survey of jazz arranging techniques for the big band.

## Independent Study and Honors

MUSIC 4901 Independent Study in Music
Fall or spring. 1-6 credits. Prerequisite: departmental approval; experience in proposed area of study. Staff.
Independent study affords students the opportunity to pursue special interests or research not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the independent course, must approve the proposed study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study; forms are available in the Office of Undergraduate Admissions and Advising, 55 and 172 Goldwin Smith Hall.

## MUSIC 4911-4912 Honors in Music

Fall and spring. 8 credits per year.
Prerequisite: senior honors candidates Staff.
See "Honors" under "The Major" at the beginning of the MUSIC listings.

## Musical Instruction

Cornell faculty members offer individual instruction in voice, organ, harpsichord, piano and fortepiano, violin, viola, cello, percussion, and some brass and woodwind instruments to those students advanced enough to do college-level work in these instruments. Lessons are available by audition only. They may be taken either without credit (MUSIC 3501) or with credit (MUSIC 3502 or 4501 ). All students studying with Cornell faculty members must enroll in MUSIC 3501, 3502, or 4501. Instruments may sometimes be studied for noncredit or credit outside Cornell, but also by audition only (see MUSIC 3501, 3502, 4501, Secs 8, 9, and 10). For more information, please go to www.music.cornell.edu.
Lessons for beginners. The Department of Music does not offer lessons for beginners, but can recommend teachers outside Cornell for those who wish to begin studying voice or an instrument.

Auditions. Auditions are held at the beginning of each semester for lessons for advanced students. Contact the music department office in 101 Lincoln Hall for information.
Earning academic credit for lessons. For every 4 credits earned in MUSIC 3502, the student must have earned, or currently be earning, at least 3 credits in another music course (excluding MUSIC 3502, 4501, 36013611 , or 4601-4631. These 3 credits must be earned before, or simultaneously with, the first 2 credits in 3502; they cannot be applied retroactively. Only music courses taught at Cornell (or approved transfer courses from other colleges or universities) may be used to satisfy this requirement.
Fees. For information about the fee structure for lessons, see the department's web site or contact the music department office. All fees are nonrefundable once lessons begin, even if the course is subsequently dropped.
Lessons taken outside Cornell. Under certain conditions, advanced students may earn credit for lessons taken outside Cornell. An audition is required, and no credit can be granted for beginning instruction. For further information, read the description of MUSIC 3501, 3502, and 4501, Secs 8, 9, and 10, and contact the Music Department office.
Scholarships. Music majors who demonstrate an advanced level of performance in an audition may be granted a waiver of lesson fees per semester. All scholarships are intended only for lessons in the student's primary performing medium. Scholarship/ registration forms, available in the music department office, are to be returned to the office within the first three weeks of classes.

## Individual Instruction in Musical Composition

Analogously to private instruction in performance, Cornell faculty members and outside instructors offer private instruction in musical composition. Music majors may
receive a waiver in lesson fees, just as for performance lessons. For nonmajors, fees are structured just as for performance study. Lessons may also be taken outside Cornell, for credit or otherwise. Students may register for these courses in successive semesters or year although individual instruction may not be available during semester where classroom composition courses are offered simultaneously.

The faculty members authorized to supervise composition study, both within Cornell and outside, are K. Ernste, P. Merrill, R. Sierra, and S. Stucky.

Prerequisites: Satisfactory completion of MUSIC 2102 and 2104.
Auditions: Students must present a portfolio of previous compositions in order to assist the faculty in determining placement.

## MUSIC 3501, 3502, and 4501 Individual Instruction

Prerequisite: advanced students only; may register after successful audition with instructor, or, if student needs to study outside Cornell, with appropriate faculty sponsor. Students should contact instructor or music department office for audition information. Students may register for these courses in successive semesters or years.

## MUSIC 3501

Fall or spring. 0 credits each semester. See section listing below for instructors.
Students who pass a successful audition to study with Cornell faculty, but either wish to take only a half-hour lesson per week or cannot receive credit for lessons, must enroll in MUSIC 3501. S-U grades only.

## MUSIC 3502

Fall or spring. 2 credits each semester. See section listing below for instructors.
Students earn 2 credits each semester for a one-hour lesson (or two half-hour lessons) per week, accompanied by an appropriate practice schedule. Credit may be earned only in conjunction with academic music courses; see "Earning Academic Credit for Lessons," above. Letter grades only.

## MUSIC 4501

Fall or spring. 4 credits each semester. See section listing below for instructors. Open only to undergraduates majoring in music and graduate students in music.
The section numbers listed below apply to MUSIC 3501, 3502, or 4501, depending on the instrument studied.
Sec 01 Voice. J. Kellock.*
Sec 02 Organ. A. Richards and D. Yearsley.
Sec 03 Piano. X. Bjerken and Staff.
Sec 04 Harpsichord. A. Richards and D. Yearsley.
Sec 05 Violin or Viola. J. Lin.
Sec 06 Cello. J. Haines-Eitzen.
Sec 08, 09, and 10 Individual Instruction Outside Cornell.
All the standard orchestral and band instruments, keyboard instruments, guitar, and voice may, under certain conditions, be studied for credit with outside teachers. This course is available primarily for the study of instruments not taught at Cornell and when there is limited enrollment in MUSIC 3501 and 3502. Prior approval and audition by a member of the faculty in the department are required, and credit may be earned only as described under "Earning academic credit for lessons," above. Additionally, a departmental
petition must be completed by the end of the third week of classes. For information and a list of approved teachers, consult the department office, 101 Lincoln Hall.

* Students taking voice lessons for credit are required to attend Prof. Kellock's weekly studio class.


## Musical Organizations and Ensembles

Students may participate in musical organizations and ensembles throughout the year. Permission of the instructor is required, and admission is by audition only (usually at the beginning of each semester), except that the World Music Choir and the Cornell Gamelan Ensemble are open to all students without prior audition. Registration is permitted in two of these courses simultaneously and students may register in successive years, but no student may earn more than 8 credits in these courses. Membership in these musical organizations and ensembles is also open to qualified students who wish to participate without earning credit. In that case, students should register for 0 credits with a pass/fail grade option.

## MUSIC 3602 Chorus

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. Fall: staff; spring: S. Tucker.
A treble-voice chorus specializing in music for women's voices and in mixed-voice repertory.

## MUSIC 3603 Glee Club

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. Fall: staff; spring: S. Tucker.
A male-voice chorus specializing in music for men's voices and in mixed-voice repertory.

## MUSIC 3604 Chorale

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. Staff.
Study and performance of selected choral music for mixed voices.

MUSIC 3610 Gamelan Ensemble
Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: permission of instructor. C. Miller.

Advanced performance on the Indonesian gamelan. Tape recordings of gamelan and elementary number notation are provided. Some instruction by visiting Balinese artist.

## MUSIC 3611 World Music Choir

Spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Prerequisite: permission of instructor. Staff.
A mixed-voice chorus whose repertoire is drawn from Africa, Central America, South America, the Caribbean, Eastern Europe, and Asia. Music reading skills are not necessary, but a good ear is essential.

## MUSIC 3612 World Drum and Dance

 EnsembleFall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: permission of instructor. T. Feeney.

WDDE focuses in 2009-10 on traditional music and dance of the Anlo-Ewe culture of southern Ghana. WDDE rehearses weekly for performance as ready throughout the semester.

No prior experience is necessary, and all members of the group will sing, drum, and dance.

## MUSIC 3613 Cornell Steel Bands

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: audition with instructor.

## T. Feeney.

The Cornell Steel Bands perform traditional music from Trinidad for steel pans, including calypso and soca, as well as repertoire expanding the boundaries of the instruments. The group includes the standard steel pan orchestra, as well as an "engine room" consisting of drumset, congas, irons (brake drums), and other percussion instruments.

One or more sections will form in 2009-10, dependent on demand and ability. The groups rehearse weekly, and perform as ready throughout the semester. Prior musical experience is necessary, though not limited to percussion, and participants must audition.

## MUSIC 3614 Middle Eastern Music

 Ensemble (also NES 3914)Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: permission of instructor. G. Holst-Warhaft.

Performance of diverse musical traditions from the Middle East. Instruction in individual instruments (oud, ney, kanoun, and percussion) and group rehearsals, culminating in one or two performances per semester. Songs are taught in several languages, with the assistance of local language and diction teachers.

## MUSIC 3615 Jazz Ensemble II

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. P. Merrill. Study and performance of classic and contemporary big band literature. Rehearsal once a week with one to two performances a semester.

## MUSIC 3621 Symphony Orchestra

Fall and spring. Either 0 credits, S-U, or
1 credit, letter grade, each semester.
Prerequisite: successful audition. Fall,
C. Kim; spring, staff.

Study and performance of a broad repertoire of orchestral works from Beethoven to the present.

## MUSIC 3631 Wind Symphony

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Prerequisite: successful audition. Fall, staff; spring, C. Johnston Turner.
[MUSIC 3632 Music Leadership and Service
Fall and spring. 4 credits per year. Corequisite: membership in Wind Ensemble. Next offered 2011-2012. C. Johnston Turner.

The goal of this music performance and service learning course is to provide the opportunity in which learning experiences address human and community needs, and to allow the necessary time for reflection on those experiences. The focus of the course is on musical and personal leadership within communities-from the local to the foreign and from the known to the unknown. Communities in this context are defined by the community of students and musicians within the wind ensemble, the local communities in Ithaca and other New York
state schools, and school, conservatory, and municipal communities in Costa Rica.]

## MUSIC 3633 Wind Ensemble

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Prerequisite: successful audition; previous background in percussion. Fall,
C. Johnston Turner; spring, staff.
[MUSIC 3634 Percussion Ensemble
Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Prerequisite: audition with instructor. Corequisite: enrollment in a Cornell large ensemble (orchestras, wind ensemble/ symphony, jazz bands, or choral group). Previous background in percussion is required. Next offered 2011-2012. T. Feeney.

The Percussion Ensemble performs pieces from the growing percussion repertory, exploring the breadth and depth of its possibilities for percussionists. Concerts might involve collaborations with composers and other instrumentalists, improvisation, or student-initiated ideas for performance.]

## MUSIC 4601 Chamber Singers

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. Staff. A mixed-voice chamber choir specializing in Renaissance and 20th-century music.

## MUSIC 4615 Jazz Ensemble I

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. P. Merrill. Study and performance of classic and contemporary big band literature. Rehearsals twice a week with two to four performances per semester.

## MUSIC 4616 Jazz Combos

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. P. Merrill. Study and performance of classic and contemporary small-group jazz.

## MUSIC 4621 Chamber Orchestra

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester.
Prerequisite: successful audition. Fall,
C. Kim; spring, staff.

Study and performance of chamber orchestra works from the baroque period to the present.

## MUSIC 4631 Chamber Winds

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Corequisites: enrollment in a Cornell large ensemble (orchestra, wind ensemble/ symphony, jazz band, or choral group), or permission of instructor. Coordinator:
C. Johnston Turner and J. Pepinsky. Flexible instrumentation ensembles perform original woodwind, brass, and percussion music. The ensembles participate in Wind Symphony and Wind Ensemble concerts in addition to several chamber concerts throughout the year.

## MUSIC 4641 Instruction in Gamelan

## Instruments

Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Limited enrollment. Prerequisite: permission of instructor. C. Miller.
Concentrated instruction for students in advanced techniques of performance on Indonesian gamelan instruments.

MUSIC 4651 Chamber Music Ensembles
Fall and spring. Either 0 credits, S-U, or 1 credit, letter grade, each semester. Prerequisite: successful audition.
Coordinator: M. Yampolsky.
Study and performance of chamber music works from duos to octets, for pianists, string, and wind players.

## Graduate Courses

Open to qualified undergraduates by permission of instructor.

## [MUSIC 6101 Analytical Technique (also MUSIC 4102)

Spring. 4 credits. Next offered 2011-2012. J. Webster.]

## MUSIC 6201 Introduction to Bibliography

 and ResearchFall. 4 credits. B. Boettcher.
This course explores the nature of the
discipline and introduces the many types of bibliographic tools, both printed and electronic, needed to pursue research in music.

## MUSIC 6301 Introduction to

 EthnomusicologySpring. 4 credits. M. Hatch.
This course introduces the terminology for and approaches to describing and analyzing the varieties of music in the cultures of the world. First, a survey of the repertories of music that ethnomusicologists have recorded and written about and the methods that they have used. Then, tailored to the interests of each student in the class, a more systematic consideration of the music in one or another region or culture in the world.

## MUSIC 6420 Techniques for Computer Music

Fall. 4 credits. Prerequisite: permission of instructor. K. Ernste.
A course on composing electroacoustic music with an emphasis on real-time performance, historical models, and aesthetics. Other topics dependent on students' backgrounds and interests.

## MUSIC 6421 Electroacoustic

 CompositionSpring. 4 credits. K. Ernste.
Intended principally for doctoral students in music composition but open to others by permission. Depending on students'
backgrounds and interests, the course may include an introduction to electroacoustic composing, an emphasis on aesthetic issues associated with the field, interactivity and realtime performance, software instrument design, performance controllers, or other topics.

## [MUSIC 7101 Topics in Tonal Theory and

 AnalysisSpring. 4 credits. Next offered 2011-2012. J. Webster.

Topic: Sonata-form theory.]

## [MUSIC 7102 Topics in Post-Tonal Theory and Analysis (also MUSIC 4103)

Spring. 4 credits. Next offered 2011-2012. Staff.]
MUSIC 7111 Composition
Fall and spring. 4 credits each semester. S. Stucky.

## [MUSIC 7121 Advanced Orchestral

 TechniqueFall. 4 credits. Next offered 2011-2012.
S. Stucky.

Intensive analysis of orchestral scores from the past hundred years, with an emphasis on modern instrumental techniques, gestures, and textures.]

## [MUSIC 7201 Seminar in Medieval Music

Fall. 4 credits. Next offered 2013-2014. J. Peraino.

Topic: The Music of the Troubadours and Trouvères. This course will familiarize the students with this extensive repertory of secular love songs, introducing the many genres, distinct notation, and issues of melodic and textual analysis, and performance practice issues].

## MUSIC 7202 Seminar in Renaissance

 MusicSpring. 4 credits. R. Harris-Warrick. Topic: Josquin

## [MUSIC 7203 Seminar in Baroque Music

Spring. 4 credits. Next offered 2011-2012. R. Harris-Warrick.

Topic: The operas of Jean-Philippe Rameau. This seminar investigates the multiple components (musical, textual, choreographic, scenographic) from which Rameau's operas were constructed, as well as the aesthetic controversies that surrounded them.]

## MUSIC 7204 Seminar in 18th-Century Music <br> Spring. 4 credits. J. Webster.

## MUSIC 7205 Seminar in 19th-Century Music <br> Fall. 4 credits. Staff.

## [MUSIC 7206 Seminar in Music of the

 20th CenturySpring. 4 credits. Next offered 2011-2012. R. Sierra.

Topic: Ligeti.]

## [MUSIC 7211 Seminar in Performance

 PracticeFall. 4 credits. Next offered 2012-2013. N. Zaslaw.

Topic: The music of Mozart and his contemporaries.]

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[MUSIC 7221 Mozart: His Life, Works, and Times
Fall. 4 credits. Next offered 2011-2012. N. Zaslaw.]
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[MUSIC 7223 Operatic States: Imagining Community in Music-Drama (also GERST 6420)
Fall. 4 credits. Next offered 2012-2013. A. Groos.]
[MUSIC 7231 Music and Postmodern Critical Theory
Fall. 4 credits. Next offered 2011-2012. J. Peraino.]

MUSIC 7232 History and Criticism
Fall. 4 credits. A. Richards.
Topic: The musical portrait.

## [MUSIC 7240 Film and Music

Fall. 4 credits. Next offered 2012-2013.
D. Yearsley.

Topic: Film and music.]
MUSIC 7301 Topics in Ethnomusicology Fall. 4 credits. Also open to graduate students in anthropology, linguistics, psychology, sociology, Africana Studies, Asian Studies, and other cognate fields by permission of instructor. S. Pond.

MUSIC 7303 Music, Technology, and Society (also MUSIC/SHUM 4303)
Fall. 4 credits. E. Bates.
For description, see MUSIC 4303.

## MUSIC 7501 Historical Performance

Fall and spring. 4 credits each semester.
Prerequisite: permission of instructor. Staff.
Lessons on the major instrument with supplementary study and research on related subjects.

## MUSIC 7901 Independent Study and

 ResearchFall and spring. Credit TBA. Staff.

## MUSIC 9901 Thesis Research

Fall and spring. Up to 6 credits each semester, TBA. S-U grades only. Limited to doctoral students in music who have passed the Admission-to-Candidacy exam.

## NEAR EASTERN STUDIES

K. Haines-Eitzen (chair), H. Al-Masri, R. Brann, Y. Chami, Z. Fahmy, I. Gocheleishvili,
G. Herman, A. Karakaya-Stump,
A. Kleinerman, C. Monroe, L. Monroe (director of undergraduate studies), D. I. Owen,
D. S. Powers (director of graduate studies), N. Scharf, S. Shoer, D. Starr (director of Program of Jewish Studies), S. M. Toorawa, M. Weatherspoon, M. Younes. Joint faculty: G. Holst-Warhaft, C. Robinson

## The Department

The Department of Near Eastern Studies (409 White Hall, 255-6275) offers courses in Near Eastern civilization including archaeology, history, religions, languages, and literatures. These course offerings treat the Near East from the dawn of history to the present and emphasize methods of historical, cultural, and literary analysis. Students are encouraged to take an interdisciplinary approach to the religions and cultures of the region and their articulation during antique, late antique, medieval, and modern times. For more information, please visit www.arts.cornell.edu/ nes.

## The Major

A major in Near Eastern Studies offers students the opportunity to explore the languages, literatures, cultures, religions, and history of the Near East/Middle East from antiquity to the modern day. The major is designed both to acquaint students broadly with the region and its cultures as well as to study a particular subfield in depth.

## Prerequisites

- The applicant for admission to the major in Near Eastern Studies (NES) must have completed at least two Near Eastern Studies content courses, one of which can be a language course. Students are strongly encouraged to enroll in language courses and/or NES 2651 or 2754 either before signing into the major or early on in their major.
- Prospective majors must meet with the director of undergraduate studies before submitting a major application.
- To qualify as a major, a cumulative grade average of C or better is required.


## Major Requirements

The precise sequence and combination of courses chosen to fulfill the major is selected in consultation with the student's advisor. All majors must satisfy the following requirements (no course may be used to satisfy two requirements; S-U option not permitted):

1. Two years of one Near Eastern language or, in exceptional cases, one year of two Near Eastern languages
2. Nine 3- or 4-credit NES courses, which must include the following:
a. NES 2651 Judaism, Christianity, and Islam or NES 2754 Introduction to Near Eastern Civilizations
b. NES 4560 Junior/Senior Proseminar: Theory and Method in Near Eastern Studies
c. Seven additional courses, of which
i. three must fulfill temporal breadth, defined as: one course whose chronological parameters fall within the period 3000 BCE to 600 CE , one course whose chronological parameters fall within the period 600 CE to 1800 CE , and one course whose chronological parameters fall between 1800 CE and the present. The following are examples (a complete list may be obtained in the department office):

## 3000 bсе to 600 ce

NES 2623 Introduction to the Hebrew Bible
NES 2629 Introduction to the New Testament
NES 2644 Introduction to Ancient Judaism
NES 2661 Ancient Seafaring
NES 2666 Jerusalem through the Ages
NES 3594 Gender, Sexuality, and the Body in Early Christianity ${ }^{\circledR}$
NES 3623 Reinventing Biblical Narrative ${ }^{\circledR}$
NES 3664 Ancient Iraq I
NES 3665 Ancient Iraq II
NES 3720 Women in the Hebrew Bible $\circledR^{\circledR}$
600 ce to 1800 ce
NES 2214 Qur'an and Commentary
NES 2556 Introduction to the Qur'an
NES 2634 Muslims and Jews in
Confluence and Conflict
NES 2655 Introduction to Islamic Civilization
NES 2673 History of the Middle East: 13th to 18th Centuries
NES 3539 Islamic Spain ${ }^{\circledR}$
NES 3651 Law, Society, and Culture in the Middle East
NES 4618 Seminar in Islamic History ${ }^{\circledR}$

## 1800 ce to the present

NES 2635 Jews and Arabs in Contact and Conflict: The Modern Period

NES 2674 History of the Modern Middle East: 19th to 20th Centuries
NES 3685 Middle Eastern Cities ${ }^{\circledR}$
NES 3693 History of Jews and Christians in the Modern Middle East

NES 3697 History of the IsraeliPalestinian Conflict
NES 3703 Cosmopolitan Alexandria ©
NES 3719 Crime and Conflict in the Modern Arabic Novel
ii. A maximum of three of these seven courses can be at the 2000 level; a minimum of four must be at the 3000 level or above.
iii. One of the 3000 -level or above courses must be a research seminar (courses are designated with $\left.\circledR^{\circledR}\right)$ The following are examples (a complete list can be found in the department office):
3539 Islamic Spain: Culture and Society @ \# (CA) ®
3594 Gender, Sexuality, and the Body in Early Christianity \# (CA) ®
3685 Middle Eastern Cities: History, Society, and Culture @ \# (HA) ®
4657 Formation of Islamic Law @ \# (HA) ®
4727 New York, Paris, Baghdad: Poetry of the City) ${ }^{\circledR}$
iv. Note: a maximum of two independent studies can be applied to the major; a maximum of two non-cross-listed courses may be applied to the major; a maximum of two courses may receive credit for more than one major; a maximum of 15 credits of relevant, departmentally approved course work taken overseas or at another university may be applied to the major.

Honors. Each fall, a small number of highly qualified seniors enter the Near Eastern Studies Honors Program. The Honors Program is open to NES majors who have done superior work and who wish to devote a substantial part of their senior year to advanced, specialized, independent research and writing of a thesis.
Note well: Successfully completing an honors thesis will require sustained interest, exceptional ability, diligence, and enthusiasm. Students must also take two honors courses (NES 4998 in fall and NES 4999 in spring), in addition to the regular major requirements.
While admission to the Honors Program and completion of a thesis do not guarantee that students will be awarded honors in Near Eastern Studies, most students find the experience as intellectually rewarding as it is rigorous.
Requirements. In order to be considered for the Honors Program, candidates must fulfill all of the following requirements:

- Minimum grade point average of 3.5 in the Near Eastern Studies major;
- Superior performance overall at Cornell (minimum 3.3 GPA);
- Completion of at least four semesters or equivalent in a relevant Near Eastern language;
- Satisfactory completion of an NES research paper ("®" course);
- Completion of at least one course in the subfield relevant to the proposed thesis (e.g., early Islamic history, modern Hebrew literature);
- Prospective honors students are strongly encouraged to take NES 4560 (NES Proseminar) in their junior year.
Study abroad. Students are encouraged to consult with their advisor about options and eligibility to study abroad. With appropriate advance consultation and approval upon return, NES will accept credits earned abroad toward the major. Students are reminded that the College of Arts and Sciences requires that they carry a minimum of 15 credits during a semester abroad.


## First-Year Writing Seminars

Consult the John S. Knight Institute brochure for descriptions, times, and instructors.

## Language Courses

## Arabic

## NES 1201-1202 Elementary Arabic I and

 II (also ASRC 1201/1202)1201, fall; 1202, spring or summer. 4 credits each semester. Limited to 18 students per sec. Prerequisite: for NES 1202, NES 1201 or permission of instructor. M. Younes and staff.

Provides a thorough grounding in all language skills: listening, speaking, reading, and writing. It starts with spoken Arabic and gradually integrates Modern Standard Arabic in the form of listening and reading texts. Emphasis is on learning the language through using it in meaningful contexts. Students who successfully complete the two-semester sequence are able to (1) understand and actively participate in simple conversations involving basic practical and social situations (e.g., introductions, greetings, school, home and family, work, simple instructions); (2) read Arabic material of limited complexity and variety (e.g., simple narrative and descriptive texts, directions); (3) write notes and short letters describing an event or a personal experience. An important objective of the course is to familiarize students with basic facts about the geography, history, and culture of the Arab world.

## NES 1203-2200 Intermediate Arabic I and II (also ASRC 1203/2200) (CA-AS)

1203, fall; 2200, spring or summer. 4 credits each semester. NES 2200 @ satisfies Option 1. Limited to 18 students per sec. Prerequisites: for NES 1203, one year of Arabic or permission of instructor; for NES 2200, NES 1203 or permission of instructor. Letter grades recommended.
M. Younes and staff.

Sequel to NES 1201-1202. Continued development of the four language skills through extensive use of graded materials on a wide variety of topics. Increased attention is given to developing native-like pronunciation and grammatical accuracy, but the main focus is on developing communication skills. The student who successfully completes 2200 is
able to: (1) understand and express himself or herself in Arabic in situations beyond the basic needs; (2) read and comprehend written Arabic of average difficulty; (3) write a letter, a summary of a report, or a reading selection. An appreciation of Arabic literature and culture is sought through the use of authentic materials.

## [NES 2203 Elementary Arabic for Native

 SpeakersSpring. 4 credits. Satisfies Option 1.
Prerequisite: fluency in a spoken Arabic dialect. Next offered 2011-2012.
M. Younes.]

## [NES 2204 Introduction to Quranic Arabic (also ASRC 2106, RELST 2204) (LA-AS)

Spring. 4 credits. Prerequisite: knowledge of Arabic alphabet. Next offered 20112012. H. Al-Masri.]

NES 3201-3202 Advanced Intermediate Arabic I and II (also ASRC 31003101) @ (CA-AS)

3201, fall; 3202, spring. 4 credits each semester. NES 3201 satisfies Option 1. Limited to 15 students. Prerequisite: for NES 3201, NES 2200 or permission of instructor; for NES 3202, NES 3201 or permission of instructor. Letter grades recommended. M. Younes and staff. Introduces students to authentic, unedited Arabic language materials ranging from poems, short stories, and plays to newspaper articles dealing with social, political, and cultural issues. Emphasis is on developing fluency in oral expression through discussion of issues presented in the reading selections. There is more focus on the development of native-like pronunciation and accurate use of grammatical structures than on elementary and intermediate Arabic. A primary objective of the course is the development of writing skill through free composition exercises in topics of interest to individual students.

## NES 3220 Advanced Arabic Literature

Fall. 4 credits. Satisfies Option 1.
Prerequisite: Advanced Intermediate Arabic II (NES 3202), a grade of no less than "A" in Advanced Intermediate Arabic I (NES 3201), OR permission of instructor. H. Al-Masri.

The course is an introductory survey to different genres in modern Arabic literature (poetry and prose). It aims at improving the four language skills at an advanced level, as well as encouraging students to appreciate Arabic literature. All readings will be in Arabic. The readings are selected from among the most salient literary texts by major writers from the 20th century.

## NES 4206 Structure of the Arabic Language (also LING 4416) @ (KCM-AS)

Spring. 4 credits. Prerequisite: one year of Arabic or linguistic background. J. Palmer. The course consists of a brief history of Arabic and its place in the Semitic language family, the sociolinguistic situation in the Arab world (diglossia), Arabic phonology (sounds, emphasis, syllable structure, and related processes), morphology (verb forms and derivational patterns), and syntax (basic sentence structures, cases, and moods).

## [NES 4211 Readings in Arabic Literature

 @ \# (LA-AS)Fall. 4 credits. Prerequisite: NES 3202, a 4000-level Arabic course, or permission of instructor. Next offered 2011-2012.
S. M. Toorawa.

This course introduces students to Arabic prose literature through a close reading of selections by classical, medieval, and modern writers. The emphasis is on grammar and vocabulary.]

## Intensive Arabic Program (IAP)

Modeled in part on the FALCON program in Chinese at Cornell University, the Intensive Arabic Program is designed to help students attain proficiency in Arabic in both its spoken and written forms in a condensed period of time. The program consists of three phases: (1) The first phase covers the equivalent of elementary Arabic I and II, and can be taken during the fall and spring semesters of the academic year, or as part of the Arabic summer intensive program. (2) The second phase covers the equivalent of Intermediate Arabic I and II and Advanced Arabic I and II and is taken in a total immersion environment at Cornell. During this phase, up to 12 students will take only Arabic classes for the duration of the fall semester. (3) The third phase takes place at the Hashemite University in Jordan during the following spring semester. The students who successfully complete the second phase will spend the spring semester at the Hashemite University with one of the teachers in the Cornell Arabic program. The course work will be taught entirely in Arabic and will focus on Arab society and culture, the Arabic language, and the modern Middle East.

## Credits for Cornell Undergraduates

The fall and spring semesters will each be the equivalent of 16 credits for Cornell undergraduates. Ideally, students would enroll in the yearlong program during their junior year, but the other years are also a possibility. The program will enable students to fulfill their language requirement and, depending on their major, they would have the option of applying the other courses toward their major. For Near Eastern Studies majors, all the courses would go toward the major (beyond the NES 1103 language course). Nonmajors will be able to count the spring courses toward the geographic breadth requirements. Upon their return, students would have the option of continuing their study of Arabic by enrolling in 4000-level Arabic courses in NES.

## Cornell undergraduates seeking degrees

 in colleges other than Arts and Sciences, please note that you will be transferred to the College of Arts and Sciences during IAP. This means that all costs will be assessed according to Arts and Sciences rates, not those of your "home" college.For further information, contact the Department of Near Eastern Studies, 409 White Hall, 255-6275 or visit our web site, www.arts.cornell.edu/nes.
NES 3206 Intensive Arabic Program (IAP)
Fall. 16 credits. Satisfies Option 1.
M. Younes and H. Al-Masri.

In the first half of this 16 -credit total immersion course, we will continue to develop the four language skills of listening, speaking, reading, and writing through the extensive use of graded materials on a wide
variety of topics (e.g., education, food, health, sports, religion, politics, economics). In the second half, students will be introduced to authentic, unedited Arabic language materials ranging from short stories, poems, and songs to newspaper articles dealing with social, political, and cultural issues related to the Arab world and the Middle East. While more attention is given to developing native-like pronunciation and grammatical accuracy than in NES 1201-1202, the main focus of the course will be on encouraging fluency and facility in understanding the language and communicating ideas in it. Building on the foundation started in NES 1201-1202, the course will continue the practice of introducing Arab society, history, and culture. Oral and written expression will be developed through discussions of issues presented in the reading selections which will be followed by free composition exercises built around topics of interest to individual students.

## NES 3207 Current Events in Arabic Media (IAP) @ (CA-AS)

Spring. 8 credits. M. Younes and staff. In this 8 -credit, one-semester, topic-based course, students will be introduced to authentic, unedited Arabic language materials from Arabic newspapers, magazines, TV broadcasts and interviews, and online media. Topics will include, among other things, politics, economics, business, sports, and women's issues. Students can suggest other topics that interest them to the teacher. Emphasis will be on developing fluency in oral and written expression through discussions, debates, presentations, and written work. The order of activities for each topic will be: reading or listening to a selection before coming to class, class discussion and/or debate, an oral presentation by the students, and, finally, a written homework assignment about the same topic. All activities are conducted entirely in Arabic. There will be more focus on the development of native-like pronunciation and accurate use of grammatical structures than at the lower levels.

## NES 3213 Introduction to Jordanian

 Society (IAP) @ (SBA-AS)Spring. 4 credits. M. Younes and staff. Selected readings and discussions on the following topics: (1) the history of the Hashemite Kingdom of Jordan; (2) urban, rural, and bedouin communities, and urbanization; (3) Palestinians and other Arab refugees in Jordan; (4) the Jordanian/Arab family (structure, responsibilities, functions); (5) marriage (and divorce); (6) women and gender roles; (7) the role of religion in the society.

## NES 4204 Arabic Grammar (IAP) @ (CA-AS)

Spring. 4 credits. M. Younes and staff. A systematic and comprehensive examination of all aspects of Arabic grammar: phonology (the sound system), morphology (word formation), and syntax (sentence structure). All the readings and discussions will be in Arabic. References in English will be used for research purposes.

## $\overline{\text { Greek }}$

NES 1340-1341 Elementary Modern Greek I and II (also GREEK 11411142)

1340, fall; 1341, spring. 4 credits.
Prerequisite: NES 1340/GREEK 1141 or placement by departmental exam. K. Yiavis.

> For description, see GREEK 1141-1142.

NES 1342-2324 Intermediate Modern Greek I and II (also GREEK 11432144)

Fall. 4 credits. NES 2324/GREEK 2144
satisfies Option 1. Prerequisite: NES
1341/GREEK 1142 or placement by
departmental exam. K. Yiavis.
For description, see GREEK 1143-2144.

## Hebrew

NES 1101-1102 Elementary Modern Hebrew I and II (also JWST 11011102)

1101, fall; 1102, spring. 4 credits each semester. Limited to 18 students per sec. Prerequisite: for NES 1102, NES 1101 with grade of C- or better or permission of
instructor. Letter grades only. S. Shoer.
Intended for beginners. Provides a thorough grounding in reading, writing, grammar, oral comprehension, and speaking. Students who complete the course are able to function in basic situations in a Hebrew-speaking environment.

## NES 1103 Elementary Modern Hebrew III (also JWST 1103) (CA-AS)

Fall. 4 credits each semester. Limited to 15 students per sec. Prerequisite: NES 1102 with grade of C - or better or permission of instructor. Letter grades recommended. S. Shoer.

Sequel to NES 1101-1102. Continued development of reading, writing, grammar, oral comprehension, and speaking skills.

## NES 1104 Beginners Intensive Hebrew (also JWST 1104)

Summer. 3 credits. S. Shoer.
This course will be taught in Israel as part of the University of Haifa Summer Hebrew Program. The curriculum is comparable to the current Cornell University course NES 1101 or JWST 1101 (Elementary Modern Hebrew I). After completing this program, students will be able to continue and join the Elementary Modern Hebrew II class (NES 1102 or JWST 1102) in the spring 2010 semester. The class is taught using Ivrit B'Ivrit (Teaching Hebrew Using Hebrew) and is part of a comprehensive, integrated skills curriculum based on Hebrew as a living language. Students are encouraged to use Hebrew from the moment they wake up, during their meals, and throughout the day. Students study grammar, reading, writing, structure of the language, listening, and conversation.

## NES 1105 Hebrew Summer Follow-Up (also JWST 1105)

Fall. 1 credit. S. Shoer.
This course is an advanced study of classical Arabic through a close reading of selected chapters of the Qur'an, together with the Qur'anic commentary (tafsir) and other relevant literature. Special attention is given to grammar, syntax, and lexicography.

NES 2100 Intermediate Modern Hebrew: Special Topics in Hebrew (also JWST 2100) @ (CA-AS)

Spring. 4 credits. Satisfies Option 1.
Prerequisite: NES 1103 with grade
equivalent to C - or above or permission of instructor. Letter grades recommended.
N. Scharf.

The course is aimed at training students in exact and idiomatic Hebrew, expanding vocabulary and usage of grammatical knowledge, and acquiring facility of expression in both conversation and writing. Uses written and oral exercises built around the texts. Reading and discussion of selections from Hebrew literature and Israeli culture through the use of texts and audiovisual materials. See web site: http://lrc.cornell.edu/ hebrew/nes2100.

NES 2125 Mishnaic Hebrew (also JWST 2125)

Spring. 3 credits. G. Herman.
In this course we shall learn and experience the rudiments of Mishnaic Hebrew whilst studying a select tractate of the Mishnah. This course is intended for students who have completed a "beginners" course in Biblical Hebrew or the equivalent.

## NES 3101 Advanced Intermediate

 Modern Hebrew I: Aspects of Israeli Society (also JWST 3101) @ (CA-AS)Fall. 4 credits. Satisfies Option 1. Limited
to 15 students. Prerequisite: for 3101, NES
2100 with grade of C- or above or
permission of instructor. N. Scharf.
Advanced study of the Hebrew language both orally and through the analysis of mostly unedited texts of social, political, and cultural relevance, with less emphasis on the study of grammar. Students are introduced to articles published in Israeli newspapers and magazines, works by authors, and movies. Students develop composition and advanced writing skills by studying language structure, idioms, and various registers of style.

## NES 3102 Advanced Intermediate

 Modern Hebrew II: Aspects of Israeli Culture (also JWST 3102) @ (CA-AS) Spring. 4 credits. Satisfies Option 1.Limited to 15 students. Prerequisite: NES
3101 with grade equivalent to C - or above or permission of instructor. Letter grades
recommended. N. Scharf.
This course is a continuation of work done in NES/JWST 3101, with less emphasis on the study of grammar. We will read and discuss texts of cultural relevance using articles published in Israeli newspapers, web sites, and works by authors in each of the three principal genres: poetry, theater, and novels. See web site: http://lrc.cornell.edu/hebrew/ nes3102.

## [NES 3103 Love, Wine, Death, and In

 Between (also JWST 3103) @ \# (CA-AS)Fall. 4 credits. Prerequisite: NES 3102 or permission of instructor. Letter grades recommended. Next offered 2011-2012. S. Shoer.]

NES 3108 Intensive Conversational Hebrew II (also JWST 3108)
Fall. 2 credits. Prerequisite: NES 3102, NES 3105 , or permission of instructor; nonnative speakers only. N. Scharf. Intended to continue the development of all aspects of the language. Emphasis, however, is placed on speaking skills and understanding by using text material relevant to Israeli
contemporary society. The instructor is sensitive to individual student needs.

## [NES 4101 Modern Hebrew Literature (also JWST 4101) @ (LA-AS)

Spring. 4 credits. Next offered 2011-2012. D. Starr.]
[NES 4102 Biblical Hebrew ProseGenesis (also JWST/RELST 4102) @ \# (LA-AS)
Fall. 4 credits. Satisfies Option 1. Prerequisite: one year of biblical or modern Hebrew. Next offered 2011-2012. L. Monroe.]

## $\overline{\text { Hindi-Urdu }}$

NES 1312-1313 Elementary Urdu Reading and Writing I and II (also URDU 1125)
Fall. 1 credit. S. Singh.
For description, see URDU 1125.
NES 2201-2202 Intermediate Urdu Reading and Writing I and II (also URDU 2225-2226)
2201, fall; 2202, spring. 2 credits. Prerequisites: HINDI 1102 or HINDI 1110; and URDU 1125 or permission of instructor. Letter grades only. S. Singh. For description, see URDU 2225-2226.

## Persian

NES 1320-1321 Elementary Persian I and II
1320, fall; 1321, spring. 4 credits each semester. Limited to 15 students.
I. Gocheleishvili.

Designed for students who want an effective and comprehensive approach to learning Persian that will enable them to progress in the language skills of speaking, listening, reading, and writing. At the completion of this course, students are prepared to deepen their comprehension of Persian through literature and the media.

## NES 1322-2322 Intermediate Persian I

 and II (CA-AS)1322, fall; 2322, spring. 4 credits. NES 2322 @ satisfies Option 1. Prerequisite: one year (two semesters) elementary Persian or permission of instructor. I. Gocheleishvili.

A continuation of NES 1320-1321. Continued development of speaking, listening, reading, and writing skills.

## Turkish

NES 1330-1331 Elementary Turkish I and II
1330, fall; 1331, spring. 4 credits each semester. Limited to 15 students.
E. Ozdogan.

Intended for students with no experience in Turkish. The goal is to provide a thorough grounding in the Turkish language with an emphasis on communication. Small class size provides intensive practice in speaking, writing, and listening/comprehension. The course is cosponsored by the Institute for European Studies.
NES 1332-2332 Intermediate Turkish I and II
1332, fall; 2332, spring. 4 credits. NES 2332 satisfies Option 1. Prerequisite: one year (two semesters) elementary
Turkish or permission of instructor. Staff.

A continuation of NES 1330-1331. Continued development of speaking, listening, reading, and writing skills.

## Ancient Near Eastern Languages

## Hieroglyphic Egyptian

[NES 3450-3451 Hieroglyphic Egyptian I and II (3451, CA-AS)
3450, fall; 3451, spring. 4 credits. Next offered 2011-2012. A. Kleinerman.]

## NES 3453 Essentials of Hieroglyphic

 EgyptianSpring. 4 credits. A. Kleinerman. Who really built the pyramids? What hung in the garden of Babylon? After a general introduction to the history of Egypt and the ancient Near East, this course focuses on the culture and society of Egypt and Mesopotamia. Topics include education and literacy, science and technology, family, life, fashion and feasting, religion, and economy. Case studies include the workers' village excavated alongside the Valley of the Tombs in Egypt and the activities of cloistered priestesses in Mesopotamia.

## Topics Courses

NES 2212 Qur'an and Commentary (also RELST 2212) @ \# (LA-AS)
Spring. 4 credits. D. Powers.
This course is an advanced study of classical Arabic through a close reading of selected chapters of the Qur'an, together with the Qur'anic commentary (tafsir) and other relevant literature. Special attention is given to grammar, syntax, and lexicography.
[NES 2537 Ninth-Century Baghdad and Its "Bad Boys and Girls" @ \# (CA-AS) Spring. 3 credits. Prerequisites: none. Next offered 2011-2012. S. M. Toorawa.]

NES 2567 Daily Life in Ancient Egypt and Mesopotamia (also JWST/ARKEO 2567) @ \# (CA-AS)

Fall. 3 credits. A. Kleinerman.
For description, see NES 3453.

## NES 2587 Great Books of Islamic Culture

 Spring. 3 credits. S. Toorawa.Islamicate culture has produced numerous works that would make it onto almost anyone's list of great books. In this introductory/survey course, students read a selection of those books and study the literary and intellectual cultures that produced them in an attempt to deepen and nuance their understanding of Islamic civilization.

## [NES 2611 Prophecy in Ancient Israel (also JWST/RELST 2611)

Spring. 3 credits. Next offered 2011-2012.
L. Monroe.]

## [NES 2629 Introduction to New

 Testament and Other Early Christian Literature (also CLASS 2613, JWST/ RELST 2629) @ \# (HA-AS)Spring. 3 credits. Next offered 2011-2012. K. Haines-Eitzen.]

## NES 2644 Introduction to Judaism (also RELST/JWST 2644)

Spring. 3 credits. L. Monroe.
This course is designed to acquaint students with the varieties of Judaism from ancient times to the early modern period. A strong emphasis will be placed on ancient Jewish civilization, and how ancient structures shaped
later religious, social, and political trends Particular attention will be devoted to moments of continuity and change in ideas and practices in each major phase of their historical development. Students will learn to analyze material evidence and primary texts in translation, to engage with the questions brought to bear on this material by contemporary scholars, and to generate their own critical questions. This course will also explore the ways Judaism and the Jewish people have been understood through various interpretive lenses, including sociology, religious studies, anthropology, musicology women's studies, and film studies. Students will be encouraged to think creatively and to engage in experiential and hands-on investigation of particular issues.

## NES 2650 Ancient Iraq (also JWST/ ARKEO 2650) <br> Spring. 3 credits. D. I. Owen

Provides an introductory survey of the history, archaeology, and culture of Sumer and Babylonia from the dawn of writing to the rise of Persia

## NES 2651 Judaism, Christianity, and Islam (also JWST/RELST 2651) \# @

 (HA-AS)Fall. 3 credits. K. Haines-Eitzen. Have you ever wondered how Jews, Christians, and Muslims can worship the same universal deity, yet find themselves in conflict with one another, often to the point of demonizing adherents of another tradition? How can Jews consider Abraham the first Jew, Christians regard him as the first Christian, and Muslims look upon him as the first Muslim? How each can put forth exclusive claims to truth, to what is required of women and men, and to control of sacred sites such as Jerusalem? This course explores the ways in which communities of Jews, Christians, and Muslims came to define themselves and by extension those outside their religious community through the production and subsequent interpretation of "authoritative texts," including the Hebrew Bible, the (Christian) Bible, and the Arabic Qur'an. We will consider each tradition's tremendous diversity and elasticity; the features that unify adherents; and how views of the "other" from within each tradition vary across time.

## NES 2655 Introduction to Islamic Civilization (also HIST 2530, RELST 2655) @ \# (HA-AS)

Fall. 3 credits. D. Powers.
Considers the major themes of Islamic civilization as they developed from the lifetime of Muhammad until the 20th century. While the readings provide the student with the chronology of Islamic history, lectures are devoted to an analysis of thematic units, such as art and architecture, science, and cities. The class meets three times weekly, and the classroom format is that of a lecture/discussion in which students are encouraged to participate actively. Lectures are accompanied by slide presentations when appropriate.

## NES 2661 Ancient Ships and SeafaringIntroduction to Nautical Archaeology (also ARKEO/JWST 2661) @ \# (HA-AS) <br> Fall. 4 credits. C. Monroe.

A survey of the history and development of ships and seafaring as revealed by shipwrecks, boat burials, texts, art, and other evidence. The role of nautical technology and seafaring among the maritime peoples of the ancient

Mediterranean world-Canaanites, Minoans Mycenaeans, Phoenicians, Hebrews, Greeks, and Romans-and the riverine cultures of Mesopotamia and Egypt is addressed. The survey stretches from the earliest evidence for Mediterranean seafaring around $10,000 \mathrm{BCE}$ to the first transatlantic voyages in the 15th century, including Arab, Viking, and European explorers, and the birth of modern capitalism in the Italian Maritime Republics. Along the way, economics, war, exploration, cult, life at sea, and colonization are discussed.

## NES 2668 Ancient Egyptian Civilization (also ARKEO/JWST 2668) @ \# (HA-AS)

Spring. 3 credits. C. Monroe.
The course surveys the history and culture of pharaonic Egypt from its prehistoric origins down to the early first millennium BCE. Within a chronological framework, the following themes or topics will be considered: the development of the Egyptian state (monarchy, administration, ideology), social organization (class, gender and family, slavery), economic factors, and empire and international relations
[NES 2674 History of the Modern Middle East: 19th-20th Centuries (also JWST 2674, GOVT 2747) @ (HA-AS)
Fall. 3 credits. Next offered 2011-2012. Z. Fahmy.]

NES 2677 The Jewish Galilee In Late Antiquity (also ARKEO/JWST/RELST 2677, CLASS 2637) @ \# (HA-AS)
Fall. 3 credits. G. Herman.
This course will study themes in the political, social, cultural, and religious history of the Jews of the Galilee in late antiquity (3rd-6th centuries CE ). Utilizing rabbinic sources (primarily from the Palestinian Talmud); material sources (such as synagogues, mosaics, inscriptions, and artifacts), but also piyyut, Roman, and Christian sources, and lists of the priestly courses, it will explore the evolution of the Jewish settlement in this region. Topics to be studied will include synagogue and communal structure, Jewish priesthood, Hellenism, rabbinization,
Christianization; the patriarchate, revolts, ethnic and social tension; and attitudes toward the Roman Empire.

## NES 2699 History of the Ottoman Empire, 1300-1922 @ \# (HA-AS) <br> Spring. 3 credits. A. Karakaya-Stump

 The Ottoman Empire was one of the longestlasting empires in world history, ruling over a large portion of the Middle East and the Balkans for nearly six centuries. It figures as a major power in the history of both Europe and the Islamic world. This course is an introductory survey of the history of the empire from its origins as a small principality in medieval Anatolia to a leading world power in the 16th century, and to its eventual disintegration by the end of World War I. It explores the major events of Ottoman political history, the main economic, social, and cultural institutions of the Ottoman state and society, and some recent trends in Ottoman historiography including debates on the origins and decline of the Ottomans, and the growing research on Ottoman women.NES 2724 Introduction to Hebrew Bible (also JWST/RELST 2724) (LA-AS)
Fall. 3 credits. L. Monroe.
The Hebrew Bible (Old Testament) is a repository of ancient Israelite religious, political, social, historical, and literary traditions. For the modern reader these ancient
traditions are often obscured by a focus on the text as revelation. The purpose of this course is to introduce students to the biblical world by reading the Hebrew Bible in translation, on its own terms, as a body of literature that evolved in an ancient Near Eastern context The Bible itself will be the primary text for the course, but students will also be exposed to the rich and diverse textual traditions of the ancient Near East, including Mesopotamia, Egypt, Moab, and Ugarit. In addition, this course will explore the impact of early biblical interpretation on shaping the monotheistic traditions inherited in the West. As participants in a secular course on the Bible, students will be challenged to question certain cultural assumptions about the composition and authorship of the Bible, and will be expected to differentiate between a text's content and its presumed meaning.
[NES 2728 Introduction to Modern Middle Eastern Literature (also COML 2728) \# (LA-AS)
Spring. 3 credits. Next offered 2011-2012. D. Starr.]

NES 2735 Jews and Arabs in Contact and Conflict (also JWST 2735, COML 2450) @ (CA-AS)

Spring. 3 credits. D. Starr.
An introduction to representations of JewishArab relations from the beginning of the 20th century to the aftermath of the 1967 ArabIsraeli War. We will discuss the historical and social contexts of these relations beginning with the cultures of the Jews in the Arab World, and the rise of nationalist movements among Jews and Arabs. We will then focus at length on the repercussions of two watershed moments that transformed the nature of interactions between Jews and Arabs: the ArabIsraeli wars of 1948 and 1967. The majority of class time will be devoted to discussing literary works and films by and about Jews from Arab countries, Zionist immigrants to Palestine, and Israelis from a variety of backgrounds, as well as Palestinians in Mandatory Palestine, in Israel, in the diaspora, and under Israeli occupation. Readings include the novels My Michael by Amos Oz and Wild Thorns by Sahar Khalifeh, as well as poetry, short stories, and memoirs. We will also discuss feature films such as Hill 24 Doesn't Answer, Chronicle of a Disappearance, and Summer in La Goulette. These texts will provide a basis for understanding how these cultures see and represent themselves and the "other" at critical historical moments. Primary source documents and critical studies will also provide the historical, cultural, and political frameworks for our discussions.
[NES 2754 Introduction to Near Eastern Civilization: The Literature of Princes, Prophets, and Poets (also COML 2754) @ \# (LA-AS)
Fall. 3 credits. Next offered 2011-2012.
S. M. Toorawa.]
[NES 2793 Middle Eastern Cinema (also COML/FILM 2930, JWST 2793, VISST 2193) @ (LA-AS)

Fall. 4 credits. Next offered 2011-2012. D. Starr.]

NES 3505 By the Rivers of Babylon (also ARKEO/JWST/RELST 3505)
Spring. 4 credits. G. Herman.
This course will introduce and explore the history and culture of Babylonian "talmudic" Jewry from the formative Parthian era until the Muslim conquest. Among the sources to be
studied: Josephus, the Palestinian and Babylonian Talmuds, Aramaic incantation bowls, Zoroastrian and eastern Christian sources, as well as archaeological evidence and Sasanian epigraphic sources and images Topics to be addressed will include communal organization, acculturation and Persian culture among the Jews, religious tolerance and intolerance, Jewish leadership, relations with Palestine. Methodological issues taught will include the use of rabbinic sources for historical analysis, earlier and current approaches to the use of rabbinic material.

## [NES 3516 Education of Princes (also NES 6516, COML/GOVT 3716/6716)

Fall. 4 credits. Co-meets with NES/COML/ GOVT 6516. Next offered 2011-2012. S. Toorawa.]
[NES 3524/6524 Israelite Prophecy (also JWST/RELST 3524) @ \# (LA-AS)
Spring. 4 credits. Next offered 2011-2012. L. Monroe.]
[NES 3551 Law, Society, and Culture in the Middle East (also HIST 3651/6651, NES 6551) @ \# (CA-AS) Spring. 4 credits. No prerequisites. Next offered 2011-2012. D. Powers.]
NES 3555 Science Fiction: Medieval and Modern \# (CA-AS)
Fall. 4 credits. S. Toorawa.
Many prominent writers of science fiction, fantasy, and alternate history have long had recourse to the texts, cultures, and topographies of the Near and Middle East; and many early Near Eastern texts and tales are examples of speculative fiction. In this course, we survey the science fiction genre through works from, about, and depicting the Near East. Our journey will begin with material from medieval and classical Jewish, Christian, and Islamic tradition. Modern readings and viewings will include Neil Gaiman's graphic novel Sandman; Frank Herbert's Dune; episodes of Star Trek: The Next Generation; Ursula Le Guin's Wizard of Earthsea; The Matrix; and stories and novels by George Alec Effinger, Leila Aboulela, Jon Courtenay Grimwood, and Philip K. Dick. All material will be in English.

## NES 3587 Quran and Its Interpreters (also RELST 3587) @ \# (CA-AS)

Fall. 4 credits. D. Powers.
In this course, we will read and analyze the Qur'an (in English translation), with attention to the following topics: the collection and redaction of the text; Qur'an recitation; structural, linguistic, and literary features of the text; occasions of revelation and abrogation; major themes; law in the Qur'an; and modes of interpretation. Knowledge of Arabic is not required.

## NES 3588 Biblical Archaeology (also JWST/RELST 3588) @ \# (CA-AS) <br> Spring. 4 credits. L. Monroe.

The purpose of the course is to place the Bible within the context of a larger ancient world that can be explored by systematic excavation of physical remains. Students will become familiar with archaeological excavations and finds from ancient SyriaPalestine from 10,000 BCE to 586 BCE. We will explore this archaeological evidence on its own terms, taking into consideration factors such as archaeological method and the interpretive frameworks in which the excavators themselves work, as well as the implications of this body of evidence for
understanding the complexity and diversity of biblical Israel.

## NES 3600 History of the Holocaust (also HIST/JWST 3700) (HA-AS)

Spring. 4 credits. V. Caron.
For description, see HIST 3700.
[NES 3619 Near Eastern Christianities, 50-650 ce (also JWST/RELST 3619) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012. K. Haines-Eitzen.]

## [NES 3629 Introduction to New

 Testament and Other Early Christian Literature (also CLASS/JWST/RELST 3629)Spring. 1 credit. Pre- or corequisite: NES 2629 or one year of ancient Greek. Next offered 2011-2012. K. Haines-Eitzen.]
[NES 3633 Christianization of the Roman World (also CLASS/HIST/RELST 3625) @ \# (HA-AS)
Fall. 4 credits. Next offered 2012-2013.
E. Rebillard.]

NES 3661 Sumerian Language and Culture I (also ARKEO/JWST 3661/6661, NES 6661) @ \# (HA-AS)
Fall. 4 credits. D. I. Owen.
This course focuses on an intense introduction to Sumerian language and grammar with additional readings in literature in translation. Particular emphasis is placed on the reading and interpretation of original texts from the Cornell collection and their use in the reconstruction of Mesopotamian history and culture in the third millennium BCE.

## NES 3662 Sumerian Language and

 Culture II (also JWST/ARKEO 3662) @ \# (LA-AS)Spring. 4 credits. Prerequisite: NES 3661. D. I. Owen.

A continuation of NES 3661, the course will continue the intensive introduction to Sumerian language and grammar with additional readings in Sumerian literature in translation. Particular emphasis will be placed on the reading and interpretation of original texts from the Cornell collection and their use in the reconstruction of Mesopotamian history and culture in the third millennium BCE.
[NES 3665 Ancient Iraq II: 2000-331 bce (also ARKEO/JWST 3665) \# (HA-AS) Fall. 4 credits. Next offered 2011-2012. D. I. Owen.]

## NES 3670 History of Modern Egypt (also

 HIST 3670) @ (HA-AS)Spring. 3 credits. Z. Fahmy.
This lecture course will explore the sociocultural history of modern Egypt from the late 18th century to the present. We will explore Egyptian history under the Ottomans and the Mamluks, the unsuccessful French attempt to colonize Egypt, and the successful British occupation of the country. We will then examine the development of Egyptian nationalism from the end of the 19th century through Nasser's pan-Arabism to the current Mubarak regime. We will accomplish this with the aid of a variety of texts and media, including novels and films.
[NES 3677 Search for the Historical Muhammad (also RELST 3677) @ \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Powers.]

NES 3690 History and Culture of Ur (also ARKEO/JWST 3690) @ \# (HA-AS)
Fall. 4 credits. D. I. Owen.
Ur was one of the major cities in Sumer and Babylonia for nearly two millennia. The course will focus on the role of this city and its history and culture of the region, the biblical tradition, and particularly the third Dynasty of Ur.

## [NES 3697 Israeli-Palestinian Conflict (also GOVT 3977, HIST/SOC 3970, JWST 3697) @ (HA-AS)

Spring. 4 credits. Next offered 2011-2012. R. Brann.]

NES 3720 Women in Ancient Israel (also JWST/RELST 3270, FGSS 3220) ® (LA-AS)
Fall. 4 credits. Prerequisite: at least one college-level course on the Bible.

## L. Monroe

This course will employ a range of methods in approaching the subject of women in ancient Israel. We will use biblical, archaeological, and ancient Near Eastern textual evidence to reconstruct aspects of the lives of Israelite women, concentrating on their economic, religious, social, and political roles. We will analyze the portrayals of women in biblical prose and poetry and will consider the ways in which women function in biblical narrative, from a literary critical standpoint. In addition, this course will examine how the roles of women in ancient Israel have been understood and integrated in later Jewish and Christian thought, and it will address the strengths and weaknesses of so-called "feminist" approaches to the Hebrew Bible.
NES 3723 The Arabian Nights: Then and Now (also COML 3723/6723, NES 6723) @ \# (LA-AS)

Spring. 4 credits. No prerequisites. S. M. Toorawa.

The medieval Arabic cycle of stories known as The Arabian Nights or The Thousand and One Nights is a classic of world literature. In the first half of the course we will read the Nights and discuss both its dominant themes-deceit, love, sex, revenge, violence, and justice-and its storytelling contexts and antecedents (e.g., the Sanskrit Jataka Tales and the Middle Persian Tales of Bidpai). And in the second half, we will explore the ways in which its themes and tales have been adapted and appropriated by authors such as Jan Potocki in Polish, Edgar Allan Poe and John Barth in English, Jorge Luis Borges in Spanish, and Naguib Mahfouz in Arabic itself. All material is in English translation.

## NES 3742 Arab Women Writers (also

 COML/FGSS 3742, NES 6742)
## Spring. 4 credits. D. Starr.

In this course, we will discuss a selection of works of modern fiction, nonfiction, and poetry by female Arab writers. These readings address a range of issues that have motivated women writers and thinkers in the Arab world through the 20th century and into the 21st century. Among the themes we will trace across the texts are Arab feminisms; appeals for political and social freedoms; confrontations with violence; experiences of migration, displacement, and exile; women's bodies and sexuality; family life; and the pressures and comforts of religion, tradition, and community. While the majority of the course will be devoted to analyzing texts originally written in Arabic, we will also
discuss some significant works by Arab women who write in French and English Readings will include the novels The Open Door by Latifa al-Zayyat, The Story of Zahra by Hanan al-Shaykh, Fantasia by Assia Djebar and Memory in the Flesh by Ahlam Mustaghanemi. All readings will be in English.

## NES 3747 Hollywood on the Nile

Fall. 4 credits. D. Starr.
Through the 20th century, Cairo was an important center of media production for the entire Arab world. The productions of the film industry in its early decades-from the 1930s to the 1950 s-reflected the influence of American cinema, earning Cairo the reputation as "Hollywood on the Nile." This course will trace the development of the Egyptian film industry from those early years, through the "Golden Age" during the Nasser era, to the rise of gritty urban films in the 1970s and beyond. We will conclude with a discussion of the present-day crisis in the Egyptian film industry. Along the way, we will pay particular attention to the lengthy career of Egypt's most well-known director, Youssef Chahine. We will discuss films representing a range of genres produced from the 1940s to the present. This course offers two tracks that will meet simultaneously under the same course number.

Track 1 (English): All films will be screened with English subtitles and all readings will be in English. No knowledge of Arabic is required. Track 2 (for advanced Arabic students): Students in track 2 will participate in class discussions in English with students from track 1. Track 2 students will be assigned additional reading in Arabic, appropriate to their language level, and will meet regularly with the professor outside of class. For purposes of assessment, readings in Arabic are considered the equivalent of one paper; students in track 2 will be exempt from one writing assignment.

## [NES 3759 Romanesque and Early Gothic

 Art and Architecture: Europe and the Mediterranean, 900-1150 AD (also ARTH 3300) \# (LA-AS)Spring. 4 credits. Next offered 2011-2012.
C. Robinson.]
[NES 3799 Imagining the Other: Jews and Arabs in Contemporary Literature and Film (also COML/JWST 3799) @ (LA-AS)

Fall. 4 credits. Next offered 2011-2012
D. Starr.]

## [NES 3844 Islamic Politics (also GOVT

 3344) @ (SBA-AS)Fall. 4 credits. Next offered 2011-2012 D. Patel.

For description, see GOVT 3344.]

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NES 3850 Middle Eastern Politics (also GOVT 3313) @ (CA-AS)
Spring. 4 credits. D. Patel.
For description, see GOVT 3313
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NES 3905 Music of Egypt and Turkey (also MUSIC 3305)
Spring. 4 credits. E. Bates.
For description, see MUSIC 3305
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## NES 3914 Middle Eastern Music

 Ensemble (also MUSIC 3614)Fall and spring. 1 credit each semester. Limited to 40 students. Prerequisite: permission of instructor. G. Holst-Warhaft. For description, see MUSIC 3614.
[NES 4101 Modern Hebrew Literature (also JWST 4101) @ (LA-AS)
Spring. 4 credits. Satisfies Option 1. Prerequisite: NES 4100 or equivalent. Students who successfully completed 3102 may enroll with permission of instructor. Next offered 2011-2012. Staff.]

NES 4501 Islam in Africa and Diaspora (also ASRC 4201/6206) (CA-AS)
Spring. 4 credits. A. Mazrui.
For description, see ASRC 4201.
[NES 4550 The World of the Phoenicians (also JWST 4550) @ \# (CA-AS)
Spring. 4 credits. Next offered 2011-2012. C. Monroe.]

## NES 4560 Theory and Method in Near

 Eastern Studies (CA-AS)Spring. 4 credits. Requirement for NES majors. Z. Fahmy.
Seminar offering advanced Near Eastern Studies students the opportunity to read and discuss the range of theories and methods that have been employed by scholars in the interdisciplinary area of Near Eastern Studies. After giving attention to the historical development of area studies programs-and their current status and relevance-students read a wide range of highly influential works in Near Eastern Studies. Literary theory, historiography, post-colonialism, archaeology, gender theory, and comparative religions are a few of the approaches, methods, and theories explored. Authors include Talal Asad, Homi K. Bhabha, Mircea Eliade, Timothy Mitchell, Mary Douglas, Zachary Lockman, Edward Said, and J. Z. Smith

## [NES 4605 Contesting Identities in Modern Egypt (also HIST 4091) @ (HA-AS)

Fall. 4 credits. Next offered 2011-2012. Z. Fahmy.]

NES 4630 Women and Gender in Middle Eastern History (also FGSS 4632) @ \# (HA-AS)
Fall. 4 credits. A. Karakaya-Stump. The focus of this course will be on the lives of women in premodern Islamicate societies of the Middle East. It will examine changes in gender concepts and relations from a historical perspective and with an eye on the diversity of women's experiences depending on regional background, ethnicity, religious affiliation, and socioeconomic class in rural and urban settings. Topics to be considered include ideal models for womanhood and gender relations according to Islamic precepts and how they were negotiated across time and space; elite women versus ordinary women in terms of their constraints, rights, and opportunities; politics of marriage and reproduction; gendered spaces and popular culture; Western images of Muslim women the impact of European imperialism upon gender relations in Middle Eastern societies; and women's press and feminist movements during the late 19th and early 20th centuries
[NES 4639 Readings in Arabic Historical Texts (also RELST 4639) @ \# (HA-AS) Spring. 4 credits. Next offered 2011-2012. D. Powers.]

## NES 4640 Suffering and the Early Christian Imagination Apocalypticism, Gnosticism, and Asceticism (also JWST/RELST 4640)

Spring. 4 credits. K. Haines-Eitzen.
How is it that religion can be both a cause of and cure for suffering? In what ways might different religious ideologies be understood as responses to suffering? Such questions are the big issues at stake in this course, which focuses very specifically on three ideologies that emerged in early Christianity: apocalypticism, "gnosticism," and asceticism. Although we might normally think of persecution and martyrdom as fundamental to early Christianity, ideologies that emphasized the coming end of the world, those that emphasized the divine element within humans, and those that disciplined the body through celibacy, fasting, and other practices came to shape diverse responses to pain, alienation, and suffering in early Christianity. Our readings will focus on some of the writings in the New Testament, the "gnostic" literatures, and monastic texts as well as theoretical writings on the problem of suffering and religion.
[NES 4642 Women in the Modern Middle East (also FGSS 4640, HIST 4642) @ (CA-AS)
Spring. 4 credits. Next offered 2011-2012. Z. Fahmy.]
[NES 4644 Late Bronze Age World of Ugarit (also ARKEO/HIST/JWST 4644, CLASS 4744/7744) @ \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012. C. Monroe.]
[NES 4666 Mass Media and Identities in the Modern Middle East) @ (CA-AS)
Fall. 4 credits. Next offered 2011-2012. Z. Fahmy.]

NES 4670 Power and Wealth in the Ancient Near East (also JWST 4670) @ \# (HA-AS)
Fall. 4 credits. C. Monroe
How were wealth and power created and distributed in the ancient Near East and neighboring regions? This seminar addresses this question by using archaeological, anthropological, sociological, and historical approaches to problematize the rise and fall of early civilizations. The course begins by introducing students to the intellectual development of historical materialism in Smith, Marx, Weber, Sombart, and Mauss, and traces their influence on later socioeconomic historians such as Polanyi, Finley, Braudel, and Wallerstein. Current approaches deriving from world-systems, economic anthropology, and game theory are also applied to case studies and comparisons thereof. Case studies will likely include 4th-millennium Mesopotamia (Uruk), the Ur III state, Old Babylonian and Old Assyrian trade, pharaonic Egypt, the international Late Bronze Age world, Aegean palatial civilization, and the Phoenicians. The instructor will provide context and clarification for the specialist readings on these early civilizations, but prior course work in ancient studies will be advantageous in the preparation of presentations and discussions.

## NES 4717 Medieval Arabic Poetry (also

 NES 6717) @ \# (LA-AS)Fall. 4 credits. S. Toorawa.
In this course we explore the splendor of medieval Arabic poetry-in English translation-through 12 poets in the pantheon, including the Arabian al-Khansa, renowned for elegies on her brothers slain in battle; the

Baghdad poets Abu Nuwas, lover of wine and boys, and Abu Tammam, patronized poet of the Abbasid court; al-Mutanabbi, the Syrian "would-be-prophet," praiser, and satirizer of princes; the Iberian Ibn Zaydun, one-time vizier and lover of the poetess Wallada; and the Egyptian mystical poet, Ibn al-Farid. In addition to learning about the lives and milieux of these and other poets, we will focus on one or more of their most celebrated poems. (An option will be available for students interested in reading the poems in Arabic.)
[NES 4727 New York, Paris, Baghdad: Poetry of the City (also COML 4600/6870, NES 6727)
Spring. 4 credits. Next offered 2011-2012. S. M. Toorawa.]
[NES 4731 Topics in Islamic Art: The Almoravids, the Almohads, and the "Sunni Revival" (also ARTH 4331/6331, NES 6731) @ \# (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
C. Robinson.]

NES 4738 Imagining the Mediterranean (also COML 4960, JWST 4738) @ (LA-AS)
Spring. 4 credits. G. Holst-Warhaft. Through a series of readings in poetry and prose from Greece, Spain, Morocco, Turkey, Israel, and Egypt, the course examines how Mediterranean writers interact with the sensuous aesthetics of landscape, music, and ritual in the Mediterranean. We will be concerned with how poetry, music, dance, and image interact in the region, and how this relationship is reflected in 20th-century literature from and about the Mediterranean. The readings will focus on particular cases, such as the relationship of Lorca's poetry to the of Andalusia, lowbrow musical form in Greece, and the nostalgia for the mythical city of Alexandria in Cavafy and other
Alexandrian authors. We will also consider how the myth of the Mediterranean has affected modern literary imagination within and beyond the region.

## NES 4755 Rabbinic Literature In Translation (also JWST/RELST 4755) @ \# (LA-AS) <br> Fall. 4 credits. G. Herman.

This course will introduce the student to the diverse genres of classical rabbinic literature: covering the legal codes (Mishna and Tosefta); halakhic midrashim; the Yerushalmi and Bavli talmudim. The student will become acquainted with these compositions through studying the texts themselves, with the course leading to a more detailed exposure to the Bavli.
[NES 4784 Israeli Nation: Self and Literature (also JWST 4784) @ (LA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Starr.]
[NES 4874 States and Societies in the Middle East (also GOVT 4374/6474, NES 6874)
Spring. 4 credits. Next offered 2011-2012. D. Patel.]
[NES 4953 Islamism (also GOVT 4665) @ Fall. 4 credits. Next offered 2011-2012.
S. Buck-Morss.

For description, see GOVT 4665.]

NES 4991-4992 Independent Study, Undergraduate Level
Fall and spring. Variable credit.
Prerequisite: permission of instructor. Staff.
NES 4998-4999 Independent Study, Honors
Fall and spring. 8 credits. Prerequisite: permission of instructor. Staff.

NES 6642 Topics in Ancient History (also CLASS 7682, HIST 6300, JWST 6642) Spring. 4 credits. E. Rebillard.

## NES 6717 Medieval Arabic Poetry (also

 NES 4717)Fall. 4 credits. S. Toorawa.
For description, see NES 4717.
NES 6723 The Arabian Nights: Then and Now (also COML 3723/6723, NES 3723)

Spring. 4 credits. No prerequisites.
S. M. Toorawa.

For description, see NES 3723.
[NES 6727 New York, Paris, Baghdad: Poetry of the City (also COML 4600/6870, NES 4727)
Spring. 4 credits. Next offered 2011-2012.
S. M. Toorawa.]

NES 6742 Arab Women Writers (also NES 3742)

Spring. 4 credits. D. Starr.
For description, see NES 3742.
[NES 6874 States and Societies in the Middle East (also GOVT 4374/6474, NES 4874)
Spring. 4 credits. Next offered 2011-2012. D. Patel.]

## NES 6991-6992 Independent Study: Graduate Level

Fall and spring. Variable credit.
Prerequisite: permission of instructor. Staff.
NES 7540 Water and Culture in the Mediterranean: A Crisis? (also BEE 7540, LAW 7792)
Spring. 4 credits. G. Holst-Warhaft and
T. Steenhuis.

For description, see BEE 7540.

## NEPALI

See "Department of Asian Studies."

## PALI

See "Department of Asian Studies."

## PHILOSOPHY

S. MacDonald, chair; K. Bennett, R. Boyd,
T. Brennan, C. Brittain, A. Chignell, M. Eklund,
G. Fine, H. Hodes, M. Kosch, R. Miller,
D. Pereboom, N. Sethi, N. Silins, N. Sturgeon, E. Taylor. Emeritus: C. A. Ginet, T. Irwin, S. Shoemaker

The study of philosophy provides students with an opportunity to become familiar with some of the ideas and texts in the history of thought while developing analytical skills that are valuable in practical as well as academic affairs. It affords the excitement and
satisfaction that come from understanding and working toward solutions of intellectual problems. The curriculum includes offerings
in the history of philosophy, logic, philosophy of science, ethics, social and political philosophy, metaphysics, and theory of knowledge. Any philosophy course numbered in the 1000s or 2000s is suitable for beginning study in the field. Sections of PHIL 1100, 1120, and 1130 are part of the first-year writing seminar program; they are taught by various members of the staff on a variety of philosophical topics, and because of their small size (17 students at most) they provide ample opportunity for discussion. Students who want a broad introduction to philosophy may take PHIL 1100, but many students with special interests may find that the best introduction to philosophy is a 2000 -level course in some particular area of philosophy; such courses have no prerequisites and are usually open to first-year students.

## The Major

Students expecting to major in philosophy should begin their study of it in their freshman or sophomore year. Admission to the major is granted by the director of undergraduate studies of the department on the basis of a student's work during the first two years. Normally the student must have completed two philosophy courses with grades of B or better. Eight philosophy courses, taken for a letter grade, are required for the major. They must include at least one course on ancient philosophy (PHIL 2200, or a course with a large component on Plato or Aristotle), at least one course on classical modern metaphysics and epistemology from Descartes through Kant (e.g., PHIL 2220 or a course on the empiricists, the rationalists, or Kant), and a minimum of three courses numbered above 3000 . Students admitted to the major are required to take a minimum of six philosophy courses numbered above 2000 and may not count more than one section of PHIL 1110, 1120, or 1130 toward the major. Courses numbered in the 1900s, 2900s, and 3900 s do not count toward the major. A course in formal logic (e.g., PHIL 2310), while not required, is especially recommended for majors or prospective majors.
Philosophy majors must also complete at least 8 credits of course work in related subjects approved by their major advisors.
Occasionally majors may serve as teaching or research aides, working with faculty members familiar with their work.
Honors. A candidate for honors in philosophy must be a philosophy major with an average of B - or better for all work in the College of Arts and Sciences and an average of B+ or better for all work in philosophy. In either or both semesters of the senior year a candidate for honors enrolls in PHIL 4900/4901 and undertakes research leading to the writing of an honors essay by the end of the final semester. Honors students normally need to take PHIL 4900/4901 both semesters of their senior year to write a satisfactory bonors essay. PHIL 4900/4901 does not count toward the eight philosophy courses required for the major. Prospective candidates should apply at the Department of Philosophy office, 218 Goldwin Smith Hall.

## Fees

In some courses a small fee may be charged for photocopying materials to be handed out to students.

## Introductory Courses

## First-Year Writing Seminars in Philosophy

Fall and spring. 3 credits. Consult the John S. Knight Institute brochure for times, instructors, and descriptions.

## PHIL 1100 Introduction to Philosophy \#

 (KCM-AS)Fall and spring. 3 credits. Fall, T. Brennan; spring, K. Bennett; summer, M. Fedyk. A general introduction to some of the main topics, texts, and methods of philosophy. Topics may include the existence of God, the nature of mind and its relation to the body, causation, free will, knowledge skepticism, and justice and moral obligation. Readings may be drawn from the history of philosophy and contemporary philosophical literature.

## PHIL 1450 Contemporary Moral Issues

 (KCM-AS)Fall, summer. 3 credits. Fall, TBA; summer, N. Sethi.

An introduction to some of the main contemporary moral issues. Topics may, for example, include animal rights, abortion, euthanasia, capital punishment, sexual morality, genetic engineering, and questions of welfare and social justice.
PHIL 1910 Introduction to Cognitive Science (also COGST 1101, CS 1710, LING 1170, PSYCH 1102) (KCM-AS)
Fall, summer. 4 credits. Staff.
For description, see COGST 1101.

## PHIL 1940 Global Thinking (also GOVT

 2947) @ (KCM-AS)Spring. 4 credits. R. Miller.
An interdisciplinary study of central issues of international justice. Topics discussed may include global climate change, economic development in the era of globalization, the ethics of war, fairness in international cooperation, and social, political, and economic processes.
PHIL 1950 Controversies about Inequality (also SOC 2220) (SBA-AS)
Fall. 4 credits. S. Morgan.
For description, see SOC 2220.
PHIL 2200 Ancient Philosophy (also CLASS 2661) \# (KCM-AS)
Fall. 4 credits. G. Fine.
An introductory survey of ancient Greek philosophy from the so-called Presocratics (6th century BCE) through the Hellenistic period (1st century BCE) with special emphasis on the thought of Socrates, Plato, and Aristotle.

## PHIL 2220 Modern Philosophy \# (KCM-AS) <br> Fall. 4 credits. D. Pereboom.

A survey of Western philosophy in the 17th and 18th centuries: Descartes, Locke, Spinoza, Leibniz, Berkeley, Hume, and Kant. We focus largely on epistemology (ideas, skepticism, belief, knowledge, science) and metaphysics (bodies, minds, God, causation, natural laws, afterlife, personal identity). Some of the ethical implications of these systems will also be mentioned in passing.

## PHIL 2300 Puzzles and Paradoxes

 (KCM-AS)Fall. 4 credits. M. Eklund.
The course provides an overview of a number of famous philosophical puzzles and paradoxes and important attempts to solve them. Among the paradoxes that may be discussed are Zeno's paradoxes of space, time and motion; the paradox of the heap; the liar paradox; Russell's set-theoretic paradox; and
various paradoxes concerning knowledge and rationality.
PHIL 2310 Introduction to Deductive Logic (MQR)
Spring. 4 credits. H. Hodes.
Covers sentential languages, the truth-
functional connectives, and their logic; first-order languages, the quantifiers "every" and "some," and their logic.

## PHIL 2410 Ethics (KCM-AS)

Spring. 4 credits. E. Taylor.
An introduction to the philosophical study of ethical reasoning and ethical theories. Topics may include ethical skepticism, ethical relativism, and ethical objectivity; ethical egoism, utilitarianism, deontological theories, and virtue ethics. Readings may be drawn from contemporary debates as well as from the long history of philosophical writing about ethics.
PHIL 2420 Social and Political Philosophy (also GOVT 2605) (KCM-AS)
Fall. 4 credits. E. Taylor.
This course will examine key issues in social and political philosophy. Topics may include the legitimacy of the state, political obligation, the nature and demands of justice, equality, liberty, and autonomy. Selected readings may be drawn from historical as well as contemporary sources.

## PHIL 2440 Continental Philosophy

Spring. 4 credits. M. Kosch.
See department web site for description.

## PHIL 2450 Ethics and Health Care

 (KCM-AS)Fall. 4 credits. N. Sethi.
An introduction to the philosophical study of ethical problems that arise from the practice of medicine as such or that arise in response to developments within medicine and the larger world.

## PHIL 2460 Ethics and the Environment

 (also BSOC/STS 2061) (KCM-AS)Spring. 4 credits. Limited to 40 students.
Open to all undergraduates; freshmen by permission of instructor. S. Pritchard. For description, see BSOC 2061.

## PHIL 2530 Religion and Reason (also

 RELST 2630) (KCM-AS)Spring. 4 credits. S. MacDonald. An introduction to some of the main issues in philosophy of religion. Topics may include the existence and nature of God, the problem of evil, the nature of faith, and the epistemology of religious belief. Readings are drawn from the history of philosophy and contemporary philosophical debates.

## PHIL 2610 Knowledge and Reality (KCM-AS)

Spring. 4 credits. N. Silins.
An introduction to some central philosophical questions about knowledge and reality. Questions to be addressed may include: What, if anything, do we know? What is it for a belief to be reasonable? What is it for one event to cause another event? What makes the person reading the beginning of this sentence the same as the person reading the end of this sentence? Readings are typically drawn from recent sources.

## Intermediate or Advanced Courses

Some of these courses have prerequisites.
PHIL 3202 Plato (also CLASS 3669) \# (KCM-AS)
Fall. 4 credits. Prerequisites: at least one previous course in philosophy at 2000 level or above; or permission of instructor. T. Brennan.

We will study several of Plato's major dialogues, including the Apology, the Meno, Phaedo, and Republic. Topics include knowledge and reality; morality and happiness; and the nature of the soul.

## PHIL 3203 Aristotle (also CLASS 3664) \# (KCM-AS)

Spring. 4 credits. Prerequisite: at least one previous course in philosophy at the 2000 level or above; or permission of the instructor. T. Brennan.
We will study several of Aristotle's major works, including the Categories, Physics, Posterior Analytics, Metaphysics, and Nicomachean Ethics. Topics include nature and change, form and matter, the nature of happiness, the nature of the soul, and knowledge and first principles.

## PHIL 3210 Medieval Philosophy (also RELST 3150) \# (KCM-AS)

Fall. 4 credits. G. Pini.
A selective survey of Western philosophical thought from the fourth to the 14 th century. Topics include the problem of universals, the theory of knowledge and truth, the nature of free choice and practical reasoning, and philosophical theology. Readings (in translation) include Augustine, Boethius, Anselm, Abelard, Aquinas, Scotus, and Ockham. Some attention will be given to the development of ideas across the period and the influence of non-Western traditions on the West.

## PHIL 3221 Modern Empiricism

Spring. 4 credits. N. Sturgeon.
For description, see department web site.

## PHIL 3230 Kant \# (KCM-AS)

Fall. 4 credits. M. Kosch.
An intensive study of the metaphysical and epistemological doctrines of the Critique of Pure Reason. Some editions of the course may also consider Kant's ethical views as laid out in the Groundwork of the Metaphysics of Morals and related works.
PHIL 3300 The Foundations of Mathematics (also MATH 3840) (MQR)
Fall. 4 credits. H. Hodes.
This will be a course on the set theory of Zermelo and Fraenkel: the basic concepts, settheoretic construction of the Natural, Integral, Rational and Real Numbers, cardinality, and, time permitting, the ordinals. Text: Enderton's Elements of Set Theory.

## PHIL 3310 Deductive Logic (also MATH 2810) (MQR)

Spring. 4 credits. Prerequisite: PHIL 2310
or permission of instructor. H. Hodes. A mathematical study of the formal languages of propositional and predicate logic, including their syntax, semantics, and deductive systems. Various formal results will be established, most importantly soundness and completeness.

## PHIL 3410 Ethical Theory (KCM-AS)

Spring. 4 credits. N. Sturgeon.
Topic: Consequentialism and Its Critics. This course will examine one of the deepest divides in modern philosophical debates about ethics,
between those who think the moral evaluation of acts, character traits, and social institutions ultimately depends solely on their good or bad consequences, and critics who find this approach fundamentally misguided.
[PHIL 3700 Problems in Semantics (also COGST 3330, LING 3333) (KCM-AS)
Fall. 4 credits. Next offered 2011-2012. D. Abusch

For description, see LING 3333.]
PHIL 3710 Philosophy of Language (also LING 3332)
Spring. 4 credits. M. Eklund.
An introduction to some of the main issues in the philosophy of language. Topics may include names, definite descriptions, belief ascriptions, truth-conditional theories of meaning, pragmatics, and metaphor. Both historical and contemporary readings are considered.

## PHIL 3810 Philosophy of Science (also STS 3811) (KCM-AS)

Fall. 4 credits. R. Boyd.
This course will cover various topics in the philosophy of science.

## PHIL 3900 Independent Study

Fall or spring. Variable credit.
To be taken only in exceptional circumstances. Must be arranged by the student with his or her advisor and the faculty member who has agreed to direct the study.

## Advanced Courses and Seminars

These courses are offered primarily for majors and graduate students.

PHIL 4003 German Philosophical Texts Fall and spring. 4 credits. Prerequisites: basic reading (not necessarily speaking) knowledge of German and permission of instructor. Open to upper-level undergraduates. M. Kosch.
Reading, translation, and English-language discussion of important texts in the German philosophical tradition. Readings for a given term are chosen in consultation with students.

PHIL 4200 Topics in Ancient Philosophy (also CLASS 4662) \# (KCM-AS)
Fall and spring. 4 credits. Fall, G. Fine; spring, T. Brennan.
Advanced discussion of topics in ancient philosophy.

PHIL 4240 Topics in German Philosophy (also GERST 4170)
Spring. 4 credits. M. Kosch
See department web site for description.

## PHIL 4310 Mathematical Logic (also

 MATH 4810) (MQR)Fall. 4 credits. Prerequisites: MATH 2220 or 2230 and preferably some additional course involving proofs in mathematics, computer science, or philosophy.
For description, see MATH 4810.
PHIL 4311 Topics in Logic (also MATH 4820) (MQR)

Fall. 4 credits. H. Hodes.
This course will focus on intuitionistic logic, including (1) its relationships to classical logic some "intermediate logics" between intuitionistic and classical, and a modal logic. We'll consider (2) both proof-theoretic and model-theoretic characterizations of the consequence relations for these logics, (3) algebraic/topological (and time permitting, categorical) characterizations of intuitionistic consequence. (4) We'll also look at how
certain mathematical theories have been developed on the basis of intuitionistic logic.

PHIL 4460 Topics in Political Philosophy (KCM-AS)
Fall. 4 credits. E. Taylor.
Advanced discussion of topics in political philosophy.

PHIL 4470 Contemporary Political Philosophy (also GOVT 4655) (KCM-AS)
Spring. 4 credits. R. Miller.
See department web site for description.
PHIL 4610 Epistemology (KCM-AS)
Spring. 4 credits. Co-meets with PHIL 6610. N. Silins.

An intensive seminar on a special topic in epistemology to be determined by the instructor. Potential topics include: What are the limits of knowledge? What is the extent and nature of our knowledge of our own minds? How do we gain knowledge through particular sources such as perception, testimony, memory, or reasoning? Readings may be drawn from historical or contemporary sources.

## PHIL 4640 Topics in Metaphysics (KCM-AS)

Spring. 4 credits. D. Pereboom Advanced discussion of a topic in metaphysics

PHIL 4720 Pragmatics (also LING 4425) (KCM-AS)
Spring. 4 credits. Prerequisite: LING 3303
or PHIL 2310, or permission of instructor.
D. Abusch.

For description, see LING 4425.
PHIL 4810 Problems in the Philosophy of Science (also STS 4811) (KCM-AS)
Fall. 4 credits. R. Boyd.
Advanced discussion of some problem or problems in the philosophy of science. Topic: Neo-Kantian/Hegelian Analytic Philosophy.

## PHIL 4900/4901 Informal Study for

 HonorsFall and spring. 4 credits. Prerequisite: senior honors students.
See "Honors" at the beginning of the Philosophy section.

## PHIL 6030 German Philosophical Texts

 (also GERST 6131)Fall and spring. Variable credit. Open to upper-level undergraduates. Prerequisite: basic reading (not necessarily speaking) knowledge of German. M. Kosch.
Reading, translation, and English-language
discussion of important texts in the German philosophical tradition. Readings for a given term are chosen in consultation with students.

## PHIL 6200 Seminar in Ancient

Philosophy (also CLASS 7173)
Fall, spring. 4 credits. Fall, G. Fine; spring, T. Brennan.

Graduate seminar covering a topic in ancient philosophy.

## PHIL 6210 Seminar in Medieval

 PhilosophyFall. 4 credits. G. Pini
Graduate seminar covering a topic in medieval philosophy.

## PHIL 6239 Kant's Political Reason (also

 GERST 6940)Spring. 4 credits.
For description, see GERST 6940.

PHIL 6410 Seminar in Ethics and Value Theory
Fall. 4 credits. N. Sturgeon.
Graduate seminar covering a topic in ethics and value theory.

## PHIL 6430 Seminar in Social and Political Philosophy

Spring. 4 credits. Prerequisite: permission of instructor. R. Miller.
This seminar will address the leading questions of what we should do about climate change. What level of climate change is sufficiently safe? What level of $\mathrm{CO}_{2}$ is a feasible goal? What are the requirements of equity-social, international, and intergenerational-in climate change policy? What ways of assessing costs and benefits are economically, ecologically, and ethically defensible? What kinds of policies and technologies are best suited to meeting the greenhouse challenge? How will social, economic, and political processes, national and international, shape the response? The seminar will be highly interdisciplinary and will include both graduate students and faculty, from many relevant departments. (Graduate students are expected to come to all meetings, faculty to come to at least half.) Major figures in the global response to climate change will come to Cornell to lead half of the seminar discussions. Each will also give a public lecture (typically on Monday) and will be available for informal interaction with members of the seminar and the Cornell community as a whole.

## PHIL 6996 Justice and Equality (also GOVT 6796) <br> Fall. 4 credits. A Smith. <br> For description, see GOVT 6796.

## PHYSICS

J. R. Patterson, chair (109 Clark Hall, 2556016); E. Mueller, director of undergraduate studies (115 Clark Hall, 255-1568, physicsdus@ cornell.edu); J. P. Alexander, T. A. Arias, I. Bazarov, E. Bodenschatz, D. G. Cassel, I. Cohen, C. Csaki, J. C. Davis, G. F. Dugan, V. Elser, E. Flanagan, C. P. Franck, R. Fulbright, A. Giambattista, L. K. Gibbons, P. Ginsparg, B. Greene, Y. Grossman, S. M. Gruner,
D. L. Hartill, C. L. Henley, G. Hoffstaetter, E.-A. Kim, P. Krasicky, M. Lawler, A. LeClair, G. P. Lepage, M. U. Liepe, L. McAllister, P. L. McEuen, C. Myers, M. Neubert, Y. Orlov, J. M. Parpia, M. Perelstein, D. C. Ralph,
R. C. Richardson, D. L. Rubin, A. Ryd, K. Selby, J. P. Sethna, K. M. Shen, A. J. Sievers, E. Siggia, S. A. Teukolsky, J. Thom, R. Thorne, H. Tye, C. Umrigar, M. Vengalattore, M. D. Wang, I. Wasserman, P. Wittich

The concepts and methods of physics have an impact on nearly all areas of human endeavor. Thus, the Department of Physics offers courses in physics for the entire Cornell community. There are general education courses for nonscientists, well-designed introductory sequences for science and engineering majors, more advanced courses for physics majors, and rigorous programs of graduate study, up to doctoral-level independent research.
Undergraduate and graduate students benefit from an outstanding faculty and world-class research facilities in the Laboratory of Atomic and Solid State Physics (LASSP) and the Laboratory of Elementary Particle Physics
(LEPP). Physics faculty members and students conduct research in condensed-matter physics, nanophysics, biophysics, atomic physics, X-ray physics, high-energy particle physics, accelerator physics, and astrophysics. Students are invited to attend weekly research seminars and colloquia that showcase the work of the national and international physics
communities. Undergraduates are encouraged to participate in research, and many find summer employment within the department. For more information, visit www.physics. cornell.edu.

## Courses for Non-Physics Majors

- PHYS 1101-1102 is a self-paced autotutorial course sequence designed for students who recognize the need for a basic understanding of physics, but who do not have preparation in calculus and who do not intend to take further physics courses.
- PHYS 2207-2208 and 1112-2213-2214 are introductory physics courses for students who want a solid grounding in physics and a chance to develop their calculusbased problem-solving skills. Nonmajors considering more advanced work in physics are encouraged to take 1112-2213-2214 or 2207-2213-2214.
- Courses beyond the introductory level that may be of interest to nonmajors include PHYS 3316 Modern Physics I, PHYS 3330 Modern Experimental Optics, and PHYS 3360 Electronic Circuits.
- General education courses currently include PHYS 1201 Why the Sky Is Blue: Aspects of the Physical World, PHYS 1203 Physics of the Heavens and Earth, and PHYS 1204 The Physics of Musical Sound.
Students may obtain advanced placement and credit, as outlined in "Advanced Placement of Freshmen," and transfer credit for physics courses taken elsewhere. Students seeking transfer credit or advice on the use of AP credit should consult the Physics director of undergraduate studies.


## The Physics Major: Two Routes to a Promising Future

The analytical and problem-solving skills and the fundamental conceptual and practical understanding of how the world works provided by an education in physics have allowed physics majors to pursue careersand have major impacts-not just in physics, but in engineering, education, medicine and the life sciences, the military services, computer and information sciences, earth and environmental sciences, law, finance and economics, management consulting, philosophy of science, forensics, and public policy. Reflecting this breadth of opportunity, the Physics Department offers two approaches to the major:

1. The concentration within physics is the principal path to professional or graduate work in physics and closely related fields, and is also the best choice for students who wish to obtain maximum benefit from rigorous studies in physics. The inside concentration consists of the core physics courses plus electives taken within the Physics Department.
2. The concentration outside physics provides more flexibility for those want to develop skills in physics but whose career
interests lie elsewhere. For example, a premedical or biophysics student may concentrate in biology; a pre-law student may concentrate in business, history, or public policy; and a student planning graduate work in econometrics or on pursuing an M.B.A. may concentrate in economics. Students interested in education careers (and in capitalizing on the critical national shortage of high school physics teachers) may concentrate in education, allowing them to complete a master's degree in physics education with New York State Teacher certification in one additional year at Cornell.
Physics majors-especially those concentrating within physics-are advised to start the introductory physics sequence in the first semester of their freshman year, as a delayed start reduces flexibility in future course scheduling. Students who switch to the physics major after taking introductory physics in their sophomore year can usually still complete an outside concentration.
Acceptance into the major program is normally granted upon completion of a year of physics and mathematics courses at Cornell with all course grades at the B - level or higher. Grades of at least C- (or S for S-U only courses) are required in all courses counting toward the physics major.

## Advising

Prospective majors are urged to meet with the Physics director of undergraduate studies for advice on advanced placement credit and on program planning. Based on their specific interests, students will be matched with a major advisor by the director of undergraduate studies. The student and major advisor will then work out the details of the major course program.

## Courses for Physics Majors

The Physics Core-All physics majors must complete a core of physics and mathematics courses, as follows:

- A three-semester introductory physics sequence, either PHYS 1112-2213-2214, or its more analytic "honors" version 1116-2217-2218. PHYS 2207 students with life/chemical/health science interests who decide to switch to the physics major may complete 2207-2213-2214. A transition from 2208 to 2214 is also possible for students with very strong math backgrounds.
- Mathematics courses covering single and multivariable calculus, linear algebra, series representations, and complex analysis: MATH 1910 or 1120 or 1220; 1920 or 2220 or $2240 ; 2930$; and 2940 or 2210 or 2230; or their equivalents. Inside concentrators should complete at least one additional year of applicable mathematics such as AEP 3210 and 3220.
- Five upper-level courses beyond the three-semester introductory sequence, consisting of (1) the two-course sequence in modern physics (PHYS 3316-3317); (2) at least three semester hours of laboratory work selected from PHYS 3310, 3330, 3360, 4410, or ASTRO 4410 or AEP 2640; (3) an intermediate course in classical mechanics (PHYS 3314 or 3318); and (4) an intermediate course in electromagnetism (PHYS 3323 or 3327). Students who complete the 1112-2213-2214 or

2207-2213-2214 introductory sequence are advised to complete the 1 -credit course PHYS 2216 before taking PHYS 3316.

In addition to the core, each physics major must complete at least 15 semester hours of credit in an area of concentration that has been agreed upon by the student and major faculty advisor.

## Concentration within Physics

Students planning professional or graduate work in physics are encouraged to take the more advanced and analytically rigorous versions of the core courses-PHYS 1116, $2217,2218,3318$, and 3327. Students with weaker high school preparation may start in PHYS 1112 and then switch to the advanced sequence in later semesters. The best-prepared students, who may qualify for advanced placement credit for PHYS 1112 and/or 2213, are still strongly encouraged to start with 1116.

For a concentration within physics, the minimum 15 hours beyond the core must be composed of physics courses with numbers greater than 3000 or ASTRO 3332, ASTRO 4431-4432, or AEP 4340. These 15 hours must include the senior laboratory course PHYS 4410 in addition to one of the lab courses listed for the core, so that a physics concentration requires a minimum of 7 credit hours of laboratory work. The accompanying table shows some typical course sequences that fulfill the major requirements. The sequence followed by each student will depend upon his or her interests and precollege preparation, and will be determined in consultation with the major advisor. Students are advised to strongly consider taking PHYS 3341 and 4443. Majors are strongly encouraged to participate in the department's research activities. If this activity is done as an independent project, PHYS 4490 , up to 8 credit hours can be applied toward the concentration.

## Concentration outside of Physics

For outside concentrations, the courses to be counted in the minimum 15 credit hours beyond the core must have internal coherence and lead to mastery in the area of concentration. The course sequence must be worked out with and approved by the major faculty advisor. At least 8 of the 15 credit hours must be in courses numbered above 3000. Past areas of concentration include astronomy, business, chemical physics, computer science, econometrics, education, geophysics, history, and philosophy of science, law, meteorology, and public policy. A combined biology/chemistry concentration is common for premedical students or those who wish to prepare for work in biophysics.
The department particularly wishes to encourage students with an interest in science education. Physics majors can obtain teaching certification by concentrating in education and then completing a one-year master of arts in teaching (M.A.T.) degree. Information about the education concentration and M.A.T. can be obtained from the Department of Education's Cornell Teacher Education Program, from the physics department's Teacher in Residence, or from the Physics director of undergraduate studies.
The core for students with outside concentrations may follow either PHYS 1112-

2213-2214, 3314, and 3323 or the advanced 1116-2217-2218, 3318, and 3327. Students concentrating in astronomy who might continue on to graduate school in that field are encouraged to include ASTRO 4410, 4431, and 4432 within the concentration.

## Honors

A student may be granted honors in physics upon the recommendation of the Physics Advisors Committee of the physics faculty. There is no particular course structure or thesis requirement for honors.

## Double Majors

Students are welcome to pursue a physics major concurrently with another major; either in the college of Arts and Sciences or in another college through the dual-degree program. Any course used to satisfy a requirement of another major may be used in satisfaction of physics major requirements only if the student's concentration is within physics.

## Courses with Overlapping Content

The grouped courses listed in the chart below have largely similar content. Students should select courses for their academic program carefully, as they may receive credit for only one course in each group.

PHYS 1101, 1112, 1116, 2207
PHYS 1102, 2208, 2213, 2217
PHYS 2214, 2218
PHYS 3314, 3318
PHYS 3323, 3327
PHYS 1116, 2216
PHYS 2206, GOVT 3847
In addition, students with credit for PHYS $1101,1112,1116$, or 2207 , or an advanced placement equivalent who wish to enroll in PHYS 1201-1204 must obtain written permission from the instructor and the Physics director of undergraduate studies.

## Course Prerequisites

Achieving success in a physics course is easier if you have the proper preparation. Each physics course description lists prerequisite courses that develop mastery in the needed mathematics and physics. Students who wish to enroll in a course but lack the listed prerequisites can often succeed with an appropriate work plan, especially if they have other relevant prior experience. These students must discuss their preparation with the course instructor and with their advisor before enrolling.

## Courses

## PHYS 1012 PHYS 1112 Supplement

Spring. 1 transcript credit (will appear on transcript, does not count toward graduation). Counts toward semester's good standing for students in Colleges of Architecture. Art. and Planning,
Engineering, Hotel Administration, and Human Ecology; does not count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations. S-U grades only. R. Lieberman. Provides backup instruction for PHYS 1112. Recommended for students who either feel insecure about taking PHYS 1112 or simply
want to develop their problem-solving skills. Emphasis is on getting the student to develop a deep understanding of basic concepts in mechanics. Much class time is spent solving problems and applications.
PHYS 1013 PHYS 2213 Supplement
Fall. 1 credit. 1 transcript credit (will appear on transcript, does not count toward graduation). Counts toward semester's good standing for students in Colleges of Architecture Art and Planning, Engineering, Hotel Administration, and Human Ecology; does not count toward semester's good standing for students in Colleges of Agriculture and Life Sciences, Arts and Sciences, and Industrial and Labor Relations. S-U grades only. R. Lieberman. Provides backup instruction for PHYS 2213. Description is the same as for PHYS 1012, except the material covered is electricity and magnetism.

## PHYS 1101 General Physics I (PBS)

Fall, summer (eight-week, six-week, or first four weeks only for those doing PHYS 1102 in the second four weeks). 4 credits. Enrollment may be limited and freshmen are excluded. (See list of overlapping physics courses.) General introductory physics for nonphysics majors. Prerequisites: three years high school mathematics, including trigonometry. Students without high school physics should allow extra time for PHYS 1101. Includes less mathematical analysis than PHYS 2207 but more than PHYS 1201-1204. A. Giambattista.
Emphasizes quantitative and conceptual understanding of the topics of introductory physics developed without use of calculus. The course is taught in a mastery-oriented
laboratory exercises, videotaped lectures, online tutorials, and sample tests are assigned with a flexible schedule of deadlines. Unit tests can be repeated with a limit of three test tries per unit. Major topics for 1101: kinematics, forces and dynamics, momentum, energy, fluid mechanics, waves and sound, thermal physics, kinetic theory, and thermodynamics. At the level of College Physics, third ed., by Giambattista, Richardson, and Richardson.

## PHYS 1102 General Physics II (PBS)

Spring, summer (eight-week, six-week, or second four weeks only for those doing PHYS 1101 in first four weeks). 4 credits. Enrollment may be limited. (See list of overlapping physics courses.) Prerequisite: PHYS 1101 or 1112 or 2207. Includes less mathematical analysis than PHYS 2208 but more than PHYS 1201-1204. Staff.
Emphasizes quantitative and conceptual understanding of the topics of introductory physics developed without use of calculus. The course is taught in a mastery-oriented format with eight subject units and a final retention (review) unit. Most instruction occurs in the learning center where individualized tutoring is available. Readings, problems, laboratory exercises, videotaped lectures, online tutorials, and sample tests are assigned with a flexible schedule of deadlines. Unit tests can be repeated with a limit of three test tries per unit. Major topics for 1102: electricity and magnetism, optics, relativity, quantum, nuclear, and particle physics. At the level of College Physics, third ed., by Giambattista, Richardson, and Richardson.

## Typical Physics Course Sequences (other sequences are also possible)

$\mathrm{P}=\mathrm{PHYS}, \mathrm{M}=\mathrm{MATH}$
$\left.\begin{array}{lcccc}\text { Semester } & \begin{array}{c}\text { Physics } \\ \text { concentrators } \\ 1 / 2 \text { year }\end{array} & \begin{array}{c}\text { Physics } \\ \text { concentrators } \\ \text { AP calculus }\end{array} & \begin{array}{c}\text { HS physics }\end{array} & \begin{array}{c}\text { Outside } \\ \text { concentrators } \\ \text { indicated }\end{array} \\ \text { 1st—Fall } & \text { P 1112, M 1910 }\end{array} \quad \begin{array}{c}\text { P 1116, M 1920 } \\ \text { concentrators } \\ \text { (alternate) } \\ \text { indicated }\end{array}\right]$

- For majors with concentrations outside physics, there is wide variation in individual programs, arranged to best match the field of concentration.
- Crossovers between the two sequences 1112-2213-2214 and 1116-2217-2218 are possible, although the combination 1112-2213-2218 is difficult. PHYS 2207 may be substituted for PHYS 1112. Students taking 2217 after 1112 must co-register for 2216.
- Students taking the honors sequence 1116-2217-2218 are strongly encouraged to start with PHYS 1116. Exceptionally well-prepared students may be able to begin work at Cornell with PHYS 2217. Such students should visit the Director of Undergraduate Studies for advice in planning a course program.
- Physics electives for the major include 3310, 3330, 3341, 3360, ASTRO 3332, 4431-2; AEP 4340, and all physics courses labeled 4000 and higher, the senior seminars 4481-4489, ASTRO 3332 or 4431-4432, and AEP 4340.
- One semester of intermediate laboratory, listed here as 3 x 0 ? , is required.
- Well-prepared sophomores wishing to take PHYS 3318 should consult the instructor before registering.
- Students interested in graduate work in physics immediately after Cornell are advised to begin the introductory physics sequence in their first semester.

PHYS 1112 Physics I: Mechanics (PBS)
Fall, spring, summer (six-week session). 4 credits. Primarily for engineering students and prospective physics majors. (See list of overlapping physics courses.) Prerequisite: MATH 1910, 1120, or 1220. Recommended: coregistration in MATH 1920. Coregistration with MATH 1910 may be allowed by instructor in exceptional circumstances. Fall, P. Krasicky; spring, staff.
Covers the mechanics of particles with focus on kinematics, dynamics, conservation laws, central force fields, periodic motion. Mechanics of many-particle systems: center of mass, rotational mechanics of a rigid body, and static equilibrium. At the level of University Physics, Vol. 1, by Young and Freedman, 12th ed.

## PHYS 1116 Physics I: Mechanics and

 Special Relativity (PBS)Fall, spring. 4 credits. More analytic than PHYS 1112; intended for students who are comfortable with deeper, somewhat more abstract approach; intended mainly but not exclusively for prospective majors in physics, astronomy, or applied and engineering physics. (See list of overlapping physics courses.) Prerequisites: good secondary school physics course, proficiency with basic calculus (at level of MATH 1910 or 1120), and enjoyment of puzzle-solving. Corrective transfers between PHYS 1116 and PHYS 1112 (in either direction) encouraged during first three weeks of instruction. Fall, K. Shen; spring, staff.
At the level of An Introduction to Mechanics by Kleppner and Kolenkow.

## PHYS 1117 Concepts of Modern Physics

Fall. 1 credit. Enrollment may be limited.
Corequisite: PHYS 1112 or 1116 or 2213 or 2217. For freshmen who plan to major in physics, applied and engineering physics, or astronomy. S-U grades only. A. Sadoff. Intended for freshmen who plan to major in physics or a closely related field (i.e., applied and engineering physics or astronomy) and would like to learn about the concepts of modern physics early in their physics education. Possible topics of discussion are scientific methodology, symmetry and conservation laws, quantum theory, the unification of forces and matter in the Standard Model, and big-bang cosmology.

PHYS 1190 Introductory Laboratory (Transfer Supplement)
Fall, spring. 1 credit. Limited enrollment. Prerequisites: 3 transfer credits for introductory physics lecture material; a degree requirement for laboratory component of that introductory course; approval of director of undergraduate studies; and permission of lecturer of that course at Cornell. Students must file PHYS 1190 permission form in 121 Clark Hall with physics department course coordinator. S-U grades only. Times TBA with instructor.
Students perform the laboratory component of one of the introductory courses (PHYS 1112, $2207,2208,2213,2214$ ) to complement the lecture-related course credit acquired elsewhere. Those wishing to take equivalent of one of these introductory courses at another institution should receive prior approval from the physics director of undergraduate studies.

PHYS 1201 Why the Sky Is Blue: Aspects of the Physical World (PBS)
Fall. 3 credits. A. Sadoff.
Descriptive physics course aimed specifically at the nonscience student. There is an emphasis on the ideas of modern physics where the approach is both historical and thematic. The methodology of science and the nature of evidence are emphasized. An overriding theme is the unification and character of physical laws as shown, for example, through the great principles of symmetry and conservation. While a few computational problems are assigned, the purpose is to help students to understand the concepts rather than to master problemsolving techniques.
PHYS 1203 Physics of the Heavens and the Earth-A Synthesis (PBS)
Spring. 3 credits. Prerequisite: none; uses high school algebra and geometry. For nonscience majors. H. Padamsee.
Shows how the unification of apparently distinct areas of physics leads to an explosion in the growth of our knowledge and understanding. The material is divided into three parts: the physics of motion on earth, motion in the heavens, and synthesis. Trace how ideas about celestial and terrestrial motion evolved separately at first, from the ancient ideas of Greek philosophers to the dynamics and telescopic discoveries of Galileo during the Renaissance. The two arenas finally melded under Newton's Universal Gravitation. Einstein's special and general theories of relativity eventually supplanted Newton's ideas. There is an emphasis throughout on "how do we know the laws?" These are the stories of breakthrough discoveries and brilliant insights made by fascinating people, offering a humanistic perspective.

## PHYS 1204 Physics of Musical Sound

 (also MUSIC 1466) (PBS)Spring. 3 credits. Open to all students and suitable for nonscientists; does not serve as prerequisite for further science courses. Assumes no scientific background but uses high school algebra. During the add/drop
period enrollment is limited and contingent
upon permission from instructor. K. Selby.
Explores musical sound from a physics point of view. Topics include how various musical instruments work; pitch, timbre, scales, intervals, and tunings; hearing; room acoustics; and reproduction of sound. Science writing and physics problem-solving skills are developed through weekly assignments. Student activities include hands-on investigations of musical instruments and field trips. Students write a term paper investigating a topic of their choice. At the level of The Science of Sound by Rossing, Moore, and Wheeler.

## PHYS 2207 Fundamentals of Physics I

 (PBS)Fall. 4 credits. Prerequisites: high school physics plus MATH 1110 or 1106 , or solid grasp of basic notions of introductory calculus. (See list of overlapping physics courses.) M. Liepe.
PHYS 2207-2208 is a two-semester introduction to physics with emphasis on tools generally applicable in sciences, intended for students majoring in physical science, mathematics, or analytically oriented biological science. The combination of lectures illustrated with applications from the sciences, medicine, and everyday life, weekly labs tightly coupled to lectures that introduce
computer-aided data acquisition and analysis, and recitations that emphasize cooperative problem-solving, provide a rich exposure to the methods of physics and the basic analytical and scientific communication skills required by all scientists. Course covers mechanics, conservation laws, waves, and topics from thermal physics, fluids, acoustics, and materials physics. At the level of Fundamentals of Physics, Vol. I, eighth ed., by Halliday, Resnick, and Walker.

## PHYS 2208 Fundamentals of Physics II

 (PBS)Spring. 4 credits. Prerequisites: PHYS 2207 or 1112 or 1101; substantial contact with introductory calculus (e.g., MATH 1110 or 1106). A continuation of PHYS 2207. R. Fulbright.

Covers electricity and magnetism, and topics
from geometrical and physical optics and quantum and nuclear physics. At the level of Fundamentals of Physics, Vol. II, eighth ed., by Halliday, Resnick, and Walker.

## PHYS 2213 Physics II: Heat/

 Electromagnetism (PBS)Fall, spring, summer (six-week session). 4 credits. Primarily for students of engineering and prospective physics majors. (See list of overlapping physics courses.) Prerequisites: PHYS 1112 and MATH 1920, 2220, or 2240. Coregistration with MATH 1920 may be allowed by instructor in exceptional cases. Fall, R. Fulbright; spring, P. Krasicky; summer, B. Smith.

Topics include temperature, heat, the laws of thermodynamics, electrostatics, behavior of matter in electric fields, DC circuits, magnetic
fields, Faraday's law, AC circuits, and
electromagnetic waves. At the level of University Physics, Vols. 1 and 2, by Young and Freedman, 12th ed.

## PHYS 2214 Physics III: Oscillations,

 Waves, and Quantum Physics (PBS) Fall, spring, summer (six-week session). 4 credits. Prerequisites: PHYS 2213 and MATH 1920, 2220, 2240 or 2130. (See list of overlapping physics courses.) Students may benefit from prior exposure to differential equations (at level of MATH 2930). Students lacking this background should co-register for MATH 2930. Students with strong performance in PHYS 2208 and who have taken vector calculus are also encouraged to enroll. Fall, R. Thorne; spring, staff; summer, D. Briota.For majors in engineering (including biological, biomedical, and biomolecular engineering), computer science, physics, earth and atmospheric science, and other physical and biological sciences who wish to understand the oscillation, wave, and quantum phenomena behind much of modern technology and scientific/medical instrumentation. Covers physics of oscillations and wave phenomena, including driven oscillations and resonance, mechanical waves, sound waves, electromagnetic waves, reflection and transmission of waves, standing waves, beats, Doppler effect, polarization, interference, diffraction, transport of momentum and energy, wave properties of particles, and introduction to quantum physics. With applications to phenomena and measurement technologies in engineering, the physical sciences, and biological sciences.

PHYS 2216 Introduction to Special Relativity
Fall, spring; classes held in first 5-7 weeks. 1 credit. Enrollment may be limited. Coregistration in this course is a requirement for registration in PHYS 2217, unless student has taken a relativity course at level of PHYS 1116 or ASTRO 1106 Students cannot get credit for PHYS 2216 if they have taken PHYS 1116. (See list of overlapping physics courses.) Prerequisites: PHYS 1112 or 2207 or permission of instructor. S-U grades only
Introduction to Einstein's Theory of Special Relativity, including Galilean and Lorentz transformations, the concept of simultaneity, time dilation and Lorentz contraction, the relativistic transformations of velocity, momentum and energy, and relativistic invariance in the laws of physics. At the level of Introduction to Relativity by J. B. Kogut.

## PHYS 2217 Physics II: Electricity and

 Magnetism (also AEP 2170) (PBS) Fall, spring. 4 credits. Enrollment may be limited. Intended for students who have done very well in PHYS 1112 or 1116 and in mathematics and who desire more analytic treatment than that of PHYS 2213. Prospective physics majors and engineering physics majors encouraged to register. (See list of overlapping physics courses.) Prerequisites: MATH 1920, 2220, or 2240 . Vector calculus is taught in this course, but previous contact, especially with the operations grad, div, and curl, is helpful. Therefore, coregistration with MATH 1920 may be allowed subject to instructor approval. It is assumed the student has seen special relativity at the level of PHYS 1116 or is currently enrolled in PHYS 2216. Fall, M. Wang; spring, C. Fennie.
## PHYS 2218 Physics III: Waves and Thermal Physics (PBS)

Fall, spring. 4 credits. Enrollment may be limited. Intended for students who have done very well in PHYS 1116 and 2217 and in mathematics and who desire more analytic treatment than that of PHYS 2214. Prospective physics majors are encouraged to register. (See list of overlapping physics courses.) Prerequisite: PHYS 2217 (with grade of B or higher). Students may benefit from prior exposure to differential equations at the level of MATH 2930 and/ or concurrent enrollment in linear algebra (MATH 2940, 2210, or 2230). Fall, J. C. Davis; spring, staff.

The first part of the course introduces thermodynamics including heat engines, the Carnot cycle, and the concepts of temperature and entropy at the level of Thermal Physics by Schroeder. It continues with an introduction to statistical thermodynamics at the level of Statistical Mechanics by Glazer and Wark. The second part gives a thorough discussion of wave equations, including traveling waves, standing waves, energy, momentum, power, reflection and transmission, interference, and diffraction. Derives wave equations on strings, sound, elastic media, and light. Covers solutions of these wave equations and Fourier series and transforms

PHYS 3310 Intermediate Experimental Physics (PBS)
Spring. 3 credits. Enrollment may be
limited. Prerequisite: PHYS 2208 or 2213. Students select from a variety of experiments. An individual, independent approach is encouraged. Facilities of the PHYS 4410 lab are available for some experiments.

## PHYS 3314 Intermediate Mechanics

 (PBS)Spring. 4 credits. (See list of overlapping physics courses.) Prerequisites: PHYS 2208 or 2214; 2216 (or equivalent) and MATH 2940 (or equivalent). Assumes prior introduction to linear algebra and Fourier analysis. Intended for physics majors. PHYS 3318 covers similar material but is aimed at students with an exceptional
background in physics/math. Staff.
Likely topics include Lagrangian mechanics; Newtonian mechanics based on a variational principle; conservation laws from symmetries; two-body orbits due to a central force; analysis of scattering experiments; small amplitude oscillating systems including normal mode analysis; rigid body motion; motion in non-inertial reference frames; and nonlinear behavior including chaos. Students not only become more familiar with analytic methods for solving problems in mechanics but also gain experience with computer tools. At the level of Classical Mechanics by John R. Taylor.

## PHYS 3316 Basics of Quantum

 Mechanics (PBS)Fall, spring. 3 credits. Prerequisites: PHYS 2214 or 2218; PHYS 1116 or 2216; and coregistration in at least MATH 2940 or equivalent. Assumes that majors registering in PHYS 3316 will continue with PHYS
3317. Fall, P. Wittich; spring, M. Liepe. Topics include breakdown of classical concepts in microphysics; light quanta and matter waves; Schrödinger equation and solutions for square well, harmonic oscillator, and the hydrogen atom; wave packets, scattering and tunneling effects, angular momentum, spin, and magnetic moments. At the level of An Introduction to Quantum Physics by French and Taylor.

## PHYS 3317 Applications of Quantum

 Mechanics (PBS)Fall. 3 credits. Prerequisite: PHYS 3316. I. Bazarov.

Covers a number of applications of quantum mechanics to topics in modern physics. Topics include: the physics of single and multielectron atoms, quantum statistical mechanics, molecular structure, quantum theory of metals, band theory of solids, superconductivity, nuclear structure, radioactivity, nuclear reactions, and elementary particle physics.

PHYS 3318 Analytical Mechanics (PBS)
Spring. 4 credits. (See list of overlapping physics courses.) Prerequisites: PHYS 1116 or permission of instructor; AEP 4210 or appropriate course(s) in mathematics. Intended for students with exceptional background in physics/math. PHYS 3314 covers similar material, while assuming less prior knowledge. Assumes prior exposure to Fourier analysis, linear differential equations, linear algebra, and vector analysis. Staff.
Covers Newtonian mechanics of particles and systems of particles, including rigid bodies, oscillating systems, gravitation and planetary motion, moving coordinate systems, Euler's equations, Lagrange and Hamilton
formulations, normal modes and small vibrations, and perturbation theory. At the level of Classical Mechanics by Goldstein, Mechanics by Landau and Lifshitz, and Analytical Mechanics by Hand and Finch.

PHYS 3323 Intermediate Electricity and Magnetism (PBS)
Fall. 4 credits. (See list of overlapping physics courses.) Prerequisites: PHYS 2208 or 2213/2214 (or equivalent) and MATH 2930/2940 (or equivalent). Recommended: coregistration in AEP 4210 or appropriate mathematics course. Intended for physics majors. PHYS 3327 covers similar material, but is aimed at students with exceptional backgrounds in physics/math. H. Tye Topics include electro/magnetostatics, boundary value problems, dielectric and magnetic media, Maxwell's Equations, electromagnetic waves, including guided waves, and sources of electromagnetic radiation. At the level of Introduction to Electrodynamics by Griffiths.

## PHYS 3327 Advanced Electricity and

 Magnetism (PBS)Fall. 4 credits. (See list of overlapping physics courses.) Prerequisites: PHYS $2217 / 2218$ or permission of instructor. Corequisite: AEP 3210 or appropriate mathematics course(s). Intended for students with exceptional backgrounds in physics/math. PHYS 3323 covers similar material while assuming less prior knowledge. Makes extensive use of vector calculus, and some use of Fourier transforms and complex variables I. Cohen.

Covers electro/magnetostatics, vector and scalar potentials, multipole expansion of the potential solutions to Laplace's Equation and boundary value problems, time-dependent electrodynamics, Maxwell's Equations, electromagnetic waves, reflection and refraction, wave guides, retarded potential, antennas, relativistic electrodynamics, four vectors, Lorentz, and transformation of fields At the level of Classical Electromagnetic Radiation by Heald and Marion.

## PHYS 3330 Modern Experimental Optics

 (also AEP 3300) (PBS)Fall. 4 credits. Limited enrollment
Prerequisite: PHYS 2214 or equivalent. G. Hoffstaetter.

A practical laboratory course in basic and modern optics. Students use lasers and basic optical bench equipment to cover a wide range of topics from geometrical optics to interference, diffraction, and polarization. Each experimental setup is equipped with standard off-the-shelf optics and opto-mechanical components to provide the students with hands-on experience in practical laboratory techniques currently employed in physics, chemistry, biology, and engineering. Students are also introduced to digital imaging and image processing techniques. Five projects are prescribed and one last project defined and designed by the student with help from the instructor. At the level of Optics by Hecht.

## PHYS 3341 Thermodynamics and

 Statistical Physics (PBS)Fall. 4 credits. Prerequisites: PHYS 2214/2218, 3316, and MATH
2940/2210/2230/2310. V. Elser. Covers statistical physics, developing both thermodynamics and statistical mechanics simultaneously. Also covers concepts of temperature, laws of thermodynamics, entropy,
thermodynamic relations, and free energy. Applications to phase equilibrium, multicomponent systems, chemical reactions, and thermodynamic cycles. Application of statistical mechanics to physical systems, and introduction to treatment of MaxwellBoltzmann, Bose-Einstein, and Fermi-Dirac statistics with applications. Elementary transport theory. At the level of Fundamentals of Statistical and Thermal Physics by Reif.

PHYS 3360 Electronic Circuits (also AEP 3630) (PBS)

Fall, spring. 4 credits. Prerequisites undergraduate course in electricity and magnetism (e.g., PHYS 2208, 2213, or 2217) or permission of instructor. No previous electronics experience assumed, although course moves quickly through introductory topics such as basic DC circuits. Fall semester usually has smaller enrollment. S-U grade option available by permission of instructor for students who do not require course for major. Fall, E. Kirkland; spring, I. Bazarov.

Practical electronics as encountered in a scientific or engineering research/development environment. Analyze, design, build, and test circuits using discrete components and integrated circuits. Analog circuits: resistors, capacitors, operational amplifiers, feedback amplifiers, oscillators, comparators, passive and active filters, diodes, and transistor switches and amplifiers. Digital circuits: combinational and sequential logic (gates, flipflops, registers, counters, timers), analog to digital (ADC) and digital to analog (DAC) conversion, signal averaging, and computer architecture and interfacing. Additional topics may include analog and digital signal processing, light wave communications, transducers, and noise reduction techniques and computer-aided circuit design. At the level of Art of Electronics by Horowitz and Hill.

## PHYS 4400 Informal Advanced

 LaboratoryFall, spring. 1-3 credits, variable. Prerequisites: two years physics or permission of instructor. P. McEuen. Experiments of widely varying difficulty in one or more areas, as listed under PHYS 4410, may be done to fill the student's special requirements.

## PHYS 4410 Advanced Experimental

 Physics (PBS)Fall, spring. 4 credits. Prerequisites: senior standing or permission of instructor; PHYS 2214 (or 3310 or 3360 ) plus 3318 and 3327 , or permission of instructor.
P. McEuen.

Selected topics in experimental concepts and techniques. About 60 different experiments are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, and nuclear physics. The student performs three to four different experiments, depending on difficulty, selected to meet individual needs and interests. Independent work is stressed. Lectures are on experimental techniques used in experiments in the laboratory and on current research topics.

## PHYS 4433 Introduction to Cosmology (also ASTRO 4433) (PBS)

Spring. 4 credits. Prerequisites: math/ calculus at 2000 level, physics at 3000 level. R. Bean.
For description, see ASTRO 4433.

PHYS 4443 Intermediate Quantum Mechanics (PBS)
Spring. 4 credits. Prerequisites: PHYS 3316, 3323 , or 3327 or AEP 4210 or appropriate mathematics course(s); coregistration in PHYS 3314 or 3318 ; or permission of instructor. Assumes prior experience in linear algebra, differential equations, and Fourier transforms. Staff.
Provides an introduction to concepts and techniques of quantum mechanics, at the level of An Introduction to Quantum Mechanics by Griffiths.

## PHYS 4444 Introduction to Particle

 Physics (PBS)Spring. 4 credits. Prerequisite: PHYS 4443 or permission of instructor. Staff.
Covers the standard model of particle physics; behavior of high-energy particles and radiation; elementary particles; basic properties of accelerators and detectors; and general symmetries and conservation laws. At the level of Introduction to Elementary Particles by Griffiths or Modern Elementary Particle Physics by Kane.

## PHYS 4445 Introduction to General

 Relativity (also ASTRO 4445) (PBS)Fall. 4 credits. Offered as an alternative to
the more comprehensive, two-semester graduate sequence PHYS 6553 and 6554. L. McAllister.

One-semester introduction to general relativity that develops the essential structure and phenomenology of the theory without requiring prior exposure to tensor analysis. General relativity is a fundamental cornerstone of physics that underlies several of the most exciting areas of current research, including relativistic astrophysics, cosmology, and the search for quantum theory of gravity. The course briefly reviews special relativity, introduces basic aspects of differential geometry, including metrics, geodesics, and the Riemann tensor, describes black hole spacetimes and cosmological solutions, and concludes with the Einstein equation and its linearized gravitational wave solutions. At the level of Gravity: An Introduction to Einstein's General Relativity by Hartle.

## PHYS 4454 Introductory Solid-State

 Physics (also AEP 4500) (PBS)Fall. 4 credits. Prerequisite: PHYS 4443,
AEP 3610, or CHEM 7930 highly desirable
but not required. C. Fennie.
Introduction to modern solid-state physics, including crystal structure, lattice vibrations, electron theory of metals and semiconductors, and selected topics from magnetic properties, optical properties, and/or superconductivity. At the level of Solid State Physics by Ashcroft and Mermin.

## PHYS 4455 Geometrical Concepts in

 Physics (PBS)Spring. 4 credits. Prerequisite: PHYS 3323 or equivalent and at least coregistration in PHYS 3318 or permission of instructor. Usually offered every other spring.
Most nonquantum physical theories are based on one or another form of geometry: Newtonian mechanics on Euclid, electromagnetism on Minkowski, general relativity on Riemann, string theory on higher dimensionality. This course surveys the unification of classical physics that accompanies the application of Hamilton's principle of least action to these various geometries. At the level of Geometric Mechanics by Talman.
[PHYS 4456 Introduction to Accelerator Physics and Technology (also PHYS 7656) (PBS)

Spring. 3 credits. Prerequisites: PHYS 3323 or 3327 and PHYS 3314 or 3318. Next offered 2013-2014.
This course covers fundamental physical principles of particle accelerators and enabling technologies, with a focus on basic effects in linear and circular accelerations as used for elementary particle collision experiments and for X-ray sources. At the level of The Physics of Particle Accelerators by K. Wille.]

## PHYS 4480 Computational Physics (also

 ASTRO 7690, PHYS 7680) (PBS)
## Spring. 3 credits. Assumes familiarity with

 standard mathematical methods for physical sciences and engineering (differential equations, Fourier transforms, and linear algebra) and with some form of computer programming (e.g., C++, Octave, Mathematica, or Python). J. Sethna. Covers numerical methods for ordinary and partial differential equations, linear algebra and eigenvalue problems, integration, nonlinear equations, optimization, and fast Fourier transforms. Find out how and why the "black-box" numerical routines you use work, how to improve and generalize them, and how to fix them when they don't. Based on the text Numerical Recipes by William H. Press, Saul A. Teukolsky, William T. Vetterling, and Brian P. Flannery.
## PHYS 4481 Quantum Information

 Processing (also CS 4812, PHYS 7681) (PBS)Spring. 3 credits. Prerequisite: familiarity
with theory of finite-dimensional vector
spaces over complex numbers.
A technology that successfully exploits
fundamental principles of quantum physics can spectacularly alter both the nature of computation and the means available for the transmission of information.

## PHYS 4484 Teaching and Learning Physics (also PHYS 7684)

Fall, spring. 1 credit. Prerequisites: none. R. Thorne.

This 1.5 -hour weekly seminar provides undergraduate and graduate students with an introduction to core concepts in physics education. Participants discuss articles and videos drawn from physics and science education research and from cognitive science, and engage in collaborative activities that help them become more effective teachers and learners. This seminar is especially valuable for those considering teaching physics at some point in their careers. Topics include: Questioning Strategies, Classroom Discourse and Bloom's Taxonomy, Learning Theory, Conceptions and Conceptual Change, Epistemology, Metacognition, and Cooperative Learning. Text: Articles from science, engineering, and math education journals.

## PHYS 4488 Topics in Accelerator Physics

 (also PHYS 7688) (PBS)Spring. 3 credits. S-U grades only.
G. Hoffstaetter.

After an introduction to the history of particle accelerators and to their fundamental physical principles, special topics in accelerator physics will be covered. Such topics are microwave structures in particle acceleration, linear and nonlinear beam dynamics, collective effects and beam instabilities, characteristics of synchrotron radiation, a project in storage ring design, and experiments with charged particle beams at Cornell's accelerator laboratory.

PHYS 4490 Independent Study in Physics Fall or spring. Variable to 4 credits; max. of 8 credits may be applied to physics major. Prerequisite: permission of professor who will direct proposed work. Copy of Request for Independent Study form must be filed with physics department course coordinator, 121 Clark Hall.
Individual project work (reading or laboratory) in any branch of physics.

## [PHYS 4491 Data Analysis in Particle Physics

Spring. Variable to 4 credits. Prerequisite: PHYS 1112 or 1116. Next offered 20112012. J. Alexander.

A nuts-and-bolts training course covering essential tools and techniques of particle physics analysis.]

## [PHYS 4492 Advanced Data Analysis in

 Particle PhysicsFall. Variable to 4 credits. Prerequisite: PHYS 4491. Next offered 2011-2012. J. Alexander.

A continuation of PHYS 4491, emphasizing essential tools and techniques of particle physics analysis.]

## PHYS 6500 Informal Graduate

 LaboratoryFall, spring. Variable to 2 credits.
Prerequisite: permission of instructor.
P. McEuen.

Experiments of widely varying difficulty in one or more areas, as listed under PHYS 6510, may be done to fill special requirements.

## PHYS 6501 Contemporary Physics for Teachers

Summer. 2 credits.
Lectures are given by Cornell faculty on topics including atomic-scale imaging, the Standard Model, and nanofabrication of integrated circuits. Hands-on activities developed by Cornell scientists working with teachers are presented by teachers. Activities are tied to the New York State Physics Core Curriculum where possible.

## PHYS 6502 Topics in Physics for Teachers

Summer. 1 credit.
This is a lecture and laboratory course open to Center for Nanoscale Systems Institute for Physics Teachers alumni and other high school physics teachers. The course is organized around daily themes that may include atomic games, physics with water, and discrepant events. Lectures are given by Cornell faculty; hands-on activities developed by Cornell scientists working with teachers are presented by teachers. Lab activities may include a pinball game analogy to the Bohr model, interference in thin films, projectile motion with water, and energy conversion in a mousetrap. Activities are tied to the NYS Physics Core Curriculum where possible.

## PHYS 6510 Advanced Experimental

 PhysicsFall, spring. 3 credits. Optional lec
associated with PHYS 4410 available.
P. McEuen.

About 60 different experiments are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, and nuclear physics. Students perform three to four experiments selected to meet individual needs.
Independent work is stressed. Lectures include techniques used in experiments in the
advanced laboratory and on current research topics.

## PHYS 6520 Projects in Experimental

 PhysicsFall, spring. Variable to 3 credits.
Prerequisite: PHYS 6510. To be supervised by faculty member. Students must advise department course coordinator of faculty member responsible for project.
Projects of modern topical interest that involve some independent development work by student. Opportunity for more initiative in experimental work than is possible in PHYS 6510.

## [PHYS 6525 Physics of Black Holes,

 White Dwarfs, and Neutron Stars (also ASTRO 6511)Fall. 4 credits. Next offered 2011-2012.
Prerequisite: none. D. Lai.]

## PHYS 6553 General Relativity I (also ASTRO 6509)

Fall. 4 credits. Prerequisite: knowledge of special relativity and methods of dynamics at level of Classical Mechanics by Goldstein. E. Flanagan.
A comprehensive introduction to Einstein's theory of relativistic gravity. This course focuses on the formal structure of the theory.
PHYS 6554 General Relativity II (also ASTRO 6510)
Spring. 4 credits. Prerequisite: PHYS 6553
or permission of instructor.
A continuation of PHYS 6553 and ASTRO 6509 that covers a variety of advanced topics and applications of general relativity in astrophysics, cosmology, and high-energy physics.

## PHYS 6561 Classical Electrodynamics

Fall. 3 credits. C. Csaki.
Covers special relativity, Maxwell's equations, electromagnetic potentials, conservation laws, Green's functions, electromagnetic waves, wave guides, radiation theory, antennas, and scattering. The practical application of appropriate mathematical methods is emphasized. At the level of Classical Electrodynamics by Jackson.
PHYS 6562 Statistical Physics I
Spring. 4 credits. Primarily for graduate students. Prerequisites: good knowledge of quantum mechanics, classical mechanics, and undergraduate-level thermodynamics
or statistical mechanics class. Staff.
Starts with the fundamental concepts of temperature, entropy, and free energy, defining the microcanonical, canonical, and grand canonical ensembles. Touches upon Markov chains, random walks, diffusion equations, and the fluctuation-dissipation theorem. Covers Bose-Einstein and Fermi statistics, black-body radiation, Bose condensation, superfluidity, metals, and white dwarves. Discusses fundamental descriptions of phases, and introduces Landau theory, topological order parameters, and the homotopy classification of defects. Briefly studies first-order phase transitions and critical droplet theory and concludes with a discussion of critical phenomena, scaling, universality, and the renormalization group.

## PHYS 6572 Quantum Mechanics I

Fall. 4 credits. D. Rubin.
Covers the general principles of quantum mechanics, formulated in the language of Dirac. Includes propagator and path integral formulation. Covers systems with few degrees
of freedom such as hydrogen atom, including fine and hyperfine structure. Theory of angular momentum, symmetries, perturbations, and collisions are developed to analyze phenomena displayed by these systems. At the level of Quantum Mechanics: Fundamentals by Gottfried and Yan. A knowledge of the subject at the level of PHYS 4443 is assumed, but the course is self-contained.

## PHYS 6574 Applications of Quantum Mechanics II

Spring. 4 credits. Knowledge of concepts and techniques covered in PHYS 6561 and 6572 and of statistical mechanics at undergraduate level assumed.
Possible topics include identical particles, many electron atoms, second quantization, quantization of the electromagnetic field, scattering of complex systems, radiative transitions, and introduction to the Dirac equation.

## [PHYS 6599 Cosmology (also ASTRO

 6599)Spring. 4 credits. Next offered 2011-2012. For description, see ASTRO 6599.]

## PHYS 7635 Solid-State Physics I

Fall. 3 credits. Prerequisites: good
undergraduate solid-state physics course
(e.g., PHYS 4454), undergraduate statistical mechanics, and familiarity with graduate-
level quantum mechanics. A. Sievers.
Survey of the physics of solids: crystal structures, X-ray diffraction, phonons, and electrons. Selected topics from semiconductors, magnetism, superconductivity, disordered materials, dielectric properties, and mesoscopic physics. The focus is to enable graduate research at the current frontiers of condensed matter physics.

## PHYS 7636 Solid-State Physics II

Spring. 3 credits. Prerequisite: PHYS 7635. Staff.
Continuation of PHYS 7635. Topics from quantum condensed-matter physics not included in that course, which may include Fermi Liquid Theory, magnetism, superconductivity, broken symmetries, elementary excitations, topological defects, superfluids, the quantum Hall effect, mesoscopic quantum transport theory, Anderson localization, and other metal insulator transitions.

## PHYS 7645 An Introduction to the

 Standard Model of Particle PhysicsSpring. 3 credits. A. Ryd.
This course is an introduction to the Standard Model of particle physics. Familiarity with Feynman rules, Lagrangians, and relativistic wave equations at the level of PHYS 7651 is assumed. Topics covered include strong and electro-weak interactions, Higgs mechanism, and phenomenology of weak interactions, the quark model, and particle accelerators and detectors. The course is taught at the level of Electroweak Interactions: An Introduction to the Physics of Quarks and Leptons by Peter Renton, Introduction to High-Energy Physics by Donald H. Perkins, and The Standard Model: A Primer by Cliff Burgess and Guy Moore.
PHYS 7646 Topics in High-Energy Particle Physics
Spring. 3 credits. Staff.
Covers topics of current interest, such as highenergy electron and neutrino interactions, electron positron annihilation, and highenergy hadronic reactions.

PHYS 7651 Relativistic Quantum Field Theory I
Fall. 3 credits. Undergraduates, letter grades only; graduate students, S-U or letter grades. M. Perelstein.
Topics include consequences of causality and Lorentz invariance, quantization of KleinGordon and Dirac fields, perturbation theory, Feynman diagrams, calculation of cross sections and decay rates, and an introduction to radiative corrections and renormalization with applications to electromagnetic and interactions. At the level of An Introduction to Quantum Field Theory by Peskin and Schroeder.

## PHYS 7652 Relativistic Quantum Field

 Theory IISpring. 3 credits. Staff.
A continuation of PHYS 7651. Introduces more advanced methods and concepts in quantum field theory. Topics include functional integral methods, quantization of non-Abelian gauge theories, renormalization, and renormalization group theories, spontaneous symmetry breaking, anomalies, solitons, and instantons. Instead of the standard model of strong and electroweak interactions, some applications to condensed-matter physics will be discussed. At the level of An Introduction to Quantum Field Theory by Peskin and Schroeder.

## PHYS 7653 Statistical Physics II

Fall. 3 credits. Prerequisites: quantum
mechanics at level of PHYS 6572, statistical
physics at level of PHYS 6562. J. Sethna.
Survey of topics in modern statistical physics selected from phase transitions and the renormalization group; linear response and fluctuation-dissipation theories; quantum statistical mechanics; nonequilibrium statistical mechanics; and soft matter and/or biological applications.

## PHYS 7654 Basic Training in Conditional

 Matter PhysicsSpring. 3 credits. Prerequisites: PHYS 6562, 6574, 7635, 7636, and 7653, or permission of instructor. S-U grades only. Staff. Advanced topics in condensed-matter physics are taught by several members of the faculty. Past modules include random matrix theory, the quantum Hall effect, disordered systems and computational complexity, asymptotic analysis, superfluid physics, generalized rigidity, many-body methods applied to nanotubes, constraint problems, quantum optics, Luttinger liquids, and quantum antiferromagnets. Future topics may include dilute cold gases and exotic quantum phenomena, thermodynamic Green's functions, $1 / \mathrm{N}$ expansions, density functional theory, instantons, dynamical mean-field theory, conformal field theory, Fermi liquid theory and superconductivity, localization and disordered metals, renormalization groups, duality transformations, and Chern-Simons gauge theory. Detailed course content will be announced at the end of the fall semester.

## [PHYS 7656 Introduction to Accelerator Physics and Technology (also PHYS 4456) <br> Next offered 2013-2014.

For description, see PHYS 4456.]

PHYS 7661 Advanced Topics in HighEnergy Particle Theory
Fall. 3 credits. Prerequisite: PHYS 7652. Y. Grossman.

Presents advanced topics of current research interest. Subject matter varies from year to year. Some likely topics are models of electroweak symmetry breaking, collider physics, flavor physics, topics in string theory and string cosmology, and conformal field theories and their applications.
[PHYS 7665 Seminar: Astrophy Gas Dynamics (also ASTRO 7699)
Next offered 2011-2012.
For description, see ASTRO 7699.]
PHYS $\mathbf{7 6 6 7}$ Theory of Stellar Structure and Evolution (also ASTRO 6560)
Fall. 4 credits. D. Chernoff.
For description, see ASTRO 6560.

## PHYS 7680 Computational Physics (also

 ASTRO 7690, PHYS 4480)For description, see PHYS 4480.

## PHYS 7681 Quantum Information

 Processing (also CS 4812, PHYS 4481)For description, see PHYS 4481.
[PHYS 7682 Computational Methods for Nonlinear Systems (also CIS 6229)
Fall. 3 credits. Enrollment may be limited.
Next offered 2011-2012. E. Mueller.
Graduate computer laboratory, focusing on
tools for computation, simulation, and analysis of complex, nonlinear systems arising in a broad range of fields.]

## PHYS 7683 Special Topics

Offerings are announced each semester. Typical topics are group theory, analyticity in particle physics, weak interactions, superfluids, stellar evolution, surface physics, Monte Carlo methods, low-temperature physics, magnetic resonance, phase transitions, and the renormalization group.

## PHYS 7684 Teaching and Learning Physics (also PHYS 4484)

For description, see PHYS 4484.

## PHYS 7688 Topics in Accelerator Physics (also PHYS 4488)

For description, see PHYS 4488.
PHYS 7690 Independent Study in Physics
Fall or spring. Variable to 4 credits.
Students must advise department course coordinator, 121 Clark Hall, of faculty member responsible for grading their project. S-U grades only.
Special graduate study in some branch of physics, either theoretical or experimental, under the direction of any professorial member of the staff.

## POLISH

See "Department of Russian."

## PORTUGUESE

See "Department of Romance Studies."

## PSYCHOLOGY

M. Christiansen, T. Cleland, J. E. Cutting,
T. J. DeVoogd, D. A. Dunning, S. Edelman, M. Ferguson, D. J. Field, B. L. Finlay,
T. D. Gilovich, M. Goldstein, B. P. Halpern,
A. M. Isen, R. E. Johnston, C. L. Krumhansl,
D. A. Levitsky, J. B. Maas, D. A. Pizarro,
H. S. Porte, D. T. Regan, E. A. Regan, H. Segal, D. Smith, B. J. Strupp, V. Zayas

The major areas of psychology represented in the department are perception, cognition, and development (PCD), behavioral evolutionary neuroscience (BEN), and social and personality psychology. These areas are very broadly defined, and the courses are quite diverse. BEN includes animal learning, neuropsychology, interactions between hormones, other biochemical processes, and behavior. PCD includes such courses as cognition, perception, memory, and psycholinguistics. Social and personality psychology is represented by courses in social psychology and personality (e.g., Psychology and Law, Judgment and Decision Making), as well as courses in fieldwork and
psychopathology. In addition to the three major areas mentioned above, the department emphasizes the statistical and logical analysis of psychological data and problems.

## The Major

Admission to the major is usually granted to any student in good standing in the college who has passed three or more psychology courses with grades of C+ or better.
Provisional admission requires two such courses. To apply to the major and receive an advisor, a major application form may be obtained from the department office ( 211 Uris Hall) and should be completed and taken to one of the faculty members whose name is listed on the form.
Requirements for the major are:

1. a total of 40 credits in psychology (including prerequisites), from which students majoring in psychology are expected to choose, in consultation with their advisors, a range of courses that covers the basic processes in psychology (laboratory and/or field experience is recommended); for any courses taken in 2009-2010 or later to count toward the 40 required credits, the student must earn a grade of C - or better; and
2. demonstration of proficiency in statistics before the beginning of the senior year. (See the section below on the statistics requirement.)
Normally it is expected that all undergraduate psychology majors will take at least one course in each of the following three areas of psychology:
3. Perception, cognition, and development (PCD)
4. Behavioral evolutionary neuroscience (BEN)
5. Social and personality psychology

The following classification of Department of Psychology offerings is intended to help students and their advisors choose courses that will ensure that such breadth is achieved.

1. Perception, cognition, and
development: PSYCH 1102, 2050, 2090,
2140, 2150, 3050, 3160, 3420, 4120, 4180,

4260, 4270, 4280, 4320, 4360, 4370, 4650, 4780.
2. Behavioral evolutionary neuroscience: PSYCH 2230, 3220, 3240, 3260, 3320, 3610, 3960, 4200, 4230, 4240, 4250, 4290, 4310, 4350, 4400, 4410, 4440, 4920.
3. Social and personality psychology: PSYCH 2650, 2750, 2800, 2820, 3250, 3270, 3280, 3800, 3850, 4050, 4300, 4520, 4810, 4820, 4850, 4910.
4. Other courses: PSYCH 1101, 1990, 3470, 3500, 4101, 4700, 4710. The major advisor determines to which group, if any, these courses may be applied.
With the permission of the advisor, courses in other departments may be accepted toward the major requirements.
Fieldwork, independent study, and teaching. The department requires students to observe the following limits on fieldwork, independent study, and teaching.

1. Undergraduates may not serve as teaching assistants for psychology courses if they are serving as teaching assistants for any other course during the same semester.
2. An undergraduate psychology major cannot apply more than 12 of the credits earned in independent study (including honors work) and fieldwork toward the 40 credits required by the major.
Statistics requirement. Proficiency in statistics can be demonstrated in any one of the several ways listed below.
3. Passing PSYCH 3500.
4. Passing an approved course or course sequence in statistics in some other department at Cornell.
5. Passing a course or course sequence in statistics at some other college, university, or college-level summer school. The course or sequence must be equivalent to at least 6 semester credits. The description of the course from the college catalog and the title and author of the textbook used must be submitted to Professor Gilovich for approval.
6. Passing an exemption examination. This examination can be given at virtually any time during the academic year if the student gives notice at least one week before. Students who have completed a theoretical statistics course in a department of mathematics or engineering and who wish to demonstrate competence in applied statistics usually find this option the easiest. Students planning this option should discuss it in advance with Professor Gilovich.

## Concentration in biopsychology.

Psychology majors interested in psychology as a biological science can elect to specialize in biopsychology. Students in this concentration must meet all of the general requirements for the major in psychology and must also demonstrate a solid background in biology; the physical sciences, including at least introductory chemistry; and mathematics. Students will design with their advisors an integrated program in biopsychology built around courses on physiological, chemical, anatomical, and ecological determinants of human and nonhuman behavior offered by the Department of Psychology. Additional courses in physiology, anatomy, biochemistry, neurochemistry,
neurobiology, and behavioral biology may be designated as part of the psychology major after consultation between the student and his or her biopsychology advisor.
Concentration in social and personality psychology. Psychology majors who wish to specialize in social psychology are expected to meet the general requirements set by their department, including statistics. To ensure a solid interdisciplinary grounding, students in the concentration are permitted to include some major courses in sociology and related fields. Advisors will assist students in the selection of a coherent set of courses from social organization, cultural anthropology, experimental psychology, social methodology, and several aspects of personality and social psychology. Seniors in the concentration may elect advanced and graduate seminars, with the permission of the instructor.
Undergraduate honors program. The honors program is designed for exceptional students who wish to pursue an intensive and independent program of research in psychology. Successful participation serves as evidence of the student's facility in the two most important skills required of an academic psychologist: namely, the capacity to acquire and integrate a substantial body of theoretical and factual material and the ability to devise and execute a creative empirical research project.
The honors program offers students the closest contact and consultation with faculty they will likely experience while at Cornell, and all qualified majors who are planning graduate work in any academic field should consider applying. However, it should also be noted that conducting honors research and completing a thesis is an extremely demanding undertaking, both in time and effort. Due to the demands of both research and writing, it is expected that after the Christmas break, honors students will return to campus as early as possible to continue their work, as well as remain on campus through all of spring break.
The focus of the honors program is conducting an experiment, analyzing the data that result, and describing the project in a thesis that closely approximates a professional-level research report both in form and quality. The research project is to be conducted under the close sponsorship of a faculty member. Subject to approval, the sponsor need not be in the psychology department per se. Students who successfully complete the honors program graduate with a certain level of honors, which is noted on their diplomas. The customary level is cum laude, awarded to approximately two-thirds of psychology honors graduates. Approximately one-third receive the nexthighest level of honors, which is magna cum laude. A student who has both an unusually strong academic record in psychology and completes a thesis of exceptionally high quality will be considered for summa cum laude, the highest level of honors. However, those are unusual cases. The T. A. Ryan Award, accompanied by a cash prize, is awarded to the student who conducts the best honors project in a given year. Students in the program register for 3 or 4 credits of PSYCH 4710 Independent Study in both fall and spring semesters. Format and binding of the thesis follows guidelines for the doctoral dissertation and master's thesis, outlined by the Cornell University Graduate School. Stylistic format is

APA style. Alternative style formats are possible, if approved in advance.

## Computing in the Arts Undergraduate Minor

A minor in Computing in the Arts with an emphasis on psychology is available both to psychology majors and to students majoring in other subjects.

## Courses

PSYCH 1101 Introduction to Psychology: The Frontiers of Psychological Inquiry (SBA-AS)
Fall, summer (six-week). 3 credits
Attendance at lec mandatory. Students who wish to take disc seminar should also
enroll in PSYCH 1103. J. B. Maas.
The study of human behavior. Topics include brain functioning and mind control, psychophysiology of sleep and dreaming, psychological testing, perception, learning, cognition, memory, language, motivation, personality, abnormal behavior, psychotherapy, social psychology, and other aspects of applied psychology. Emphasis is on developing skills to critically evaluate claims made about human behavior.
PSYCH 1102 Introduction to Cognitive Science (also COGST 1101, CS 1710, LING 1170, PHIL 1910) (KCM-AS)
Fall, summer (six-week). 3 or 4 credits
(4-credit option involves writing sec
instead of exams). Staff.
For description, see COGST 1101.

## PSYCH 1103 Introductory Psychology

 SeminarsFall. 1 credit. Limited to 200 students. Corequisite: PSYCH 1101. 12 different time options. J. B. Maas and staff.
Weekly seminar that may be taken in addition to PSYCH 1101 to provide an in-depth exploration of selected areas in the field of psychology. Involves extensive discussion and a semester paper related to the seminar topic. Choice of seminar topics and meeting times are available at the second lecture of PSYCH 1101.

## PSYCH 1110 Brain, Mind, and Behavior

 (also BIONB/COGST 1110) (PBS)Spring. 3 credits. Prerequisite: freshmen and sophomores in humanities and social sciences; juniors and seniors not allowed. Not recommended for psychology majors; biology majors may not use for credit toward major. Letter grades only. E. Adkins Regan and R. Hoy.
For description, see COGST 1110.
PSYCH 1650 Computing in the Arts (also CIS/CS/ENGRI 1610, DANCE 1540, FILM 1750, MUSIC 1465) (LA-AS)
Fall. 3 credits. G. Bailey.
For description, see CS 1610.

## PSYCH 2050 Perception (also PSYCH

 6050)Fall. 3 credits. Open to all students.
Graduate students, see PSYCH 6050.
J. E. Cutting.

One of four introductory courses in cognitive psychology. Basic perceptual concepts and phenomena are discussed with emphasis on stimulus variables and sensory mechanisms. All sensory modalities are considered. Visual and auditory perception are discussed in detail.

PSYCH 2090 Developmental Psychology (also PSYCH 7090) (KCM-AS)
Spring. 4 credits. Graduate students, see PSYCH 7090. M. Goldstein.
One of four introductory courses in cognition and perception. A comprehensive introduction to current thinking and research in developmental psychology that approaches problems from both psychobiological and cognitive perspectives. We will use a comparative approach to assess principles of development change. The course focuses on the development of perception, action, cognition, language, and social understanding in infancy and early childhood.

## PSYCH 2140 Cognitive Psychology (also COGST 2140/6140, INFO 2140, PSYCH 6140) (KCM-AS)

Spring. 4 credits. Limited to 200 students. Prerequisite: sophomore standing.
Graduate students, see PSYCH 6140.
S. Edelman.

Introduces the idea of cognition as information processing or computation, using examples from perception, attention and consciousness, memory, language, and thinking. Participants acquire conceptual tools that are essential for following the current thought on the nature of mind and its relationship to the brain.

## PSYCH 2150 Psychology of Language

 (also COGST 2150, LING 2215) (KCM-AS)Spring. 3 credits. Prerequisites: sophomore, junior, or senior standing; any one course
in psychology or human development.
M. Christiansen.

Provides an introduction to the psychology of language. The purpose of the course is to introduce students to the scientific study of psycholinguistic phenomena. Covers a broad range of topics from psycholinguistics, including the origin of language, the different components of language (phonology, morphology, syntax, and semantics), processes involved in reading, computational modeling of language processes, the acquisition of language (both under normal and special circumstances), and the brain bases of language.

## PSYCH 2230 Introduction to

 Biopsychology (PBS: supplementary list)Fall. 3 credits. Prerequisites: none. May be used to satisfy psychology major breadth requirement and as alternative prerequisite for upper-level biopsychology courses. D. Smith.

Introduction to psychology from a biological perspective, which focuses on brain mechanisms of behavior. Topics include the structure and function of the nervous system, physiological approaches to understanding behavior, hormones and behavior, biological bases of sensation and perception, learning and memory, cognition, emotion, and communication.
Introductory courses in social and personality psychology. Each of the following three courses (2650, 2750, 2800) provides an introduction to a major area of study within social and personality psychology. These courses are independent of one another, and none have any prerequisites. Students may take any one of the courses or any combination of them (including all three). Courses may be taken in any order or simultaneously.

PSYCH 2610 Development of Social Behavior (also HD 2610) (SBA-AS)
Fall. 3 credits. Prerequisites: HD 1150, PSYCH 1101. Staff.
For description, see HD 2610.

## [PSYCH 2650 Psychology and Law (SBA-AS)

Fall. 3 credits. Next offered 2011-2012. D. A. Dunning.

Examines the implications of psychological theory and methods for law and the criminal justice system.]

## [PSYCH 2750 Introduction to Personality Psychology (also HD 2600) (SBA-AS)

Fall. 3 credits. Recommended: introductory psychology or human development. Next
offered 2011-2012. V. Zayas.
In this undergraduate-level course, we will review the major theories and research paradigms (e.g., trait, biological, cognitive, humanistic) of modern-day personality psychology.]

## PSYCH 2800 Introduction to Social

 Psychology (SBA-AS)Spring, summer (three-week). 3 or 4
credits (4 credit option involves writing sec
instead of exams). T. D. Gilovich.
Introduction to research and theory in social psychology. Topics include social influence, persuasion, and attitude change; social interaction and group phenomena; altruism and aggression; stereotyping and prejudice; and everyday reasoning and judgment.

## PSYCH 2820 Community Outreach (also HD 2820)

Fall. 2 credits. Prerequisites: PSYCH 1101 or HD 1150. H. Segal.
Provides students with information and perspectives essential to volunteer fieldwork with human and social service programs in the community. Readings are drawn from the field of community psychology and include analyses of successful programs, such as Head Start, as well as a review of the methods by which those programs are developed and assessed. Although students are not required to volunteer, the instructor provides students with a list of local agencies open to student placements.

## PSYCH 3010 Health Psychology (SBA-AS)

Spring. 3 credits. Prerequisites: at least two psychology courses. J. Andersen. Overview of health psychology: the scientific study of behaviors and cognitive processes related to health states. Students will learn about the biological, psychological, and social aspects of experience as related to health. The biological mechanisms by which social experiences and stress get "under the skin" and influence health outcomes across the life span will be examined. Understanding the interactions between social and physical experience on individuals' health states is a key element in developing effective health communication and intervention programs. Students will learn about critical topics in health psychology such as the interaction between mental and physical health, health promotion, health-compromising and -enhancing behaviors, stress management, coping strategies, patient-provider relations, utilization of health services, pain management, coping with disease, addictions, careers in health psychology, and a discussion about the complexity and challenges that await health psychology in the future. This course is taught from a diversity-focused
perspective; understanding the intersection between health and underrepresented minority status is a key element of this course. Students approach all course topics from both theory-driven and applied perspectives.

## PSYCH 3050 Visual Perception (also

 VISST 3305)Spring. 4 credits. Limited to 25 students.
Prerequisite: PSYCH 2050 or permission of instructor. J. E. Cutting.
Detailed examination of pictures and their comparison to the real world. Linear perspective in Renaissance art, photography, cinema, and video is discussed in light of contemporary research in perception and cognition.

## PSYCH 3150 Obesity and the Regulation of Body Weight (also NS 3150)

Spring. 3 credits. Limited to 30 students. Prerequisites: one course each in psychology and nutrition; undergraduates by permission of instructor. S-U or letter grades. Offered alternate years. D. A. Levitsky.

Multidisciplinary discussion of the causes,
effects, and treatments of human obesity.
Topics include the biopsychology of eating behavior, the genetics of obesity, the role of activity and energy metabolism, psychosocial determinants of obesity, anorexia nervosa, therapy and its effectiveness, and social discrimination.

## [PSYCH 3160 Auditory Perception (also PSYCH 7160) (KCM-AS)

Spring. 4 credits. Limited to 15 students. Prerequisite: PSYCH 1102, 2050, 2090, or 2140 (or other similar engineering, physics, linguistics, or biology courses). Graduate students, see PSYCH 7160. Next offered 2011-2012. C. L. Krumhansl.
Lab course introducing students to experimental methods in auditory perception and cognition.]

## [PSYCH 3220 Hormones and Behavior (also BIONB 3220, PSYCH 7220) (PBS)

Fall. 3 credits. Two lec plus sec in which students read and discuss original papers in the field, give an oral presentation, and write a term paper. Prerequisites: junior or senior standing; any one of the following: PSYCH 2230, BIONB 2210 or 2220 , or one year introductory biology plus psychology course. Graduate students, see PSYCH 7220. Next offered 2011-2012. E. Adkins Regan.
Covers comparative and evolutionary approaches to the study of the relationship between reproductive hormones and sexual behavior in vertebrates, including humans. Also hormonal contributions to parental behavior, aggression, stress, learning and memory, and biological rhythms.]

## PSYCH 3240 Biopsychology Laboratory

 (also BIONB 3240) (PBS)Fall. 4 credits. Limited to 20 students. Prerequisites: junior or senior standing, PSYCH 2230 or BIONB 2210 or 2220, and permission of instructor. Lab fee: $\$ 50$. T. J. DeVoogd.

Experiments designed to provide experience in animal behavior (including learning) and its neural and hormonal mechanisms. A variety of techniques, animal species, and behavior patterns are included.

## PSYCH 3250 Adult Psychopathology

 (also HD 3700) (SBA-AS)Spring. 3 credits. Prerequisites: sophomore, junior, or senior standing; any one course in psychology or human development. Letter grades only. H. Segal.
A theoretical and empirical approach to the biological, psychological, and social (including cultural and historical) aspects of adult psychopathology. Readings range from Freud to topics in psychopharmacology. The major mental illnesses are covered, including schizophrenia as well as mood, anxiety, and personality disorders. Childhood disorders are not covered.

## PSYCH 3260 Evolution of Human

 Behavior (PBS: Supplementary List)Spring. 4 credits. Prerequisite: PSYCH 2230,
or introductory biology, or introductory anthropology. R. Johnston.
Broad comparative approach to the behavior of animals and humans with special emphasis on the evolution of human behavior. Topics vary but include some of the following: human evolution, evolutionary and sociobiological theory, animal communication, nonverbal communication, language, cognitive capacities, social behavior and organization, cooperation and altruism, sexual behavior, mating and marriage systems, aggression, and warfare.

## PSYCH 3270 Field Practicum I (also HD 3270) (SBA-AS)

Fall only. 3 credits. Limited enrollment. Prerequisites: PSYCH 3250 or HD 3700 (or taken concurrently), and permission of instructor. Students must commit to taking PSYCH 3280 in spring semester. Letter grades only. H. Segal.
Composed of three components that form an intensive undergraduate field practicum. First, students spend three to six hours a week at local mental health agencies, schools, or nursing facilities working directly with children, adolescents, or adults; supervision is provided by host agency staff. Second, the instructor provides additional weekly individual, clinical supervision for each student. Third, seminar meetings cover issues of adult and developmental psychopathology, clinical technique, case studies, and current research issues. Students write one short paper, two final take-home exams, and present an account of their field experience in class.

## PSYCH 3280 Field Practicum II (also HD 3280) (SBA-AS)

Spring. 3 credits. Limited enrollment. Prerequisites: PSYCH 3270 taken previous semester, PSYCH 3250 or HD 3700 (or taken concurrently), permission of instructor. Letter grades only. H. Segal. Continues the field practicum experience from PSYCH 3270.

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PSYCH 3300 Introduction to
        Computational Neuroscience (also
        BIONB/BME/COGST 3300) (PBS)
    Fall. }3\mathrm{ or 4 credits. C. Linster.
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For description, see BIONB 3300.

## PSYCH 3320 Biopsychology of Learning

 and Memory (also BIONB 3280, PSYCH 6320) (PBS)Spring. 3 credits. Limited to 60 students. Prerequisites: one year of biology and either a biopsychology course or BIONB
2220. Graduate students, see PSYCH 6320.

## T. J. DeVoogd.

Surveys the approaches that have been or are currently being used to understand the biological bases for learning and memory.

Topics include invertebrate, "simple system" approaches, imprinting, avian song learning, hippocampal and cerebellar function, or research using fMRI pathology in humans. Many of the readings are from primary literature.

## PSYCH 3420 Human Perception:

 Applications to Computer Graphics, Art, and Visual Display (also COGST 3420, PSYCH 6420, VISST 3342)
## (KCM-AS)

Fall. 3 or 4 credits; 4-credit option involves term paper. Highly recommended: PSYCH 2050. Graduate students, see PSYCH 6420. D. J. Field.

Our present technology allows us to transmit and display information through a variety of media. To make the most of these media channels, it is important to consider the limitations and abilities of the human observer. The course considers a number of applied aspects of human perception with an emphasis on the display of visual information. Topics include "three-dimensional" display systems, color theory, spatial and temporal limitations of the visual systems, attempts at subliminal communication, and "visual" effects in film and television.

## PSYCH 3470 Psychology of Visual

 Communications (SBA-AS)Spring. 3 credits. Limited to 15 students. Prerequisites: PSYCH 1101 and permission of instructor. J. B. Maas.
Exploration of theories of education, communication, perception, attitude, and behavior change as they relate to the effectiveness of visually based communication systems. Emphasis is on the use of photography and computer graphics to deliver educational messages. A digital camera with manual control of f-stops and shutter speed is mandatory.

## PSYCH 3500 Statistics and Research <br> Design (MQR)

Fall, summer (three-week). 4 credits.
Limited to 120 students. T. Cleland. Acquaints the student with the elements of statistical description (e.g., measures of average, variation, correlation) and, more important, develops an understanding of statistical inference. Emphasis is placed on those statistical methods of principal relevance to psychology and related behavioral sciences.
[PSYCH 3610 Biopsychology of Normal and Abnormal Behavior (also NS 3610) (PBS: Supplementary List)

Spring. 3 credits. Limited to 50 students in psychology and 50 students in nutritional sciences. Prerequisites: junior or senior standing; introductory biology and introductory psychology or permission of instructor. S-U or letter grades. Next offered 2011-2012. B. J. Strupp.
For description, see NS 3610.]

## PSYCH 3800 Social Cognition (SBA-AS)

Fall. 3 credits. Prerequisites: junior or
senior standing. M. Ferguson.
What are the causes and consequences of our own and other's judgments, feelings, attitudes, and behaviors? This course introduces students to social cognition, which is a research perspective that uses both cognitive and social psychological theories and methodologies to explain such social phenomena.

## PSYCH 3850 The Psychology of Emotion

 (SBA-AS)Spring. 3 credits. D. Pizarro.
We've all been mad, sad, happy, and disgusted. Some of us get nostalgic at times, and some of us are easily embarrassed. We've been feeling these emotions nearly our whole lives, and this makes us all emotion experts of a sort.
Nonetheless, these feelings can be mysterious. Where do they come from? Do people across all cultures experience similar emotions? How can we regulate our emotions? Do emotions make us less rational? Do they make us smarter? What triggers certain emotions? Are there gender differences in emotions? The science of emotion is fairly young, but there has been an enormous amount of progress in understanding emotional phenomena in the last few decades. In this course, we will tackle the aforementioned questions and more. By the end of the course you should be familiar with the most influential theories of emotionfrom the evolutionary explanations of emotion to the developmental and social factors involved in making us emotional creatures. So while we are all intuitive experts on emotion, by the end of the course you will have a different kind of expertise-one grounded in the most recent scientific discoveries in this exciting field.

## PSYCH 3860 Self-Regulation and the Will (SBA-AS)

Spring. 3 credits. Limited to 15 students, by application; priority given to junior and senior psychology majors. Prerequisite: PSYCH 2800. D. Regan.
This seminar examines the explosion of recent social psychological work on self-control (i.e., what it is, how it works, and when and why it fails) and relates it to issues revolving around the will, including the meaning (and possible existence, in a sense that is psychologically coherent) of "free will." Readings will include chapters in two recent books: Handbook of Self-Regulation by R. Baumeister and K. Vohs (eds.) and Are We Free? Psychology and Free Will by J. Baer, J. Kaufman, and R. Baumeister (eds.). These chapters may be supplemented by relevant recent empirical articles. Students will come to class prepared to discuss the readings and will write a term paper on a selfregulatory issue of their own choosing. No exams.

## [PSYCH 3960 Introduction to Sensory Systems (also BIONB 3960) (PBS)

Spring. 4 credits. Limited to 35 students.
Next offered 2011-2012. B. P. Halpern. Somesthetic, auditory, and visual system neuroscience principles and methods of study are taught using the Socratic method. Original literature read and discussed.]

## [PSYCH 4050 Intuitive Judgment (SBA-AS)

Fall. 4 credits. Limited to 18 students by application. Priority given to senior psychology majors. Prerequisites: at least one course in each of social and cognitive psychology. Next offered 2011-2012. T. Gilovich.

## This course examines classic and

 contemporary scholarship on the subject of how people make judgments and decisions in their everyday and professional lives.]PSYCH 4101 Undergraduate Seminar in Psychology
Fall or spring. 2 credits. Priority given to psychology majors. Staff.
Information on specific sections for each semester, including instructor, prerequisites, and time and place, may be obtained from the Department of Psychology office, 211 Uris Hall.

## PSYCH 4120 Laboratory in Cognition and Perception (also COGST 4120,

 PSYCH 6121) (KCM-AS)Spring. 4 credits. Limited to 15 students. Prerequisite: statistics and one course in cognition or perception recommended. Graduate students, see PSYCH 6120. D. J. Field.

Laboratory course designed to introduce students to experimental methods in perception and cognitive psychology. Students take part in a number of classic experiments and develop at least one independent project. Computers are available and used in many of the experiments although computer literacy is not required. Projects are selected from the areas of visual perception, pattern recognition, memory, and concept learning.

## [PSYCH 4180 Psychology of Music (also

 MUSIC 4181, PSYCH 6180) (KCM-AS) Fall. 3 or 4 credits, depending on whether student elects to do independent project. Intended for upper-level students in music, psychology, engineering, computer science, linguistics, physics, anthropology, biology, and related disciplines. Some music background desirable but no specific musical skills required. Graduate students, see PSYCH 6180. Next offered 2011-2012. C. L. Krumhansl.Covers the major topics in music treated from a scientific perspective, beginning with music acoustics and extending to music's emotional and social effects.]

## PSYCH 4200 Advanced Neurobiology Learning and Memory (also PSYCH

 6200) (KCM-AS)Spring. 3 credits. Prerequisites: PSYCH 2230 or HD 2200 and BIONB 2220. Offered alternate years. D. Smith.
This seminar will examine the neural mediation of learning and memory processes, broadly defined to include simple and complex forms of learning in humans and animals. After a historical overview, students will discuss cutting-edge literature on the brain mechanisms of learning and memory. Topics will be decided upon by the participants and may include the cellular mechanisms of plasticity (e.g., LTP), neural circuits involved in Pavlovian conditioning and instrumental learning, spatial memory, emotional memory, working memory, and episodic and semantic memory.

## PSYCH 4230 Navigation, Memory, and

 Context: What Does the Hippocampus Do? (also PSYCH 6230) (SBA-AS)Spring. 3 credits. Prerequisites: intended for juniors, seniors, and graduate students. Offered alternate years. D. Smith.
Although the hippocampus has been the subject of intense scrutiny for nearly 50 years, there remains considerable disagreement about functional contributions the hippocampus makes to learning and memory process. This seminar will examine the diverse functions attributed to the hippocampus with an eye toward integrating the differing viewpoints in the literature. After a brief historical overview, students will discuss
cutting-edge literature on the hippocampal role in spatial navigation, learning, and memory, and context processing.

## [PSYCH 4240 Neuroethology (also BIONB 4240) (PBS)

Fall. 4 credits. Prerequisites: BIONB 2210 or 2220 or BIOG 1101-1102 and permission of instructor. S-U or letter grades. disc, one hour each week. Next offered 2011-2012. C. D. Hopkins.
For description, see BIONB 4240.]

## PSYCH 4250 Cognitive Neuroscience (also BIONB 4230, PSYCH 6250) (KCM-AS)

Fall. 4 credits. Prerequisites: introductory biology; biopsychology or neurobiology (e.g., PSYCH 2230 or BIONB 2210, 2220); and an introductory course in perception, cognition, or language (e.g., PSYCH 1102, 2090, 2140, or 2150). Graduate students, see PSYCH 6250. S-U or letter grades. Offered alternate years. B. L. Finlay.
Studies the relationship between structure and function in the central nervous system, stressing the importance of evolutionary and mechanistic approaches for understanding the human behavior and cognition.

## PSYCH 4260 Learning Language (also

COGST 4260, PSYCH 7260) (KCM-AS)
Spring. 4 credits. Prerequisite: PSYCH 2140 or permission of instructor. Letter grades only. S. Edelman.
A survey of a promising new synthesis in the understanding of the cognitive function that is at the core of the human nature: language. The material focuses on two aspects of the study of language: (1) psycholinguistic data and their interpretation, and (2) algorithmic studies and computational modeling. In psycholinguistics, students will read key papers that shed light on the nature of linguistic knowledge ("grammar") possessed by normal adult speakers, and on the learning of this knowledge by children. In computation, the focus is on learning grammar from raw data. The common thread to this course is realism: in psycholinguistics, we shall consider only those results obtained empirically by established psychological procedures (as opposed to intuition, either of experts or of lay speakers); in computation, the only approaches of interest to us are those that are algorithmically tractable, and that are effective when applied to realistic data.

## [PSYCH 4270 Evolution of Language (also COGST 4270, PSYCH 6270)

 Fall. 3 credits. Prerequisite: junior or senior standing; any one course in psychology or human development. Graduate students, see PSYCH 6270. S-U or letter grades. Offered alternate years; next offered 20112012. M. Christiansen.Seminar surveying a cross-section of modern theories, methods, and research pertaining to the origin and evolution of language.]

## PSYCH 4280 Connectionist

 Psycholinguistics (also COGST 4280, LING 4428/6628, PSYCH 6280) Fall. 3 credits. Prerequisite: senior standing or permission of instructor. Graduate students, see PSYCH 6280. Offered alternate years. M. Christiansen. Connectionist psycholinguistics involves using (artificial) "neural" networks, which are inspired by brain architecture, to model empirical data on the acquisition and processing of language. As such, connectionist psycholinguistics has had a far-reachingimpact on language research. This course surveys the state of the art of connectionist psycholinguistics, ranging from speech processing and word recognition, to inflectional morphology, sentence processing, language production, and reading. An important focus of discussion is the methodological and theoretical issues related to computational modeling of psychological data. Furthermore, the course discusses the broader implications of connectionist models of language, not only for psycholinguistics, but also for computational and linguistic perspectives on language.

## [PSYCH 4290 Olfaction and Taste:

 Structure and Function (also BIONB 4290, PSYCH 6290) (PBS)Spring. 4 credits. Next offered 2011-2012. B. Halpern.

Explores structural and functional characteristics of smelling and tasting by reading and discussing current literature in these areas, using the Socratic method.]

## PSYCH 4300 Moral Reasoning (also PSYCH 6300) (SBA-AS)

Fall. 4 credits. Prerequisites: open to junior and senior psychology majors and to graduate students; open to others by permission of instructor. D. Pizarro. In recent years there has been a resurgence of interest in the science of morality. Recently, scientists across a wide range of disciplines have made discoveries that bear on the question of how and why humans have a sense of morality. The goals of this course are to offer an introduction to the science behind our moral sense. To achieve this goal, we will read articles on almost every area of scientific psychology. By the end of the course students should be well versed in the primary issues and debates involved in the scientific study of morality.
PSYCH 4310 Effects of Aging on Sensory and Perceptual Systems (also BIONB 4210, PSYCH 6310) (PBS)
Fall. 3 or 4 credits; 4-credit option involves term paper or creation of relevant web site. Limited to 35 students. Prerequisites: introductory biology or psychology, plus second course in perception, neuroscience, cognitive science. Graduate students, see
PSYCH 6310. B. P. Halpern.
Literature-based examination of postmaturation changes in the perceptual, structural, and physiological characteristics of somesthetic, visual, auditory, and chemosensory systems. Emphasis is on human data, with nonhuman information included when especially relevant. Quality of life issues are included. Current developments in human sensory prosthetic devices are examined, as well as an overview of replacement or regeneration of sensory receptor structures or organs. Brief written statements by e-mail of questions and problems related to each set of assigned readings are required in advance of each class meeting and are automatically distributed to all members of the class. This course is taught using the Socratic method, in which the instructor asks questions of the students. Clickers will be used by students for responses to questions and for attendance, but not for grading. Students read, analyze, and discuss in class difficult original literature dealing with the subject matter of the course. Students are expected to come to each class having already done and thought about the assigned readings, and to take an active part in every class. All examinations are take home.

PSYCH 4320 Topics in Cognitive Science (also BIONB 4330, COGST/LING 4310)

Fall. 4 credits. Prerequisite: COGST/INFO/ PSYCH 2140/6140. S. Edelman.
For description, see COGST 4310.

## [PSYCH 4340 Sensory Construction (also PSYCH 6340)

Spring. 3 credits. Prerequisites: one introductory course in neurobiology (PSYCH 2230 or BIONB 2220) and one intro course in perception or cognition (PSYCH 1102, 2050, 2090, or 2140) or permission of instructor. Offered alternate years; next offered 2011-2012. T. Cleland. Is it true that everything you encounter is stored somewhere in your memory, if only you could recall it? How does that information get into your brain in the first place? This course investigates how coherent sensory percepts are constructed from the physical features of sensory stimuli, the properties of animal sensors and neural circuits, the active allocation of cognitive and physiological resources to selective sampling, and the integration of sampled data, prior knowledge, and expectations. Emphasis is placed on integrating multiple approaches-including biophysical, neurobiological, evolutionary, cognitive, social, and legal-to the problem of complex perception, cognition, and memory.]

## PSYCH 4350 Olfaction, Pheromones, and Behavior

Fall. 4 credits. Prerequisites: introductory biology and course in neurobiology and behavior or biopsychology or 3000-level course in biopsychology or permission of instructor. Offered alternate years. R. Johnston.

Covers chemical signals, olfaction, and behavior in vertebrates (including humans), as well as the neurobiology of olfaction and odor-mediated behaviors. Behavioral topics may vary from year to year but include evaluation of and advertisement for mates, aggression and territorial behavior, parentalyoung interactions, social recognition (species, sex, individual, kin reproductive state, status), memory for odors, odor and endocrine interactions, imprinting, and homing and navigation. Basic aspects of the structure and function of the olfactory system are also covered, including the molecular biology of chemo-reception, olfactory coding, and higher-order processing in the central nervous system. The format includes lectures,
discussions, and student presentations.
PSYCH 4360 Language Development (also COGST/HD 3370, LING 4436) (KCM-AS)
Spring. 4 credits. B. Lust. Open to undergraduate and graduate students. Graduate students should also enroll under HD 6330/LING 4700/PSYCH 6000,
supplemental graduate seminar.
Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. S-U or letter grades. B. Lust.
For description, see HD 3370.
PSYCH 4370 Lab Course: Language Development (also COGST 4500, HD 4370, LING 4450)
Fall. 2 credits. Offered in conjunction with COGST/HD 4360 and LING 4436 ,
Language Development. B. Lust.
Optional supplement to the survey course Language Development (HD 3370, COGST/

LING/PSYCH 4360). Provides students with a hands-on introduction to scientific research, including design and methods, in the area of first-language acquisition. For description, see HD 4370.

## [PSYCH 4380 Social Neuroscience

Fall. 4 credits. Prerequisite: PSYCH 2230, 3220,3320 , or 3260 . Offered alternate years; next offered 2011-2012. B. Johnston. Comparative approach to the neural and endocrine mechanisms of social behavior in animals and humans.]

## PSYCH 4400 To Sleep, Dream, and

Remember (also PSYCH 6400)
Fall. 4 credits. Prerequisites: at least PSYCH 2230 or BIONB 2210. Recommended: additional course in biology,
biopsychology, or neurobiology. S-U or letter grades. Graduate students, see PSYCH 6400. H. S. Porte.
What brain events instigate, maintain, and switch the states of sleep? How does the brain construct a dream? What brain events produce and sustain a night terror? Does the sleeping brain work for memory or against it? These questions will be considered as problems in cognitive neuroscience. Students must be conversant with brain anatomy and brain physiology.

## PSYCH 4410 Laboratory in Sleep

## Research (also PSYCH 6410)

Spring. 4 credits. Lab fee: $\$ 50$. Graduate students, see PSYCH 6410. H. S. Porte. Emphasizing the neurobiology of sleep state, this course introduces students to the laboratory study of human sleep and its psychological correlates. Serving as both experimenter and subject, each student learns the physical rationale and techniques of electroencephalography and other bioelectric measures of behavioral state. Analyzing data they have collected themselves, students work in small groups to complete a collaborative term project. Overnight sleep recording sessions are required.

## PSYCH 4440 Neural Computation (also BIONB 4440) (PBS)

Spring. 3 credits. Limited to 10 students.
Prerequisites: PSYCH 2230 or BIONB 2220, or permission of instructor. S-U or letter grades. Offered alternate years. T. Cleland. Lecture and computer lab course covering the biophysical mechanisms underlying neural computation and information coding by neurons and networks. Students will study and develop computational models of single neurons and small neural networks. An independent modeling project will be required.

## PSYCH 4650 Topics in High-Level Vision

 (also COGST 4650, PSYCH 6650) (KCM-AS)Spring. 4 credits. Graduate students, see PSYCH 6650. Offered alternate years.
S. Edelman and M. Goldstein.

High-level vision is a field of study concerned with functions such as visual object recognition and categorization, scene understanding, and reasoning about visual structure. It is an essentially cross-disciplinary endeavor, drawing on concepts and methods from neuroanatomy and neurophysiology, cognitive psychology, applied mathematics, computer science, and philosophy. This course concentrates on a critical examination of a collection of research publications, linked by a common thread, from the diverse perspectives offered by the different disciplines. Students
write biweekly commentaries on the assigned papers and a term paper integrating the material covered in class.
PSYCH 4700 Undergraduate Research in Psychology
Fall or spring. 1-4 credits. Prerequisite: written permission from staff member who will supervise the work and assign grade must be included with course enrollment material. Students should enroll in section listed for that staff member; section list available from Department of Psychology. S-U or letter grades. Staff.
Practice in planning, conducting, and reporting independent laboratory, field, and/or library research.
PSYCH 4710 Advanced Undergraduate Research in Psychology
Fall or spring. 1-4 credits. Prerequisite: written permission of staff member who will supervise work and assign grade must be included with course enrollment material. Students should enroll in sec listed for that staff member; sec list available from Department of Psychology. S-U or letter grades. Staff.
Advanced experience in planning, conducting, and reporting independent laboratory, field, and/or library research. One, and preferably two, semesters of PSYCH 4700 is required. The research should be more independent and/or involve more demanding technical skills than that carried out in PSYCH 4700.

## PSYCH 4780 Parenting and Child

 Development (also HD 4440, PSYCH 6780) (KCM-AS)Fall. 4 credits. Limited to 25 students.
Intended for seniors and graduate students. Graduate students, see PSYCH 6780.

## M. Goldstein.

## PSYCH 4810 Advanced Social

 Psychology (also PSYCH 6810) Fall. 4 credits. Limited to 15 students, by application. Priority given to senior psychology majors. Graduate students, see PSYCH 6810. D. T. Regan.The focus is on current readings, namely selected articles from very recent issues of the best social psychological journals. Readings are chosen for their importance, their readability, and the likelihood that they will generate stimulating discussion. Students write brief "thought papers" before each class in which they offer suggestions for class discussion based on their close reading of the day's assigned articles. They also write a term paper on a social psychological topic of their own choosing. No exams.

## [PSYCH 4820 Automaticity (also PSYCH

 6820) (SBA-AS)Spring. 4 credits. Prerequisites: PSYCH 2800; at least one course in cognitive psychology or permission of instructor.
Next offered 2011-2012. M. Ferguson.
Critical review of research showing that classic social psychological phenomena can occur without one's awareness, intention, effort, or control.]

## PSYCH 4840 Goals, Needs, and Desires

 (also PSYCH 6840)Spring. 4 credits. M. Ferguson. Limited to
15 students, by application. Grad students, see PSYCH 6840.
Covers recent social psychological research on human goals and desires. We will examine the meaning and similarity of the constructs of goals, motivation, desires, wants, and needs.

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Our discussion will extend to the relevant topics of self-control, free will, nonconscious goal pursuit, liking versus wanting, motivation in nonhuman animals, and the development of goals. We will focus on the social psychological literature, but also will consider recent work in cognitive, social neuroscience, and developmental psychology.

## PSYCH 4850 The Self (also PSYCH 6850)

 (SBA-AS)Spring. 4 credits. Limited to 15 students. Prerequisite: PSYCH 2750 or 2800 or permission of instructor, with priority given to seniors and graduate students.
D. Dunning.

An enduring task in psychological inquiry has been to survey the ways in which a person's self-image influences emotion, thought, and action. What is self-esteem, and is it a good or a bad thing? How do concerns over self-image motivate people? Do people really know themselves accurately? How does a person's sense of self develop, and does it differ across cultures? Students will be introduced to these and other topics by reading original research articles, and should expect to take part in class discussions of the issues raised.

## PSYCH 4910 Research Methods in

 Psychology (also COGST 4910, COGST/PSYCH 6910)Spring. 4 credits. Limited to 15 students. Prerequisite: permission of instructor. V. Zayas.

Research methods are the tools that allow psychologists to test the validity of
hypotheses. This course provides a survey of the methods used by scientists in personality and social psychology as well as related behavioral sciences to empirically test hypotheses. Specifically, this course will discuss the following topics: (1) philosophy of science; (2) research designs and methods; (3) data collection, analysis, and validity; (4) report writing; and (5) recurrent and emerging trends and issues in the field of research methods and quantitative analysis. Students concentrate on completing a small research project in which they conduct an experiment, interpret its data, and write up the results.
[PSYCH 4920 Sensory Function (also BIONB 4920, PSYCH 6920) (PBS) Spring. 4 credits. Limited to 35 students. Prerequisites: 3000-level neuroscience course, or BIONB 2220 or BIOAP 3110, or equivalent; knowledge of elementary physics, chemistry, and behavior. S-U or letter grades. Graduate students, see PSYCH 6920. Offered alternate years; next offered 2012-2013. B. P. Halpern.
In general, this course has covered classical topics in sensory function such as vision, hearing, touch, and balance, as well as sensory processing and location of stimulus sources in space.]

## Advanced Courses and Seminars

Advanced seminars are primarily for graduate students, but with the permission of the instructor they may be taken by qualified undergraduates. The selection of seminars to be offered each semester is determined by the needs of the students.
A supplement describing these advanced seminars is available at the beginning of each semester and can be obtained from the department office ( 211 Uris Hall). The following courses may be offered either
semester and carry 4 credits unless otherwise indicated.

## PSYCH 6000 General Research Seminar <br> PSYCH 6050 Perception (also PSYCH 2050) <br> Fall. 4 credits. Non-arts graduate students only. J. E. Cutting.

## PSYCH 6100-6110 Perception

PSYCH 6120 Perception Lunch Seminar Spring and fall. J. Cutting.
PSYCH 6121 Laboratory in Cognition and Perception (also PSYCH 4120) Spring. 4 credits. D. J. Field.
PSYCH 6140 Cognitive Psychology (also COGST/PSYCH 2140, COGST 6140) Spring. 4 credits. S. Edelman
[PSYCH 6180 Psychology of Music (also MUSIC 4181, PSYCH 4180)
Fall. 4 credits. Next offered 2011-2012. C. Krumhansl.]

PSYCH 6181 Topics in Psycholinguistics
PSYCH 6200 Advanced Neurobiology and Memory (also PSYCH 4200)
Spring. 3 credits. D. Smith.
PSYCH 6210 Behavioral and Brain Sciences
Fall and spring. 4 credits each semester.
PSYCH 6220 Topics in Perception and Cognition
PSYCH 6230 Navigation, Memory, and Context: What Does the Hippocampus Do? (also PSYCH 4230)

Spring. 4 credits. D. Smith.
PSYCH 6250 Cognitive Neuroscience (also PSYCH 4250)
Fall. 4 credits. B. L. Finlay.
[PSYCH 6270 Evolution of Language (also COGST/PSYCH 4270)
Fall. 3 credits. Next offered 2011-2012. M. Christiansen.]

PSYCH 6271 Topics in Biopsychology Fall or spring. Staff.
PSYCH 6280 Connectionist Psycholinguistics (also COGST/ PSYCH 4280, LING 4428/6628)
Fall. 3 credits. M. Christiansen.
[PSYCH 6290 Olfaction and Taste: Structure and Function (also BIONB/ PSYCH 4290)
Spring. 4 credits. Next offered 2011-2012. B. P. Halpern.]

PSYCH 6300 Moral Reasoning (also PSYCH 4300)
Fall. 4 credits. D. Pizarro.
PSYCH 6310 Effects of Aging on Sensory and Perceptual Systems (also BIONB 4210, PSYCH 4310)
Fall. 4 credits. B. P. Halpern.
PSYCH 6320 Biopsychology of Learning and Memory (also BIONB 3280, PSYCH 3320)
Spring. 4 credits. T. J. DeVoogd.
PSYCH 6340 Sensory Construction (also PSYCH 4340)
Spring. 3 credits. T. Cleland.

PSYCH 6350 Evolutionary Perspectives on Behavior

PSYCH 6400 To Sleep, Dream, and Remember (also PSYCH 4400)
Fall. 4 credits. H. S. Porte.
PSYCH 6410 Laboratory in Sleep
Research (also PSYCH 4410)
Spring. 4 credits. H. S. Porte.
PSYCH 6420 Human Perception: Applications to Computer Graphics, Art, and Visual Display (also PSYCH/ COGST 3420, VISST 3342)
Fall. 4 credits. D. J. Field.
PSYCH 6430 Statistics in Current Psychological Research
PSYCH 6500 Special Topics in Cognitive Science (also COGST 5500)
PSYCH 6650 Topics in High-Level Vision (also PSYCH/COGST 4650)
Spring. 4 credits. Offered alternate years. S. Edelman.

PSYCH 6780 Parenting and Child Development (also PSYCH 4780, HD 4440)

Fall. 4 credits. M. Goldstein.
PSYCH 6800 Experimental Social Psychology
PSYCH 6810 Advanced Social Psychology (also PSYCH 4810)
Fall. 4 credits. D. T. Regan.
[PSYCH 6820 Automaticity (also PSYCH 4820)

Spring. 4 credits. Next offered 2011-2012. M. Ferguson.]

PSYCH 6830 Affects and Cognition
Fall. 4 credits. A. M. Isen.
PSYCH 6840 Goals, Needs, and Desires (also PSYCH 4840)
Spring. 4 credits. M. Ferguson. Limited to 15 students, by application.
PSYCH 6850 The Self (also PSYCH 4850) Spring. 4 credits. D. Dunning.
PSYCH 6910 Research Methods in Psychology (also COGST/PSYCH 4910)

Spring. 4 credits. V. Zayas.
[PSYCH 6920 Sensory Function (also BIONB/PSYCH 4920)
Spring. 4 credits. Offered alternate years; next offered 2013-2014. B. P. Halpern]
[PSYCH 6960 Introduction to Sensory Systems (also BIONB/PSYCH 3960)
Spring. 4 credits. Next offered 2011-2012.
B. P. Halpern.]

PSYCH 7000 Research in Biopsychology
PSYCH 7090 Developmental Psychology (also PSYCH 2090)
Spring. 4 credits. M. Goldstein.
PSYCH 7100 Research in Human Experimental Psychology (also COGST 7100)
PSYCH 7130 Information Processing: Conscious and Nonconscious Spring. 4 credits. R. Staff.

## [PSYCH 7160 Auditory Perception (also

 PSYCH 3160)Spring. 4 credits. Next offered 2011-2012. C. L. Krumhansl.]

## PSYCH 7200 Research in Social Psychology and Personality

## [PSYCH 7220 Hormones and Behavior

 (also BIONB/PSYCH 3220)]PSYCH 7260 Learning Language (also COGST/PSYCH 4260)
Spring. 4 credits. S. Edelman

## PSYCH 7750 Proseminar in Social

 Psychology IFall. 2 credits. Limited to 10 students. Prerequisites: graduate students in social psychology; permission of instructors.
D. A. Dunning, M. Ferguson,
T. D. Gilovich, D. Pizarro, D. T. Regan, and V. Zayas.

First semester of a yearlong discussion-seminar course intended to give graduate students an in-depth understanding of current research and theory in social psychology. Emphasizes social cognition, but other topics, such as group dynamics, social influence, the social psychology of language, and emotional

## experience, are covered.

## PSYCH 7760 Proseminar in Social Psychology II

Spring. 2 credits. Limited to 10 students. Prerequisites: graduate students in social psychology; permission of instructors.
D. A. Dunning, M. Ferguson,
T. D. Gilovich, D. Pizarro, D. T. Regan, and V. Zayas.

Second semester of a yearlong discussionseminar course intended to give graduate students an in-depth understanding of current research and theory in social psychology. Emphasizes social cognition, but other topics, such as group dynamics, social influence, the social psychology of language, and emotional experience are covered.

## PSYCH 9000 Doctoral Thesis Research in Biopsychology

PSYCH 9100 Doctoral Thesis Research in Human Experimental Psychology
PSYCH 9200 Doctoral Thesis Research in Social Psychology and Personality

## Summer Session Courses

The following courses are also frequently offered in the summer session, though not necessarily by the same instructor as during the academic year. Not all of these courses are offered in a particular summer. Information regarding these courses and additional summer session offerings in psychology is available from the department before the end of the fall semester.

PSYCH 1101 Introduction to Psychology: The Frontiers of Psychological Inquiry
PSYCH 1102 Introduction to Cognitive Science
PSYCH 1128 Introduction to Psychology: Personality and Social Behavior
PSYCH 1990 Sports Psychology
PSYCH 2230 Introduction to Biopsychology
PSYCH 2800 Introduction to Social Psychology
PSYCH 3500 Statistics and Research Design

## RELIGIOUS STUDIES MAJOR

D. Boucher, director; A. Blackburn, R. Brann, C. M. Carmichael, A. Chignell, K. Clinton, L. Donaldson, J. Fajans, D. Fredericksen, D. Gold, S. Greene, K. Haines-Eitzen, J. S. Henderson, T. D. Hill, T. J. Hinrichs, D. Holmberg, P. R. Hyams, W. J. Kennedy, J. M. Law, S. MacDonald, K. S. March, L. Monroe, R. L. Moore, D. I. Owen, D. S. Powers, C. Robinson, P. S. Sangren, S. Toorawa, M. Washington, A. Willford

The Religious Studies Program, an academic unit providing a major in the scholarly study of religion, offers a wide variety of courses addressing various approaches to, and topics in, the study of religion.
The Religious Studies Program is designed to meet the needs of three classes of students: (1) students planning to pursue advanced degrees in the academic study of religion or allied disciplines or subdisciplines (e.g., history of religions, religion and literature, religion and psychology, ethics, theology, area studies); (2) students seeking courses on topics relating to religion to fulfill distribution requirements; and (3) students desiring a more systematic exposure to the academic study of religion as a significant component of a liberal arts education. To all students, our program offers an excellent opportunity to develop a deeper understanding and appreciation of the complex ways in which religious traditions inform human thought and behavior. The courses offered through our program are built on the established scholarly tradition of the study of religion as an academic, as opposed to confessional, pursuit. Religious traditions are explored in all of their complexity through comparative contextual (in specific historical or cultural contexts), and thematic studies.
The program also hosts lecture series, conferences, symposia, and periodic social gatherings for faculty members and students throughout the academic year to foster a sense of intellectual community.

## The Major in Religious Studies

Signing into the major: To sign into the major in Religious Studies, a student must have completed at least one course in Religious Studies before scheduling an appointment with the program director. Here is the process:

1. Schedule an appointment with the director of the Religious Studies Program, whose name and e-mail address can be found on the Religious Studies web site.
2. In addition to a copy of the current Cornell transcript (the informal one students regularly receive is acceptable), students should bring to their meeting with the director all of these forms, available in the Religious Studies office, 409 White Hall:
a. a completed Religious Studies major application form
b. a proposed "course of study," which will be used as a guide in the student's conversation with the director and revised for formal submission to the program upon his or her entrance as a major
c. a College of Arts and Sciences advisor/ major form, which will be signed by the director and advisor. The advisor will be assigned in this meeting, based on interest.

## Advising in the Religious Studies

Program: Upon entering the major in Religious Studies, a student is assigned a faculty advisor whose area of expertise most closely matches the proposed interest of the student. An up-to-date approved advisor list is available in the Religious Studies office. Note that not all faculty members who cross-list courses with RELST can serve as RELST advisors. Working closely with one's RELST advisor when selecting courses is an important component of this program, enabling students to fulfill the requirements for the major while creating an integrated and coherent course of study out of our large number of multidisciplinary course offerings.
To graduate as a major in Religious Studies, a student must (1) complete with letter grades the program's three core courses, RELST 2250 Introduction to Asian Religions; RELST 2651 Judaism, Christianity, and Islam; and RELST 4449 History and Methods of the Academic Study of Religion; and (2) complete with letter grades seven additional courses approved for the major.

## Students must complete 10 courses cross-listed

 with Religious Studies:
## Three Core Courses:

RELST 2250 Introduction to Asian Religions RELST 2651 Judaism, Christianity, and Islam
RELST 4449 History, Theory, and Methods in the Academic Study of Religion
The requirement for either or both RELST 2250 and 2651 may be satisfied by taking two or more courses in the relevant traditions with some attention to breadth. The requirement for RELST 2250 may be satisfied by taking at least one course on South Asian traditions AND one course on East Asian traditions. The requirement for RELST 2651 may be satisfied by taking at least one course in each of two or more of the traditions of Near Eastern origin (Judaism, Christianity, and Islam). Absolutely no student will be exempted from RELST 4449.

## Seven Additional Courses

In selecting their additional courses for the major, students are expected to consult closely with their advisors to ensure that their programs have adequate breadth in Religious Studies generally and depth in a particular tradition, cultural area, or approach to the field.
Most courses approved for the major are offered by cooperating departments within the College of Arts and Sciences. A comprehensive up-to-date list of these courses is maintained at the office of the Religious Studies Program, 409 White Hall.

## Graduating with Honors in Religious Studies:

## General Information

1. Eligibility. 3.0 cumulative average and 3.5 average inside the major with no grade in the major below B-. Program director notifies eligible candidates during the spring semester of the junior year or before commencement of final year.
2. Honors Courses. Candidates must sign into RELST 4995 Senior Honors Essay for 8 credits (two courses) for two semesters. After the first semester, an R in the transcript indicates that this course (usually for 8 credits) is a yearlong course. When the project is completed at the end of the second semester, the grade recorded counts for all 8 credits. (The 8 -credit limit is the result of the conviction that earning more than 8 credits for a single piece of one's undergraduate education is unwise.)

The student submits the honors proposal (with and according to the program's instruction/cover sheet) to the Religious Studies administrator before the end of the spring semester of the junior year, or not later than Sept. 15 of the final year. The administrator then approves the student's signing into the honors courses.
3. Honors Committee-three faculty members. While students are required to have three faculty members on their committee at the time of the submission of the final draft, only two of them must be identified when the proposal is submitted. In the event the advisor is on leave, the program will assign a committee member from the list of approved RELST advisors. The three members should be:
a. The professor who has agreed to work closely with the student over the year and to be the supervisor/grader of the project is chair of the committee.
b. The student's Religious Studies major advisor (required)
c. Another knowledgeable faculty member Sometimes the advisor is the supervisor/ chair. If that is the case, the student needs two additional knowledgeable professors for the committee of three

## Courses Approved for the Major Sponsored by Religious Studies

[RELST 2110 Black Religious Traditions: Sacred and Secular (also AMST/HIST 2110) (HA-AS)

Spring 4 credits. Next offered 2011-2012. M. Washington.]
[RELST 2204 Introduction to Qu'ranic Arabic (also ASRC 2106, NES 2204) @ (LA-AS)
Spring. 4 credits. Next offered 2011-2012. H. Al-Masri.]

RELST 2212 Qur'an and Commentary (also NES 2212) @ \# (LA-AS)
Spring. 4 credits. D. Powers.
For description, see NES 2212.
RELST 2250 Introduction to Asian Religions (also ASIAN 2250) @ \# (HA-AS)
Spring. 3 credits. D. Boucher
For description, see ASIAN 2250.
[RELST 2277 Meditation in Indian Culture (also ASIAN 2277) @ \# (CA-AS)
Spring. 3 credits. Next offered 2011-2012. D. Gold.

For description, see ASIAN 2277.]

## RELST 2299 Buddhism (also ASIAN 2299)

 @ \# (CA-AS)Fall. 3 credits. D. Boucher.
For description, see ASIAN 2299.
[RELST 2611 Prophecy in Ancient Israel (also JWST/NES 2611)
Spring. 3 credits. Next offered 2011-2012. L. Monroe.]
[RELST 2629 Intro to the New Testament (also CLASS 2613, JWST/NES 2629) @ \# (HA-AS)
Spring. 3 credits. Next offered 2011-2012. K. Haines-Eitzen.]

RELST 2630 Religion and Reason (also PHIL 2530) (KCM-AS)
Spring. 4 credits. S. MacDonald.
For description, see PHIL 2530.
RELST 2644 Introduction to Judaism (also JWST/NES 2644)
Spring. 3 credits. L. Monroe.
For description, see NES 2644.
RELST 2651 Judaism, Christianity, and Islam (also NES 2651) @ \# (HA-AS)
Fall. 3 credits. K. Haines-Eitzen.
For description, see NES 2651.
RELST 2655 Intro to Islamic Civilization (also HIST 2530, NES 2655) @ \# (HA-AS)
Fall. 3 credits. D. Powers.
For description, see NES 2655.
RELST 2724 Introduction to the Hebrew Bible (also JWST/NES 2724) @ \# (LA-AS)
Fall. 3 credits. L. Monroe.
For description, see NES 2724.
RELST 3150 Medieval Philosophy (also PHIL 3210) \# (KCM-AS)
Fall. 4 credits. G. Pini.
For description, see PHIL 3210.
RELST 3230 Myth, Ritual, and Symbol (also ANTHR 3420) @ (CA-AS)
Spring. 4 credits. D. Holmberg.
For description, see ANTHR 3420.
RELST 3260 Christianity and Judaism (also COML 3260) \# (LA-AS)
Spring. 4 credits. C. Carmichael.
For description, see COML 3260.
RELST 3280 Literature of the OId Testament (also COML 3280) @ \# (LA-AS)
Fall. 4 credits. C. Carmichael.
For description, see COML 3280.

## RELST 3309 Temple in the World:

 Buddhism in Contemporary South and Southeast Asia (also ASIAN 3309) @ (CA-AS)Spring. 3 credits. A. Blackburn.
For description, see ASIAN 3309.
RELST 3310 Heavens, Hells, and Purgatories: Buddhist and Christian Notions of the Afterlife (also ASIAN 3310) @ \# (CA-AS)

Fall. 4 credits. D. Boucher.
For description, see ASIAN 3310.
RELST 3342 Death of God (also FREN/ HIST/JWST 3342, GERST 3542) (HA-AS)
Fall. 4 credits. C. Robcis.
For description, see HIST 3342.
[RELST 3347 Tantric Traditions (also ASIAN 3347) @ \# (CA-AS)
4 credits. Next offered 2011-2012.
D. Gold.]
[RELST 3351 Indian Religious Worlds (also ASIAN 3351) @ (CA-AS)
Spring. 4 credits. Next offered 2012-2013. D. Gold.]
[RELST 3355 Japanese Religions (also ASIAN 3355) @ (CA-AS)
4 credits. Next offered 2011-2012.
J. M. Law.]
[RELST 3359 Japanese Buddhism (also ASIAN 3359) @ \# (HA-AS)
Spring. 4 credits. Next offered 2012-2013. J. M. Law.]

RELST 3587 Quran and Its Interpreters (also NES 3587) @ \# (CA-AS)
Fall. 4 credits. D. Powers.
For description, see NES 3587
RELST 3588 Biblical Archaeology (also ARKEO/JWST/NES 3588) @ \# (CA-AS)
Spring. 4 credits. L. Monroe.
For description, see NES 3588.
[RELST 3629 Intro to the New Testament (also CLASS/JWST/NES 3629)
Spring. 1 credit. Next offered 2011-2012.
K. Haines-Eitzen.]
[RELST 3635 Christianization of the Roman World (also CLASS/HIST/NES 3625) @ \# (HA-AS)

Fall. 4 credits. Next offered 2012-2013.
E. Rebillard.]
[RELST 3644 Sages and Saints/Ancient World (also CLASS 3644) \# (HA-AS)
4 credits. Next offered 2012-2013. Staff.]
[RELST 3677 Search for the Historical Mohammad (also NES 3677) @ \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012. D. Powers.]

RELST 3680 Marriage and Sexuality in Medieval Europe (also HIST/FGSS 3680) \# (HA-AS)

Fall. 4 credits. P. Hyams.
For description, see HIST 3680.
RELST 3720 Women in Ancient Israel (also NES 3720) (LA-AS)
Fall. 4 credits. L. Monroe.
For description, see NES 3720.
[RELST 3731 Religion and Society in Early Modern Europe (also HIST 3731) \# (HA-AS)

Spring. 4 credits. Next offered 2011-2012. D. Corpis.]
[RELST 4102 Biblical Hebrew: Genesis (also JWST/NES 4102) @ \# (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
L. Monroe.]

RELST 4260 Biblical Seminar II (also COML 4260) \# (HA-AS)
Spring. 4 credits. C. Carmichael.
For description, see COML 4260.
RELST 4280 Biblical Seminar I (also COML 4280) @ \# (HA-AS)
Fall. 4 credits. C. Carmichael.
For description, see COML 4280.
[RELST 4405 Zen Buddhism: Experience and Ideology (also ASIAN 4405) @ \# (CA-AS)
4 credits. Next offered 2011-2012.
J. M. Law.]
[RELST 4438 Monks, Texts, and Relics: Transnational Buddhism in South and Southeast Asia (also ASIAN 4438/6638) (CA-AS)
Spring. 4 credits. Next offered 2011-2012 A. Blackburn.]

## RELST 4444 Ritual Puppetry in a Global

 Context (also ASIAN 4444) @ \# (CA-AS)Fall. 4 credits. J. M. Law.
For description, see ASIAN 4444.
RELST 4449 History and Methods of the Academic Study of Religion (also ASIAN 4449) \# (KCM-AS)
Spring. 4 credits. Requirement for Religious Studies majors. J. M. Law and D. Boucher. For description, see ASIAN 4449.

## [RELST 4460 Indian Meditation Texts

 (also ASIAN 4460) @ \# (KCM-AS)Fall. 4 credits. Next offered 2012-2013.
D. Gold.

For description, see ASIAN 4460.]
[RELST 4462 Religion, Colonialism, and Nationalism in South and Southeast Asia (also ASIAN 4462/6662) @ (CA-AS)
4 credits. Next offered 2011-2012.
A. Blackburn.]
[RELST 4489 Religion and Sustainability (also ASIAN 4489) @ (CA-AS)
Fall. 4 credits. Next offered 2012-2013.
A Blackburn.]

## [RELST 4639 Readings in Arabic

 Historical Texts (also NES 4639) @ \# (HA-AS)Spring. 4 credits. Next offered 2011-2012 D. Powers.]

RELST 4845 Secularism and Its Discontents (also GOVT/SHUM 4845) Fall. 4 credits. E. Anker.
For description, see SHUM 4845.

## RELST 4990-4991 Directed Study

4990, fall; 4991, spring. 2-4 credits each semester. For majors in Religious Studies; permission of director required. Staff.
RELST 4995 Senior Honors Essay
Fall and spring (two semesters). 8 credits. Requirement for honors in Religious Studies. Staff.

## ROMANCE STUDIES

R. Klein, acting chair, fall; D. Cruz de Jesús (associate chair); G. Aching, T. Alkire, S. Amigo-Silvestre, M. Balsa (visiting), M. Baraldi, K. Bättig von Wittelsbach, M. Beviá, T. Beviá, B. Bosteels, T. Campbell, F. Cervesi, D. Castillo, C. Doumet (visiting), L. Dubreuil, T. Fallman, D. Fieni (visiting), M. A. Garcés, M. Greenberg, L. Horne, C. Howie, P. Keller, , C. Lawless, S. LoBello, K. Long, J. Luks, N. Maldonado-Méndez, T. McNulty, M. Migiel, J. Oliveira, J. E. PazSoldán, S. Pinet, K. Pinkus, M. K. Redmond, J. Routier-Pucci, K. Serafin, C. Sparfel, B. Teutli, S. Tun, M. C. Vallois, C. Waldron. Emeriti: C. Morón Arroyo, J. Béreaud, A. Colby-Hall, N. Furman, A. Grossvogel, P. Lewis, A. Seznec. Adjunct Professor: Anne Berger. Adjunct Associate Professor: S. Tarrow.
The Department of Romance Studies offers courses in the following areas: French,
Hispanic, Italian, and Luso-Brazilian literatures; French, Italian, Portuguese, and Spanish
languages; Francophone, Italian, LusoBrazilian, and Hispanic cultures; and linguistics and semiotics. Through its course offerings and opportunities for independent study, the department seeks to encourage study of the interactions of the Romance literatures among themselves, with other literatures, and with other fields of inquiry.

## French

T. Alkire, L. Dubreuil, D. Fieni (visiting),
M. Greenberg, C. Howie, R. Klein, S. LoBello,
K. Long, J. Luks, T. McNulty, C. Sparfel, S. Tun, M. C. Vallois, C. Waldron. Emeriti: J. Béreaud,
A. Colby-Hall, N. Furman, D. I. Grossvogel,
P. Lewis, A. Seznec. Adjunct Professor:
A. Berger. Adjunct Associate Professor:
S. Tarrow

## The Major

French is a national language in 28 countries and is spoken widely in at least 18 more. The French brought the world the Bayeux Tapestry (arguably the world's first comic strip),
Versailles, Impressionism, Surrealism, New
Wave cinema, Poststructuralist Theory, and many other movements and works that have been influential for world culture.
The major in French is divided into two tracks: French literature and French cultural studies. Prospective majors should try to plan their programs as far ahead as possible, especially if they intend to study abroad. For further information, students are asked to consult the director of undergraduate studies.

## Track 1: French Literary Studies

This option is designed to give students mastery of the oral and written language, as well as knowledge and understanding of French and Francophone literatures and cultures, and to develop their skills in literary analysis.

## Prerequisite

FREN 2190

## Shared Core Courses

FREN 2210
FREN 3120

## Core Courses

FREN 3210
FREN 3220

## Elective Courses

five (5) literature, culture, or linguistic courses

## Track 2: French Cultural Studies

This option is designed to give students mastery of the oral and written language, as well as a broader knowledge of French and Francophone culture in an interdisciplinary context.

## Prerequisite

FREN 2190

## Shared Core Courses

FREN 2210
FREN 3120

## Core Courses

FREN 2240, or 2270
FREN 3380

## Electives

five (5) literature, culture, or linguistic courses

## The Following Rules Apply to Both Tracks

Three of the non-core courses must be in French (either taught in Romance Studies or in a Cornell-approved study abroad program in a Francophone country) and be on French or Francophone subjects. Only courses above the level of FREN 3130 can count toward the major. Two courses may be in English and/or in related fields (e.g., History, Art History, Government, Anthropology, Sociology); 50 percent of the subject matter in these courses must be related to France or the Francophone worlds (e.g., French, History).
One of these courses must be on pre-1789 literature or culture; one must be on Francophone literature or culture; and one must be at the 4000 level. Please note that in some classes, one course may cover two of these requirements (for example, a 4000-level course may also be on a pre-1789 topic, such as Medieval or Early Modern literature or culture.
Students are encouraged to study abroad through Cornell-sponsored or Cornellapproved programs, such as EDUCO in Paris. When appropriate, this work can be counted toward the required course work for the major. Students should consult with the director of undergraduate studies of Romance Studies, the Study Abroad advising dean, and Cornell Abroad, as well as with their faculty advisor before taking courses abroad to assure that they are appropriate.

## Administration of the French Major

Students are admitted to the major by the director of undergraduate studies but are guided by their individual advisors. A copy of each student's progress is given to the director of undergraduate studies for approval and safe-keeping.

## Minor in French Studies

The purpose of the minor in French Studies is to supplement a student's major with a complementary focus or concentration that is indicated on the graduate's transcript. Organized by the interdisciplinary Program in French Studies, it is designed to be compatible with all kinds of majors and is open to students in all the undergraduate colleges. The minor promotes broad understanding of French culture, as well as Francophone literatures, societies, and their political/ economic systems; it also encourages students to refine and practice their language skills. Students pursuing the minor must attain proficiency (by taking a placement exam or completing a 2000-level course in French) and must take the core course The French Experience (FREN 2240) or an approved equivalent of the core course (approved alternatives will be listed on the program web site). Students may also petition the program director to use an advanced course conducted in French as their core course. Completion of the minor requires, in addition to the core, three nonlanguage courses on French and Francophone topics. Only one of the four courses required for the minor can be taken for S-U grades.
Applications for the minor are accessible at the French Studies web site, www.einaudi. cornell.edu/french-studies/about/index.asp, and should be submitted to the Department of

Romance Studies (306 Morrill Hall) or to Callean Hile at clh2@cornell.edu.

## Study Abroad in France

French majors or other interested students may study in France for one or two semesters during their junior year. Opting for one of several study-abroad plans recognized by the Department of Romance Studies facilitates the transfer of credit. Information about these plans is available from the director of undergraduate studies.
Students must be Cornell undergraduates with a strong academic record. The minimum French preparation is the completion of FREN 2190 or its equivalent in advanced credit or placement by the Cornell CASE examination. Taking FREN 3010 or 3050, or even 3120 or 3130 is, however, strongly recommended Students interested in studying in France are encouraged to consider the special benefits offered by EDUCO, the program in Paris cosponsored by Cornell, Emory, and Duke Universities. EDUCO offers advanced students a challenging course of study and the experience of total immersion in French life and culture in Paris. Participants in this program may spend the year or the semester as fully matriculated students at the Universities of Paris VII or IV and other institutions of higher learning in Paris, including the possibility of study at the Institut d'Etudes des Sciences Politiques (Sciences Po), selecting courses in many fields from the regular university course offerings. Students begin the academic year with an intensive three-week orientation in French history, society, and daily life. While it is possible to enroll in the EDUCO Program for one semester, admission will be offered first to students planning to study abroad for the full academic year

EDUCO maintains a center in Paris with full support staff. The resident director, chosen annually from the Cornell, Emory, and Duke faculties, teaches a special seminar each semester, provides academic advice, and helps ensure the quality of the courses. The center, which includes a small library and wordprocessing facilities, is regularly used by students for special tutorials, seminars, and lectures, as well as informal gatherings.

Honors. The honors program encourages well-qualified students majoring in French literature and culture to do independent work in French beyond the required course work for the major. The preparation of the senior honors essay, generally spread over two semesters, provides a unique learning opportunity, since it allows for wide reading and extensive rewriting to a degree not possible in the case of course papers.
To be eligible for honors, students must have a general grade point average of at least 3.00 and a grade point average of at least 3.5 in the French major.
No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisors who have agreed to supervise their work. They may receive course credit by enrolling in FREN 4290-4300, but these independent study courses must be taken in addition to the courses that meet the minimum requirements for the major. At the end of the senior year, each honors student is examined orally on the honors essay by a jury consisting of his or her faculty advisor and two other faculty
members. The senior essay is to be made available for reading by the jury on or before April 15. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay

## Courses in the French Program

Enrollment in a language course is conditional upon the student's eligibility for the particular level and on attendance at the first scheduled class session. Because of the high demand for language courses, a student who fails to attend the first class meeting will be dropped so others may register.

Note: Students placed in the 2000-level courses have the option of taking language and/or literature courses.

## FREN 1210-1220 Elementary French

1210, fall; 1220, spring. 4 credits each term. Students who have previously studied French must have an LPF score lower than 37 , or SAT II lower than 410, to be eligible for FREN 1210. Prerequisite for 1220: LPF score 37-44 or SAT II 410-480, FREN 1210
J. Luks (course coordinator) and staff.

FREN 1210-1220 is a two-semester sequence of courses designed to provide a thorough grounding in French language and an introduction to intercultural competence as preparation for real-world application or eventual work in literary and/or cultural studies. Classes provide context- and genrespecific practice in speaking, listening reading, and writing, as well as analytical skills for grammar, with the goal of helping students to develop the necessary tools to become independent language learners.

## FREN 1230 Continuing French

Fall or spring. 4 credits. Prerequisite: FREN 1220 or an LPF score of $45-55$ or SAT II 490-590. Recommended courses after
FREN 1230: FREN 2060 or 2090.
C. Waldron (course coordinator) and staff. FREN 1230 is an all-skills course designed to improve pronunciation, oral communication, and reading ability; to establish a groundwork for correct writing; and to provide a substantial grammar review. The approach in the course encourages the student to see the language within the context of its culture

FREN 2060 French Intermediate Reading and Writing
Fall or spring. 4 credits. Satisfies Option 1 of language requirement.
Prerequisite: FREN 1230, LPF score 56-64, or SAT II 600-680. Conducted in French. Recommended courses after FREN 2060 FREN 2100, 2190, or 2210. Students who have taken FREN 2060 are not eligible to take FREN 2090 for credit. S. Tun.
This language course is designed for students who want to focus on their reading and writing skills. Emphasis is placed on grammar review and expansion, vocabulary
development, and appreciation of different styles of language. Diverse text types are used, including a contemporary novel and studentselected material.

## FREN 2090 French Intermediate

 Composition and Conversation IFall, spring, or summer. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 1230, LPF score 56-64, or SAT II 600-680. Recommended courses after FREN 2090: FREN 2100, 2190, or 2210. Students who have taken FREN 2090 are not eligible to take FREN 2060 for credit. C. Sparfel (course coordinator) and staff; summer: C. Waldron.
This intermediate-level course is designed for students who want to focus on their speaking and writing skills. Emphasis is placed on strengthening of grammar skills, expansion of vocabulary and discourse levels to increase communicative fluency and accuracy. The course also provides continued reading and listening practice as well as development of effective language learning strategies.

## FREN 2100 Pronunciation of Standard

 FrenchSpring. 3 credits. Cannot serve to fulfill language requirement. Prerequisite:
FREN 2060 or 2090 or higher, or CASE Q+ or permission of instructor. T. Alkire. This intermediate-level course focuses on accent reduction. Students will engage in systematic listening and pronunciation exercises while simultaneously learning how to transcribe French sounds, a skill essential to mastering the language's complex soundspelling correspondences and being able to pronounce correctly words newly encountered in reading. The pronunciation exercises target accurate perception and production of vowels, consonants, and basic intonational patterns, as well as speed of production. During the last four weeks of the course, students begin practice with expressive intonation. Class work includes memorization of short dialogues and/or scenes from films. By the end of the course, students will achieve noticeably improved pronunciation, greater fluency, improved aural comprehension, and increased self-assurance in spoken French.

## FREN 2190 French Intermediate

 Composition and Conversation II Fall or spring. 4 credits. Satisfies Option 1 of language requirement.Prerequisite: FREN 2060 or 2090 or CASE Q+. Taught in French. FREN 2210 may be taken concurrently with 2190.
Recommended courses after FREN 2190: FREN 2210, 3010, or 3050. S. LoBello (course coordinator) and staff.
This course emphasizes conversation based on short stories, poems, a play, a novel, newspaper articles, short videos, and oral presentations by students. Improving grammatical accuracy and enriching vocabulary in oral and written expression of French occur in the lively classroom discussions, as well as through written and oral analyses of the readings, compositions on student-selected topics, and through grammar review. Themes and emphases may vary from section to section.

## FREN 2210 Reading, Looking, Thinking: Introduction to Interpretation

 (LA-AS)Fall or spring. 3 credits. Satisfies Option 1 of language requirement.
Prerequisite: FREN 2060 or 2090 or CASE
Q+. Conducted in French. Staff.
Designed to introduce students to methods of textual analysis, through reading and
discussion of works in various genres
(narrative prose, drama, poetry) from the

French and Francophone world. Emphasizes the development of analytical skills, in particular close readings by a variety of authors from different periods.

## FREN 2270 Versions of Versailles \# (LA-AS)

Fall. 4 credits. Conducted in English. Used as introduction to French Studies major. L. Ferri and R. Klein.

This course will consider the chateau of Versailles as an index of modern French civilization from its political and aesthetic origins at the court of Louis XIV to the present. The course will examine the role played by the chateau in the history of France, particularly at decisive moments. Versailles will be taken, as well, as a cultural icon reflecting, in literature, cinema, and fashion, widely held myths and conceptions of France.

## FREN 2280 Introduction to LGBT Studies (also FGSS 2290)

Fall. 4 credits. C. Howie.
For description, see FGSS 2290.

## FREN 3010 Advanced French

 Composition and ConversationFall or spring. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 2190 or CASE Q++. Recommended courses after FREN 3010: FREN 2210, 3120, or above. FREN 2210 may also be taken concurrently with 3010. Students who have taken FREN 3050 are not eligible to take FREN 3010 for credit. S. LoBello (course coordinator) and staff.
In this course, oral communication skills, writing practice, and a comprehensive review of fundamental grammatical structures are integrated with the reading of short stories and articles on current events taken from French magazines or newspapers, chosen for thematic or cultural interest. Students write weekly papers (essays or translations) and give at least one oral presentation in class.

## FREN 3050 Advanced French through

 FilmFall or spring. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 2190 or CASE Q++. Recommended courses after FREN 3050: FREN 2210, 3120 or above. FREN 2210 may also be taken concurrently with 3050 . Students who have taken FREN 3010 are not eligible to take FREN 3050 for credit. C. Waldron.
This language course provides students with opportunities to further develop their written and oral communication, as well as their listening and reading skills, through the use of French contemporary films, related readings, and presentations by guest speakers. Particular emphasis is given to the cultural and historical context within viewed films, as it relates to contemporary French society.

## FREN 3080 Introduction to French Linguistics (also LING 3080) (KCM-AS)

Spring. 4 credits. Prerequisite: FREN 2190 or CASE Q++ or permission of instructor. T. Alkire.

Linguistics is the study of human languageshow they are structured and how those structures are put to use. This course aims to introduce students to the fundamental notions of linguistics analysis (phonetics, phonology, morphology, syntax, semantics) using French as the language of instruction, and to provide a complete examination of the French language at a level suitable for nonnative speakers and nonlinguists.

FREN 3120 Advanced French Stylistics Fall. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 3010 or 3050 , or CASE Q++. Students who have taken FREN 3130 are not eligible to take FREN 3120 for credit. T. Alkire. This course on stylistics, and its application to textual analysis and translation, aims to help students develop a richer, more nuanced and idiomatic command of both the spoken and written language. Systematic study of grammar is discontinued as more attention is devoted to such topics as descriptive and prescriptive stylistics, authorial style, varieties of spoken French and their literary representations, and rhetorical figures and poetics, as well as textual analysis and translation theory. Writing exercises include literary pastiche, isosyntactic imitation, intralingual translation, an exercise de style, stylistic analysis, and critical translation. Additional exercises will target vocabulary development and contrastive grammar. Seminar-style participation in class discussions is expected.

## FREN 3130 Advanced French through

 NewsSpring. 4 credits. Satisfies Option 1 of
language requirement. Prerequisite: FREN 3010 or 3050 , or placement by CASE. Students who have taken FREN 3120 are not eligible to take FREN 3130 for credit. C. Waldron.

This course prepares students for interacting at an advanced level of proficiency in both speaking and writing. Students will increase their vocabulary and knowledge of idiomatic French, while discussing and debating topics of current interest as they are presented in French televised news broadcasts and other media. A flexible approach allows students to improve their language skills on an individualized basis.
FREN 3210 Readings in Modern French Literature and Culture (LA-AS) Fall. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 2210, 3010, or 3050, or CASE Q++ placement. Conducted in French. T. McNulty.

This course is designed to teach ways of reading and understanding works created from the Romantic period to the present day, in their cultural context. A range of texts from various genres is presented, and students refine their analytical skills and their understanding of various methodologies of reading. Texts by authors such as Balzac, Baudelaire, Cixous, Duras, Genet, Mallarmé, Michaux, Proust, Rimbaud, Sarraute, and Sartre.
FREN 3220 Readings in Early Modern French Literature and Culture \# (LA-AS)
Spring. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 2210, 3010, or 3050, or CASE Q++ placement. Conducted in French.

## C. Howie.

This course is designed to familiarize students with works from the Renaissance, the Classical period, and the Enlightenment, as well as the cultural and historical context in which these texts are created, reflecting a dynamic period of significant change for France. Texts by such authors as Ronsard, du Bellay, Montaigne, Molière, Marguerite de Navarre, Corneille, Diderot, de Lafayette, Racine, Perrault, and Rousseau. Students may read texts in the original languages or in translation.

FREN 3370 The Algerian Experience \# (LA-AS)
Spring. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 2210, 3010, or 3050, or CASE Q ++, or permission of instructor. D. Fieni. Throughout its history, Algeria has played host to a succession of empires, invaders, freebooters, and other nomads who have transformed the land into a living laboratory for political, religious, aesthetic, and literary adventures of all sorts. This course introduces students to a range of core issues in this social and cultural crucible at the crossroads of Africa, Europe, and the Middle East. While we will focus particularly on the period that begins with French colonization (1830-), we will also examine periods (Roman, Islamic, and Ottoman Empires). A broadly comparative framework will allow us to analyze intersections between Berber, Arab, Islamic, and Jewish cultures of the Maghreb, including Morocco and Tunisia. We will look at French colonialism from multiple perspectives, delve into anti-colonial engagements and trace Algerian influences and diasporas in France and beyond. Authors studied include (Saint) Augustine of Hippo, Ibn Khaldun, Abd al-Qadr, Eugène Fromentin, Isabelle Eberhardt, Albert Camus, Abdelhamid Ben Badis, Kateb Yacine, Rachid Mimouni, Frantz Fanon, Yamina Mechackra, Tahar Djaout, Waciny Lâredj, Leïla Sebbar Maïssa Bey, and Salim Bachi. We will screen films by cinéastes such as Merzak Allouache, Assia Djebar, Abdellatif Kechiche, and Rachid Bouchareb.
FREN 3530 Monsters A-X (Aristotle-X-files) (also COML/FGSS 3530) \# (CA-AS)

Spring. 4 credits. K. Long.
This course will explore the history of notions of monstrosity, a concept that takes on a wide range of meanings over the course of thousands of years. We will discuss why monstrosity is so often linked to questions of gender and racial difference, from the classical period to the present day, how from the early modern era monstrosity becomes linked to class tensions, the relationship between monstrosity and bodily difference (deformity, "birth defects," and injuries), and the representation of moral monstrosity (particularly cruelty but also fraud). We will also consider how monstrosity stands at the borders of life, and helps us to define (and question) not only what is human, but what may constitute life itself. We will contemplate the epistemology of the monstrous, that is, monstrosity as a model for processing or creating information, and as a means of questioning the possibility of knowing.
FREN 3650 The Dawn of Modernity Fall. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: FREN 2210, 3010, or 3050, or CASE Q++ placement. C. Doumet.
Studying works of the early 20th century (1900-1914), this course seeks to trace common aesthetic features in music, the novel, painting, poetry, and architecture at the dawn of modernity. Features such as dissonance, collage, and taste for the exotic can help us understand the distinctiveness of the beginning of this century and also the configuration of our own modernity. We will consider works by Proust, Picasso, Stravinsky, Gide, and Apollinaire, among others.

FREN 3680 Passion for Poetry (LA-AS) Spring. 4 credits. Satisfies Option 1 of
language requirement. Prerequisite:
FREN 3210, 3220, or permission of instructor. L. Dubreuil.
Yes, passion, for and in poetry. The class is a rare opportunity to study all major aspects of poetry in French from the second part of the Middle Ages to the present. While the course will indeed provide breadth and coverage as well as insights on the way to read and write a poem in French, another goal is to create or strengthen a personal taste for poetry among students. This is why the course progression will be centered on existential problems and nations that are at stake in poetry and in our lives-e.g., passionate love and friendship, carpe diem, eroticism, marginality, and extraordinary ways of life. We'll read poems by authors such as Villon, Ronsard, Louise Labbé, Baudelaire, Césaire, Georges Bataille, Jean Genet, Victor Hugo, or Marguerite de Navarre. Assignments will be diverse and will include exercises such as reading verses aloud, writing a sonnet, commenting on a text, collecting and editing poems on a focal theme, or even co-organizing a poetry festival.

## FREN 3740 Being Bad in the Renaissance \# (LA-AS)

Fall. 4 credits. Satisfies Option 1 of
language requirement. Prerequisite:
FREN 3210, 3220, or permission of instructor. K. Long.
This course follows the tradition of the histoires tragiques, short stories that served as sources for a number of Shakespeare's plays (Hamlet, Romeo and Juliet, Macbeth, among others) and that foreground bad behaviormurder, sexual transgressions, power struggles, and general mayhem. In our analysis of the Heptameron of Marguerite de Navarre, and the Histoires tragiques of Matteo Bandello, Pierre Boaistuau, and François de Belleforest, we will also consider the hold that these bleak views of human nature had on the early modern imagination, and ponder the nature of evil in the early modern universe. All texts will be in French; the course will be conducted in French.

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FREN 4170 Shipwrecks: Disaster, Deliverance, and Capitalism (also LATA/SPAN 4170 ) (LA-AS)
Fall. 4 credits. G. Aching.
For description, see SPAN 4170.
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## FREN 4190-4200 Special Topics in

 French Literature4190, fall; 4200, spring. 2-4 credits each semester. Prerequisite: permission of instructor. Staff.
Guided independent study of special topics.
FREN 4290-4300 Honors Work in French 4290, fall; 4300, spring (yearlong). 8 credits. R grade given at end of fall semester and final grade at end of spring semester. Open to juniors and seniors. Consult director of honors program for more information. Staff.

FREN 4420 Sex in French (LA-AS) Fall. 4 credits. Satisfies Option 1 of language requirement. Prerequisites: FREN 3210, 3220, or permission of instructor. C. Howie.
Does a close investigation of French culture sustain its reputation for sexual provocation? From the medieval querelle de la rose to the recent best-seller La vie sexuelle de Catherine M., the boundaries between representing sex
and philosophizing about it are more or less constantly preamble. We'll look at a few particularly fraught moments in this history of permeability, beginning with the medieval dirty stories known as fabliaux and the debates that grew out of the Roman de la rose; Sade's Pbilosphie dans le boudoir, Cocteau's Le livre blanc; Genet's Miracle de la rose, Bataille's Erotisme; Duras' Les yeux bleus cheveux noirs; and films by Patrice Chereau, Cyril Collard, Catherine Breillat, and Francois Ozon.

## FREN 4540 Montaigne and Skepticism

 (also FREN 6540) \# (KCM-AS) Spring. 4 credits. Satisfies Option 1 of language requirement. Conducted in French. K. Long.How does philosophy respond to widespread and continuous disaster? The Wars of Religion in France and throughout Europe offer the context of continual violence, trauma, and social upheaval, and the Essais of Michel de Montaigne respond to this context by elaborating a new form of skepticism, based on classical models, which creates a space for more humane ethics (including some of the earliest discussions of religious and racial tolerance) and for freedom of thought (a relatively new concept in the Western World), by means of radical questioning of the functioning of political, religious, and intellectual authority. What Montaigne offers is both a practical and intellectual model for coping with extreme and omnipresent violence and social conflict, a model that presents difference as a necessary condition of physical and psychic survival. All texts will be in French; course will be conducted in French.

## FREN 4956 Transatlantic Decadence

 (also SPAN/SHUM 4956)Spring. 4 credits. B. Bosteels.
For description, see SHUM 4956.

## FREN 6130 Francophonie and the

 Inventions of the MaghrebFall. 4 credits. Conducted in English. D. Fieni.

This course examines the politics of French in the Maghreb as it engages with other languages in the battle for cultural capital and the right to represent a variety of interests (e.g., national, religious, class, gender, aesthetic). We will explore the legacy of French colonial language politics in the Maghreb since 1830, the development of Arabization (and its discontents), and a range of "postcolonial" language wars and contestations. An important aim of this course will be to complicate the meanings attributed to global French by considering the ways that Arabic and Berber languages can be said to trouble not just the older concept of francophonie but also the more recent idea of "littérature-monde." Readings will include fiction and poetry written in the French language from writers such as Malek Haddad, Mohammed Dib, Assia Djebar, Rachid Boudjedra, Yamina Mechakra, Abdelkebir Khatibi, Edmond Amran El Maleh, and Abdelwahab Meddeb; works translated from the Arabic by Tahir Wattar and Ahlem Mostaghanemi; and critical texts by Frantz Fanon, Jacques Derrida, Hélène Cixous, Réda Bensmaïa, Pascale Casanova, Ranjana Khanna, and Ronald Judy, among others.

## FREN 6300 French Reading for Graduates

Spring. 3 credits. Prerequisite: graduate standing. T. Alkire.

Designed for those with little or no background in French. Aims primarily to develop skill in reading French. Covers grammar basics, extensive vocabulary, and strategies for reading in a foreign language. Some flexibility in selecting texts according to fields of interest.

## FREN 6360 The Refusal of Politics

Spring. 4 credits. Conducted in French. L. Dubreuil.

Graduate and senior seminar on negative relations between literature and politics. It will include a reading of some theories of engagement and dégagement (or retreat) from the last decades. We will compare these theories with the discrete and problematic solutions that literary oeuvres have invented. We shall focus on the literary refusal of society in 19th-century France and will consider different ways of living in an "ivory tower." Studied writers could include Mme. De Staël, Vigny, Hugo, Baudelaire, Flaubert, Maupassant, Mallarmé, or Zolo.

## FREN 6390-6400 Special Topics in French Literature

6390, fall; 6400, spring. 2-4 credits each semester. Staff.
Guided independent study for graduate students.

## FREN 6431 Aesthetic of Excess:

 Psychophilosophical Approaches to Technology (also SHUM 6341)Fall. 4 credits. T. Murray.

## For description, see SHUM 6341.

## FREN 6450 Montaigne and Skepticism (also FREN 4540)

Spring. 4 credits. Conducted in French. K. Long.

For description, see FREN 4540.

## FREN 6475 Theories in Ideology (also

 HIST 6475)Fall. 4 credits. C. Robcis.
For description, see HIST 6475.

## FREN 6660 The Poetic Vocation of

 PhilosophyFall. 4 credits. Conducted in French. C. Doumet.

An interrogation of the ancient division between poetry and philosophy, exploring the territories constituted by this division and interactions between them. How do supposedly poetic features such as image, metaphor, and the play of the signifier animate philosophical discourse and how do concepts enter into the composition of the poem and come to function there? We will examine critical moments in philosophical discourse where the elaboration of concepts passes through fiction and image and the inventiveness of language. In addition to some classic philosophical texts, including Descartes, we shall consider work by such contemporary philosophers as Derrida, Rancière, Badiou, Nancy, Jean-Louis Chretien, and Michel Duquy.

## FREN 6770 Four Literary Theologians

Spring. 4 credits. C. Howie.
This course engages with the literary articulation of ideas about God (but also, let it be said, with love, embodiment, and language) in premodern and modern literature, with special emphasis on four writers who are also theologians: Augustine, Bernard of Clairvaux, Pascal, and Kierkegaard. As we read them, we'll also be reading some of the work done by contemporary
philosophers and theologians (such as Catherine Keller, Mark Jordan, Jean-Louis Chrétien, Graham Ward, Jean-Luc Nancy, and Karmen MacKendrick) on what it means to think, and speak, theologically, even as we ask questions about how literature, and the arts more generally, may embody various modes of resistance to anything like a straightforward account of what-with or without the name of God-informs, exceeds, and drives them.

## FREN 6920 Psychoanalysis and Sexual

 Difference (also COML 6779)Fall. 4 credits. Conducted in English. T. McNulty.

This course will serve as a theoretical introduction to psychoanalytic treatments of sexual difference, especially in the work of Sigmund Freud, Jacques Lacan, and their successors. Distinct from both biological sex and social gender, masculinity and femininity are understood psychoanalytically as two positions that the subject of the unconscious may take up with respect to castration, each of which involves a particular ethical response to the death drive and to the signifier or law that seeks to limit its insistence. The first half of the course will examine the logics of femininity and masculinity in their cultural contexts; the second half will explore their implications for politics, aesthetics, and logic.

## Italian

T. Alkire, M. Baraldi, K. Bättig von Wittelsbach, T. Campbell, F. Cervesi, M. Migiel, K. Pinkus, K. Serafin. Emerita: A. Grossvogel

## The Major

The Italian section offers a major in Italian with tracks in Italian literature and culture and Italian studies. The first track is designed for students who wish to study Italian language, literature, and culture through the works of writers, artists, and cultural figures who have developed rich and varied aesthetic traditions. The second track in Italian studies includes a broader progression of courses that entails work in related disciplines. Both are designed to provide students with proficiency in reading, speaking, and writing in Italian, to familiarize them with Italian culture, and to assist them in analyzing Italian texts in related fields. For further information, students are asked to consult the director of undergraduate studies.

## Track 1: Italian Literature and Culture

Track 1 is designed for students who: (1) wish to study Italian language, literature, and culture through the works of writers, artists, and cultural figures; and (2) wish to do most of their course work in Italian.
Admission: the prerequisite for official admission to Track 1 of the Italian major is successful completion of any ITAL course at the 2000 level or higher conducted in Italian.
Students who wish to follow Track 1 in Italian are advised to consult with the director of undergraduate studies, who will take into account the student's interest, preparation, and career goals and assign the student to an advisor. Students majoring in Italian are expected to become conversant with a fair portion of the masterworks of Italian literature, to acquaint themselves with the outlines of Italian literary and cultural history, and to develop some skill in textual and cultural
analysis. In conjunction with the major advisor, the student will craft an individualized plan of studies that will meet the minimum requirements for Track 1 as listed here:

- At least 10 Italian literature or culture courses at the 2000 level and higher (the prerequisite may be counted toward this requirement. The 1 -credit Italian practicum and the 1 - or 2 -credit independent study options do not count as full courses). One of these courses must be at the 4000 level and one must focus on Italian texts before the 19th century. With the permission of the advisor, the student may substitute for two of these courses other courses that are deemed relevant to the student's study of Italian (e.g., a course in another national literature, a course in critical theory, or a course in European history).
- At least 20 credits in courses conducted entirely in Italian. The Italian practica may be used to fulfill 3 of these credits. Twelve of these credits must be in courses in Italian at the 3000 level or above.
- Competency in the Italian language (as demonstrated by examination or by course work approved by the director of undergraduate studies).

ITAL 4040 History of the Italian Language and ITAL 4030 Linguistics Structure of Italian may be counted toward the 10 courses required for the major. Note: An introductory course is prerequisite for ITAL 4030 and 4040.

## Track 2: Italian Studies

Track 2 in Italian Studies is designed primarily for students who wish to pursue individual interests that do not fall within Track 1 of a major. Students select courses from Italian as well as courses from other departments that have a substantial Italian component, such as History of Art, Architecture, Government, Music, and Comparative Literature. For the list of approved Italian studies courses, please see the director of undergraduate studies.
Admission: By the end of their sophomore
year, prospective majors in Track 2 should
have taken ITAL 2190 Intermediate
Conversation and Composition or demonstrated the equivalent level of fluency.

To complete the program, students must:

1. Demonstrate competence in the Italian language by completing ITAL 3130 Advanced Conversation and Composition, or its equivalent (such as ITAL 3300 Italian Writing Workshop);
2. Complete the core series of Italian Studies courses: ITAL 2900 Perspectives in Italian Culture (fall), ITAL 2950 Italian Cinema (fall), and ITAL 2970 Introduction to Italian Literature (spring);
3. Complete at least five courses ( 20 credits) from the approved list of Italian Studies courses at the 3000 level or above from no more than three departments. Students planning on studying abroad for a year or a semester in Italy should plan their course work to emphasize their individual interests. Note: Students must maintain a B- in each of the five Italian Studies courses; and
4. Select a committee of one or more faculty advisors to help formulate a coherent
program of study. One of the advisors must come from the Italian section.

Students are encouraged to enrich the program by combining this option with other majors in related fields such as history of art, music, comparative literature, or architecture.

## Minor in Italian Studies

In order to complete an undergraduate minor in Italian Studies, students must take at least five courses (a minimum of 15 credits) by selecting courses in consultation with the minor advisor, one of which must be ITAL 2900 Perspectives in Italian Culture. These courses must be allocated among at least three Cornell departments and must include one introductory course and one course at the advanced level. Language competence must be demonstrated by successfully completing ITAL 2190. Please note that courses taken as part of a study abroad program approved by the study abroad dean may count toward meeting the above requirements.

Students wishing to enroll in the minor must register their intent by contacting the director of undergraduate studies, who will assign a faculty advisor to students.

Study Abroad in Italy: Italian studies faculty members strongly encourage students to consider studying abroad in Italy. Students will have the opportunity to immerse themselves in Italian and gain a singular perspective on the Italian cultural context.

Students are urged to consider the Bologna Cooperative Studies Program (BCSP), of which Cornell is an associated member. BCSP offers qualified undergraduate students an opportunity to study for a full academic year or a semester at the University of Bologna for credit. During each semester of the academic year, which begins in October and extends through June, BCSP students enroll in one or two regular University of Bologna courses with Italian students. Students may also take special courses in Italian literature, language, art history, film studies, and contemporary politics.
Enrollment in a language course is conditional upon the student's eligibility for the particular level and on attendance at the first scheduled class session. Because of the high demand for language courses, a student who fails to attend the first class meeting will be dropped so others may register.
Note: Students placed in the 2000-level course have the option of taking language and/or literature courses.
ITAL 1210-1220 Elementary Italian 1210, fall; 1220, spring. 4 credits each semester. Prerequisite: for ITAL 1220, 1210 or LPI 37-44 or SAT II 370-450. Intended for beginners or students placed by examination. At the end of ITAL 1220, students who score lower than 56 on the LPI take ITAL 1230; those with 56 or
higher may enter the 2000-level sequence.
Fall, M. Baraldi; spring, K. Serafin and staff. ITAL 1210 and 1220 are fast-paced, introductory-level courses designed for students with no previous knowledge of Italian (1210), and those with some basic knowledge of the language (1220). Students will be guided in developing four language skills (listening, speaking, reading, and writing) in the context of everyday topics (e.g., school, housing, travel, personal
preferences, simple exchanges about past, future and possible events). They will also be introduced to culturally acceptable modes of oral and written communication in Italian, some fundamentals of Italian history, and select current social and political issues.

## ITAL 1230 Continuing Italian

Fall or spring. 4 credits. Prerequisites: score of 45-55 at the final examination in ITAL 1220; LPI score of 45-55, or 460-580 on SAT II. Qualified students are strongly encouraged to take this course as soon as possible after completing ITAL 1220, or as early in the course of their undergraduate studies as possible. K. E. Bättig von Wittelsbach.
This course is designed to accommodate students who have fair knowledge of Italian vocabulary and structure, but are not ready for ITAL 2090. It aims to help students further develop their intercultural, reading, listening, speaking, and writing skills, and increase their confidence in communicating in Italian. Course materials and assignments provide ample opportunity for vocabulary building and grammar review. Intercultural awareness is cultivated through a variety of short readings, films, discussions, class presentations, and group work.

## ITAL 2090 Italian Intermediate

 Composition and Conversation I Fall or spring. 4 credits. Satisfies Option 1 of language requirement.Prerequisite: ITAL 1230 or LPI 56-64 or SAT II 590-680. Qualified students are strongly encouraged to take this course as soon as possible after completing ITAL
1220. Fall: K. Serafin; spring: F. Cervesi. The goal of this course is development of all language skills at an intermediate level, with an emphasis on accurate, idiomatic, and culturally appropriate communication in Italian. Students will improve their language abilities through readings and other material related to common Italian cultural practices and daily life, guided compositions and other written assignments, directed conversation on topics relevant to understanding modern Italy, grammar review, and a variety of vocabularybuilding tasks. Class presentations, discussions, and group assignments are an integral part of this course.

## ITAL 2140 World News, Italian Views

 (CA-AS)Spring. 4 credits. Satisfies Option 1 of language requirement. Limited to 18 students. Prerequisite: ITAL 2090 or permission of instructor. Designed to improve students' proficiency in Italian. Special attention will be given to writing. Conducted in Italian. M. Migiel.
In this seminar, we will read, discuss, and write about a variety of global and transnational issues that get debated in the Italian media. Topics will take into account student interests and are likely to include changing family structures, Islam and the West (particularly after September 11), immigration policies, international politics, developments in science and technology, economic and business ventures, cultural events, and sports.

## ITAL 2190 Italian Intermediate Composition and Conversation II

 Spring. 4 credits. Satisfies Option 1 of language requirement. Prerequisites: ITAL 2090 or equivalent (LPI score of 65 or above, SAT II 690 or above). Students pursuing a minor in Italian Studies are required to demonstrate their language competence by successfully completing this course. K. E. Bättig von Wittelsbach. An intermediate-level course that aims to further develop intercultural, reading, listening, speaking, and writing abilities acquired in ITAL 2090. Students will be guided in perfecting their communication skills, improving their cultural proficiency, and developing a critical eye toward printed and visual material drawn from literature, history, politics, science, and arts in the Italophone world. Conversation skills will be practiced in daily discussions and in individual or group projects and presentations. A variety of written assignments will help students increase the range, accuracy, and stylistic appropriateness of their writing. Review of select grammar topics is part of this course, as is reading a short contemporary novel.
## ITAL 2900 Perspectives in Italian Culture (CA-AS)

Spring. 3 credits. "Core course" in track two of the Italian major, offered every year. Conducted in English with discussion section in Italian. Staff.
This course aims to provide students with the tools necessary to understand the most important social, political, and artistic developments occurring in contemporary Italian culture. These include the nature of geographic and national fragmentation in post-Risorgimento "ITALY"; the "Southern" question and the phenomenon of "Costa Nostra"; Italian contributions to world cinema; and the politics of food. By providing students with interdisciplinary perspectives on Italian culture, they will be introduced to how Italian culture is produced and consumed globally today. Primary readings include selections from Peter Robb, Leonardo Sciascia, and Tim Parks, and films from Rossellini, de Sica, Sergio Leone, and Benigni. A group of secondary readings stimulates the discussion of the historical and cultural panorama of contemporary Italy.

## ITAL 2950 The Cinematic Eye of Italy (CA-AS)

Fall. 3 credits. Satisfies Option 1 of
language requirement. Prerequisite:
ITAL 2090 or permission of instructor. M. Migiel.

This seminar introduces students to select masterworks of Italian postwar cinematography and familiarizes students with the vocabulary and the structures needed to analyze films and critique them. We will examine the films' cultural and sociopolitical contexts as well as their formal aspects.

## ITAL 2970 Introduction to Italian Literature (LA-AS)

Spring. 3 credits. Satisfies Option 1 of
language requirement. "Core course" in Italian Studies major. Prerequisite: ITAL 2090 or permission of instructor.
Conducted in Italian. Staff.
The course aims to introduce students to Italian literature, mainly through readings in prose and poetry from the 20th century. The course includes significant practice in grammar, vocabulary building, and
composition, and to this end, students are
required to write five papers of medium length over the course of the semester.

## ITAL 3010 Screening Cosa Nostra: The Mafia and the Movies from Scarface to The Sopranos (also FILM 3010) (CA-AS)

Fall. 4 credits. T. Campbell.
From Al Capone to Tony Soprano, the mafia has been the subject of numerous films over the course of 70 years, so many in fact that one might well speak of a "mafia obsession" in American popular culture. Drawing upon a large number of American and Italian films, this course examines the cultural history of the mafia through film. We will explore issues related to the figure of the gangster, the gender and class assumptions that underpin it, and the portrayal-almost always stereotypical—of Italian-American immigrant experience that emerges from our viewings. The aim will be to enhance our understanding of the role of mafia plays in American and Italian culture in the 20th and 21st centuries. Film screenings will include Little Caesar, Scarface, Shame of the Nation, The Godfather Parts I and II, Goodfellas, The Funeral, Donnie Brasco, episodes from The Sopranos, and

## Gomorrah.

## ITAL 3020 Italian Practicum

Spring. 1 credit. Staff.
Students enrolled in an Italian literature or culture course that is conducted in English may opt to take this practicum provided that they have already attained proficiency in the language.

## ITAL 3130 Advanced Italian: Language in

 Italian Culture (LA-AS)
## Fall. 4 credits. Satisfies Option 1 of

language requirement. Students
pursuing the Italian Major Track 2 (Italian
Studies) are required to demonstrate their competence in the Italian language by successfully completing this course.
Prerequisite: ITAL 2190 or equivalent.
Conducted in Italian. K. Bättig von
Wittelsbach.
This course is designed to develop accuracy and fluency in oral and written expression, and to sharpen awareness of idiomatic and stylistic nuances in present-day Italian. The material discussed is drawn primarily from a wide range of social and cultural issues in modern Italy, and in the areas of Europe where Italian is an official (Switzerland) or a regional minority language (Istria). Some of the topics discussed are the role of Italy in the European Community, the place of the minorities (especially that of more recent, non-European immigrants) in Italian public life, the importance of art and artists in contemporary Italian society, and the changing Italian language and its regional varieties. Listening and speaking skills are cultivated through the frequent use of authentic audio and visual materials. Readings range from fictional to analytical and argumentative, with writing assignments frequently emulating the text being read. Presentations and grammar review are also an important component of this course.

ITAL 3300 Italian Writing Workshop (LA-AS)
Spring. 4 credits. Satisfies Option 1 of
language requirement. Prerequisite:
ITAL 2090 or permission of instructor. M. Migiel.

Aimed at helping students to improve their writing abilities in Italian, this course will focus on writing to narrate, writing to persuade, writing to entertain, and writing for social change. Topic for spring 2011: Alessandro Manzoni's Promessi sposi. This 19th-century historical novel is one of two Italian classics that Italian secondary school students are required to study in depth (the other being Dante's Commedia). In reading this novel ourselves, alongside selections from 20th-century reworkings of it, we will ask: How did I promessi sposi contribute to the development of the Italian language, to the unification of Italy, to the Romantic movement, and to the understanding of Italian Catholicism? In this novel about "the betrothed," why does Manzoni avoid love scenes, and what does it mean for 20th-century writers (including writers under Fascism) to parody and eroticize Manzoni? How did Manzoni's Promessi sposi help Italians define themselves in the 19th century and how does it help them to define themselves now? Students will have the opportunity to write in a variety of genres.

## ITAL 4190-4200 Special Topics in Italian

 Literature4190, fall; 4200, spring. 2-4 credits each semester. Prerequisite: permission of instructor. Staff.
Guided independent study of special topics.
ITAL 4290-4300 Honors Work in Italian 4290, fall; 4300, spring (yearlong). 8 credits. R grade given at end of fall semester and final grade at end of spring semester. Open to juniors and seniors. Consult director of honors program for more information. Staff.

## ITAL 4450 Decameron (also ITAL 6450) \# (LA-AS)

Fall. 4 credits. Conducted in English. M. Migiel.

This seminar will be dedicated to a reading of Boccaccio's Decameron (1349-51). Particular attention will be dedicated to exploring how the stories of the Decameron represent competing notions of love, marriage, sexuality, truth, and honor, as well as how the
Decameron represents a world caught between aristocratic ideals and the interests of a new mercantile and business class.

## ITAL 4660 War and Modernity: The Italian Experience (LA-AS) <br> Fall. 4 credits. T. Campbell.

This course will examine a selection of modern Italian war narratives within the context of contemporary theorizations on trauma. We will begin with the First World War, and Emilio Lussu's Un anno sull'altipiano, the classic memoir of Italian defeat at Caporetto, and then follow it up with other Italian accounts of war in the trenches. In the second half, we will shift our attention to the war in Ethiopia and World War II. Questions to be addressed include how literature approximates the trauma of war; the relation among media, subjectivity, and getting people to die for you; and how modern narratives measure and commemorate their distance from combat. Authors include Flaiano, Primo Levi, Revelli, Salsa, and Tobino.

ITAL 4720 Federico Fellini (CA-AS) Spring. 4 credits. Satisfies Option 1 of language requirement. K . Pinkus. Born to a middle class family in the small seaside town of Rimni, Federico Fellini became one of the most imaginative and powerful filmmakers in the history of cinema. How was he drawn to cinema? What rules did he break with his idiosyncratic working method? Why did he call himself "a born liar"? The course will move between close readings of his extraordinary films and studies of cultural context in which they were produced. Films will include The White Sheik, I Vitelloni, La Dolce Vita, Nights of Cabiria, Amarcord, Matrimonial Agency, The Temptation of Dr. Antonio, 8/12, Ginger and Fred, various TV commercials; as well as sections from films by Roberto Rosselini, Pier Pasolini, and others.

## ITAL 6390-6400 Special Topics in Italian Literature

6390, fall; 6400, spring. 2-4 credits each semester. Staff.
Guided independent study for graduate students.
ITAL 6450 Decameron (also ITAL 4450) (LA-AS)
Fall. 4 credits. Conducted in English. M. Migiel.

For description, see ITAL 4450.

## ITAL 6850 Precarietà/Precariousness

Spring. 4 credits. Conducted in either
Italian or English, depending on
enrollment. K. Pinkus.
"Precariousness" is a key in contemporary Italian thought. Normally it refers to the economic and social condition of young people who work in temporary jobs (such as call centers) without the kind of social welfare and security enjoyed by previous generations. This course will expand outward from an examination of precarietà in the peculiar Italian context. Does precariousness share an organic tie with literature and literary language? Is it possible or useful to speak of precariousness as a more general condition of labor and affect linked to literature since the Unification of Italy? What is the relation between the term and alienated labor, especially under Fascism? And why does precariousness erupt during the so-called Postfordist era, not only in Italy but in a global context? Although the course will focus primarily on Italy, students with other areas of concentration are welcome. Readings will be in Italian (with optional readings in English, Spanish, and French).

## Portuguese

Faculty: J. Oliveira.

## PORT 1210-1220 Elementary Brazilian Portuguese I-II

1210, fall; 1220, spring. 4 credits each
semester. PORT 1210 is the prerequisite for

## PORT 1220. J. Oliveira.

A full-year introductory course intended for students with no knowledge of Portuguese and with limited or no knowledge of Spanish. Stress is placed upon the development of the fundamental communication skills: listening, speaking, reading, and writing.

PORT 2090-2190 Intermediate Brazilian Portuguese for Spanish Speakers 1-II @
2090, fall; 2190, spring. 4 credits each semester. PORT 2090 satisfies Option 1 of language requirement. Prerequisite: for 2090, PORT 1220; for 2190, PORT 2090
or permission of instructor. J. Oliveira.
A full-year course intended for students who have already taken the first level of
Portuguese, or as an intensive introductory course for those who are native/near native speakers of Spanish. An all-skills course with particular emphasis on Brazilian Portuguese spoken within the context of its culture. It presents a fast-paced review focused on improving grammatical accuracy, pronunciation, and on enriching vocabulary.

## PORT 2800 Perspectives on Brazil (also

 LATA 2201) (CA-AS)Spring. 4 credits. Staff.
This course provides an introduction and overview of Brazilian culture. It will study different periods of Brazilian history, through the analysis of films, literature, essays, visual arts, and music. Students will explore different definitions of Brazilian identity and
"Brazilianness" focusing on key topics including the formation of the colonial Brazil as a tropical paradise; slavery and abolition; the particularities century; and the contradictions of the modernization process throughout the 20th century. We will consider elements of Brazilian popular culture such as Carnival, Samba, and "telenovels," and some of the most important cultural movements of the 20th century, such as "Modernismo,"
"Cinema Novo," and "Tropicalla." The primary objective of the course is to provide students with the relevant background to understand Brazilian cultural history.

## Romance Studies

## Faculty: D. Cruz de Jesús.

## ROMS 5070 Methodology of Romance

 Language Learning and TeachingSpring. 3 credits. Required for all graduate TAs who will be teaching Romance languages for the first time at Cornell. D. Cruz de Jesús.

Focuses on language teaching as facilitation of learning, thus on the learner's processing of language acquisition and the promotion of reflective teaching. Pedagogical approaches will be addressed from a learner-centered perspective involving effective language learning strategies and analysis.

## ROMS 5080 Pedagogy Practicum

Fall. 1 credit. Required for all graduate TAs teaching language for the first time in the Department of Romance Studies. Staff. This practicum is designed to better enable the TAs to meet the needs of their students in the understanding and acquisition of the linguistic forms, notions, and functions covered in their course.

## Spanish

G. Aching, S. Amigo-Silvestre, M. Balsa, M. Beviá, T. Beviá, B. Bosteels, D. Castillo, D. Cruz de Jesús, M. A. Garcés, P. Keller, C. Lawless, N. Maldonado-Méndez,
J. E. Paz-Soldán, S. Pinet, M. K. Redmond,
J. Routier-Pucci, B. Teutli. Emeritus: C. Morón Arroyo.

## The Major

The Spanish major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic cultures, and to develop their skills in literary and linguistic analysis. Satisfactory completion of the major should enable students to meet language and literature requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, and to satisfy standards for acceptance into the training programs of the government, social agencies, and business concerns. A Spanish major combined with another discipline may also allow a student to undertake preprofessional training for graduate study in law or medicine. Students interested in the major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies, who will admit them to the major, and assign them an advisor from the Spanish faculty. Spanish majors will then work out a plan of study in consultation with their advisors. Spanish majors have great flexibility in designing their programs of study and areas of concentration. Previous training and interests as well as vocational goals will be taken into account when the student's program of course is determined.
SPAN 2190 is a prerequisite to entering the major in Spanish.

All majors will normally include the following core courses in their programs:

1. SPAN 2150, 2150, and 2170 (not necessarily in that order).
2. SPAN 3060 and 3110
3. One of the two senior seminars offered each year.

A minimum grade of B - is required in order for a course to count toward the major.

## The Spanish Language and Literature Option

The Spanish language and literature option normally includes at least 15 credits of
Spanish literature, language, and culture courses, beyond the core courses. Language and literature majors are strongly urged to include in their programs all the major periods of Hispanic literature and may consider courses in related departments, such as Near Eastern Studies, Comparative Literature, and History of Art.

## Area Studies Option (Spanish, Latin American, or U.S. Latino Studies):

At least 15 credits of courses at the 3000 level and above in any of those focus areas beyond the core, all courses to be approved through consultation with the major advisor. Courses should reflect interdisciplinary interests in the area and may include up to three other academic fields of interest. For example, a student interested in Latin American studies may want to include courses on such topics as Latin American history, government, rural sociology, and economics; students who want to specialize in U.S. Latino issues may want to include such topics as sociology of Latinos, Latino history, and Latino medical issues in addition to further studies in literature.

Students are encouraged to enrich the major program by including a variety of courses from related fields or by combining Spanish with related fields such as history, philosophy, sociology, anthropology, art, music, classics,

English, comparative literature, and other foreign languages and literatures.

The J. G. White Prize and Scholarships are available annually to undergraduate students who achieve excellence in Spanish.

## Minor in Spanish

The minor promotes a broad understanding of Spanish and Spanish American culture, literature, and society; it also encourages students to refine and practice their language skills. In order to complete the minor, students must take a minimum of 5 courses ( 15 credits), distributed as follows: Language competence must be demonstrated by successfully completing either SPAN 3060 (Introduction to Hispanic Linguistics), SPAN 3100 (Advanced Spanish Conversation and Pronunciation), or SPAN 3110 (Advanced Spanish Writing Workshop). Students pursuing a minor must furthermore complete either SPAN 2200 (Perspectives on Latin America), SPAN 2240 (Perspectives on the Caribbean), or SPAN 2230 (Perspectives on Spain), as well as three elective courses to be chosen in consultation with the student's advisor. Among those electives, students are strongly encouraged to take at least one course at the advanced 3000-4000 level.

Students wishing to enroll in the minor must register their intent by contacting the director of undergraduate studies, who will assign a faculty advisor to each student

Academic Year Only in Spain: Cornell, the University of Michigan, and the University of Pennsylvania co-sponsor an academic year in Spain program. Students enrolled in this program spend the first month before the fall semester begins in an orientation session at the University of Seville, where they take courses in Spanish language and culture and take advantage of special lectures and field trips. Once the semester begins, students enroll in regular classes at the University of Seville and at the program's center facility. Center courses are designed for the program and include a seminar offered by the resident director, from the faculty of either Cornell, Michigan, or Pennsylvania. Other center courses typically include history of art, history of the Mediterranean region, a literature course, and Spanish composition and syntax. In Seville, students live in private homes and a rich array of cultural activities and excursions are organized every semester.

Applicants are expected to have completed SPAN 2190 before departure. Completion of SPAN 3110 is highly recommended. Students are strongly encouraged to study abroad for the entire year rather than one semester. Students interested in the study abroad program should visit Cornell Abroad in 474 Uris Hall and see the Cornell Abroad web site www.einaudi.cornell.edu/cuabroad.

Summer Program in Madrid: A six-week intensive summer program in Madrid, designed to enhance language skills in a cultural context. The 4 -credit courses offered satisfy the language requirement of Cornell's College of Arts and Sciences, and SPAN 2230 may count toward the major/minor in Spanish Courses taught exclusively by Cornell faculty, the courses are complemented by field trips in and outside Madrid. Interested students should contact Cornell's Summer Program in B20 Day Hall and visit www:sce.cornell.edu/Madrid.

Honors: Honors in Spanish may be achieved by superior students who want to undertake guided independent reading and research in an area of their choice. Students in the senior year select a member of the Spanish faculty to supervise their work and direct the writing of their honors essay (see SPAN 4290-4300).

## Courses in the Spanish Program

Enrollment in a language course is conditional upon the student's eligibility for the particular level and on attendance at the first scheduled class session. Because of the high demand for language courses, a student who fails to attend the first class meeting will be dropped so others may register.

Note: Students placed in the 2000-level course have the option of taking language and/or literature courses.

## SPAN 1120 Elementary Spanish: Review

 and ContinuationFall. 4 credits. Students may not receive credit for both SPAN 1120 and 1220.
Prerequisite: LPS 37-44 or SAT II 370-450. Students who have taken SPAN 1210 may enroll. Meets five times a week: four class sessions and one lecture. B. Teutli.
Using an integrated approach, this course develops listening, speaking, reading, and writing skills in a cultural context. It begins with a basic vocabulary and grammar review and then introduces new materials. Class sessions are in Spanish, and the language is actively used in communicative and creative activities. Students develop writing skills through composition and read short cultural and literary texts to foster vocabulary acquisition and improve reading strategies Lectures introduce and clarify grammatical structures. After 1120, students may take 1230, 2070 , or 2090 depending on their LPS score at the end of the course.

## SPAN 1210-1220 Elementary Spanish I

 and II1210, fall. 4 credits. Prerequisite: students with no previous knowledge of Spanish, up to two years of high school Spanish, LPS score 37 or lower, or SAT II 370 or lower. 1220, spring: 4 credits. Students may not receive credit for both SPAN 1120 and 1220. Prerequisite: SPAN 1210, LPS 37-44, or SAT II 370-450. Fall,
M. K. Redmond and staff; spring, T. Beviá and staff.
Using an integrated approach, this two-course sequence develops listening, speaking, reading, and writing skills in a cultural context. Both courses meet five times a week, with four class sessions and one lecture. Class sessions are in Spanish, and the language is actively used in communicative and creative activities. Students develop writing skills through compositions and read short cultural and literary texts to foster vocabulary acquisition and improve reading strategies Lectures introduce and clarify grammatical structures. After 1210 students may take 1120 (fall) or 1220 (spring). After 1220, students may take 1230,2070 , or 2090 depending on their LPS score at the end of this course.

## SPAN 1230 Continuing Spanish

Fall, spring, or summer. 4 credits Prerequisite: SPAN 1120, 1220, or LPS $45-55$, or SAT II 460-580. Meets four times a week. Fall and spring, S. Amigo-Silvestre and staff.

The goal of this low-intermediate course is to achieve a higher level of comprehension as well as to advance oral and written expression in a cultural context. Classes are in Spanish and the language is actively used in communicative and creative activities. Students engage in linguistic and literary analysis of texts to acquire new vocabulary, complete analytical exercises, and develop reading strategies. Students continue developing writing skills through composition, give oral presentations, and review grammatical structures independently with some clarification by the instructor as needed. After this course, students may take SPAN 2000, 2070 , or 2090 .

## SPAN 2000 Spanish for Heritage Speakers (also LSP 2020)

 Fall. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: LSP 56 or higher, SAT II 590 or higher, CASE placement, or permission of instructor. Not open to students who have taken SPAN 2070 or 2090. D. Cruz de Jesús.Designed to expand bilingual students' knowledge of Spanish by providing them with ample opportunities to develop and improve each of the basic language skills, with a particular focus on writing vocabulary. After this course students may take SPAN 2140, 2150,2170 , or 2190.
SPAN 2070 Intermediate Spanish for the Medical and Health Professions Fall or spring. 4 credits. Satisfies Option 1 of language requirement
Prerequisite: SPAN 1230, LPS 56-64, or SAT II 590-680, Q on CASE exam. Students who have taken SPAN 2000 or 2090 should speak to instructor. M. Beviá.
This intermediate-level course develops accurate and idiomatic oral and written expression in a medical context. Students read authentic texts on health-related topics, write compositions, and give oral presentations. Attention is given to relevant cultural differences and how they may affect medical care and doctor-patient communication. The course provides practice in real-life applications, such as taking a medical history and speaking to a Hispanic patient in a culturally acceptable manner. Classes are in Spanish, and the language is actively used in communicative and creative activities. Students review grammar structures on their own, with clarification and support of the instructor. After this course students may take 2140, 2150, 2170 , or 2190.

## SPAN 2090 Intermediate Spanish I

 (Composition and Conversation) Fall or spring. 4 credits. Satisfies Option 1 of language requirement.Prerequisite: SPAN 1230, or LPS 56-64, or SAT II 590-680, or CASE Q. Not open to students who have taken SPAN 2000 or 2070. Class meets three times a week. J. Routier-Pucci and staff.

This intermediate course develops accurate and idiomatic oral and written expression in a cultural context. Students achieve a higher level of syntactical and lexical competence through reading and discussing essays and literary texts and viewing films. Particular emphasis is on writing and editing academic essays with peer/instructor feedback. Classes are in Spanish and the language is actively used in oral presentations and communicative, creative, and critical-thinking activities. Students review grammar structures on their
own with clarification and support of the instructor. After this course, students may take SPAN 2140, 2150, 2170, or 2190.
SPAN 2140 Modern Spanish Survey (LAAS)
Fall or spring. 4 credits. Satisfies Option 1 of language requirement
Prerequisite: SPAN 2070 or 2090, or CASE Q+, or permission of instructor. Conducted in Spanish. Fall, M. Balsa and staff; spring, P. Keller and staff.

Introductory survey of modern Spanish literature. Students develop their analytical skills and learn basic literary concepts such as genre (drama, lyric, short story, and novel) and style (romanticism, realism, etc.) as well as male/female perspectives and the translation of literature to film language. The survey introduces students to Spain's cultural complexity through readings of works by authors representative of its diverse linguistic and literary traditions.
SPAN 2150 Contemporary Latin American Survey (also LATA 2150) @ (LA-AS)
Fall or spring. 4 credits. Satisfies Option 1 of language requirement.
Prerequisite: SPAN 2070 or 2090, or CASE Q+ or permission of instructor. Conducted in Spanish. C. Lawless and staff.
Readings and discussion of representative texts of the 19th and 20th centuries from various regions of Spanish America. Among the authors considered are Sarmiento, Hernández, Martí, Darío, Agustini, Cortázar, García Márquez, Poniatowska, and Valenzuela.

## SPAN 2170 Early Modern Iberia Survey

 (also LATA 2170) \# (LA-AS)Fall or spring. 4 credits. Satisfies Option

## 1 of language requirement.

Prerequisites: SPAN 2070 or 2090, or CASE Q+, or permission of instructor. Conducted in Spanish. S. Pinet and staff.
This course explores major texts and themes of the Hispanic tradition from the 11th to the 17th centuries. We will examine general questions on literary analysis and the relationship between literature and history around certain events, such as medieval multicultural Iberia, the creation of the Spanish Inquisition in the 15 th century, and the expulsion of the Jews in 1492; the encounter between the Old and the New Worlds; and the "opposition" of high and low culture, and of the secular and the sacred in poetry and prose. Issues of representation regarding gender, identities, and subjectivity may also be studied. Readings may be drawn from medieval short stories and miracle collections; chivalric romances; Columbus, and the literary as well as geographic discovery; and Lazarillo de Tormes, Cervantes, Lope de Vega, Calderón, and Sor Juana Inés de la Cruz, among others.

## SPAN 2190 Intermediate Spanish II

(Composition and Conversation) Fall or spring. 4 credits. Satisfies Option 1 of language requirement.
Prerequisite: SPAN 2070, or SPAN 2090, or CASE Q+. Class meets three times a week. T. Beviá and staff.

This advanced-intermediate course is designed to prepare students for study abroad, entry into the major, and advanced-level courses. Students study stylistics, analyze and discuss texts, view films, and acquire advanced reading strategies. Continued emphasis is on writing and editing academic essays with peer
and instructor feedback. Classes are in Spanish and the language is actively used in oral presentations and communicative, creative, and critical-thinking activities. Students review grammar structures on their own, although the instructor may clarify as needed. The course is required for the major and may be taken concurrently with SPAN 2140,2150 , or 2170.

## SPAN 2200 Perspectives on Latin

 America (also LATA 2200) @ (CA-AS) Spring. 3 credits. Highly recommended for Latin American studies concentrators. Conducted in English. 1-credit disc sec conducted in Spanish. E. Paz-Soldán. Interdisciplinary course offered every spring. Topics vary by semester, but readings always focus on current research in various disciplines and regions of Latin America. The range of issues addressed include the economic, social, cultural, and political trends and transitions in the area. In the weekly meetings, instructors and guest lecturers facilitate student discussions. Students taking the course are required to participate in all class discussions and write a research paper in their chosen focus area.
## SPAN 2230 Perspectives on Spain (LA-

 AS)Fall. 4 credits. Satisfies Option 1 of

## language requirement. Prerequisite:

SPAN 2190 or permission of instructor.
Conducted in Spanish. P. Keller.
An introduction to Spain's history, plural cultures, and present-day society. Through a series of key literary works, films, and other visual representations we will explore such topics as the place of tradition, religion, and the family in modern Spain. Our focus will be on the transformation of Spain from an authoritarian state under General Franco's dictatorship (1939-1975) into a remarkably diverse and pluralistic nation in which linguistic, cultural, political, and gender differences have been consecrated in a very progressive legislation. This course satisfies the main requirement for the minor in Spanish, may be used as an elective for the major, and is crucial to those planning to study abroad in Spain in the near future.

## SPAN 2240 Perspectives on the

 Caribbean (also ASRC/LATA 2240) (CA-AS)Fall. 4 credits. Prerequisite: SPAN 2190 or permission of instructor. G. Aching. This course examines the Caribbean as a site where challenges to and within Western thought emerged. We analyze the ways in which freedom is described in revolutionary thinking by interrogating the following themes in four sections. In the first section, we analyze the difficulties that 16th-century theologians experienced in determining if the "Indian" possessed a soul and if the Spanish crown could wave a "just war" against indigenous "pagans"; this debate was crucial for the New World origins of disciples such as anthropology and international relations. In the second section, we examine the Haitian Revolution in order to describe and interrogate the philosophical and historical relations between master and slave. In the third section, we look at writings such as the Communist Manifesto and Che Guevara's essays in order to analyze the difficulties of articulating the relationship between man and socialism in Cuba. In the final section, we examine the problems designating who constitutes the native "we" and the foreign "them" in the
neoliberal economic revolution that is taking place in Jamaica: for this discussion, we read Jamaica Kincaid's A Small Place and view Stephanie Black's film Life and Debt.

## SPAN 3010 Hispanic Theatre Production (also LATA 3010)

Spring. 1-3 credits, variable. 3 credits satisfies Option 1 of language requirement and fulfills (LA-AS). D. Castillo.

Students develop a specific dramatic text for full-scale production. The course involves selection of an appropriate text, close analysis of the literary aspects of the play, and group evaluation of its representational value and effectiveness. All students in the course are involved in some aspects of production of the play, and write a final paper as a course requirement. Credit is variable depending upon the student's role in play production: a minimum of 50 hours of work is required for 1 credit; a maximum of 3 credits are awarded for 100 hours or more of work.

## SPAN 3020 Spanish in the Disciplines

 (also LATA 3020)Fall or spring. 1 credit. Staff.
Spanish-language discussion section supplementing the course materials during the lecture section including conversation in Spanish and discussion of course lecture in Spanish.

## SPAN 3060 Introduction to Hispanic Linguistics (also LSP/LING 3060) (KCM-AS)

Fall. 4 credits. Prerequisites: SPAN 2190 or CASE Q++ or permission of instructor.
D. Cruz de Jesús.

Linguistics is the study of human languageswhat they are composed of and how they are used. This course provides an introduction to Spanish linguistics and establishes the basis for future application of linguistic principles. The course begins with an exploration of the sound system of Spanish and its theoretical representation. Building on this, the discussion continues with topics in Spanish morphology such as word formation and verbal reflection. This is followed by issues in syntax and semantics that are analyzed both in isolation and in terms of relationship to each other. The goal of this course is to provide students with a level of knowledge that enables them to make connections between the structure of Spanish and relevant issues in contemporary Hispanic linguistics, such as language variation, bilingualism, and Spanish in the United States.

## SPAN 3100 Advanced Spanish

 Conversation and Pronunciation Spring. 3 credits. Satisfies Option 1 of language requirement. Prerequisite: SPAN 2190 or CASE Q++. B. Teutli. Conversation course with intensive oral practice obtained through the production of video programs. Students practice the fundamental aspects of communication in the standard spoken and written Spanish, with some focus on dialectal variations. There are weekly pronunciation labs.
## SPAN 3110 Advanced Spanish Writing Workshop

Fall or spring. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: SPAN 2190 or CASE Q++ or equivalent. C. Lawless and staff.

This course, which is required for the major, is designed to help the learner develop increased
accuracy and sophistication in writing in Spanish for academic purposes and continued oral practice in Spanish. To this end, there will be ample writing and revising practice, with a focus on specific grammatical and lexical areas, customized to the needs of the students enrolled in the course. A number of literary and popular texts are included as well as films. SPAN 3110 may be taken concurrently with SPAN 2140, 2150, or 2170.

## SPAN 3150 Translating from Spanish (also COML 3140) (LA-AS)

Spring. 4 credits. Prerequisites: SPAN 3100 or 3110, or permission of instructor. J. Routier-Pucci.

This seminar-type course, open to students who have successfully passed a 3000 -level language course, will focus on translating from the source language (Spanish) into the target language (English). The purpose of the course is to learn and practice the skill of translation, and investigate the various technical, stylistic, and cultural difficulties encountered in the process.

## SPAN 3170 Creative Writing Workshop (in

 Spanish)Fall. 4 credits. Satisfies Option 1 of language requirement. Prerequisite: SPAN 2140, 2150, 2170, or 2190, or CASE $\mathrm{Q}++$, or permission of instructor.
Conducted in Spanish. E. Paz-Soldán.
Focuses on the practice of narrative writing in Spanish. Explores what makes a novel and a short story work, paying close attention to narrative structure, plot, beginnings/endings, character development, theme, etc. Students read classic novels and short stories as points of departure for the discussion. Because the course is a workshop, students are expected to write their own fiction.

## SPAN 3320 Latin American Science Fiction (also LATA 3320)

Fall. 4 credits. Prerequisite: SPAN 2150 or permission of instructor. E. Paz-Soldán. Popular genres such as detective and science fiction have a distinguished tradition in Latin America. In this course we will explore the origins, development, and consolidation of science fiction, from the end of the 19th century until today, placing particular emphasis on the Southern Cone (Argentina and Chile). We will also see its relationship with magical realism and the "neofantástico," and analyze how the genre has allowed writers freedom to tackle relevant political and social issues.

## SPAN 3990 More Than Meets the Eye: Spanish Theater and Early 20th-Century Thought (LA-AS)

Fall. 4 credits. M. Balsa.
On the basic premise that ideas can appear to us on stage and on screen just as productively as they can be found on the pages of a book, this course proposes a study of various leitmotifs in 20th-century Western thought through a series of analyses of Spanish theater plays placed in dialogue with texts and films from the period. In this vein, we will focus on a selection of works by major playwrights such as Unamuno (El Otro, 1926), García Lorca (El public, 1933), Casona (La Sirena Varada, 1929), or Valle-Inclán (Luces de Bohemia, 1920). Our perspectives on plays will be enriched by texts like Freud's Civilization and Its Discontents, Brenton's Surrealist Manifestoes, and Marx's and Engels's Communist Manifesto, as well as films such as Un chien andalou (Dalí and Charles Buñuel, 1929), Metropolis (Fritz Lang, 1927),

Frankenstein (James Whale, 1931), and Modern Times (Charles Chaplin, 1936).

## SPAN 4040 The Task of the Cleric

Spring. 4 credits. S. Pinet.
This seminar will explore three main topicstranslation, cartography, and economythrough two 13th-century Spanish works of mester de clerecía. The Libro de Alexandre, and the Libro de Apolonio. While all of these are decidedly Spanish (Castilian) works, their obvious links to a general Western European romance and epic tradition offer ample opportunity to reflect on questions of sources, authority, and originality, as well as the close analysis of the practices that reveal developments-especially in the visual arts, politics, and economy-contemporary to their composition. Readings will include a variety of theoretical materials on translation, space/ place, cartography, and political economy by authors such as Michel de Certeau, Marcel Mauss, Paul Zumthor, George Steiner, Walter Bénjamin, and Frederic Jameson, among others.
SPAN 4170 Shipwrecks: Disaster, Deliverance, and Capitalism (also FREN/LATA 4170) (LA-AS)
Fall. 4 credits. G. Aching.
This course examines actual and imagined shipwrecks as the means by which witnesses, survivors, writers, and artists reflect on the relations between disaster and deliverance, civilization and barbarism, and the relationship between necessity, freedom, and contingency in capitalism. The course begins with classical readings on shipwrecks and castaways, such as selections from Homer's Odyssey, the shipwreck of St. Paul, and Horace's shipwrecked sailor. Subsequent readings focus principally on shipwrecks within colonial frameworks, such as Alvar Nüñez Cabeza de Vaca's Castaways, Luis de Góngora's Solitudes, William Shakespeare's The Tempest, Daniel Defoe's Robin Crusoe, and Jean-Baptiste Savigny's and Alexandre Corréard's Narrative of a Voyage to Senegal in 1816, as well as on Herman Melville's Moby Dick. Critical readings include selections from Marx's Capital, Peter Linebaugh's and Marcus Rediker's The ManyHeaded Hydra, and C.L.R. James' Mariners, Renegades, and Castaways.

## SPAN 4190-4200 Special Topics in

 Spanish Literature4190, fall; 4200, spring. 2-4 credits each semester. Prerequisite: permission of instructor. Staff.
Guided independent study of special topics.
SPAN 4290-4300 Honors Work in Spanish 4290, fall; 4300, spring (yearlong). 8 credits. R grade given at end of fall semester and final grade at end of spring semester. Open to juniors and seniors. Consult director of honors program for more information. Staff.

## SPAN 4610 Ghostly Figures in

 Contemporary Spanish Film (LA-AS) Spring. 4 credits. M. Balsa.With the help of texts by thinkers like Sigmund Freud, Walter Benjamin, and Roland Barthes, who have theorized the importance of the phantasmagoric in the ways in which most of us see, remember, and narrate our life experiences, this course proposes an exploration of the diverse roles that spectral figures of various kinds play in the works of prominent contemporary Spanish filmmakers. Our viewing list will include Pedro

Almodóvar's Volver (2006), Alejandro
Amenábar's The Others (2001), Isabel Coixet's My Life Without Me (2003), Mercedes Alvarez's The Sky Turns (2004), and Guillermo del Toro's Pan's Labyrinth (2006). The course will be conducted entirely in English and all films will have English subtitles.

## SPAN 4790 The Seven Deadly Sins (LA-AS)

Fall. 4 credits. Mandatory senior seminar. Conducted in Spanish. S. Pinet.
After a brief historical and philosophical exploration of the concept of sin, we will trace the development of the list of seven deadly sins from Evagrius and Cassian to Gregory I. We will then explore each of the sins-lust, gluttony, greed, acedia or sloth, pride, envy, and wrath-in an Iberian context through works of art and literature that may include Libro de buen amor, Libro de Alexandre, Berceo, Bosch, and Libro de la infancia y muerte de Jesús, and will end with contemporary versions, such as Se7en.
SPAN 4910 Latin American Literature and Mass Media (also LATA 4910)
Spring. 4 credits. E. Paz-Soldán. An analysis of Latin American literary texts and their relationship with the changing media landscape of the 20th century. We will explore how Latin American authors have engaged thematically and formally with the impact of mass media and new technologies. Some of the writers we will read are Huidobro, Cabrera Infante, Cortazar, Puig, and Fuget.

## SPAN 4956 Transatlantic Decadence

 (also FREN/SHUM 4956)Spring. 4 credits. B. Bosteels.
For description, see SHUM 4956.

## SPAN 6390-6400 Special Topics in

 Spanish Literature6390, fall; 6400, spring. 2-4 credits each semester. Staff.
Guided independent study for graduate students.

## SPAN 6560 The Cross and the Crescent in Iberia

Fall. 4 credits. Conducted in Spanish.
M. A. Garcés.

This course concentrates on the twin themes of cultural frontiers and exchanges in the early modern Mediterranean, where the writer Miguel de Cervantes played an important role as a soldier and captive. We will explore contacts between Muslims and Christians in texts produced after the conquest of Granada in 1492, as well as in later Iberian works centered on Algiers, Sicily, Cyprus, and Constantinople in the 16th and 17th centuries. Particular attention will be paid to the dynamic improvisation of identities who converted to Islam and fled to Ottoman territories. Course readings will include Spanish reports of captivity and plays, novels, and eyewitness accounts of life in Granada, Algiers, and Constantinople by Busbecq, Calderón, Cervantes, Lope de Vega, Diego Galán, Nuñez-Muley, Pérez de Hita, and Antonio de Sosa, among others. Course selections will be supplemented with an ample range of critical approaches.

## SPAN 6640 Borderworks (also COML

 6335, ASIAN 6633, LSP/LATA 6640)Fall. 4 credits. D. Castillo and A. Banerjee. For description, see COML 6335.

## SPAN 6820 The Architecture of Desire-

 Luis Buñuel and Film TheorySpring. 4 credits. Conducted in Spanish. P. Keller.

An advanced graduate course that explores the films of renowned auteur Luis Buñuel in conjunction with different theories of film, aesthetics, and politics. Tracing his work from the inception of surrealism to the final stage of his career in the late 1970s, the course proposes an in-depth study of the Bruñuelian canon, placing his work in dialogue with contemporary debates, and sexuality. In addition to scholarship on Buñuel, we will read works by Kracauer, Deleuze, Tarkovsky, Theweleit, Ranciere, Mulvey, Eisensten, Foucault, and Kizek.

## RUSSIAN

N. Pollak, fall; G. Shapiro, spring, director of undergraduate studies ( 226 Morrill Hall, 2558350); S. Paperno, director of Russian language program (226E Morrill Hall);
W. Browne, R. Krivitsky, G. Shapiro,
V. Tsimberov. Visiting: K. Bättig von Wittelsbach, C. Golkowski. Emeriti: P. Carden,

## S. Senderovich

For updated information, consult our web sites:
(literature) www.arts.cornell.edu/russian (language) russian.cornell.edu

## The Russian Major

Students wishing to major in Russian should discuss options with the DUS.

## Satisfying the Foreign Language Requirement

## 1. Options 1a and 1b:

1a. Any Russian-language (RUSSA) course totaling 3 or 4 credits at the 2000 level or above (with the exception of RUSSA 3300 Directed Study) satisfies the Arts and Sciences language requirement under Option 1a.
1b. After completing the prerequisites RUSSA 1121 and RUSSA 1122, students may satisfy the language requirement by taking RUSSL 2209. Other RUSSL courses that are taught in Russian may also be used when appropriate.

## 2. Option 2:

- In two semesters: RUSSA 1103 and 1121 in the fall, RUSSA 1104 and 1122 in the spring
- In three semesters: RUSSA 1121 in the fall, 1122 in the spring, 2203 the following fall
- In four semesters: RUSSA 1121 in the fall, 1122 in the spring, 1125 the following fall, 1126 the following spring


## Study Abroad

Students from Cornell frequently participate in the Council on International Educational Exchange and the American Council of Teachers of Russian programs for language study, as well as other Russian language programs. Opportunities are available for study during the summer, a single semester, or
the full year. Further information is available from Professor Wayles Browne in the
Department of Linguistics (220 Morrill Hall) and from the Cornell Abroad Office.
Honors. Students taking honors in Russian do individual reading and research and write an honors essay. Students planning to take honors should consult the director of undergraduate studies in their junior year.

## Russian Language

Detailed information and schedules of the Russian language courses, as well as office hours of the instructors, are available at: russian.cornell.edu.
Suggested tracks for first- and second-year Russian language study:

- First-year intensive: $1103+1121$ in the fall, $1104+1122$ in the spring
- First-year nonintensive: 1121 in the fall, 1122 in the spring
- Second-year intensive: $1125+2203$ in the fall, $1126+2204$ in the spring
- Second-year nonintensive: 2203 in the fall, 2204 in the spring
- Second-year "mostly reading; lighter load": 1125 in the fall, 1126 in the spring


## RUSSA 1103-1104 Conversation Practice

 1103, fall; 1104, spring. 2 credits each semester. Students must enroll in one sem. of 1103 and one sem. of 1121 in fall, and one sem. of 1104 and one sem. of 1122 in spring. R. Krivitsky.Reinforces the speaking skills learned in RUSSA 1121 and 1122. Homework includes assignments that must be done in the language lab or on the students' own computers.

## RUSSA 1121-1122 Elementary Russian through Film

1121, fall; 1122, spring. 4 credits each semester. Prerequisite: for RUSSA 1122, RUSSA 1121. R. Krivitsky, S. Paperno, and V. Tsimberov.

Gives a thorough grounding in all the language skills: listening, speaking, reading, and writing. Course materials include clips from original Russian films and television programs. Homework includes assignments that must be done in the language lab or on the students' own computers.

## RUSSA 1125-1126 Reading Russian Press

1125, fall; 1126, spring. 2 credits each semester. sem. 101 for non-native speakers of Russian; sem. 102 for native speakers of Russian. Prerequisite for 1125 sem. 101: RUSSA 1122 or placement by department; prerequisite for 1126 sem. 101: RUSSA 1125 or placement by department; prerequisite for 1125 and 1126 sem . 102: placement by department. Times TBA with instructors.* See starred (*) note at end of RUSSA section. S. Paperno and

## V. Tsimberov.

The emphasis is on reading unabridged articles on a variety of topics from current Russian periodicals and web pages and translating them into English; a certain amount of discussion (in Russian) may also be undertaken.

## RUSSA 2203-2204 Intermediate

 Composition and Conversation 2203, fall; 2204, spring. 4 credits each semester. Satisfies Option 1. Prerequisite: for RUSSA 2203, RUSSA 1122 and 1104, or RUSSA 1122 with grade higher than B, or placement by department; for RUSSA 2204, RUSSA 2203 or equivalent. R. Krivitsky, Guided conversation, translation, reading, pronunciation, and grammar review, emphasizing the development of accurate and idiomatic expression in the language. Course materials include video clips from an original Russian feature film and work with Russian web sites, in addition to the textbook.
## RUSSA 3300 Directed Studies

Fall or spring. 1-4 credits, variable.
Prerequisite: permission of instructor. Times TBA with instructor.* See starred (*) note at end of RUSSA section. Staff.
Taught on a specialized basis for students with special projects (e.g., to supplement a nonlanguage course or thesis work).

RUSSA 3303-3304 Advanced Composition and Conversation 3303, fall; 3304, spring. 4 credits each semester. Either RUSSA 3303 OR 3304
satisfies Option 1. Prerequisite: for RUSSA 3303, RUSSA 2204 or equivalent; for RUSSA 3304, RUSSA 3303 or equivalent. R. Krivitsky, S. Paperno, and V. Tsimberov. Reading, writing, and conversation: current Russian films (feature and documentary), newspapers, television programs, Russian web sites, and other materials are used. In some years, completing interviews with native speakers of Russian is a component of RUSSA 3304.

## RUSSA 3305-3306 Reading and Writing

 for Heritage Speakers of Russian 3305 , fall; 3306, spring. 2-3 credits, variable. Prerequisite: placement by department. Times TBA with instructor.* See starred (*) note at end of RUSSA section. S. Paperno and V. Tsimberov. Intended for students who speak grammatically correct Russian but do not know Russian grammar and have not learned to read or write Russian well (or have not learned written Russian at all). The two courses are very similar and do not constitute a sequence. Each may be taught slightly faster or slower in a given year, depending on the needs and interests of the students. Two classes a week teach writing and grammar and include related reading. These classes are required, and the students who take them receive 2 credit hours. The third (optional) class teaches reading and discussion, and grants an additional credit hour.
## RUSSA 3308 Russian through Popular Culture

Spring. 2-3 credits, variable. Prerequisite: RUSSA 3304 for nonnative speakers of Russian; RUSSA 3305 or 3306 for heritage speakers of Russian; for all others with advanced knowledge of Russian, placement by department. Not open to fluent native speakers of Russian (recommended: RUSSA 3309/3310 and RUSSL courses). Conducted in Russian. Times TBA with instructor.* See starred (*) note at end of RUSSA section. R. Krivitsky. Aims to expand the students' vocabulary and their comprehension, speaking, reading, and writing skills, as well as cultural competence, through a mosaic study and discussion of a
variety of styles in contemporary Russian popular culture ( 1970 s through the present). Course materials include traditional and urban folklore, film, animation, published texts (prose and poetry), and recordings of songs. Includes two or three essays or similar writing assignments. Work is distributed so that a student may attend all three weekly meetings for 3 credit hours or only two of the meetings for 2 credit hours.

RUSSA 3309-3310 Advanced Reading 3309, fall; 3310, spring. 4 credits each semester. Satisfies Option 1. Sem. 101 for nonnative speakers of Russian; sem. 102 for native speakers of Russian. Prerequisites: for sem. 101 of RUSSA 3309, RUSSA 2204; for RUSSA 3310, RUSSA 3309 or equivalent; for sem. 102 of 3309 and 3310, placement by department. Two meetings per week. Times TBA with instructors.* See starred (*) note at end of RUSSA section. May be canceled if enrollment is insufficient. S. Paperno and V. Tsimberov.

Designed to teach advanced reading and discussion skills. In seminar 101, weekly reading assignments include 20-40 pages of unabridged Russian, fiction or nonfiction. In seminar 102, the weekly assignments are 80-100 pages. Discussion of the reading is conducted entirely in Russian and centered on the content and analysis of the assigned selection.
[RUSSA 4401 History of the Russian Language (also LING 4417) (HA-AS)
Spring. 4 credits. Next offered 2011-2012. W. Browne.

For description, see LING 4417.]

## RUSSA 4403 Linguistic Structure of

 Russian (also LING 4443) (KCM-AS)Fall. 4 credits. W. Browne.
For description, see LING 4443-4444.
RUSSA 4413-4414 Advanced Conversation and Stylistics
4413, fall; 4414, spring. 2 credits each semester. Prerequisites: for RUSSA 4413, RUSSA 3304 or equivalent; for RUSSA 4414, RUSSA 4413 or equivalent. Times TBA with instructor.* See starred (*) note at end of RUSSA section. V. Tsimberov.
Involves discussion of authentic Russian texts and films (feature or documentary) in a variety of nonliterary styles and genres.

## RUSSA 4491 Reading Course: Russian

 Literature in the Original Language Fall or spring. 1 credit each semester. Prerequisite: permission of instructor. Times TBA with instructor.* See starred (*) note at end of RUSSA section. Staff.To be taken in conjunction with any Russian literature course at the advanced level.
Students receive 1 credit for reading and discussing works in Russian in addition to their normal course work.

## RUSSA 6601 Old Church Slavonic (also

 LING 6663)Fall. 4 credits. W. Browne. For description, see LING 6663.

## RUSSA 6602 Old Russian Texts (also

 LING 6662)Spring. 4 credits. W. Browne. For description, see LING 6662.

## RUSSA 6633-6634 Russian for Russian

 Specialists6633, fall; 6634, spring. 1-4 credits, variable. Prerequisite: four years of college Russian or equivalent. Times TBA with instructor.* See starred (*) note at end of RUSSA section. Course will be cancelled if enrollment is insufficient. Staff.
Designed for students whose areas of study require advanced active control of the language. Fine points of translation, usage, and style are discussed and practiced. Syllabus varies from year to year.

## [RUSSA 6651 Comparative Slavic

Linguistics (also LING 6671)
Fall. 4 credits. Next offered 2011-2012.
W. Browne.

For description, see LING 6671.]

* For RUSSA courses marked "Time to be arranged with instructor(*)," students should bring their class schedules to the
organizational meeting, usually held on the second or third day of the semester, where class meeting times will be chosen so as to accommodate as many students as possible. The date, time, and place of the organizational meeting is announced at russian.cornell.edu, and posted at the Russian Department office ( 226 Morrill Hall). Students may also contact the department office at 255-8350 or e-mail russiandept@cornell.edu.
**For TBA courses taught by Wayles Browne, contact Professor Browne (ewb2@cornell.edu or 255-0712).


## Russian Literature

A variety of courses is offered in Russian literature. Readings may be in English translation or in the original Russian or both (see course descriptions). Instruction often encompasses culture and intellectual history as well as literature. Some courses are crosslisted with appropriate departments.

## [RUSSL 2207-2208 Themes from Russian Culture \# (LA-AS)

Spring. 3 credits. In translation. Offered
alternate years; next offered 2012-2013.
G. Shapiro.

These courses are based on lectures,
discussions, and audiovisual presentations and cover various aspects of Russian culture, such as literature, art, architecture, music, religion, philosophy, and social thought. RUSSL 2207 extends through the 18 th century, and RUSSL 2208 covers the 19th and 20th centuries.]

## RUSSL 2209 Readings in Russian Prose and Poetry \# (LA-AS)

Fall. 3 credits. Reading in Russian;
discussion in English. Satisfies Option 1. Prerequisite: for students with $2+$ semesters of Russian language (RUSSA 1121/1122 or equivalent). N. Pollak.
Short classics of the 19th and early 20th centuries. Authors may include Pushkin, Lermontov, Tolstoy, Chekhov, Blok, and Akhmatova. Assignments adjusted for native fluency. May be used as a prerequisite for RUSSL 3300-4400 courses with reading in Russian.

## [RUSSL 2212 Readings in 20th-Century

 Russian Literature (LA-AS)Spring. 3 credits. Reading, writing, and
discussion in Russian. Satisfies Option 1.
Next offered 2011-2012. G. Shapiro.
For students with native background.
Introduces students to 20th-century Russian
literature in the original and improves Russian reading and writing skills.]
[RUSSL 2279 The Russian Connection, 1830 to 1867 (also COML 2790) \# (LA-AS)
Fall. 4 credits. In translation. Next offered 2012-2013. Staff.
Examines Russian prose of mid-19th century (Lermontov, Tolstoy) against the background of European prose (Rousseau, Musset,
Stendhal, Thackeray, et al.).]
[RUSSL 2280 The Russian Connection, 1870 to 1960 (also COML 2800) (LA-AS)
Fall. 4 credits. In translation. Next offered 2012-2013. Staff.
Examines the Dostoevskian novel against the background of European prose (Diderot, Camus, Sarraute, et al.]

## RUSSL 3331 Introduction to Russian Poetry \# (LA-AS)

Fall. 4 credits. Reading in Russian; discussion in English. Prerequisite: proficiency in Russian or permission of instructor. May be counted toward 12 credits of Russian literature in original language for Russian major. Next offered 2011-2012. N. Pollak.
A survey of Russian poetry, with primary emphasis on the analysis of individual poems

## by major poets.

[RUSSL 3332 Russian Drama and Theater (also THETR 3220) \# (LA-AS)
4 credits. In translation. Next offered 20112012. Staff.

Covers 19th- to 20th-century plays (Gogol, Ostrovsky, Chekhov), including historical period, cultural atmosphere, and literary trends.]

## [RUSSL 3333 20th-Century Russian Poetry (LA-AS)

4 credits. Reading in Russian; discussion in English. May be counted toward 12 credits of Russian literature in original language for Russian major. Next offered 2011-2012. N. Pollak.

Close readings of lyrics by major 20th-century poets.]

## RUSSL 3334 The Russian Short Story \# (LA-AS)

4 credits. Reading in Russian; discussion in English. Prerequisite: proficiency in Russian or permission of instructor. May be counted toward 12 credits of Russian literature in original language for Russian major. G. Shapiro.
Survey of two centuries of Russian storytelling. Analysis of individual stories by major writers. Emphasis on narrative structure and on related landmarks of Russian literary criticism.

## RUSSL 3335 Gogol \# (LA-AS)

Fall. 4 credits. G. Shapiro
Selected works of Gogol are read closely in translation and viewed in relation to his life and to the literature of his time.

## [RUSSL 3337 Films of Russian Literary

 Masterpieces (LA-AS)4 credits. In translation. Next offered 20122013. Staff.

Comparative analysis of American films based on the Russian novels War and Peace and Dr. Zhivago. Discusses problems of translation between media and cultures.]

## [RUSSL 3338 Lermontov's Hero of Our

 Time \# (LA-AS)4 credits. Reading in Russian; discussion in
English. Next offered 2012-2013. N. Pollak. Hero of Our Time has been called the first major Russian novel. Close reading, attention to linguistic and literary problems.]

## [RUSSL 3367 The Russian Novel \# (LA-

 AS)Spring. 4 credits. In translation. Students who read Russian may sign up for a discussion section of the Russian text for 1 credit (RUSSA 4491). Next offered 20112012. N. Pollak.

The rise of the Russian novel in the 19th century: Pushkin, Lermontov, Dostoevsky, Tolstoy, Chekhov.]

## RUSSL 3368 20th-Century Russian Literature (LA-AS)

Spring. 4 credits. In translation. Students who read Russian may sign up for discussion of Russian text for 1 credit
(RUSSA 4491). G. Shapiro.
Survey of 20th-century Russian prose, including such writers as Bunin, Bulgakov, and Nabokov, as well as Solzhenitsyn, Shalamov, and Voinovich.
[RUSSL 3369 Dostoevsky \# (LA-AS)
Fall. 4 credits. In translation. Next offered 2012-2013. Staff.
A survey of Dostoevsky's major novels: Notes from Underground, Crime and Punishment, The Idiot, and The Brothers Karamazov.]
[RUSSL 3373 Chekhov in the Context of Contemporary European Literature and Art \# (LA-AS)
4 credits. In translation. Next offered 20122013. Staff.

Anton Chekhov's stories in the context of the European art of the short story and contemporary paintings. Readings in English translation.]

## RUSSL 3385 Reading Nabokov (also

 ENGL 3790) (LA-AS)Fall. 4 credits. In translation. G. Shapiro. Nabokov's Russian works in translation from Mary to The Enchanter, and two novels he wrote in Ithaca while teaching literature at Cornell, Lolita and Pnin.

## RUSSL 3393 Honors Essay Tutorial

Fall and spring. 8 credits. Must be taken in two consecutive semesters in senior year; credit for first semester is awarded upon completion of second semester. For information, see director of undergraduate studies. Times TBA with instructor. Staff.
[RUSSL 4409 Russian Stylistics (LA-AS) Spring. 4 credits. Also open to graduate students. Prerequisite: proficiency in Russian or permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Next offered 2012-2013. Staff.
Beyond normative grammar. Introduction to idiomatic Russian (morphology, syntax, vocabulary, phraseology) and genres of colloquial and written language. Development of writing skills.]

## [RUSSL 4415 Post-Symbolist Russian

 Poetry (LA-AS)4 credits. Reading in Russian; discussion in English. Prerequisite: proficiency in Russian or permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Next offered 20122013. N. Pollak.

Verse, critical prose, and literary manifestos by selected early 20th-century Russian poets, including Annenskii, Pasternak, and
Mandelstam.]

## [RUSSL 4430 Practice in Translation

 (LA-AS)Spring. 4 credits. Prerequisite: proficiency in Russian or permission of instructors.
Next offered 2012-2013. Staff.
Practical workshop in translation: documents, scholarly papers, literary works (prose and poetry). Mostly Russian to English, some

## English to Russian.]

[RUSSL 4432 Pushkin \# (LA-AS)
Spring. 4 credits. Reading in Russian;
discussion in English. Prerequisite: proficiency in Russian or permission of instructor. May be counted toward 12 credits of Russian literature in original language for Russian major. Next offered 2011-2012. N. Pollak.
Selected works by Pushkin: lyrics, narrative poems, and Eugene Onegin.]

## [RUSSL 4433 Short Works of Tolstoy \#

 (LA-AS)4 credits. Reading in Russian; discussion in English. Prerequisite: RUSSL 2209 or 2212 or equivalent mastery of Russian language skills. Next offered 2012-2013. N. Pollak. A selection of short stories and short novels in Russian. Attention to style, themes, idioms. Assignments adjusted to students' language capabilities.]

## RUSSL 4492 Supervised Reading in

 Russian LiteratureFall or spring. 1-4 credits each semester. Independent study. Prerequisite: students must find an advisor and submit a plan before signing up. Times TBA with instructor. Staff.
[RUSSL 4493 Anton Chekhov \# (LA-AS) 4 credits. Reading in Russian; discussion in English. Prerequisite: proficiency in Russian or permission of instructor. Next offered 2011-2012. Staff.
Major works of Chekhov in Russian; focus on style and language. Readings include stories ("Anna on the Neck," "Darling," "Steppe") and plays (Uncle Vanya and Seagull).]

## Graduate Seminars

RUSSL 6611 Supervised Reading and
Research Research
Fall or spring. 2-4 credits each semester.
Prerequisite: proficiency in Russian or permission of instructor. Times TBA with instructor. Staff.

## Related Languages

Note: Completion of the 1131-1132-
1133-1134 sequence in HUNGR/
POLSH/BCS fulfills the Option 2
language requirement.

## Czech

## CZECH 3300 Directed Studies

Spring. 1-4 credits, variable. Prerequisite: permission of instructor. Times TBA with instructor.** See double-starred (**) note at end of UKRAN section. Staff.
Taught on a specialized basis to address particular student needs.

## Hungarian

## [HUNGR 1131-1132 Elementary

## Hungarian

1131, fall; 1132, spring. 3 credits.
Prerequisite: for 1132: HUNGR 1131 or permission of instructor. Offered alternate
years; next offered 2011-2012. Staff.
Teaches the basic grammar of Hungarian. Designed to aid the student in all facets of language acquisition: speaking, listening comprehension, reading, and writing. Secondsemester Hungarian (1132) teaches more advanced grammar of the language at an intermediate level.]

## [HUNGR 1133-1134 Continuing

 Hungarian1133, fall; 1134, spring. 3 credits.
Prerequisite: for 1133, HUNGR 1132 or permission of instructor; for 1134, HUNGR 1133 or permission of instructor. Offered alternate years; next offered 2012-2013. Staff.
Conversation and reading course designed to aid the student in speaking, listening comprehension, reading, and writing. 1134 teaches more advanced instruction of the language at an intermediate level.]

## [HUNGR 3300 Directed Studies

Fall or spring. 1-4 credits, variable.
Prerequisite: permission of instructor.
Times TBA with instructor.** See double-
starred (**) note at end of UKRAN section.
Next offered 2011-2012. Staff.
Taught on a specialized basis to address particular student needs.]

## [HUNGR 4427 Structure of Hungarian (also LING 4427) (KCM-AS) <br> Spring. Next offered 2011-2012. Staff.]

## $\overline{\text { Polish }}$

POLSH 1131-1132 Elementary Polish
1131, fall; 1132, spring. 3 credits each semester. Prerequisite: for POLSH 1132, POLSH 1131 or equivalent. Offered alternate years. Staff.
Covers all language skills: speaking, listening comprehension, reading, and writing.
[POLSH 1133-1134 Continuing Polish 1133, fall; 1134, spring. 3 credits each semester. Prerequisites: for POLSH 1133, POLSH 1132 or permission of instructor; for POLSH 1134, POLSH 1133 or equivalent.
Times TBA with instructor.*** Offered alternate years; next offered 2011-2012. See double-starred (**) note at end of UKRAN section. Staff.
An intermediate conversation and reading course.]

## POLSH 3300 Directed Studies

Fall or spring. 1-4 credits, variable. Prerequisite: permission of instructor. Times TBA with instructor.** See doublestarred (**) note at end of UKRAN section. Staff.

Taught on a specialized basis to address particular student needs.

## POLSH 3301 Polish Through Film and Literature (LA-AS)

Fall. 3 credits. Satisfies Option 1.
Prerequisite: POLSH 1134 or permission of instructor. Times TBA with instructor.** See double-starred (**) note at end of UKRAN section. C. Golkowski.
Language proficiency and insight into Polish culture through videos, films, and contemporary texts. Listening and reading comprehension, conversation, grammar review.

## Bosnian-Croatian-Serbian

[BCS 1131-1132 Elementary Bosnian-Croatian-Serbian
1131, fall; 1132, spring. 3 credits each semester. Prerequisite: for BCS 1132, BCS 1131 or equivalent. Times TBA with instructor.** Offered alternate years; next offered 2011-2012. See double-starred (**) note at end of UKRAN section. Staff. Covers all language skills: speaking, listening comprehension, reading, and writing. Includes Bosnian.]

## BCS 1133-1134 Continuing Bosnian-

 Croatian-Serbian1133, fall; 1134, spring. 3 credits each semester. Prerequisite: BCS 1133, BCS 1132 or equivalent; for BCS 1134, BCS 1133 or equivalent. Times TBA with instructor.** See double-starred (**) note at end of
UKRAN section. Offered alternate years. Staff.
An intermediate conversation and reading

## course.

## BCS 3300 Directed Studies

Fall or spring. 1-4 credits, variable. Prerequisite: permission of instructor.
Times TBA with instructor.** See doublestarred ( ${ }^{* *)}$ note at end of UKRAN section. Staff.
Taught on a specialized basis to address particular student needs.
BCS 3302 Advanced Bosnian-CroatianSerbian Through Literature and Film Fall. 3 credits. Satisfies Option 1.
Prerequisite: BCS 1133/1134 or permission of instructor. Meeting times TBA with instructor.** See double-starred (**) note at end of UKRAN section. K. Bättig von Wittelsbach.
This is a third-year course with intensive speaking and writing practice. Selections from a variety of fictional and argumentative texts, as well as films illustrative of contemporary South Slavic societies (Croatia, Bosnia and Herzegovina, Serbia, Montenegro), will provide the basis for discussions and essays. Review of select grammar topics is included. The student's grade will be based on participation, compositions, oral presentations, grammar exercises, and a final exam.

## $\overline{\text { Ukrainian }}$

## UKRAN 3300 Directed Studies

Spring. 1-4 credits, variable. Prerequisite: permission of instructor. Times TBA with instructor.** See double-starred (**) note at end of section. Staff.
Taught on a specialized basis to address particular student needs.
**For these courses, contact the Russian department (russiandept@cornell.edu or 255-
8350) for time and place of organizational meeting(s).

## SANSKRIT

See "Asian Studies."

## SCIENCE AND TECHNOLOGY STUDIES

T. Pinch, acting chair (309 Rockefeller Hall, 255-6043); K. Vogel (DUS), R. N. Boyd, P. R. Dear, S. H. Hilgartner, R. Kline,
C. Leuenberger, B. V. Lewenstein, M. Lynch,
T. J. Pinch, A. G. Power, R. Prentice,
S. Pritchard, M. W. Rossiter, P. J. Sengers,
S. Seth, Emeritus: W. R. Lynn, J. V. Reppy,

## L. P. Williams

In today's world, issues at the intersection of the technical and the social arise continually in all aspects of life, from the role of computers in society, the history of evolutionary theory, and the challenges of environmental controversies, to the ethical dilemmas of genomics and biomedicine. The field of science and technology studies (S\&TS) addresses such issues through the study of the social aspects of knowledge, especially scientific and technological knowledge. S\&TS explores the practices that shape science and technology, examines their social and cultural context, and analyzes their political and ethical implications. S\&TS provides a strong liberal arts background from which students can go on to careers in law, medicine, environmental policy, business, and a variety of other professions where the social aspects of science and technology loom large.

## The Science and Technology Studies <br> Major <br> The Department of Science and Technology

 Studies has revised the major for students applying to the major, effective fall 2008.Admission to the major requires successful completion of one S\&TS course. First-Year Writing Seminars may count as the prerequisite, but not as part of the major. There are no other prerequisites, but students should plan to fulfill the science PBS and quantitative $M Q R$ requirements of the College of Arts and Sciences early in their college careers in order to be in a position to take additional science or engineering courses as outlined below.
Students intending to major in Science and Technology Studies should submit an application during their sophomore years. Juniors are considered on a case-by-case basis. The application includes (1) a one-page statement explaining the student's intellectual interests and why the major is consistent with the student's academic interests and goals; (2) a tentative plan of courses fulfilling S\&TS requirements; and (3) an up-to-date transcript of work completed at Cornell University (and elsewhere, if applicable). Further information and application materials are available in 306 Rockefeller Hall (255-6047).

## Requirements

S\&TS majors must complete the following requirements:
(Note: all courses used to fulfill major requirements must be taken for a letter grade, which must be C- or higher.)

1. The core course (STS 2011)
2. Three additional 2000 -level courses selected from the following list: STS 2021, 2051, 2061, 2331, 2501, 2851, 2861, 2871, 2921.
3. Additional S\&TS courses to total 34 credit hours in the major. Four of these courses must be 3000 level or above and a minimum of two of these must be 4000 level or higher. STS 1101 and/or 1102 may be used to meet major requirements only if taken before joining the major or during your first two semesters in the major. Only one independent study (STS 3991) of no more than 4 credit hours may be taken to meet major requirements.
4. Science requirement: In addition to the science requirement of the College of Arts and Sciences, Science \& Technology Studies majors are required to take an additional two courses in natural science or engineering (including computer science). Mathematics sufficient to provide background for the additional science requirement should be completed before undertaking that requirement. Choice of these courses should be made in consultation with the student's major advisor.

## The Honors Program

The honors program is designed to provide independent research opportunities for academically talented S\&TS majors. Students who enroll in the honors program are expected to do independent study and research, with faculty guidance, on issues in science and technology studies. Students who participate in the program should find the experience intellectually stimulating and rewarding whether or not they intend to pursue a research career. S\&TS majors are considered for entry into the honors program at the end of the second semester of their junior year. To qualify for the S\&TS honors program, students must have an overall Cornell cumulative grade point average (GPA) of at least 3.00 and a 3.30 cumulative GPA in courses taken for the major. Additionally, the student must have formulated a research topic, and have found a project supervisor and a second faculty member willing to serve as the advisors; at least one of these must be a member of the S\&TS department. More information on the honors program is available from the S\&TS undergraduate office at 306 Rockefeller Hall (255-6047).

## The Biology and Society Major

The Department of Science and Technology Studies also offers the Biology and Society major, which includes faculty from throughout the university. The Biology and Society major is designed for students who wish to combine the study of biology with exposure to perspectives from the social sciences and humanities. In addition to providing a foundation in biology, Biology and Society students obtain background in the social dimensions of modern biology and in the biological dimensions of contemporary social issues.

The Biology and Society major is offered to students enrolled in the College of Arts and

Sciences, the College of Human Ecology, and the College of Agriculture and Life Sciences. The major is coordinated for students in all colleges through the Biology and Society office. Students can get information, specific course requirements, and application procedures for the major from the office in 306 Rockefeller Hall, 255-6047

A full description of the Biology and Society major can be found on p. 507 of this catalog.

## The Minor in Science and Technology Studies

T. Pinch, acting chair (309 Rockefeller Hall, 255-6043); K. Vogel, director of undergraduate studies; R. N. Boyd, P. R. Dear, S. Hilgartner, R. Kline, C. Leuenberger, B. V. Lewenstein, M. Lynch, T. J. Pinch, A. G. Power, R. Prentice S. Pritchard, M. W. Rossiter, P. J. Sengers, S. Seth. Emeritus: W. R. Lynn, J. V. Reppy, L. P. Williams

The minor in Science \& Technology Studies (S\&TS) is designed for students who wish to engage in a systematic, interdisciplinary exploration of the role of science and technology in modern societies. The minor is intended for students with varied academic interests and career goals. Majors in the natural sciences and engineering have an opportunity to explore the social, political, and ethical implications of their selected fields of specialization, while students majoring in the humanities and social sciences have a chance to study the processes, products, and impacts of science and technology from an S\&TS perspective.
To satisfy the requirements for the S\&TS minor, students must complete, with a letter grade of C - or above, a minimum of four courses selected from the course offerings listed for the major, excluding first-year writing seminars. The four courses must include STS 2011 and at least one course at the 3000 or 4000 level. No more than one course can be at the 1000 level. Interested students may obtain further information about courses and a list of course descriptions by contacting the S\&TS undergraduate office, 306 Rockefeller Hall (255-6047).

## Graduate Field of Science \& Technology Studies

T. Pinch, acting chair; R. Kline, director of graduate studies; R. Boyd, P. Dear,
S. Hilgartner, R. Kline, S. Langwick, B. Lewenstein, M. Lynch, T. Gillespie, T. Hinrichs, A. Power, R. Prentice, S. Pritchard, W. Provine, J. Reppy, M. Rossiter, P. Sengers, S. Seth, K. Vogel. Minor Member:
C. Leuenberger.

Students may obtain further information about the field and course offerings by contacting the S\&TS graduate field office, 306 Rockefeller Hall (255-3810).

## First-Year Writing Seminars

Consult the John S. Knight Institute web site for times, instructors, and descriptions: www. arts.cornell.edu/Knight_institute/index.html.

## Introductory Courses

STS 1101 Science, Technology, and Politics (SBA-AS)
Fall. 3 credits. STS 1101 and 1102 may be taken separately or in any order. Recommended as introduction to field; not required and may not be used to fulfill a major requirement. R. Prentice.
From global warming to surveillance of citizens to health-care reform, issues in science, technology, and medicine also are political issues. This course uses contemporary scientific controversies to explore the intersections of science and politics. Issues explored may include the role of the military and private sector in funding research, the politics of experts and expertise, computer privacy and national security, and environmental politics.

## STS 1102 Histories of the Future (also

 HIST 1620) (CA-AS)Spring. 3 credits. Recommended as introduction to field; not required and may not be used to fulfill a major requirement. STS 1101 and 1102 may be taken separately or in any order. S. Seth. From Frankenstein to The Matrix, science fiction and film have depicted contemporary science, technology, and medicine for almost two centuries. This course introduces students to historical and social studies of science and technology using science-fiction films and novels, as well as key readings in science and technology studies. What social questions can fictional accounts raise that factual ones can only anticipate? How have "intelligent machines" from Babbage's Analytical Engine to Hal raised questions about what it means to be human? What can Marvel Comics teach us about changes in science and technology? When can robots be women and, in general, what roles did gender play in scientific, technological, and medical stories? How was the discovery that one could look inside the human body received? How do dreams and nightmares of the future emerge from the everyday work of scientific and technological research?

STS 1941 The History of Science in Europe: From the Ancient Legacy to Isaac Newton (also HIST 1941) (HA-AS)
Fall. 3 credits. P. Dear
For description, see HIST 1941.

## STS 1942 The History of Science in Europe: Newton to Darwin, Darwin to Einstein (also HIST 1942) (HA-AS)

Spring. 3 credits. P. Dear.
For description, see HIST 1942.

## Core Courses

STS 2011 What Is Science? An Introduction to the Social Studies of Science and Technology (also SOC 2100) (CA-AS)

Spring. 3 credits; also offered as Writing in the Majors 4 -credit option, by permission only, and limited to 15 students. T. Pinch Introduces some of the central ideas in the field of S\&TS. As well as serving as an introduction to students who plan to major in Biology and Society or in Science and Technology Studies, the course is aimed at students with backgrounds in either the sciences or the humanities who are challenged to think more critically about what we mean by science, what counts as scientific knowledge and why, and how science and
echnology intervene in the wider world. The course is a mixture of lecture, discussion, and other activities. The discussion sections are an integral part of the course and attendance is required. In addition, a series of written assignments throughout the semester and a take-home final during exam week compose the majority of the grade

## s\&TS Courses

STS 2051 Ethical Issues in Health and Medicine (also BSOC 2051) (KCM-AS) Fall. 4 credits. Limited to 150 students K. Vogel.

For description, see BSOC 2051.
STS 2061 Ethics and the Environment (also BSOC 2061, PHIL 2460) (KCM-AS)
Spring. 4 credits. S. Pritchard.
For description, see BSOC 2061.
STS 2331 Agriculture, History, and Society: From Squanto to Biotechnology (also AMST 2331) (HA-AS)
Fall. 3 credits. M. Rossiter
Surveys the major themes in the development of agriculture and agribusiness in the United States in the 19th and 20th centuries. These include particular individuals (e.g., Liberty Hyde Bailey, Luther Burbank, G. W. Carver, Henry A. Wallace, and Norman Borlaug), the rise of government support and institutions (including U.S.D.A. and Cornell), noteworthy events (the dust bowl, World War II, and the environmental movement), and the achievements of the Green and "Gene" Revolutions.

## STS 2501 Technology in Society (also ECE/ENGRG/HIST 2500) (HA-AS) <br> Fall. 3 credits. R. Kline. <br> For description, see ENGRG 2500.

## STS 2851 Communication, Environment,

 Science, and Health (also COMM 2850)Spring. 3 credits. B. Lewenstein.
For description, see COMM 2850.
STS 2871 Evolution (also BIOEE 2070, HIST 2870) (PBS)
Fall. 3 credits. W. Provine.
For description, see BIOEE 2070.

## STS 2921 Inventing an Information

 Society (also ECE/ENGRG 2980, HIST 2920) (HA-AS)Spring. 3 credits. R. Kline
For description, see ENGRG 2980.

## STS 3011 Life Sciences and Society

 (also BSOC 3011) (SBA-AS)Fall. 4 credits. M. Lynch.
For description, see BSOC 3011.

## STS 3111 Sociology of Medicine (also SOC 3130) (SBA-AS)

Fall. 4 credits. Not open to freshmen.
C. Leuenberger.

This course provides an introduction to the ways in which medical practice, the medical profession, and medical technology are embedded in society and culture. We will ask how medicine is connected to various sociocultural factors such as gender, social class, race, and administrative cultures. We will examine the rise of medical sociology as a discipline, the professionalization of medicine, and processes of medicalization and demedicalization. We will look at alternative medical practices and how they differ from and converge with the dominant medical
paradigm. We will focus on the rise of medical technology in clinical practice with a special emphases on reproductive technologies. We will focus on the body as a site for medical knowledge, including the medicalization of sex differences, the effect of culture on nutrition, and eating disorders such as obesity and anorexia nervosa. We will also read various classic and contemporary texts that speak to the illness experience and the culture of surgeons, hospitals, and patients, and we will discuss various case studies in the social construction of physical and mental illness
[STS 3181 Living in an Uncertain World: Science, Technology, and Risk (also HIST 3181) (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
S. Pritchard.

This course explores the history, sociology, and ethics of risk. In particular, we will focus on the complex and often ambiguous relationship between science, technology, and risk. A historical perspective shows how science and technology have generated risks while they have also played key roles in managing and solving those very risks. By examining several case studies, including 19th-century mining, the 1911 Triangle fire, nuclear science, the space shuttle disasters, asbestos litigation, Hurricane Katrina, and the contemporary financial crisis, we will consider how risk and ideas about risk have changed over time. By exploring different historical and cultural responses to risk, we will examine the sociopolitical dimensions of the definitions, perceptions, and management of risk both in the past and the present.]

## STS 3221 Lives of Scientists and

 Engineers (also FGSS 3221) (HA-AS)Spring. 4 credits. M. Rossiter
This course will explore the lives of a variety of scientists and engineers-American, international, men, women, and minoritiesthrough readings of biographies, autobiographies, and other sources. The goal will be to examine the obstacles overcome, opportunities offered, and choices made; the reasons and rationalization given; and the uses made of idealized biographies in science education, requirement, myth-making, and national prestige. Weekly readings, discussion, and research paper required

## STS 3241 Environment and Society (also DSOC/SOC 3240) (SBA-AS) <br> Fall. 3 credits. C. Geisler.

For description, see DSOC 3240

## [STS 3301 Making Modern Science (also HIST 3290) (HA-AS)

Fall. 4 credits. Next offered 2012-2013
S. Seth.

Examines the history of the physical sciences in Europe and the United States from 1800 to the present. Students study such topics as the development of thermodynamics and electrodynamics, the quantum and relativity theories, science during the world wars, and post-war "big science." As well as a history of ideas, the course emphasizes the broader historical contexts in which physical science has been produced, focusing on issues raised in relation to Romanticism, the first and second industrial revolutions, social statistics, train travel, and the military-industrial-scientific complex, among others. Reading for the course ranges from primary source material (original papers by Thomson, Helmholtz, Planck, and Einstein) to extracts from Mary

Shelley's Frankenstein and Michael Frayn's Copenhagen.]
[STS 3311 Environmental Governance (also BSOC 3311, NTRES 3310) (CA-AS)
Spring. 3 credits. Next offered 2011-2012. S. Wolf.

For description, see NTRES 3310.]
STS 3460 Anthropology of the Body (also ANTHR 3465/6465, BSOC 3460, STS 6460) @ (CA-AS)

Fall. 4 credits. S. Langwick
For description, see ANTHR 3465

## STS 3491 Media Technologies (also COMM/INFO 3490) (HA-AS)

Spring. 3 credits. Offered odd-numbered years. T. Gillespie
For description, see COMM 3490.

## STS 3521 Science Writing for the Mass Media (also COMM 3520)

Fall. 3 credits. Students who take STS
3521 may not receive credit for COMM
2600, 2630, or 3520. B. Lewenstein.
For description, see COMM 3520.

## STS 3561 Computing Cultures (also COMM/VISST 3560, INFO 3561)

 (CA-AS)Spring. 4 credits. No technical knowledge
of computer use presumed or required.
STS 3551 and 3561 may be taken
separately or in any order. R. Prentice. Computers are powerful tools for working, playing, thinking, and living. Laptops, PDAs, webcams, cell phones, and iPods are not just devices, they also provide narratives, metaphors, and ways of seeing the world. This course critically examines how computing technology and society shape each other and how this plays out in our everyday lives. Identifies how computers, networks, and information technologies reproduce, reinforce, and rework existing cultural trends, norms, and values. Looks at the values embodied in the cultures of computing and considers alternative ways to imagine, build, and work with information technologies

STS 3601 Ethical Issues in Engineering Practice (also ENGRG 3600)
Spring. 3 credits. Limited to juniors and seniors only. P. Doing.
For description, see ENGRG 3600

## STS 3811 Philosophy of Science: Knowledge and Objectivity (also PHIL 3810) (KCM-AS)

Fall. 4 credits. R. Boyd.
For description, see PHIL 3810

## STS 3871 The Automatic Lifestyle:

 Consumer Culture and Technology (also INFO 3871)Spring. 4 credits. P. Sengers.
For description, see INFO 3871.
[STS 3911 Science in the American Polity, 1960 to Now (also AMST 3911, GOVT 3091) (SBA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Hilgartner

This course reviews the changing political relations between science, technology, and the state in America from 1960 to the present. It focuses on policy choices involving science and technology in different institutional settings, such as Congress, the court system, and regulatory agencies. The tension between the concepts of science as an autonomous republic and as just another interest group is a central theme.]
[STS 4001 Components and Systems: Engineering in a Social Context (also MAE 4000/4010)
Fall. 3 credits. Offered alternate years; next offered 2011-2012. Z. Warhaft.
For description, see MAE 4000.]

## [STS 4021 Bodies in Medicine, Science, and Technology (also BSOC/FGSS 4021) (CA-AS)

Spring. 4 credits. Limited to 15 students.
Next offered 2011-2012. R. Prentice. Every day we are barraged with cultural messages telling us to eat better, get more exercise, stop smoking, and practice safe sex. These messages make us insecure about our bodies: Am I thin enough, ripped enough, sexy enough? They are also contradictory: Fish makes you smarter; mercury in fish makes you sick. Many of these messages use the language of science and medicine: There are obesity "epidemics" and chocolate "addictions." Our bodies are described and treated like machines: transplant surgeons talk about our "spare parts"; computer
programmers describe their brains as "wetware." Our sense of our bodies may feel improvised, created on the fly from a collage of scientific, medical, cultural, and advertising snapshots. This course draws from literature in science and technology studies, anthropology, and feminist and gender studies to examine how bodies emerge from the shifting lessons of science, technology, and medicine, as well as how cultural and political concerns express themselves in and through bodies.]

## STS 4071 Law, Science, and Public

 Values (also BSOC 4071) (SBA-AS)Spring. 4 credits. M. Lynch.
Examines problems that arise at the interface of law and science. These problems include the regulation of novel technology, the role of technical expertise in public decision making, and the control over scientific research. The first part of the course covers basic perspectives in S\&TS and how they relate to legal decisions and processes. The second part covers a series of examples and legal cases on the role of expert judgments in legal and legislative settings, intellectual property considerations in science and medicine, and legal and political oversight of scientific research. The final part examines social processes and practices in legal institutions, and relates these to specific cases of scientific and technological controversy. Lectures and assignments are designed to acquaint students with relevant ideas about the relationship between legal, political, and scientific institutions, and to encourage independent thought and research about specific problems covered in the course.
[STS 4120 The Scientific Revolution in Early-Modern Europe (also HIST 4120) \# (HA-AS)

Spring. 4 credits. Next offered 2011-2012 P. Dear.]

## [STS 4121 Science, Technology, and

 Culture (also COML 4100) (CA-AS)Fall. 4 credits. Next offered 2012-2013. A. Banerjee.]

STS 4122 Darwin and the Making of Histories (also HIST 4122) (HA-AS)
Fall. 4 credits. P. Dear and S. Seth.
For description, see HIST 4122.
[STS 4131 Comparative Environmental History (also BSOC 4131) (HA-AS)
Fall. 4 credits. Next offered 2011-2012. S. Pritchard.

One of the most troubling realizations of the 20th century has been the extent to which human activities have transformed the environment on a global scale. The rapid growth of human population and the acceleration of the global economy have meant that the 20th century, in environmental terms, has been unlike any other in world history. This course takes a comparative approach, examining crucial themes in the environmental history of the 20th-century world in different times, places, and ecologies.]

## STS 4221 New York Women (also FGSS

 4220) (HA-AS)Fall. 4 credits. Limited to 15 students. M. Rossiter.

Over the centuries New York State has been the site of activity for a great many women of consequence. This course is a one-semester survey of the past and present activities and contributions of rural and urban women in a variety of fields of interest to Cornell students: politics, medicine, science, the law, education, business (including hotels), entertainment, communications, government, labor, religion, athletics, the arts, and other areas. Weekly readings and discussion and a paper, possibly using local or university archives.

## [STS 4231 Gender and Technology in

 Historical Perspectives (also BSOC/ FGSS/HIST 4231) (HA-AS)Spring. 4 credits. Next offered 2011-2012. S. Pritchard.

Why are some technologies such as cars and computers associated with men and masculinity? How did vacuums and sewing machines become gendered female? How do technological artifacts and systems constitute, mediate, and reproduce gender identities and gender relations? How do technologies uphold gender hierarchies and thus social inequalities? This class explores the relationship between gender and technology in comparative cultural, social, and historical perspective. Specific themes include meanings, camouflage, and display; socializations; industrialization, labor, and work; technologies of war; the postwar workplace; sex and sexuality; and reproductive technologies. Most course materials focus on Western Europe and the United States since the late 18th century, but the issues raised in this class will prepare students to think about the relationship between gender and technology in other contexts including our own.]
[STS 4291 Politics of Science (also BSOC 4291, GOVT 4293) (SBA-AS)
Fall. 4 credits. Next offered 2011-2012. R. Herring.]

## [STS 4311 From Surgery to Simulation

 (also BSOC 4311) (SBA-AS)Fall. 4 credits. Next offered 2011-2012. R. Prentice.

A cliche among medical professionals says, "If you have a hammer, every problem looks like a nail." In other words, treatment decisions often are dictated by available technologies. This course looks at medical technologies from dissection to X-rays to antidepressants and the ways they shape how medical professionals look at and practice upon the human body. Takes a broad view of technology, encompassing systems of practice
that shape how work is conducted and the body is understood, as well as specific machines and treatments with specific uses. Considers how these technologies often are not only treatments for individual patients but also metaphors for larger cultural questions.]

## [STS 4331 Global History of Science \#

 (HA-AS)Spring. 4 credits. Next offered 2011-2012. M. Rossiter.

Survey of the major scientific events and institutions in several foreign nations, including developing countries. Covers the period 1660 to the present and gives some attention to who in each country becomes a scientist, who rises to the top, and who emigrates. Weekly readings and a research paper.]
[STS 4421 The Sociology of Science (also BSOC 4421, SOC 4420) (SBA-AS)
Spring. 4 credits. Next offered 2011-2012. T. Pinch.

A view of science less as an autonomous activity than as a social institution. Discusses such issues as controversies in science, analysis of scientific text, gender, and the social shaping of scientific knowledge.]

## STS 4441 Historical Issues of Gender

 and Science (also FGSS 4440) (CA-AS)Spring. 4 credits. Not open to freshmen. M. Rossiter.

A one-semester survey of women's role in science and engineering from antiquity to the present, with special emphasis on the United States in the 20th century. Readings include biographies and autobiographies of prominent women scientists, educational writings and other primary sources, and recent historical and sociological studies. By the end of the semester, students attain a broad view of the problems that have faced women entering science and those that still remain.

## STS 4471 Seminar in the History of Biology (also BIOEE 4670, BSOC 4471, HIST 4150) (PBS)

Summer or fall. 4 credits. Limited to 18 students. S-U or letter grades. W. Provine. For description, see BIOEE 4670.

## STS 4531 Knowledge and Society (also

 SOC 4530) (CA-AS)Spring. 4 credits. Limited to 15 students.
C. Leuenberger.

What is real? How is one to know? In this course we explore these questions by focusing on the intersection between knowledge, society, culture, and politics. Knowledge is central to the organization of society. It not only constitutes everyday, common-sense, and indigenous practices, but also professional and scientific endeavors. We will discuss theoretical debates and empirical studies of how knowledge partakes in the construction and experience of reality, personhood, identity, interaction, religion, and the emotions, and how it builds and sustains the artistic, scientific, and technical professions.

## [STS 4661 Public Communication of Science and Technology (also COMM 4660)

Spring. 3 credits. Limited to 15 students. Offered even-numbered years; next offered 2011-2012. B. Lewenstein.
For description, see COMM 4660.]
[STS 4711 The Dark Side of Biology: Biological Weapons, Bioterrorism, and Biocriminality (also BSOC 4711) (SBA-AS)
Fall. 4 credits. Next offered 2011-2012. K. Vogel.

For description, see BSOC 4711.]

## [STS 4751 Science, Race, and

 Colonialism (also HIST 4751) (HA-AS)Spring. 4 credits. Next offered 2011-2012. S. Seth.

This course examines the social construction and utilization of scientific conceptions of race in the West. We begin with the existence (or not) of conceptions of biological race in the early-modern period, focusing on early voyages of discovery and so-called "first encounters" between the peoples of the Old and New Worlds. In the second part of the course we will look at early enunciations of racial thought in the late 18th century and at the problems of classification that these raised, before examining the roots of "Scientific Racism." Part three looks at Darwin, Social Darwinism, and eugenics movements in different national contexts, concluding with a study of Nazi science and the subsequent trials of doctors at Nuremberg. The last part of the course examines recent and contemporary applications of racial thinking, including the debate over the origin of AIDS, race and IQ, and the question of whether doctors should make use of race as a category when researching and prescribing new treatments.]

## STS 4811 Philosophy of Science (also PHIL 4810, STS 6811) (KCM-AS)

Fall. 4 credits. R. Boyd.
For description, see PHIL 4810.

## STS 4842 Political Ecology of Imagination (also GOVT/SHUM 4842, ANTHR 4082) <br> Fall. 4 credits. T, Heatherington. For description see SHUM 4842.

## STS 4911 Vitality and Power in China

 (also BSOC 4911, HIST 4931/6962, RELST 4931, ASIAN 4429)Spring. 4 credits. T. Hinrichs.
For description, see HIST 4931.

## STS 4951 Social Studies of the Human

 Sciences (CA-AS)Spring. 4 credits. C. Leuenberger.
Explores how the human and social sciences have provided the knowledge and categories we use to make sense of human beings and their behavior. Looking across a range of disciplines-including sociology, anthropology, psychiatry, psychology, psychoanalysis, and economics-we will look at how human beings have become objects of scientific investigation. We will focus on how culture, politics, and the professional environment impact the human sciences and how the use of rhetoric constitutes academic discourse. We will also focus on the social scientific
construction of selves, sex, and gender.

## Independent Study

## STS 3991 Undergraduate Independent

 StudyFall, spring. 1-4 credits. No more than 8 credit hours total of independent study (not including honors) can count toward the S\&TS major. Prerequisite: permission of instructor.
More information and applications available in 306 Rockefeller Hall.

STS 4991/4992 Honors Project Fall and spring (yearlong).* Prerequisites: senior S\&TS students by permission of department; overall Cornell cumulative GPA of 3.00 and 3.30 cumulative GPA in courses taken for major. Apply in 306 Rockefeller Hall.
Students admitted to the honors program are required to complete two semesters of honors project research and to write an honors thesis. The project must include substantial research, and the completed work should be of wider scope and greater originality than is normal for an upper-level course. The student must find a project supervisor and a second faculty member willing to serve as faculty reader; at least one of these must be a member of the S\&TS department.
*Students must register for 4 credits each semester, for a total of 8 credits. After the fall semester, students will receive a letter grade of " R " for the first semester with a letter grade for both semesters submitted at the end of the second semester whether or not they complete a thesis, and whether or not they are recommended for honors. Minimally, an honors thesis outline and bibliography should be completed during the first semester. In consultation with the advisors, the director of undergraduate studies will evaluate whether the student should continue working on an honors project. Students should note that these courses are to be taken in addition to those courses that meet the regular major requirements. If students do not complete the second semester of the honors project, they must change the first semester to independent study to clear the " R " and receive a grade. Otherwise, the " R " will remain on their record and prevent them from graduating.

## Summer Course

STS 1451 Body, Mind, and Health: Perspectives for Future Medical Professionals (also BSOC 1451) \# (CA-AS)
Summer. 3 credits. Open to high school students. D. Caurso.
In this three-week program, you'll: explore the fascinating past, present, and future of medicine in the United States; examine the ways in which medicine and its practitioners have impacted-and been impacted byAmerican social, political, cultural, and economic development; build a solid base of knowledge for enriching your own perspective as a future health or medical professional; and gain a semester's worth of experience with college-level work. You'll begin by studying the development of medicine as a profession in the late-19th century and investigating how pharmaceuticals transformed medical practice in the second half of the 20th century. You'll learn why doctors were not always seen as the medical experts, nor hospitals as the place to go when suffering a severe illness or trauma, and how our current health care system began to take shape in the early- to mid-20th century.
Using a rich variety of sources, you'll examine how gender issues and beliefs about disease have crafted new roles for people within medicine and American society. And, you'll see how the personal experiences of patients caused public health professionals and medical researchers to reconsider health policy and medical experimentation in the United States. This program also serves as an
excellent introduction to college-level work. You'll use a wide range of materials throughout the session-from scholarly and scientific articles to children's literature, publications in magazines and popular journals, and documentary and popular films-and you'll learn to integrate these materials with daily lectures. In addition, you'll participate in discussion sections with teaching assistants to talk about assignments and in writing seminars to learn the basics of collegelevel writing. You'll be evaluated based on your writing assignments, your participation in lectures and discussion sections, and your performance on in-class quizzes and exams.

## Graduate Seminars

## STS 6181 Confluence: Environmental History and Science \& Technology

 Studies (also HIST 6181)Spring. 4 credits. S. Pritchard.
This course uses water to examine the confluence of two fields: environmental history and the social and historical studies of science and technology. Although preliminary scholarship has begun to demonstrate the fruitful integration of these fields, a number of methodological and theoretical tensions remain. Some of these tensions include the social construction of "nature," nature as a historical actor, accounts of the emergence of "environmental" "problems," constructivist models of science and technology, and scholars' use of technoscientific sources to assess environmental change. This class, therefore, examines a number of scholarly debates about key terms, definitions, and categories (both historical actors' and analysts'), knowledge-making about "nature" and human interactions with nonhuman nature, and the concept of agency. Weekly seminars are organized around readings in environmental history, science studies, and/or their intersection that explore these issues in diverse ways while usually addressing various aquatic environments in comparative historical and cultural perspective.

## [STS 6271 Making People through Expert

 KnowledgeSpring. 4 credits. Next offered 2011-2012. C. Leuenberger.

This seminar explores how the human and social sciences have provided the knowledge and categories we use to make sense of human beings and their behavior. Looking across a range of disciplines-including sociology, psychiatry, psychology, psychoanalysis, anthropology, and economics-we will look at how human beings have become objects of scientific investigation. We will focus on how culture, politics, and the professional environment impact the human sciences and how the use of rhetoric constitutes academic discourse. We will also focus on the social scientific construction of selves, sex, gender, and race.]

## [STS 6281 Self and Society

Fall. 4 credits. Next offered 2012-2013.
C. Leuenberger.

How has the self became a political, scientific, and cultural project caught up in the ideological battles of modern times? What roles do cultural institutions, politics, and science play in making human beings visible, understandable, and treatable? Students in this course will read and discuss texts at the intersection of sociology, cultural studies, history of the human and behavioral sciences,
and science and technology studies that treat the self as a social construction. The course focuses on how culture, politics, science, as well as bureaucratic and economic imperatives help shape modern and postmodern conceptions of the self.]

## STS 6301 Social Theory In Formation

Spring. 4 credits. R. Prentice.
Sociologist C. Wright Mills challenged his readers to develop their "sociological imagination" to understand the social and historical forces at work in seemingly individual events, such as the receipt of a pink slip, a draft card, or a drug prescription. Within science and technology studies, scholars have documented how social issues can become scientific, technological, or medical, often appearing to leave the social realm naturalized, normalized, or
pathologized. This course introduces graduate students to classic texts and concepts in social theory with a focus on how scholars apply such theories to empirical research. It will consider major thinkers and schools of social thought, such as Marx, Weber, Durkheim, Mannheim, Foucault, and the Frankfurt School. It will also consider how a nuanced interplay of theory and empirical data can bring critically important insights to both theoretical and empirical understandings of the world. The course is relevant for students in sociology, history, and anthropology who are interested in social theory.

## STS 6311 Qualitative Research Methods for Studying Science (also SOC

 6310)Spring. 4 credits. T. Pinch.
Much has been learned about the nature of science by sociologists and anthropologists donning lab coats and studying scientists in action. This course looks at the methods used in this new wave of science studies. Examines what can be learned by interviewing scientists, from videos, and from detailed examinations of scientific texts. Students gain hands-on experience by conducting a mini-project in which they investigate some aspect of scientific culture.

## STS 6321 Inside Technology: The Social Construction of Technology (also SOC 6320)

Spring. 4 credits. T. Pinch
Rather than analyze the social impact of technology upon society, this course investigates how society gets inside technology. In other words, is it possible that the very design of technologies embody assumptions about the nature of society? And, if so, are alternative technologies, which embody different assumptions about society, possible? Do engineers have implicit theories about society? Is technology gendered? How can we understand the interaction of society and technology? Throughout the course the arguments are illustrated by detailed examinations of particular technologies, such as the ballistic missile, the bicycle, the electric car, and the refrigerator.

## [STS 6341 Information Technology in Sociocultural Context

Spring. 4 credits. Next offered 2011-2012. P. Sengers.

Analyzes information technology using historical, qualitative, and critical approaches. Discusses questions such as: In what ways is information technology-often portrayed as radically new-actually deeply historical? How do information technologies represent and intervene in debates and struggles among
people, communities, and institutions? How is the design of information technology tools entangled in the realms of law, politics, and commerce? In what ways are the social consequences of information technologies produced as much by the claims we make about the technologies as about the raw functionality of the tools themselves? This course investigates these issues through the lenses of long-standing debates and current controversies.]
[STS 6401 Science, Technology, Gender: Historical Issues (also FGSS 6400, HIST 6410)
Fall. 4 credits. Next offered 2012-2013. S. Seth.

This course explores five, often interrelated, aspects of the literature on gender, science, and technology: (1) The historical participation of women (and men) in scientific work; (2) the embodiment of scientific, medical, and technical knowledge; (3) the scientific construction of sexuality; (4) the gendering of technological systems and artifacts; and (5) feminist critiques of scientific knowledge. We begin with an analysis of reason, gender, and sexuality in the classical and late-antique western world, before moving on to an examination of the origins of modern western science in the scientific revolution considering the claim that "science," by its very nature, is an androcentric enterprise. The rise of scientific and medical disciplines and professions in the 19th century will provide a focus for discussions of the systematic exclusion of women from the production of scientific knowledge at precisely the point that women's bodies become the object of intensive scientific study. Drawing on a range of material, the course considers the construction of homosexual and intersexual individuals in scientific discourse. In later weeks, we will discuss so-called "postmodernist" critiques of science, and will debate the possibilities for "feminist science."]

## STS 6460 Anthropology of the Body (also

 ANTHR 3465/6465, STS 3460)Fall. 4 credits. S. Langwick.
For description, see ANTHR 3465.

## STS 6661 Public Communication of

 Science and Technology (also COMM 6660)Fall. 4 credits. B. Lewenstein. For description, see COMM 6660.

## STS 6751 Science, Race, and

 ColonialismSpring. 4 credits. S. Seth. Scholarly work in the last two decades has increasingly focused on the oft-neglected linkages between technology and science on the one hand and the discourses and practices of colonialism and imperialism on the other. Texts of broad conception like Michael Adas' Machines as the Measure of Men and Gyan Prakash's recent Another Reason have made an attempt to provide an overview of many of the issues involved, but the field awaits a genuinely synthetic treatment. This course will aim to provide the framework for such a treatment by looking at a number of key areas of current interest. The first half of the course begins with a survey of the history of ideas of race and the development of "race-sciences" in the 19th century, including a sampling of primary materials on Darwinian theories of race and later formulations of social Darwinism. The latter part of the course will explore a number of specific themes, including the importance of social statistics
and technologies of identification
(fingerprinting), medicine and hygiene, scientific nationalism and nationalist science, the periphery as laboratory, and gender, savagery, and criminality. Readings will comprise a mixture of primary and secondary sources, and students are encouraged to contribute topics and texts of particular interest.

## [STS 6801 Historical Approaches to

 Science (also HIST 6800)Fall. 4 credits. Prerequisite: graduate standing. Next offered 2011-2012. P. Dear. Examines philosophical, sociological, and methodological dimensions of recent historiography of science.]

## STS 6811 Philosophy of Science (also PHIL 4810, STS 4811)

Fall. 4 credits. R. Boyd.
For description, see PHIL 4810.
[STS 7003 Special Topic 3: Issues in the Social and Cultural History of Technology
Spring. 4 credits. Next offered 2012-2013. R. Kline.

This seminar focuses on different issues in the social and cultural history of technology each semester. Typical issues include Gender and Technology, Rethinking Technological Determinism, Was there an Information Revolution?, Consumerism, and the Military and Technology in the United States. Students read and discuss exemplary books and articles on a topic for the first half of the course, then give presentations on their research papers.]
STS 7111 Introduction to Science and Technology Studies (also HIST 7110)
Fall. 4 credits. M. Lynch.
Provides students with a foundation in the field of science and technology studies. Using classic works as well as contemporary exemplars, seminar participants chart the terrain of this new field. Topics for discussion include, but are not limited to, historiography of science and technology and their relation to social studies of science and technology, laboratory studies, intellectual property, science and the state, the role of instruments, fieldwork, politics and technical knowledge, philosophy of science, sociological studies of science and technology, and popularization.

## Independent Study

## STS 6991 Graduate Independent Study

Fall or spring. 2-4 credits. Permission of department required.
Applications and information are available in 306 Rockefeller Hall.

## SCIENCE OF EARTH SYSTEMS

See "Department of Earth and Atmospheric Sciences."

## SERBO-CROATIAN

See "Department of Russian."

## SOCIETY FOR THE HUMANITIES

Timothy Murray, Director

## Fellows for 2010-2011

Elizabeth Anker,
Jennifer Bajorek
Bruno Bosteels
Joshua Clover
Kay Dickinson
Tracey Heatherington
Yunte Huang
Lawrence McCrea
Andrew McGraw
James McHugh
Jolene Rickard

## Adam Smith

The society annually awards fellowships for research in the humanities. The fellows offer, in line with their research, seminars intended to be exploratory or interdisciplinary. These seminars are open to graduate students and suitably qualified undergraduates. The theme for 2010-2011 is "Global Aesthetics."

## SHUM 4841 The Poetics of Capital (also

 ENGL 4076)Fall. 4 credits. Limited to 15 students. T 12:20-2:15. J. Clover.
Marxist literary studies, fascinated by "poetics," has had relatively little to say about poetry in the last several decades. This course takes up the possibility that poetry is peculiarly wellsuited to conceptualizing the matters that concern Marxian analysis (especially those of political economy), and vice versa. While the readings will cover a broad scope, particular attention will be given to the "late modern" and contemporary periods. A familiarity with basic categories of Marxian political economy will be useful but not requisite; the David Harvey introductory lectures to accompany Capital, available at davidharvey.org or on iTunes, are an excellent resource.

## SHUM 4842 Political Ecology of Imagination (also ANTHR 4082, GOVT/STS 4842)

Fall. 4 credits. Limited to 15 students. M

> 12:20-2:15. T. Heatherington.

The world warms, and global environmental imaginaries evolve. Epistemic shifts supplant the natural richness of biodiversity with the artificial wealth of neoliberal economies, and overwrite traditional forms of cultural inhabitation with naïve fictions of wilderness. Changing representations of culture and environment have compelling implications for human rights and indigenous sovereignties over land, water and natural resources. This course will consider how visions and aesthetics of landscape in the 21st century are engaged with transforming frameworks of environmental security, governance, and power. Blending literary and ethnographic perspectives with media studies and critical social theory, we will develop a series of cases to reflect upon relevant cultural approaches to political ecology in national and transnational contexts.

## SHUM 4843 Musical Avant-Gardes (also MUSIC 4843) <br> Fall. 4 credits. Limited to 15 students. W 2:30-4:25. A. McGraw

This course will be a critical discussion concerning the history and development of musical experimentalism, broadly defined, as we identify its emergence in world cultures beginning in the early 20 th century. We will interrogate a variety of discourses that have developed around the notion of
"experimental," "avant-garde," "new,"
"contemporary" (etc.) musics, noting that while all expressions are localized, nearly all self-consciously experimental musics worldwide are linked through an engagement with modernity, colonization/post-coloniality, antagonism, urbanization and "the other." Experimentalism often represents a tactic in the effort to deal with the problems of culture, hegemony and inequity. Through an examination of local experiments we will theorize issues of musical meaning, change, influence, appropriation, dialogue,
interculturalism, and misunderstanding.

## SHUM 4844 Strategies in "World Cinema" (also FILM 4844)

Fall. 4 credits. Limited to 15 students. T 10:10-12:05. K. Dickinson. Examining films produced within the majority world/non-G-8 countries of Latin America, Africa, and Asia, this course adopts an inquisitive and critical stance on how "world cinema" is defined. This film material and the consumer cultures that circulate around it will be addressed according to three guiding themes: global(ized) economies, activism, and populism. The analyses will be driven by a range of interdisciplinary debates on how different forms of colonization are absorbed into and interrogated by such movies' fluctuating national, transnational, industrial, institutional, distributional, and aesthetic contexts.

## SHUM 4845 Secularism and Its Discontents (also ENGL 4075, RELST/GOVT 4845)

Fall. 4 credits. Limited to 15 students. R 12:20-2:15. E. Anker.
This course considers how contemporary literature engages with theoretical debates about the status of secularism. While global modernity is typically thought to be fundamentally secular, our readings will explore critics of that thesis. We will investigate notions such as "political theology"; the religious undercurrents of historical narratives of secularization; the relationship of indigenous worldviews to dominant conceptions of the secular; and some key political controversies, like those surrounding the veil, that have crystallized secularism's competing meanings. Course materials will include a collection of theorists (Connolly, Mahmood, Pecora, Viswanathan, Taylor, Asad) paired with literature (Danticat's Krik?Krak!, Wa Thiong'o's A Grain of Wheat, Pamuk's Snow, and Coetzee's Elizabeth Costello) and film (Malick's The Thin Red Line and Kushner's HBO miniseries Angels in America).

## SHUM 4846 Classical Indian Poetry and Comparative Poetics (also ASIAN

 4446)Fall. 4 credits. Limited to 15 students. M 2:30-4:25. L. McCrea.
This course will treat the classical Indian tradition as a case study in comparative poetics. We will read works of Sanskrit poetry in translation, along with selections from the works of both Sanskrit and early modern and contemporary Western literary and aesthetic theorists. We will look at the way contemporary developments in aesthetics have
shaped the reception of Sanskrit poetry and poetic theory over the past two centuries, as well as using parallel readings in classical Indian and contemporary theory to explore the broader normative question of how theoretical resources should be deployed in the interpretation of other, particularly classical, literatures.
SHUM 4951 Photography and Decolonial Imagination (also VISST/ARTH/ASRC/ HIST 4951, COML 4067)
Spring. 4 credits. Limited to 15 students. M 12:20-2:15. J. Bajorek.
This seminar will examine the role played by photography-historically and in the presentin the complex and layered visual, public, and political spaces of several modern West African polities. We will draw on recent work in art history, visual anthropology, urban sociology, African studies, while also attending to the social, cultural, and political dimensions of aesthetic and philosophical approaches to photography. Historical data will be considered in light of broader theoretical questions, including questions about photography's power to foster investments by non-state actors in official and state-sponsored practices of the image and its power, alternatively, to produce visual publics with non-state investments; the aesthetics of anticolonial and independence movements; the relationship between popular and statesponsored practices; questions about cultural and political dimensions, as well as technical or technological dimensions, of memory regimes.
SHUM 4952 Exotic Scents: Cross-Cultural Aesthetics of Smell (also ASIAN 4495)

Spring. 4 credits. Limited to 15 students. T 10:10-12:05. J. McHugh.
This course is a cross-cultural exploration of the aesthetics of smell, the technologies of affecting smell (i.e., perfumery), and the demand for exotic aromatics. We will consider the theory of the aesthetics of smell in a variety of regions and periods including, for example, the work of Kant, early South Asian sources, as well as more recent studies by perfumers, philosophers, and anthropologists. We also explore the long-globalized art of perfumery and the important international demand for exotic aromatics such as musk and sandalwood. Texts will include a variety of approaches to smell, aromatics, and the exotic by scholars such as Clare Batty, Alain Corbin, Paul Freedman, David Howes, and Edward Schafer.

## SHUM 4953 The Political Lives of Things

 (also ANTHR/ARKEO 4153, CLASS 4602, ARTH 4953)Spring. 4 credits. Limited to 15 students. W 2:30-4:25. A. Smith.
Our political lives are rife with objects (red tape, rubber stamps, etc.). Yet we rarely inquire as to how these things have shaped our sense of authority and our attachment to the polity. This seminar explores the materiality of political life by drawing broadly on contemporary works in art history, social thought, media studies, archaeology, sociocultural anthropology, and literary theory to piece together a sense of the political lives of things. The goal of the course is to juxtapose the sense, sensibility, and sentiments of objects with the production and reproduction of authority. In so doing, the course opens an interdisciplinary dialogue on
both the nature of our relationship with things and our ties to our political communities.

## SHUM 4954 Yellowface (also ENGL 4077, COML 4068, FILM/AAS 4954)

Spring. 4 credits. Limited to 15 students. T 2:30-4:25. Y. Huang
This seminar is a study of the cross-cultural flows between China and the West via literature, translation, and cinema. It focuses on yellowface as racial ventriloquism performed by writers, translators, actors, directors, and other cultural go-betweens. The most notable yellowface performance is obviously in Hollywood films (Charlie Chan, Fu Manchu, and David Carradine's Kung Fu series), but it is also increasingly evident in the self-representations by contemporary Chinese filmmakers. We will also examine poetic translations, wisdom products (philosophy, aphorisms, and fortune cookies), and other areas of culture, high and low, elite and popular.

## SHUM 4955 Sensation and Indigenous Intent (also ARTH/VISST/AMST 4955)

Spring. 4 credits. Limited to 15 students. R 10:10-12:05. J. Rickard.
Encounter/counter visual expressive Indigenous cultures as part of a global aesthetic of repossession. Indigeneity today is about youth culture, up from the street but not main-street. Throat singers meet hip-hop, Maori moko confronts colonialism, Kayapo viral media subverts dispossession and all through the visual mark, spoken word, or performative act. Embedded in Indigenous cultures globally are radical challenges to the West's imaginary of itself and others. The rise of experimental films, performances, and expressive acts based on observations of the physical and a speculative world reveal content impacted by colonial narratives, yet anticipatory of an unexpected future. Emergent theories on indigeneity will be connected to current theoretical concerns. This class will be taught within the ancestral homelands of the Cayuga Nation (Haudenosaunee) requiring interaction with contemporary Indigenous artists locally and globally.

## SHUM 4956 Transatlantic Decadence

(also FREN/SPAN 4956, COML 4069)
Spring. 4 credits. Limited to 15 students. R 12:20-2:15. B. Bosteels.
Approaching decadence and dandyism from a global perspective informed by imperial and colonial dynamics, we will read canonical statements from Baudelaire, Barbey d'Aurevilly, Marx, and Nietzsche side by side with essays and novels from across the Atlantic, including the Cuban José Martí, the Colombian José Asunción Silva, the Venezuelan Manual Díaz Rodríguez, and the Uruguayans José Enrique Rodó, Delmira Agustini, and Roberto de las Carreras. Theoretical texts informing our underlying framework include Georg Simmel, Carl Schmitt, Fredric Jameson, Angel Rama, Julio Ramos, Sylvia Molloy, and Rita Felski.

## SHUM 6341 Aesthetic of Excess:

 Psychophilosophical Approaches to Technology (also COML/ENGL/VISST/ FREN 6341)Fall. 4 credits. T 2:30-4:25. T. Murray. Psycho-Philosophical Approaches to
Technology. This will emphasize French approaches to technology as well as current practices in new media art with readings ranging from Artaud, Heidegger and Derrida
to Lyotard, Deleuze, Laplanche, Barthes, and current writers and artists.

## SOCIOLOGY

K. Weeden, chair (322 Uris Hall, 255-3820), M. Berezin, L. Brashears, M. Brashears, B. Cornwell, D. Harris, D. Heckathorn, E. Lawler, M. Macy, S. Morgan, V. Nee, D. Strang, R. Swedberg, S. Tarrow, S. Van Morgan, E. Wethington, E. York Cornwell. Emeritus: S. Caldwell
Sociology is the study of social life, social change, and the social causes and consequences of human behavior. Sociologists investigate the structure of groups, organizations, and societies, and how people interact within these contexts. Since all human behavior is social, the subject matter of sociology ranges from the intimate family to the hostile mob; from organized crime to religious cults; from the divisions of race, gender, and social class to the shared beliefs of a common culture; and from the sociology of work to the sociology of sports. In fact, few fields have such broad scope and relevance for research, theory, and application of knowledge.
Sociology provides many distinctive perspectives on the world, generating new ideas and critiquing the old. The field also offers a range of research techniques that can be applied to virtually any aspect of social life: street crime and delinquency, corporate downsizing, how people express emotions, welfare or education reform, how families differ and flourish, or problems of peace and war. Because sociology addresses the most challenging issues of our time, it is a rapidly expanding field whose potential is increasingly tapped by those who craft policies and create programs.

## Requirements

In addition to the academic requirements established by the College of Arts and Sciences, students must also fulfill requirements for the Sociology major. Ten courses are required in the sociology major. All courses toward the major must be taken for a letter grade, and students must earn a C- or higher in each course. The courses required for the major are divided into the following categories:

- SOC 1101 Introduction to Sociology
- SOC 3750 Classical Theory, SOC 3190 Contemporary Sociological Theory
- SOC 3010 Evaluating Statistical Evidence
- seven additional (i.e., elective) courses in sociology


## The Honors Program

Honors in sociology are awarded for excellence in the major, which includes overall GPA and the quality of an honors thesis. In addition to the regular requirements of the major, candidates for honors must maintain a cumulative GPA of at least an A- in all sociology classes, complete SOC 4950 and 4960 (in the senior year), and write an honors thesis.
Students are awarded either honors (cum laude), high honors (magna cum laude), or highest honors (summa cum laude) in the program based on the director of
undergraduate studies and the honors advisors' evaluations of the level and the quality of the work completed toward the honors thesis and the quality of the course work. The honors distinction will be noted on the student's official transcript and it will also be indicated on the student's diploma.
Complete information on the major can be found on the department's undergraduate program web page: www.soc.cornell.edu/ undergrad. In addition to regularly updated course lists, the web page provides an overview of the discipline of sociology, procedures for declaring the major and applying to the honors program, and strategies for locating research opportunities. The main department web site, www.soc. cornell.edu, provides an overview of the department's faculty members, their research, and the department's affiliated research centers.

## Introductory Courses

SOC 1101 Introduction to Sociology (SBA-AS)
Fall, spring. 3 credits. Students may not receive credit for both SOC 1101 and
DSOC 1101. B. Cornwell.
This course introduces students to sociological perspectives and methodologies. We will begin by considering sociological perspectives that focus on macro-level spheres of society (e.g., the economy, polity) and sweeping societal changes that have occurred within them over the past couple of centuries. The remaining bulk of the course introduces alternatives to these macro-oriented models of society. First, we will cover arguments that address the causes and consequences of individuals' integration into and contributions to society, and attempt to answer such questions as: Why do people follow seemingly irrational social norms? We will then complicate matters by considering explanations that assume that there is some measure of individual rationality behind individuals' behavior. Finally, we will consider how larger social forms, especially social networks, emerge through both rational and nonrational kinds of social action.

## SOC 1104 Race and Ethnicity (SBA-AS)

Fall. 3 credits. L. Brashears.
This course explores race and ethnicity from a sociological viewpoint. Topics will include, but aren't limited to: the social construction of race and ethnicity in the United States over time; historical and contemporary racism, prejudice, and discrimination; the relationships between race/ethnicity and educational achievement/attainment, occupational prestige, income, wealth, and health; racial and ethnic identity; and current national debates regarding race/ethnicity, such as affirmative action and immigration. Throughout the course, we will address these issues in light of contemporary and classical sociological theories.

## SOC 1150 Utopia in Theory and Practice

 (SBA-AS)Spring. 3 credits. D. Strang
People have always sought to imagine and realize a better sort of society, with both inspiring and disastrous results. In this course, we discuss the literary utopias of Moore, Morris, Bellamy, and the dystopias of Huxley, Orwell, and Zamiatin. We also examine real social experiments, including 19th-century intentional communities, 20th-century
socialisms and religious cults, and modern ecological, political, and millennial movements. Throughout, the emphasis is on two sociological questions. What kinds of social relationships appear as ideal? How can we tell societies that might work from those that cannot?

## General Education Courses

## [SOC 2070 Problems in Contemporary

 Society (also DSOC 2070) (SBA-AS)Fall. 4 credits. Next offered 2011-2012. Staff.
For description, contact department.]

## SOC 2090 Networks (also CS 2850, ECON/INFO 2040) (SBA-AS)

Fall. 4 credits. D. Easley and J. Kleinberg. For description, see ECON 2040.

## SOC 2100 What Is Science? (also STS 2011) (CA-AS)

Spring. 3 credits. K. Vogel.
For description, see STS 2011.

## SOC 2130 Research Methods (also PAM

 2150) (SBA-AS)Spring. 3 credits. K. Musick.
For description, see PAM 2150.
[SOC 2150 Organizations: An Introduction (also DSOC 2150) (SBA-AS)
Fall. 4 credits. Next offered 2011-2012. Staff.
For description, contact department.]

## SOC 2160 Health and Society (SBA-AS)

Spring. 4 credits. E. York Cornwell.
This course will examine how social factors shape physical and mental health. First, we will review social scientific research on the relationship between health and status characteristics, neighborhood and residential context, employment, social relationships and support, religion, and health-related behaviors. We will devote particular attention to the development of research questions and methodological approaches in this work. Next, we will directly examine the relationship between health and social factors using data from a nationally representative survey. Course instruction will include statistical analysis of survey data and social scientific writing. Students will develop their own research exploring how social factors contribute to health.

## SOC 2180 American Community and Society (SBA-AS) <br> Fall. 4 credits. M. Brashears.

This course will explore what we mean by community and society and present a number of different explanations for their development and operation. We will begin with general structural theories in sociology, which account for society through the basic demographic and mathematical features of human groups. We will then proceed to explore how structure interacts with culture and agency in specific contexts, including sex, gender, and economics. We will conclude by examining more cultural explanations for the development and change of community and society.

## SOC 2190 Introduction to Economic Sociology (SBA-AS)

Fall. 3 credits. V. Nee.
What is the driving force behind economic growth? How do people find jobs? Does culture matter for economic action? What
exactly is a market? Why is there a concentration of high-tech firms in Silicon Valley? Why has entrepreneurial capitalism emerged in China? These are some of the questions that this course will explore through the theoretical lens of economic sociology. Economic sociology has sought to understand the beliefs, norms, and institutions that shape and drive the global economy. It has sought to extend the sociological approach to the study of economic life by studying the interactions between social structure and economic action. The systematic application of sociological reasoning to explain economic action involves analysis of the ways in which social networks, norms, and institutions matter in economic transactions. The goal of this course is to provide an introduction to economic sociology as an approach and research program to understand and explain the relationship between economy and society in the modern era.

## SOC 2202 Population Dynamics (also DSOC 2010) (CA-AS) <br> Fall. 3 credits. L. Williams. <br> For description, see DSOC 2010.

SOC 2206 International Development (also DSOC 2050) (HA-AS)
Spring. 3 credits. P. McMichael.
For description, see DSOC 2050.
[SOC 2208 Social Inequality (also DSOC 2090) (SBA-AS)

Spring. 4 credits. Next offered 2011-2012. K. Weeden.

For description, contact department.]
SOC 2220 Controversies about Inequality (also DSOC/ILROB/PAM 2220, GOVT 2225, PHIL 1950) (SBA-AS)
Fall. 4 credits. S. Morgan.
Introduces students to contemporary debates and controversies about the underlying structure of inequality, the processes by which it is generated and maintained, the mechanisms through which it comes to be viewed as legitimate, natural, or inevitable, and the forces making for change and stability in inequality regimes. These topics are addressed through readings, class discussion, visiting lectures from distinguished scholars of inequality, and debates staged between faculty who take opposing positions on pressing inequality-relevant issues (e.g., welfare reform, school vouchers, immigration policy, and affirmative action). Although this course is required for students in the Inequality Concentration, it is also open to other students who have completed prior coursework relevant to issues of inequality.

## SOC 2250 Schooling and Society

 (SBA-AS)Spring. 4 credits. L. Brashears.
This course will use classical and
contemporary theory/research to explore several questions relating to the institution of education. The following are examples of topics to be covered in this course: the exploration of education as an institution that has changed over time; the purpose of education; issues of inequality and upward mobility in the education system, and its relationship to inequality in the larger societal context; the school experience for individuals with different demographic characteristics (i.e., race/ethnicity, social class, and gender), both in terms of academic performance and psychological well-being; and a sociological understanding of current educational policies, such as No Child Left Behind.

SOC 2460 Drugs and Society (SBA-AS)
Spring. 4 credits. D. Heckathorn.
The course focuses on drug use and abuse as a social rather than as a medical or psychopathological phenomenon. Specifically, the course deals with the history of drug use and regulatory attempts in the United States and around the world; the relationship between drug use and racism/class conflict; pharmacology and use patterns related to specific drugs; perspectives on the etiology of drug use/abuse; AIDS prevention and harm reduction interventions; drug-using subcultures; drug policy, drug legislation, and drug enforcement; and the promotion and condemnation of drug activities in the mass media.

## SOC 2480 Politics and Culture (also GOVT 3633) (HA-AS)

Fall. 4 credits. M. Berezin.
Focuses on currently salient themes of nationalism, multiculturalism, and democracy. It explores such questions as who is a citizen; what is a nation; what is a political institution; and how do bonds of solidarity form in modern civil society. Readings are drawn principally from sociology and where applicable from political science and history. Journalist accounts, films, and web site

## research supplement readings.

## SOC 2510 Social Gerontology: Aging and

 the Life Course (also HD 2510)Spring. 3 credits. E. Wethington.
For description, see HD 2510.

## SOC 2560 Sociology of Law (SBA-AS)

Fall. 4 credits. E. York Cornwell.
This course provides an introduction to the sociological perspective of law and legal institutions in modern society. A key question is the extent to which the law creates and maintains social order. And, what is its role in social change? We will review theoretical perspectives on the reciprocal relationship between law and society, and consider how this relationship is reflected in contemporary legal issues. Empirical research covered in this course will examine social interactions among actors within legal institutions (including the criminal courts, law school classrooms, and the jury room), and how individuals experience and utilize the law in everyday life.

## SOC 2650 Latinos in the United States (also DSOC 2650, LSP 2010, AMST 2655) (SBA-AS)

Spring. 3 credits; 4 -credit option available. H. Velez.

Exploration and analysis of the Hispanic experience in the United States. Examines the sociohistorical background and economic, psychological, and political factors that converge to shape a Latino group identity in the United States. Perspectives are suggested and developed for understanding Hispanic migrations, the plight of Latinos in urban and rural areas, and the unique problems faced by the diverse Latino groups. Groups studied include Mexican Americans, Dominicans, Cubans, and Puerto Ricans.
SOC 2710 Social and Political Context of American Education (also AMST/ EDUC 2710/5710, SOC 5710) (SBA-AS)
Fall. 3- or 4-credit option. J. Sipple. For description, see EDUC 2710.

## Methods and Statistics Courses

## SOC 3010 Evaluating Statistical

 Evidence (also SOC 6010) (MQR)Fall. 4 credits. Prerequisite: Arts and
Sciences students only. M. Brashears.
This course will introduce students to the theory and mathematics of statistical analysis. Many decisions made by ourselves and others around us are based on statistics, yet few people have a solid grip on the strengths and limitations of these techniques. This course will provide a firm foundation for statistical reasoning and logical inference using probability. While there is math in this course, it is not a math class per se, as a considerable amount of attention is devoted to interpreting statistics as well as calculating them.
[SOC 3040 Social Networks and Social Processes (SBA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Strang.

For description, contact department.]

## SOC 3070 Society and Party Politics

 (also GOVT 3063) (SBA-AS)Spring. 4 credits. S. Van Morgan. This course will focus on the role that society plays in the emergence and functioning of political parties. In addition to investigating different types of party systems, the societal roots of political parties, and the influence of institutions on electoral politics, the course will also examine contemporary debates, such as the relationship between culture and electoral behavior. Case studies will be drawn from a number of Western and non-Western settings.

## Intermediate Courses

## SOC 3110 Group Solidarity (SBA-AS)

Fall. 4 credits. M. Macy.
What is the most important group that you belong to? What makes it important? What holds the group together, and how might it fall apart? How does the group recruit new members? Select leaders? Make and enforce rules? Do some members end up doing most of the work while others get a free ride? This course explore these questions from an interdisciplinary perspective, drawing on sociobiology, economics, and social psychology, as it applies alternative theories of group solidarity to a series of case studies, such as urban gangs, spiritual communes, the civil rights movement, pro-life activists, athletic teams, work groups, and college fraternities.

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SOC 3130 Sociology of Medicine (also
    STS 3111) (SBA-AS)
    Fall. }4\mathrm{ credits. C. Leuenberger.
For description, see STS }3111
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SOC 3190 Contemporary Sociological Theory (SBA-AS)
Fall. 4 credits. D. Strang. Introduction to the main ideas and lines of research in contemporary sociology, from the emergence of the field in the American academy to the present. We read the work of seminal theorists and researchers such as Robert Merton, Erving Goffman, James Coleman, Harrison White, and Theda Skocpol. Topics include the development of distinctive lines of argument in areas like the study of the face-to-face group, the modern organization, social movements and social revolutions, inequality, and social mobility. The course considers the relationship between intellectual challenges, techniques of social
inquiry, and the social context within which ideas are put forward and take hold.
SOC 3240 Environment and Society (also DSOC 3240, STS 3241) (SBA-AS)
Fall. 3 credits. Staff.
For description, see DSOC 3240.

## [SOC 3270 Toleration and

 Fundamentalism (SBA-AS)Spring. Next offered 2011-2012. M. Berezin.

For description, contact department.]
SOC 3360 Evolving Families: Challenges to Public Policy (also PAM 3360) (SBA-AS)
Spring. 3 credits. K. Musick.
For description, see PAM 3360.
SOC 3370 Race and Public Policy (also PAM 3370) (SBA-AS)
Spring. 3 credits. S. Sassler.
For description, see PAM 3370.
SOC 3410 Modern European Society and Politics (also GOVT 3413) (SBA-AS)
Fall. 4 credits. S. Van Morgan.
For description, see GOVT 3413.
[SOC 3500 Sociology of China's Transition to Capitalism @ (SBA-AS)
Spring. 3 credits. Next offered 2011-2012. V. Nee.

For description, contact department.]
SOC 3570 Schooling, Racial Inequality, and Public Policy in America (SBA-AS)
Spring. 4 credits. S. Morgan.
For description, contact department.
[SOC 3620 Employment Inequality and the Law (SBA-AS)
Fall. 4 credits. Next offered 2011-2012.
Staff.
For description, contact department.]

## SOC 3710 Comparative Social

 Inequalities (also DSOC 3700) (SBA-AS)Spring. 3 credits. T. Hirschl. For description, see DSOC 3700.

## SOC 3750 Classical Theory \# (SBA-AS)

Spring. 3 credits. Staff.
Introduction to the classics in sociology, primarily works by Karl Marx, Max Weber, Emile Durkheim, and Georg Simmel. Students also study the works of Alexis de Tocqueville, Montesquieu, and Joseph Schumpeter. Special emphasis is put on the concepts, ideas, and modes of explanation that characterize the classics. Students also look at these writers' empirical material, and what may be termed the social construction of the classics. Course requirements include active class participation and three tests in class.

## [SOC 3950 Advanced Economic

 Sociology (SBA-AS)Spring. 4 credits. Next offered 2011-2012. R. Swedberg.

For description, contact department.]
[SOC 3970 Israeli-Palestinian Conflict (also GOVT 3977, HIST 3970, JWST/ NES 3697) @ (HA-AS)
Spring. 4 credits. Next offered 2011-2012. R. Brann.]

## Advanced Courses

The following courses are intended for advanced undergraduates with substantial preparation, as well as for graduate students
in sociology and related disciplines. The normal prerequisite for all 4000-level courses is one introductory course plus 3010 (or an equivalent statistics course). Students who are not sure whether their background is sufficient for a particular course should consult the professor.

## [SOC 4080 Qualitative Methods (also

 SOC 5080) (SBA-AS)Spring. 4 credits. Next offered 2011-2012.
M. Berezin.

For description, contact department.]
SOC 4100 Health and Survival Inequalities (also DSOC/FGSS 4100) (SBA-AS)
Fall. 4 credits. A. Gonzales.
For description, see DSOC 4100.
[SOC 4250 Artificial Societies (also SOC 5270) (SBA-AS)

Spring. 4 credits. Next offered 2011-2012. M. Macy.

For description, contact department.]
[SOC 4340 Online Social and Information Networks
Fall. 4 credits. Next offered 2011-2012.
M. Macy.

For description, contact department.]

## [SOC 4420 The Sociology of Science

 (also BSOC/STS 4421) (SBA-AS)Spring. 4 credits. Next offered 2011-2012. T. Pinch.

For description, see STS 4421.]
SOC 4470 Families and Inequality (also PAM 4470)
Fall. K. Musick.
For description, see PAM 4470.
[SOC 4510 Special Topics in Social Psychology: Social Structure and Personality
Spring. 4 credits. Next offered 2011-2012. L. Brashears.

For description, contact department.]
SOC 4530 Knowledge and Society (also STS 4531) (CA-AS)
Spring. 4 credits. C. Leuenberger.
For description, see STS 4531.

## [SOC 4570 Health and Social Behavior

 (also HD 4570)Fall. 3 credits. Prerequisites: HD 2500, SOC 1101, DSOC 1101, or SOC 2500 and a course in statistics. Letter grades only. Next offered 2011-2012. E. Wethington.
For description, see HD 4570.]

## SOC 4780 The Family and Society in

 Africa (also ASRC 4606) @ (SBA-AS)Fall. 4 credits. N. Assié-Lumumba.
For description, see ASRC 4606.

## SOC 4910 Independent Study

Fall or spring. 1-4 credits. For
undergraduates who wish to obtain research experience or do extensive reading on a special topic. Prerequisites: acceptable prospectus and agreement of a faculty member to serve as supervisor for project throughout semester. Graduate students should enroll in 8910-8920.
SOC 4920 Economic Sociology of Entrepreneurship (SBA-AS)
Fall. 4 credits. V. Nee.
This course introduces the classical and contemporary writings on the rise of entrepreneurial capitalism in the West and the global diffusion of the modern entrepreneurial spirit and firm. Classical approaches pioneered
the sociological study of modern entrepreneurship in its rational orientation to profit-making and innovative drive to apply new technologies and ideas to production. Contemporary approaches shift the emphasis away from analysis of individual attributes and agency to focus on examining the role of social networks, organizational forms, and institutional environment in facilitating the entrepreneurs and the firm. In the second part of the course, we will examine case studies of entrepreneurs, drawing selectively from novels, movies, and autobiographies.

## SOC 4950 Honors Research

Fall or spring. 4 credits. Prerequisite: sociology seniors; permission of instructor.
SOC 4960 Honors Thesis: Senior Year Fall or spring. 4 credits. Prerequisite: SOC 4950.

## Graduate Core Courses

These courses are primarily for graduate students in sociology but may be taken by other graduate students with permission of the instructor.

## SOC 5010 Basic Problems in Sociology

Fall. 4 credits. B. Cornwell.
Analysis of theory shaping current sociological research. Examination of several central problems in sociological inquiry provides an occasion for understanding tensions and continuities between classical and contemporary approaches, for indicating the prospects for unifying microsociological and macrosociological orientations, and for developing a critical appreciation of efforts to integrate theory and research.

## [SOC 5020 Basic Problems in

 Sociology IIFall. 4 credits. Next offered 2011-2012. D. Heckathorn.

For description, contact department.]
SOC 5060 Research Methods II
Spring. 4 credits. Staff.
This course provides an in-depth examination of linear modeling. We begin with the basics of linear regression, including estimation, statistical inference, and model assumptions. We then review several tools for diagnosing violations of statistical assumptions and what to do when things go wrong, including dealing with outliers, missing data, omitted variables, and weights. Finally, we will explore extensions of the linear regression model, including models for categorical outcomes and hierarchical linear modeling. While statistical modeling is the focus of the course, we proceed with the assumption that models are only as good as the theoretical and substantive knowledge behind them. Thus, in covering the technical material, we will spend considerable time discussing the link between substantive knowledge and statistical practice.

## Graduate Seminars

These seminars are primarily for graduate students but may be taken by qualified advanced undergraduates who have permission of the instructor. The seminars offered in each semester are determined in part by the interests of students, but it is unlikely that any seminar will be offered more frequently than every other year. The list below indicates seminars that are likely to be offered, but others may be added and some
may be deleted. Students should check with the department before each semester.

## [SOC 5080 Qualitative Methods (also SOC 4080)

Spring. 4 credits. Next offered 2012-2013. M. Berezin.

For description, contact department.]

## [SOC 5100 Seminar on Comparative

 Societal AnalysisSpring. 3 credits. Prerequisites: advanced graduate students throughout social sciences; permission of instructor. Next offered 2011-2012. M. Berezin.
For description, contact department.]

## [SOC 5180 Social Inequality

Fall. 4 credits. Next offered 2012-2013. S. Morgan.

For description, contact department.]
SOC 5190 Workshop on Social Inequality Fall. 4 credits. Prerequisite: SOC 5180; sociology Ph.D. students, or permission of instructor. K. Weeden.
For description, contact department.

## [SOC 5270 Artificial Societies (also SOC 4250)

Spring. 4 credits. Next offered 2011-2012. M. Macy.

For description, contact department.]
[SOC 5280 Conflict and the Nation-State Fall. 4 credits. Next offered 2011-2012. D. Strang.

For description, contact department.]

## SOC 5400 Organizational Research

 Spring. 4 credits. D. Strang.This seminar focuses on contemporary sociological research on organizations. It centers theoretically on the interplay of institutional, ecological, and choice-theoretic accounts of organizational structure and action. Subjects include organizational founding and mortality, change in organizational practices over time, the relationship between organizations and their legal, social, and cultural environment, and stratification and mobility within organizations.

## SOC 5710 Social and Political Context of

 American Education (also AMST/ EDUC 2710/5710, SOC 2710)Fall. 3- or 4-credit option. J. Sipple. For description, see EDUC 2710.

## [SOC 5800 Identity and Interest in Collective Action

Fall. 4 credits. Offered alternate years; next offered 2011-2012. M. Macy.
For description, contact department.]

## SOC 6010 Evaluating Statistical

Evidence (also SOC 3010)
Fall. 4 credits. M Brashears.
For description, see SOC 3010.

## SOC 6060-6070 Sociology Colloquium

 Fall and spring. 0 credits. Requirement for sociology graduate students. Staff. A series of talks representative of current research interests in sociology, given by distinguished visitors and faculty members
## SOC 6080 Proseminar in Sociology

Fall. 1 credit. Prerequisite: first-semester sociology graduate students. Staff.
Discussion of the current state of sociology and of the research interests of members of the graduate field; taught by all members of the field.
[SOC 6090 Special Topics in Methodology Spring. 2 credits. Next offered 2011-2012. S. Morgan.

For description, contact department.]
[SOC 6100 The Sociological Classics Spring. 3 credits. Next offered 2011-2012. R. Swedberg.

For description, contact department.]
[SOC 6110 Introduction to Network Theory and Methods
Spring. 4 credits. Intended as an introduction for students who have not had exposure to network analysis previously or who are interested in the historical role of networks in sociology. Next offered 20112012. M. Brashears.

For description, contact department.]

## SOC 6180 AIDS and Society

Fall. D. Heckathorn.
AIDS is a disease for which sociology is especially relevant. Unlike influenzas that spread through mere proximity or casual contact, AIDS is spread through social networks-typically sexual or drug- using networks. The first recognition of the networkbasis of HIV transmission occurred in the early 1980s when the CDC established a task force to investigate a puzzling syndrome involving weakened immune systems. A sociologist on the team, William Darrow, suggested asking patients whether they knew one another. Their answers revealed a network linking patients within the East and West Coast sites where early cases where found, and also linking them across the two coasts. In this way, the network-basis of HIV transmission became clear.

## [SOC 6260 Controversies in Economic

 SociologyFall. 4 credits. Next offered 2011-2012. R. Swedberg.

For description, contact department.]
[SOC 6300 Cultural Sociology
Spring. 4 credits. Next offered 2011-2012.
M. Berezin.

For description, contact department.]
SOC 6320 Inside Technology: The Social Construction of Technology (also STS 6321)
Fall. 4 credits. Staff.
For description, see STS 6321.

## [SOC 6350 Network Sampling and

 Network StructureFall. 4 credits. Next offered 2011-2012.
D. Heckathorn.]

## SOC 6460 Economic Sociology

Fall. 4 credits. V. Nee.
Introduces the field of economic sociology and covers major topics addressed by sociologists studying the intersection of economy and society. We begin with classic statements on economic sociology and then move to the invigoration of the field in recent years, reading works that have been instrumental in this invigoration. Consideration is given to the several variants of "institutionalism" that have informed the sociological study of markets, organizations, and economic exchange.

## [SOC 6600 States and Social Movements

 (also GOVT 6603)Spring. 4 credits. Next offered 2011-2012.
S. Tarrow.

For description, see GOVT 6603.]

## [SOC 6660 Event History Analysis

Spring. 4 credits. Next offered 2012-2013. D. Strang.

For description, contact department.]

## SOC 6700 Classical Theory Seminar

Spring. 4 credits. R. Swedberg.
This course is primarily intended for graduate students who lack a background in the classics as well as for those who are only familiar with elementary works such as The Protestant Ethic, Suicide, and The Communist Manifesto. The readings and the discussion will primarily be concentrated to Weber's Economy and Society, Durkheim's Elementary Forms of Religious Life, and Marx's Capital. Works by Georg Simmel are also part of the reading list. The purpose of the course is to make the student familiar with the concepts, ideas, and ways of reasoning that characterize the classics. The main idea is to lay a solid foundation for future work in sociology. Each class will be in the form of a seminar discussion. The requirements include active class participation and a research paper on some aspect of the classics. Each class will be introduced by one or several students, who will suggest topics for discussion. The exact way that this will be done depends on the participants and their number.

## SOC 6910 Independent Study

Fall or spring. 2-4 credits. Prerequisite:
graduate status and permission of faculty
member willing to supervise project. Staff.
For graduates who wish to obtain research
experience or to do extensive reading on a special topic. Permission to enroll for independent study is granted only to students who present an acceptable prospectus and secure the agreement of a faculty member to serve as supervisor for the project throughout the semester.

## SOC 7780 Solidarity in Groups (also ILROB 7780) <br> Fall. 3 credits. E. Lawler.

 For description, see ILROB 7780.
## SOC 8910-8920 Graduate Research

 8910, fall; 8920, spring. Variable to 4 credits each semester. Prerequisite: graduate standing and permission of faculty member willing to supervise project.
## SOC 8950-8960 Thesis Research

8950, fall; 8960, spring. Variable to 6 credits each semester. Prerequisite: permission of thesis supervisor.

## SPANISH

See "Department of Romance Studies."

## STATISTICAL SCIENCE

## 301 Malott Hall, 255-8066

M. T. Wells, chair; R. L. Strawderman, director of graduate studies; J. A. Bunge, director of professional programs; J. Abowd, J. Booth, T. DiCiccio, R. Durrett, E. Dynkin, Y. Hong, G. Hooker, J. T. G. Hwang, N. Kiefer, P. Li, F. Molinari, M. Nussbaum, P. Protter, S. Resnick, D. Ruppert, G. Samorodnitsky, S. J. Schwager, B. Turnbull, P. Velleman, D. Woodard

The university-wide Department of Statistical Science offers undergraduate and graduate degrees in Statistical Science (B.A.), Applied Statistics (MPS), and Statistics (M.S./Ph.D.). The Statistical Science undergraduate major, open to students in Arts and Sciences, provides an interdisciplinary academic program in the study of empirical quantitative reasoning in its scientific and social context. The Statistical Science major has been designed to ensure that students have a firm grounding in both the major area as well as substantial depth in a particular applied area.

## The Major <br> Statistical Theory (8 courses)

CS 1112 or 1110 Introduction to Computing Using JAVA or MATLAB
MATH 2210-2220 or 2230-2240 or 2930-2940 or 2130 and 2310: Second-Year Calculus and Linear Algebra
PHIL 2010: Puzzles and Paradoxes; or PHIL 2310: Deductive Logic; or PHIL 2610: Knowledge and Reality
STSCI 2200: Biological Statistics I (cross-listed as BTRY 3010)
STSCI 3200 Biological Statistics II (cross-listed as BTRY 3020)
STSCI 4080 (cross-listed as BTRY 4080) or MATH 4710: Theory of Probability
STSCI 4090 (cross-listed as BTRY 4090) or MATH 4720: Theory of Statistics

## Statistical Applications (3 courses)

Three (3) additional courses from among:
STSCI 3100: Statistical Sampling (cross-listed with BTRY/ILRST 3100)
ORIE 3510: Stochastic Processes
STSCI 4100: Multivariate Analysis (cross-listed with BTRY/ILRST 4100)
STSCI 4110: Categorical Data (cross-listed with BTRY 6030, ILRST 4110)
STSCI 4120: Applied Experimental Design (cross-listed with BTRY 6040)
ORIE 4740: Statistical Data Mining (prereqs: ORIE 3600, MATH 2940)
CS 4780: Machine Learning (prereq: CS 2110, CS 2120, CS 2800, CS 3110)
BTRY 6520 Computationally Intensive Statistical Inference**
NTRES 6700 Spatial Statistics**
** comparable courses are being developed at the 4000 level

## External Specialization (3 courses)

Three 300+ related courses that are outside of Statistical Science and total at least nine credits ( 3 credit min per course). At least one course to include a paper, a project, or research with substantive, nontrivial application of statistical methods to subject-related data.

## Admission

Prerequisites to apply for the major include a minimum 2.50 cumulative GPA over at least two (2) semesters at Cornell University; and grades of C or higher in at least three (3) of the following courses to ensure foundational mathematical, computational, and/or statistical ability:

Calculus I (MATH 1110)
Calculus II (MATH 1120)
Introduction to Computing (CS 1110 or CS

## 1112)

Statistical Methods I (STSCI 2200, BTRY 3010)
Statistical Methods II (STSCI 3200, BTRY 3020)

## Courses

For complete course descriptions, see "Statistical Science" under "Computing and Information Science (CIS)."

## SWAHILI

See "Africana Studies and Research Center."

## SWEDISH

See "Department of German Studies."

## TAGALOG

See "Department of Asian Studies."

## THAI

See "Department of Asian Studies."

## THEATRE, FILM, AND DANCE

Faculty: A. Villarejo, chair; R. Archer, S. Bernstein, S. Brookhouse, J. Chu, W. Cross, M. Dreyer, D. Feldshuh, A. Fogelsanger, D. Fredericksen, J. E. Gainor (on leave 20102011), K. Goetz, S. Haenni (director of graduate studies), D. Hall, E. Intemann, J. Kovar, B. Levitt, P. Lillard, R. MacPike, B. Milles, J. Morgenroth, L. Patti, M. Rivchin, N. Salvato, J. Self, B. Suber, A. Van Dyke (director of undergraduate studies), S. Warner, H. Yan

Teaching staff: A. Bernstein, L. Boquist, T. Ostrander, K. Phoenix, J. Tindall.

Through its courses and production laboratories, the department provides students with a wide range of opportunities in theatre, film, and dance. It also offers bachelor of arts degrees in each of those areas. These majors educate students in accordance with the general liberal arts ethic of the college. The department invites and encourages academic and studio participation by students from all disciplines.

## Theatre Arts Major

R. Archer, S. Bernstein, S. Brookhouse, W. Cross, D. Feldshuh, J. E. Gainor (on leave 2010-2011), K. Goetz, D. Hall, E. Intemann, B. Levitt, P. Lillard, R. MacPike, B. Milles, L. Patti, N. Salvato, A. Van Dyke (director of undergraduate studies), S. Warner, H. Yan
The theatre major offers studies in the history of theatre, dramatic theory and criticism, playwriting, acting, directing, design/ technology, and stage management. Students interested in the theatre arts major should consult with Alison Van Dyke (director of undergraduate studies).

## Theatre major requirements

1. THETR 2400 and 24108

THETR 2500 Introduction to Theatre Design and Technology

THETR 2800 Introduction to Acting 3
2. Four laboratory courses
distributed as follows:
THETR 1510 Production Lab I 1-3
THETR 1530, 2530, or 3530 Stage Management Lab I, II, or III THETR 1550 Rehearsal and Performance or THETR 1510 in a different area 1-3 THETR 2510 or $\mathbf{3 5 1 0}$ Production Lab II or III 1-3
3. Four courses in the area of theatre studies (see "Theatre Studies" section of theatre courses) chosen in the following manner:
one course must be at 3000 level
one course must be at 4000 level
two additional courses at the 3000 or above level
one of the four courses must be pre20th century.
4. Three courses (at least 9 credits) in other theatre courses chosen in consultation with the faculty advisor. A course taken to qualify for admission to the Advanced Undergraduate Theatre Program (described below) may also be used to fulfill this requirement.
5. Courses in which a student receives a grade below $C$ cannot be used to fulfill the requirements for a Theatre major.

## Honors

The theatre honors program is for majors who have demonstrated exceptional ability in the major and who seek an opportunity to explore branches of their subject not represented in the regular curriculum or to gain experience in original research. To be part of the honors program the student must maintain a GPA of 3.5 in classes for the theatre major and an average of 3.0 in all courses. Students must consult with their advisors in the spring of their junior year to enroll in the honors programs.

## The Advanced Undergraduate Theatre Program

The department offers advanced study in directing, playwriting, design/technology, and stage management to students who qualify on the basis of outstanding achievement in course work. Admission to the AUTP is by invitation of the area faculty supervisor and the completion of a recommended "track" of courses or equivalent experience. (For recommended courses of study see listing of courses at end of departmental listings.) Approval process includes a portfolio review and/or interview. The program provides students with intensive study in theatre as well as the opportunity to collaborate with professional faculty and guest artists.

## Minor in Theatre

The Theatre Minor is divided into three tracks in order to allow students to focus in the area that interests them most within the theatre discipline. The Theatre Studies Track is the
most generalized, providing an introductory exposure to performance and production studies, with the remaining courses taken in theatre history, theory, and criticism. The Theatre Performance Track is tailored to students who wish to focus their studies in the areas of acting and directing. And the Theatre Production Track is tailored to those students interested in exploring more specifically theatre design and technology.

The Theatre minor is open to any student in the university, including those outside the College of Arts and Sciences, with the approval of the director of undergraduate studies.

## Requirements:

## Theatre Studies Track

1. THETR 2400 or 2410 : Introduction to World Theatre I or II
2. THETR 2800: Introduction to Acting
3. one production studio course
4. one theatre studies course at any level
5. one 3000 -level theatre studies course
6. 1-3 credits of THETR 1510,2510 , or 3510 : Production Laboratory I, II, or III

## Theatre Performance Track

1. THETR 2400 or 2410 : Introduction to World Theatre I or II
2. THETR 2800: Introduction to Acting
3. three acting or directing courses
4. 1-3 credits of THETR 1510, 2510, or 3510: Production Laboratory I, II, or III

## Theatre Production Track

1. THETR 2400 or 2410: Introduction to World Theatre I or II
2. THETR 2500: Fundamentals of Theatre Design and Technology
3. any three production studio courses
4. 1-3 credits of THETR 1510, 2510, or 3510: Production Laboratory I, II, or III
Courses in which a student receives a grade below a $C$ cannot be used to fulfill the requirements for the Theatre Minor.
Information on current courses that can be used to satisfy requirements of the above minors can be obtained at 223 Schwartz Center, or online at www.arts.cornell.edu/ theatrearts/academics/theatre/ TheatreMinorRequirements.asp.

## Independent Study, Internships, and Honors <br> THETR 3000 Independent Study

Fall, spring, or summer. 1-4 credits. Independent study in theatre allows students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course, must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study, which is available in 223 Schwartz Center.

THETR 4850 Undergraduate Internship
Fall, spring, or summer. 1-3 credits.
Prerequisite: majors or concentrators in the department.
Students are responsible for arranging their own internships in consultation with the faculty in their area of choice before preregistration for the semester in which the internship is planned to take place. To receive credit for this course, the internship must be unpaid. Students must follow the rules and procedures stated in the departmental internship form.

## THETR 4950 Honors Research Tutorial

Fall. 4 credits. Prerequisite: honors students in theatre.
First of a two-semester sequence (the second is THETR 4960) for seniors engaged in an honors project.

THETR 4960 Honors Research Tutorial Spring. 4 credits. Prerequisite: honors students in theatre.
Second of a two-semester sequence (the first is THETR 4950) for students engaged in an honors project.

## THETR 7210 Independent Study for Graduate Students in Theatre

Fall and spring. 1-4 credits. Staff. Independent study in theatre allows graduate students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course, must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study, which is available in 223 Schwartz Center.

## First-Year Writing Seminars

Consult the John S. Knight Institute brochure for times, instructors, and descriptions.

## Theatre Studies

THETR 2150 The American Musical (also AMST 2105, ENGL 2150, MUSIC 2250) (LA-AS)

Spring. 3 credits. N. Salvato.
The musical is a distinct and significant form of American performance. This course will consider the origins, development, and internationalization of the American musical and will emphasize the interpenetration of the history of musical theatre with the history of the United States in the 20th century and beyond. We will investigate how political, social, and economic factors shape the production of important American musicalsand how, in turn, musicals shape expressions of personal identity and national ideology. Key texts include Oklahoma, Guys and Dolls, West Side Story, Hair, and Rent.

## THETR 2160 Television (also AMST/

 ENGL/FGSS/FILM/VISST 2160) (LA-AS)Fall. 4 credits. N. Salvato.
In this introductory course, participants will study the economic and technological history of the television industry, with a particular emphasis on its manifestations in the United States and the United Kingdom; the changing shape of the medium of television over time and in ever-wider global contexts; the social meanings, political stakes, and ideological effects of the medium; and the major methodological tools and critical concepts
used in the interpretation of the medium, including Marxist, feminist, queer, and postcolonial approaches. Two to three hours of television viewing per week will be accompanied by short, sometimes dense readings, as well as written exercises.

THETR 2230 The Comic Theater (also CLASS 2651, COML 2230) \# (LA-AS)
Spring. 3 credits. J. Rusten.
For description, see CLASS 2651.
[THETR 2360 Public Voice and Civic Gesture (also DANCE 2450, VISST

## 2360)

Fall. 1 credit. Next offered 2011-2012.
B. Suber.

For description, see DANCE 2450.]
THETR 2400 Introduction to World Theatre I-Antiquity Through 1500 @ \# (LA-AS)
Fall. 4 credits. N. Salvato.
A survey of practices, literatures, and themes of global performance in Africa, America, Asia and Europe from antiquity through 1500. Examines case studies from ancient Egypt, Greece, Rome, the Near East, India, China, Japan, and England, continuing up to the age of European imperialism. Looks at issues of masking and identity, storytelling and ritual, stage and society, tradition and modernity. Lectures are combined with periodic student projects.

## THETR 2410 Introduction to World Theatre II-NeoClassical to the <br> \section*{Present \# (LA-AS)}

Spring. 4 credits. S. Warner
A survey of practices, literatures, and themes of global performance from around 1600 to the present. Examines the development of European and Asian vernacular and national theatrical traditions; recent ethnic and popular performance traditions of Europe, Asia, Africa, and meso-America; recurring issues of realism and theatricality; avant-garde innovations; colonial expansion and marginalization; intercultural and transnational exchanges. Lectures are combined with periodic student projects.

## THETR 2605 Theater, Sport, and Spectacle: Performance and Competition in Greece and Rome (also CLASS 2605) \# (CA-AS) <br> Fall. 3 credits. J. Rusten.

For description, see CLASS 2605.
THETR 2730 Opera (also MUSIC 2241) \# (LA-AS)
Spring. 3 credits. R. Harris-Warrick.
For description, see MUSIC 2241.

## THETR 2770 Shakespeare (also ENGL 2270) \# (LA-AS) <br> Fall. 4 credits. B. Correll. <br> For description, see ENGL 2270.

THETR 2780 Desire (also COML/ENGL/ FGSS 2760) (LA-AS)
Spring. 4 credits. E. Hanson.
For description, see ENGL 2760.

## THETR 3130 Special Topics in Drama

 and Performance (also ENGL 3760, FGSS 3130)Fall, spring. 4 credits. Fall, S. Warner; spring, H. Yan.
An intensive study of a particular dramatist, period, form or problem in drama and/or performance. Topics, prerequisites, and formats will vary from year to year. Topic for fall: Theatre and Social Change. Topic for
spring: Women Playwrights, Women Directors: A Genealogy of Modern Drama and Performance.
[THETR 3190 Music, Dance, and Light (also DANCE 3590, VISST 3519) (LA-AS)
Spring. 3 credits. Attendance at dance concerts and music concerts required. Next offered 2011-2012. A. Fogelsanger and E. Intemann.

For description, see DANCE 3590.]
THETR 3240 Comparative Renaissance Drama: "Blood Politics"
Spring. 4 credits. P. Lorenz.
For description, see ENGL 3240.

## [THETR 3260 Queer Performance (also

 FGSS 3250) (LA-AS)Fall. 3 credits. Next offered 2011-2012.
Limited to 15 students. S. Warner.
What constitutes queer performance? What is queer's relationship to lesbian and gay? What is performance's relationship to theatre? Is sexuality all we mean by queer?]
[THETR 3350 Performance Modernism (also ENGL 3350, VISST 3735) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. N. Salvato.

This course investigates drama and the cultural contexts of its performance from the mid-19th century to the mid-20th century in Europe and the United States.]

## THETR 3360 American Drama and

 Theatre (also AMST 3360) (LA-AS)Fall. 4 credits. Prerequisite: permission of instructor. Limited to 25 students. S. Warner.

Explores major American playwrights from 1900 to 1960 , introducing students to American theatre as a significant part of modern American cultural history. We will consider the ways in which theatre has contributed to the construction and deconstruction of a national identity. We will pay special attention to the social, political, and aesthetic contexts of the time period and discuss the shifting popularity of dramatic forms, including melodrama, realism, expressionism, absurdism, and the folk play, in the American theatre canon. Authors include O'Neill, Glaspell, Odets, Rice, Hellman, Hughes, Hurston, Hansberry, Miller, Williams, and Albee, among others.
[THETR 3370 Contemporary American Theatre (also AMST/ENGL 3370) (LA-AS)
Spring. 3 credits. Limited to 15 students Next offered 2011-2012. S. Warner. In this course we will examine major trends in American drama from 1960 to the present.]

## [THETR 3450 The Tragic Theatre (also

 CLASS 3645, COML 3440) \# (LA-AS)Spring. 4 credits. Next offered 2011-2012.
Limited to 40 students. F. Ahl.
For description, see CLASS 3645.]

## THETR 3470 On the Fringe-New Plays

 in Development (LA-AS)Spring. 4 credits. B. Levitt. A laboratory approach to new plays involving text analysis, scene work, and interactions with the authors of unproduced work. Authors who agree to participate with the class will submit plays for study and rehearsal. Authors will be included in discussions of the work via SKYPE and other Internet tools. The course will work with various theatres and
new play networks in selecting plays and authors. At least one Cornell playwright will be included in each semester. Whenever possible, international writers will be part of the makeup of the class.
[THETR 3720 Medieval and Renaissance Drama (also ENGL 3720) \# (LA-AS)
Spring. 4 credits. Next offered 2011-2012. M. Raskolnikov.

For description, see ENGL 3720.]
THETR 3750 Studies in Drama and Theatre: Modern Drama (also ENGL 3750) (LA-AS)

Spring. 4 credits.
For description, see ENGL 3750.
THETR 4030 Ritual, Play, Spectacle, Act: Performing Culture (also THETR 6030) (LA-AS)

Spring. 4 credits. S. Warner.
Takes a broad-spectrum approach to performance. Includes anthropological texts on ritual and play, sociological texts on performances in everyday life, literary studies texts on "performatives" in speech and writing, folklore studies on parades and reenactments, psychological and philosophical studies on the role of performance in the formation of identity, and standard texts of the theatre Considers the distinctions between play, ritual, spectacle, festival, theatre, and the visual arts. Explores the differences between being a spectator and witnessing and examines studies on audience behavior. At the base of the inquiry is the broad issue of the role of representational practices within culture and among cultures. If, as Barbara Meyerhoff has written, we understand ourselves by showing ourselves to ourselves, what role does "showing" have to construction of the selves we seek to understand? Why is postmodern culture often called the "society of the spectacle" (Debord)? If, as Aristotle claimed, we are mimetic creatures at base, which comes first-representation or reality? Looking closely at the notion of "live" art, students weigh theorists who claim that performance is ephemeral and disappearing against those who claim that performance, such as oral history, is resilient and enduring. Students have the opportunity to do fieldwork, create performative works, and engage in scholarly study.

THETR 4070 Transnational Imagination: A Seminar on Modern Theatre and Cultural History (also THETR 6070) (LA-AS)
Spring. 4 credits. H. Yan.
This course will explore 20th-century Anglophone drama in diverse areas of the English-speaking world. Through works by playwrights from Irish, African, Caribbean, U.S., and other regions (e.g., Friel, Soyinka, Aidoo, Walcott, and Shange), the seminar will be organized around two principal issues: the performative transformation of the received genre of European literary drama; themes of empire, colony and postcolony, and theatrical agency in the making of the modern world.

## [THETR 4200/6200 Parody (also ENGL/

 FGSS 4270/6370) (LA-AS)Spring. 4 credits. Next offered 2011-2012. N. Salvato.

This course examines a number of recent imitative texts in order to distinguish the rich variety of political agendas and aesthetic rationales for postmodern parody.]

THETR 4260 Adaptation: Text/ Theatricality (also VISST 4260) (LA-AS)
Spring. 4 credits. Prerequisite: permission of instructor. B. Milles.
Mounting a script into a show is a process of adaptation from page to stage. This course challenges the boundaries of text to discover the possibilities of performance. Asks: How do we translate inspiration into tangible (or intangible) theatrical imagery? Working in workshop format as actors and writers, students explore the process of developing theatre pieces based on a variety of sources.

## [THETR 4270 Advanced Seminar in

 Shakespeare: Shakespeare and Marlowe (also ENGL 4270) \# (LA-AS)Fall. 4 credits. Next offered 2011-2012. B. Correll.]

## THETR 4310 Theory of the Theatre and

 Drama (also GERST 4310, THETR 6310) \# (LA-AS)Fall. 4 credits. H. Yan.
This course is a survey of dramatic theory and theories of theatrical representation from Aristotle to the present. Although covering a span of over two thousand years, the point will be to focus our analysis on a smaller number of key representative texts from the European, American, and postcolonial traditions. In so doing we will seek to develop a close reading of each text, while at the same time exploring both their reception within the context in which they emerged as well as their importance in the ever-evolving process of the institutions of theatre and drama over greater periods of time. Participants will be expected to read carefully the primary and background texts assigned for each session and come to class prepared to raise and answer questions about the material at hand.

## THETR 4320 Theatre and Society: A

 Comparative Study of Asian Dramatic Cultures (also ASIAN 4435/6632, THETR 6320) @ (CA-AS)Fall. 4 credits. H. Yan.
This course is a study of Chinese and Japanese theatres with an emphasis on the profound ruptures and variable continuities between "the traditional" and "the modern" aesthetic practices as embodied in the dramatic movements in both countries since the beginning of the 20th century. While major traditional forms of Chinese and Japanese theatres will be introduced and studied in the course, plays by modern Chinese authors such as Hu Shi, Ouyang Yuqian, Hong Shen, Cao Yu, Guo Moruo, and Lao She, modern Japanese authors such as Kishida Kunio, Kubo Sakae, Yukio Mishima, Masakazu Yamazaki, Minoru Betsuyaku, and Seiichi Yashiro will be examined with special attention paid to the transformative ways in which those artists engage their respective traditions and the cultural forces of international modernisms. The aesthetic, social, and political cross-currents between these two historically distinctive Asian dramatic cultures will be further explored in their differential relationships with, and shifting placements in, the changing force fields of globalizing modernity throughout the century. DVDs and other visual materials are used.
[THETR 4360 The Female Dramatic Tradition (also FGSS 4330) (LA-AS)
Spring. 4 credits. Next offered 2011-2012. S. Warner.

Is there a "female dramaturgy?" What is the female tradition in the theatre? This course explores these questions through an investigation of texts by women dramatists, including Hrotsvitha, Aphra Behn, and Caryl Churchill, as well as theory by such critics as Sue Ellen Case and Jill Dolan.]

## THETR 4440 Gossip (also ENGL

4640/6640, THETR 6440) (LA-AS)
Spring. 4 credits. N. Salvato.
Literary and cultural theorist Eve Kosofsky Sedgwick has described gossip as a "devalued art" that ought to be revalued for "projects of nonce taxonomy, of the making and unmaking and remaking and redissolution of hundreds of old and new categorical imaginings concerning all the kinds it may take to make up a world." In this graduate seminar, we will focus attention on the philosophical traditions in which gossip has been devalued, as well as on its more recent revaluations by theorists like Sedgwick. As we investigate the ways in which gossip may produce provisional maps of the world, we will occasionally pair philosophical and theoretical texts with their literary, theatrical, and filmic complements. Key authors include Kant, Kierkegaard, Freud, Benjamin,

## Heidegger, and Barthes

## THETR 4450 Text Analysis for

Production: How to Get from the Text onto the Stage (also ENGL 4450, VISST 4545)
Spring. 4 credits. Limited to 15 students.
Prerequisite: THETR 2500 or 2810 or 3980,
or permission of instructor. B. Levitt.
Examines the play as the central, essential source for production decisions made by the actor, the director, the designer, and the dramaturg. Students "present" their conclusions about the performance of studied texts through project work as either an actor, director, designer, or dramaturg, as well as through two to three papers.

## THETR 4460 Shakespeare in (Con)text

 (also ENGL 4210, VISST 4546) \# (LA-AS)Fall. 4 credits. Limited to 15 students.
Prerequisite: permission of instructor. B. Levitt.

Examines how collaboration among stage directors, designers, and actors leads to differing interpretations of plays. The course focuses on how the texts themselves are blueprints for productions with particular emphasis on the choices available to the actor inherent in the text.

## [THETR 4470 Hamlet: The Seminar (also

 ENGL 4820) \# (LA-AS)Fall. 4 credits. Limited to 15 students.
Prerequisites: THETR 2400, 2410, 2420 or equivalent and permission of instructor.
Next offered 2011-2012. B. Levitt.
Through research and assigned readings the course tests theoretical viewpoints about the play against the text itself by reading the theory in relationship to the production history.]

## THETR 6000 Proseminar in Theatre Studies

Fall. 4 credits. Prerequisite: graduate standing.
An introduction to the theory and methods involved in the study of the theatre. Attention focuses on pedagogy and the profession in
Part I. Part II explores current scholarly trends.

## THETR 6030 Ritual, Play, Spectacle, Act

Spring. 4 credits. S. Warner.
Takes a broad-spectrum approach to performance. Includes anthropological texts on ritual and play, sociological texts on performances in everyday life, literary studies texts on "performatives" in speech and writing, folklore studies on parades and reenactments, psychological and philosophical studies on the role of performance in the formation of identity, and standard texts of the theatre. Considers the distinctions between play, ritual, spectacle, festival, theatre, and the visual arts. Explores the differences between being a spectator and witnessing and examines studies on audience behavior. At the base of the inquiry is the broad issue of the role of representational practices within culture and among cultures. If, as Barbara Meyerhoff has written, we understand ourselves by showing ourselves to ourselves, what role does "showing" have to construction of the selves we seek to understand? Why is postmodern culture often called the "society of the spectacle" (Debord)? If, as Aristotle claimed, we are mimetic creatures at base, which comes first-representation or reality? Looking closely at the notion of "live" art, students weigh theorists who claim that performance is ephemeral and disappearing against those who claim that performance, such as oral history, is resilient and enduring. Students have the opportunity to do fieldwork, create performative works, and engage in scholarly study.

## [THETR 6050 Camp, Kitsch, and Trash

(also ENGL 6510, FGSS 6050)
Spring. 4 credits. Next offered 2011-2012. N. Salvato.

This seminar investigates histories of taste; the traffic between popular culture and "high art"; and the relationships among material artifacts, identity politics, and community formations.]

## [THETR 6060 Passionate Politics (also

 FGSS 6040)Fall. 4 credits. Next offered 2011-2012. S. Warner.

Complete Course Title: Passionate Politics: Affect, Protest, Performance. This course explores the relationship between affect, performance, and political engagement.]
THETR 6070 Transnational Imagination: A Seminar on Modern Theatre and Cultural History (also THETR 4070)
Spring. 4 credits. H. Yan.
For description, see THETR 4070.

## [THETR 6300 Melodrama, Modernism,

 and Modernity (also ENGL 6300)Fall. 4 credits. Next offered 2011-2012. N. Salvato.

This course examines the history of melodrama and the various theories, often sharply divergent, that have developed about and around it.]
THETR 6310 Theory of Theatre and Drama (also COML 6051, GERST/ THETR 4310)
Fall. 4 credits. H. Yan.
For description, see THETR 4310.

THETR 6320 Theatre and Society: A Comparative Study of Asian Dramatic Cultures (also ASIAN 4435/6632, THETR 4320)
Fall. 4 credits. H. Yan.
For description, see THETR 4320.

## THETR 6440 Gossip (also ENGL

 4640/6640, THETR 4440)Spring. 4 credits. N. Salvato.
For description, see THETR 4440.

## THETR 7100 The Pedagogy of Theatre

Fall. 4 credits. Corequisite: relevant undergraduate class and permission of instructor. Staff.
Provides graduate students in the field of theatre an opportunity to work directly with a faculty member to explore pedagogical theory and practice for undergraduate theatre classes in all areas of the curriculum.

## Acting

THETR 1550 Rehearsal and Performance
Fall or spring. 1-2 credits; 1 credit per production experience per semester up to 2 credits per semester. Students must register for course in semester in which credit is earned. Prerequisite: students who are assigned roles after tryouts at department's scheduled auditions. Students should add this course only after they have been assigned roles. S-U grades only. The study, development, and performance of roles in departmental theatre or dance productions or the study and practice of directing as experienced in assisting faculty and guest directors.

## THETR 2050 Rehearsal Workshop

Fall or spring. 2 credits. Limited to 30 students. Prerequisites: participation in a particular department production and permission of instructor. Staff.
Enables students participating in a particular production to gain expertise and/or knowledge to contribute to that production. The focus of the course depends on the needs of a particular production (e.g., history, choreography, textwork, dramaturgy).

## THETR 2800 Introduction to Acting

 (LA-AS)Fall and spring. 3 credits. Limited to 16 students per sec. Preregistration and registration only through roster in department office, 223 Schwartz Center. No online registration. Staff.
An introduction to the actor's technique and performance skills, exploring the elements necessary to begin training as an actor, i.e., observation, concentration, and imagination. Focus is on physical and vocal exercises, improvisation, and text and character. There is required play reading, play attendance, and some scene study.

## THETR 2810 Acting I (LA-AS)

Fall and spring. 3 credits. Limited to 14 students per sec. Prerequisites: sophomore standing and above; THETR 2800 and audition. Registration only through roster
in department office, 223 Schwartz Center. Practical exploration of the actor's craft through exercises in physical and psychological action, improvisation and scene study.

## THETR 2820 Standard American Stage

 Speech (LA-AS)Fall. 3 credits. Limited to 10 students. Prerequisites: THETR 2800 and permission of instructor. A. Van Dyke.
Introduction to Standard American Stage Speech. Study of various regional American accents and Standard American Stage Speech using the International Phonetic Alphabet as a way to designate the vowel, diphthong, and consonant sounds of spoken English.

## THETR 2830 Voice and Speech for Performance (LA-AS)

Spring. 3 credits. Limited to 12 students. Prerequisite: permission of instructor. M. Dreyer.

Development of the speaking voice with additional emphasis on dramatic interpretation. Registration only through department roster, 223 Schwartz Center.

## THETR 2840 Speech and Dialects for

 Performance (LA-AS)Spring. 3 credits. Limited to 10 students. Primarily for department majors. Prerequisites: THETR 2810 and permission of instructor. A. Van Dyke.
Development of speech and dialects in dramatic text.

## THETR 3800 Acting II (LA-AS)

Fall. 3 credits. Limited to 12 students.
Prerequisite: THETR 2810 and audition. B. Milles.

Continuation of Acting I. Special consideration is given to a physical approach to
characterization.

## THETR 3810 Acting III: Advanced Scene

 Study (LA-AS)Spring. 3 credits. Limited to 10 students.
Prerequisite: audition. Strong priority given to those who have taken THETR 4460. Staff.
Focuses on advanced problems for the stage. Monologues and scenes are drawn from Shakespeare and classical sources.

## THETR 3840 Commedia: A

## Contemporization of Physical Acting Styles and the Comic Approach (also

 VISST 3850) (LA-AS)Spring. 3 credits. Limited to 10 students.
Prerequisite: THETR 2810, and permission
of instructor. B. Milles.
A wholly physical acting course based in the practices of Commedia dell'arte-stock characters, physical lazzi, improvisation, street theatre-using improvisation, some mask work, clown and viewpoint training. An exploration of how to use the body to illuminate text, and how to mine text to maximize comedy.

## [THETR 3850 Advanced Studies in Acting

 Techniques (LA-AS)Fall or spring. 3 credits; may be repeated for credit. Limited to 8 students. Prerequisites: THETR 2810, 2840, audition, and permission of instructor. Next offered 2011-2012.
A. Van Dyke.

Scene study using plays that require the accents studied in THETR 2840.]

## THETR 3860 Solo Performance (LA-AS)

Fall. 4 credits. Prerequisites: THETR 2800,
2810, and permission of instructor.

## B. Levitt.

THETR 3860 was designed to explore the evolution and performance of material from nonscripted texts and focus on the performance of those texts by the solo performer. Material may be drawn from
newspapers, novels, poetry, nonfiction, biography, autobiography, and interviews.

## THETR $\mathbf{3 8 7 0}$ Movement for the Actor

Fall. 3 credits. Prerequisite: permission of instructor. M. Dreyer.
Physical skills for the actor are developed through work with LeCog-based Neutral Mask corporeal mime and physical acting techniques.

## [THETR 4810 Senior Seminar in Theater Exploration (LA-AS)

Spring. 3 credits. Prerequisites: 3000-level acting course and/or senior theatre student
by permission of instructors. Next offered 2011-2012. B. Levitt and A. Van Dyke.
This seminar will re-explore and summarize the techniques taught in acting and theatre classes relating to performance and serve as a culminating experience for those undergraduates whose major study of interest during their four years at Cornell has been in the performance side of Theatre Arts.]
THETR 6770 Seminar in Theatre: The Question of Sovereignty: Theatre, Theory, Form (also ENGL 6770)
Fall. 4 credits.
For description, see ENGL 6770.

## $\overline{\text { Directing }}$

THETR 1770 Student Laboratory Theatre Company
Spring. 1-2 credits. D. Feldshuh.
The Student Laboratory Theatre Company (SLTC) is a group of student-actors who earn credit by acting in three scenes directed by students taking THETR 4980. Students enrolling in SLTC for credit earn 1 credit for two projects and 2 credits for three projects. SLTC also meets with directors once a week.

## THETR 3980 Fundamentals of Directing I

 (also VISST 3798) (LA-AS)Fall. 3 credits. Limited to 9 students.
Prerequisite: permission of instructor.
Special consideration given to students
who have completed THETR 2800 or are intending to continue in area of stage or screen directing. Students should see
instructor one year in advance to sign up for course. D. Feldshuh.
Focused, practical exercises teach the student fundamental staging techniques that bring written text to theatrical life. A core objective is to increase the student's awareness of why and how certain stage events communicate effectively to an audience. Each student directs a number of exercises as well as a short scene.

## THETR 4980 Fundamentals of Directing

 II (LA-AS)Spring. 4 credits. Limited enrollment. Prerequisite: THETR 2800 and 3980, and permission of instructor. Recommended:
THETR 2500 and 2810. D. Feldshuh. Builds on the staging techniques learned in Fundamentals of Directing I. In this course each student directs actors from the Student Laboratory Theatre Company in a series of projects and public presentations focusing on specific directorial challenges.

## THETR 4990 Practicum in Directing

Fall or spring. 1-4 credits. Prerequisites:
THETR 2400, 2500, 2800, 3980, 4980, and permission of instructor. D. Feldshuh. Allows the student who has completed the appropriate prerequisites the opportunity to direct a full presentation of theatre in
conjunction with a faculty mentor. May also involve an internship with a prominent director on campus or the opportunity to assistant direct a faculty or guest director.

## Playwriting

## THETR 3480 Playwriting (LA-AS)

Fall. 4 credits. Limited to 12 students. Prerequisite: permission of instructor. B. Milles.

Various approaches and techniques are examined as the student is introduced to the art and craft of dramatic writing. The student is required to read dramatic texts, observe theatre productions and rehearsals, and write. The semester culminates in the completion of a 20- to 30 -minute one-act play.

## [THETR 3490 Advanced Playwriting

 (LA-AS)Spring. 4 credits. Prerequisite: THETR 3480 or permission of instructor. Next offered 2011-2012. B. Milles.
Continuation of THETR 3480. An intensive writing class. Students are encouraged to explore a rich creative landscape culminating in the completion of a full-length play.]
[THETR 4970 Seminar in Playwriting
Fall or spring. 1-4 credits. Prerequisite: THETR 3480 and 3490 and permission of instructor. Next offered 2011-2012. Staff.
Extension of THETR 3480 and 3490. Students formulate a process for developing a fulllength play, which they develop over the course of the semester.]

## Design, Technology, and Stage Management

## Design

THETR 2500 Fundamentals of Theatre Design and Technology (LA-AS)
Fall and spring. 4 credits. Limited to 12 students. Not open to first-semester freshmen. Registration through department roster only in 223 Schwartz Center. Highly recommended: concurrent enrollment in 1 credit of Production Lab (THETR 1510 or 2510). Students required to purchase materials that instructors specify (approx. cost \$50). K. Goetz, W. Cross, E. Intemann, and S. Bernstein.
Lectures, discussion, and project work introduce the principles of designing scenery, costumes, lighting and sound, and the technical process of realizing designs on stage.
THETR 2540 Theatrical Makeup Studio
Spring. 3 credits. Limited to 10 students. Prerequisite: permission of instructor. Registration only through department roster in 223 Schwartz Center. Students are required to purchase makeup kits that instructor provides (approx. cost $\$ 50$ ). It is expected that any interested student will have taken courses within the department in any of the areas of design, acting, dance, or film, or will have completed rehearsal and performance (THETR 1550) credit. S. Bernstein.

Basic technique of makeup design and application for the stage including corrective, old age, likeness, and animals; use of some three-dimensional makeup and false facial hair.

## [THETR 3190 Music, Dance, and Light

 (also DANCE 3590, VISST 3519) (LA-AS)Fall. 3 credits. Limited to 12 students. Attendance at dance concerts and music concerts required. Next offered 2011-2012.
E. Intemann and A. Fogelsanger.

For description, see DANCE 3590.]

## THETR 3410 CAD Studio for Theatre

 Design (LA-AS)Fall or spring. 3 credits. Prerequisite: THETR 2500 and 3400 and permission of instructor. Registration only through department roster in 223 Schwartz Center. Experience in theatre production and graphic communication helpful but not essential. Fall, K. Goetz; spring,
S. Brookhouse.

Students will utilize commercially available computer assisted design software to explore the process of designing scenery, costume and lighting for the live theatre. AutoCad,
Vectorworks and Photoshop are some of the applications utilized.

## THETR 3430 Costume History: From Fig Leaf to Vanity \# (LA-AS)

Fall. 3 credits. Limited to 20 students.
S. Bernstein.

Offers an overview of the history of clothing
from the first signs of clothing to the early
20th century. It investigates social, political, economic, technological, geographic, ecological, and artistic influences on costume.

## THETR 3620 Lighting Design Studio I

 (also DANCE 3660, VISST 3620) (LA-AS)Fall. 4 credits. Limited to 6 students. E. Intemann.

The theory and practice of lighting design as a medium for artistic expression. This course explores the aesthetic and mechanical aspects of light and their application in a variety of disciplines. Emphasis is on understanding lighting's function in an environment and manipulating light effectively. Artistic style and viewpoint are also covered.

## THETR 3640 Scenic Design Studio (LA-AS)

Fall and spring. 3 credits. Limited to 10 students. Prerequisite: THETR 2500 and 3400 or permission of instructor. Experience in theatre production and drawing skills is helpful but not essential. Students are required to purchase materials that instructor will specify (approx. cost
$\$ 50$ ). Course co-meets with THETR 4640.
K. Goetz.

An exploration of the scene design process for the live theatre. Students will execute design projects employing various media (e.g., sketches, paper models, computer graphics) that examine how elements of stage craft, architecture, and interior design can be employed to support and enhance the action of dramatic texts.

## THETR 3650 Automated Lighting and

 ControlFall. 3 credits. Limited to 8 students. E. Intemann.

Covers the understanding and application of light control technologies, including electrical systems, color, optics, dimming protocols, and console programming. Students complete a series of projects culminating in the programming and use of moving fixtures and lighting visualization software.

## THETR 3660 Costume Design Studio

 (LA-AS)Spring. 3 credits; may be repeated for credit Limited to 10 students. Students are required to purchase materials that instructor will specify (approx. cost $\$ 70$ ). S. Bernstein.

Design of costumes for the theatre, concentrating on script and character analysis, period research, design elements, figure drawing and rendering skills, and an understanding of production style.

## THETR 3680 Sound Design and Digital Audio (also DANCE 3680, MUSIC 3431) (LA-AS)

Fall and spring. 3 credits. Prerequisite: permission of instructor. Recommended: some experience with audio/video recording or editing. W. Cross.
Basics of digital audio, psychoacoustics, and sound design as they apply to theatre, film, and music production. Weekly projects require time spent in the studio outside of class. Students create soundtracks for text and moving image, with final projects in 5.1 surround sound, using Pro Tools and Digital Performer.

## THETR 3690 Interactive Performance

 Technology (also DANCE 3560, MUSIC 3441) (LA-AS)Spring. 3 credits. Laptop computer and Max 5 software required, see http:// cycling $74 . \mathrm{com} /$ shop/discounts for student pricing. (As of April 17, 2010, a one-time, nine-month Max 5 authorization costs \$59.) Lab performance at end of semester. A. Fogelsanger.

Introduction to the multimedia programming platform Max 5 and its application to computer-interactive dance (interactive dance technology). Intended to bring together programmers and dancers. Each student will create software patches and movement pieces and collaborate with others on a final project focusing on the input, manipulation, and output of movement, sound, video, graphics, and lighting in live dance performance. Topics include digital audio/video processing, MIDI control, sensor use, electroacoustic music, history of computer technology and dance, gestural expression, choreography, composition, design, and aesthetics. There will be assigned online readings.

## THETR 3710 Costume Design Studio II

 (LA-AS)Fall. 3 credits. Limited to 10 students. Prerequisite: THETR 3660, or THETR 2500 with permission of instructor. Students are required to purchase materials that instructor will specify (approx. cost $\$ 50$ ). S. Bernstein.

Explores unconventional costume designs for theatre and dance. Deals with the special considerations found in many plays and performance pieces, such as the theatricalization of nonhuman subjects (e.g., animals, plants, machines, magical creatures), the visualization of music, or the support or enhancement of movement. Also covers alternative (some non-Western) ways to create character through costume, makeup, masks, and wearable forms of puppetry.

## THETR 4620 Lighting Design Studio II

 (also DANCE 4660, VISST 4563) (LA-AS)Spring. 4 credits. Limited to 6 students; may be repeated for credit. Prerequisite: THETR 2500 or 3620 or permission of instructor. E. Intemann.

Concentrates on designing lighting for different genres of performance in various venues. Emphasis is placed on developing both the visual sophistication and the technical artistry of the lighting designer. Commitment, personal style, and professional presentation are stressed.

## THETR 4640 Scene Design Studio II (LA-AS)

Fall and spring. 3 credits. Limited to 10 students. Prerequisite: THETR 3640 or permission of instructor. Students are required to purchase materials that instructor will specify (approx. cost \$50). Course co-meets with THETR 3640. K. Goetz

Builds on the techniques learned in THETR 3640. Students will execute more complex design projects tailored to their particular skills, goals, and interests, with emphasis on developing professional standards and practices that would prepare the student for a major design assignment on a department production.

## Technology

## THETR 3400 Theatrical Drafting and

 Technical Drawing StudioFall. 3 credits. Limited to 5 students. Prerequisite: permission of instructor. S. Brookhouse.

Implementation of the fundamentals of drafting and technical drawing. Introduction of the concept of an individual style in the approach to drafting for the theatre. Involves a series of projects to familiarize students with the convention and process of visualization and drafting, using both mechanical drafting techniques and AUTOCAD.

## THETR 3410 CAD Studio for Theatre

 Design (LA-AS)Spring. 3 credits. Prerequisite: THETR 2500 and 3400 and permission of instructor. Registration only through department roster in 223 Schwartz Center. Experience in theatre production and graphic communication helpful but not essential. S. Brookhouse and staff.

Students will utilize commercially available computer-assisted-design software to explore the process of designing scenery, costume, and lighting for the live theatre. AUTOCAD, Vectorworks, and Photoshop are some of the applications utilized.

## THETR 3520 Themed Entertainment: The

 Technical PerspectiveFall. 3 credits. Limited to 12 students. R. Archer.

Exploration into the integration of art and science in today's theme parks and interactive entertainment attractions. Papers, projects, and discussions deal with planning and development aspects of large-scale entertainment projects including architecture, engineering, construction, and attraction installation. Focus is on the specialized entertainment technologies that make these attractions work: audio and lighting design, ride and show control systems, and special effects.

## THETR 3540 Stagecraft Studio

Fall. 3 credits. Prerequisite: THETR 2500 or permission of instructor. Highly recommended: concurrent enrollment in at least 1 credit of THETR 1510 or 2510 . R. Archer.

Exploration of the techniques and practice of theatre operation, scenic construction, stage
mechanics, rigging, painting, and model building.

## THETR 3560 Costume Construction Studio

Spring. 3 credits. Highly recommended: concurrent enrollment in at least 1 credit of THETR 1510 or 2510 . Lab fee: $\$ 100$ (paid in class). R. MacPike.
Project/lecture/discussion class in costume research, patterning, cutting, construction, and fitting.

## THETR 3600 Costumes: Special Projects

 Fall. 3 credits; may be repeated for credit. Prerequisite: permission of instructor. Lab fee: $\$ 150$ (paid in class). R. MacPike. Designed for students who have completed a basic construction class (in THETR or FSAD, or another department). Each fall, this projectoriented course focuses on one of the following areas of costume crafts: millinery, fabric modification, or mask making. Students should check with the instructor to find out each fall which topic is being offered. Fall 2009 special project is mask-making.
## Stage Management

## THETR 1530 Stage Management

 Production Laboratory IFall and spring. 1-2 credits; may be repeated for credit. Before registering, students must attend orientation meeting at 7:30 P.M. in Kiplinger Theatre at Schwartz Center on first Tuesday of classes. Prerequisite: permission of instructor. P. Lillard.
Practical experience in theatrical production as assistant stage manager for a dance theatre concert or as a stage manager for readings, Black Box lab productions, or SLTC under the supervision of the faculty production manager. THETR 3700 complements this course.

## THETR 2530 Stage Management

## Laboratory II

Fall and spring. 1-5 credits; may be repeated for credit. Before registering, students must attend orientation meeting at 7:30 p.m. in Kiplinger Theatre at Schwartz Center on first Tuesday of classes. Prerequisite: permission of instructor. P. Lillard.

Practical experience in theatrical production as assistant stage manager for a season production under the supervision of the faculty production manager. THETR 3700 complements this course.

## THETR 3530 Stage Management

 Laboratory IIIFall and spring. 1-4 credits; may be repeated for credit. Before registering, students must attend orientation meeting at 7:30 p.m. in Kiplinger Theatre at Schwartz Center on first Tuesday of classes. Prerequisite: permission of instructor. P. Lillard.

Practical experience in theatrical production as stage manager for a dance theatre concert or an AUTP production under the supervision of the faculty production manager. THETR 3700 complements this course.

## THETR 3700 Stage Management Studio

 Fall. 2 credits. Prerequisite: THETR 2500 or 2800 or permission of instructor. Students are required to purchase materials that instructor will specify (approx. cost $\$ 10$ ). P. Lillard.Introduction to the concepts and techniques of stage management as they relate to specific areas of production. Development of relevant
communication skills and an understanding of the production process as experienced by a working stage manager or assistant stage manager. THETR 1530, 2530, and 3530 complement this course.

## THETR 4530 Stage Management

## Laboratory IV

Fall and spring. 1-5 credits; may be repeated for credit. Prerequisite: admission to Advanced Undergraduate Theatre Program. P. Lillard.
Practical experience in theatrical production as stage manager for a season production under the supervision of the faculty production manager.

## Production Laboratories

THETR 1510 Production Laboratory I
Fall and spring. 1-3 credits; may be repeated for credit. No prerequisites or experience required. Orientation meeting at 7:30 P.m. first Tuesday of classes each semester in Kiplinger Theatre at Schwartz Center. P. Lillard, S. Brookhouse and R. MacPike.

Provides practical experiences in theatrical production. Students can work on scenery, costumes, properties, lighting, or stage crew.

## THETR 2510 Production Laboratory II

Fall and spring. 1-3 credits; may be repeated for credit. Prerequisite:
permission of instructor. Orientation meeting at 7:30 P.m. on first Tuesday of classes each semester in Kiplinger Theatre at Schwartz Center. P. Lillard, D. Hall,
W. Cross, and R. MacPike.

Practical experience in theatrical production, as a light board operator, sound board operator, video operator, follow-spot operator, sound technician, head dresser or scenery/ props special project.

## THETR 3510 Production Laboratory III

Fall and spring. 1-3 credits; may be
repeated for credit. Prerequisite:
permission of instructor. P. Lillard,
R. Archer, S. Brookhouse, D. Hall,
E. Intemann, and S. Bernstein.

Practical experience in theatrical production as a master electrician, assistant technical director, assistant costume shop manager, or assistant to a faculty or guest director or designer.

## THETR 4510 Production Laboratory IV

Fall and spring. 1-4 credits; may be
repeated for credit. Prerequisite: admission to Advanced Undergraduate Theatre
Program. P. Lillard, R. Archer, S. Bernstein,
D. Hall, W. Cross, and E. Intemann.

Practical experience in theatrical production, in the position of designer, shop manager, technical director, or sound engineer.

## Independent Study, Internships, and Honors

## THETR 3000 Independent Study

Summer, fall, or spring. 1-4 credits. Independent study in the theatre allows students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course, must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study, which is available in 223 Schwartz Center.

## THETR 4850 Undergraduate Internship

Fall, spring, or summer. 1-3 credits. To be eligible to enroll and receive credit for an internship, students must either be majors or be concentrators in the department. Students are responsible for arranging their own internships in consultation with the faculty in their area of choice before preregistration for the semester in which the internship is planned to take place. To receive credit within this course, the internship must be unpaid. Students must follow the rules and procedures stated in the departmental internship form.

## THETR 4950 Honors Research Tutorial

Fall or spring. 4 credits. Prerequisite: honors students in theatre.
First of a two-semester sequence (the second is THETR 4960) for seniors engaged in an honors project.

## THETR 4960 Honors Research Tutorial

Fall or spring. 4 credits. Prerequisite: honors students in theatre.
Second of a two-semester sequence (the first is THETR 4950) for students engaged in an honors project.

## THETR 7210 Independent Study for

 Graduate Students in TheatreFall and spring. 1-4 credits.
Independent study in theatre allows graduate students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course, must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study, which is available in 223 Schwartz Center.

## $\overline{\text { Film }}$

Faculty: A. Villarejo, D. Fredericksen, S. Haenni (director of graduate studies), L. Patti, M. Rivchin.

The study of film began in this department in the 1930 s and continues to be based here. In the intervening years, however, it has also spread into a significant number of other departments in the College, including Africana studies, anthropology, Asian studies, comparative literature, English, German studies, government, history, psychology, Romance studies, and FGSS. This proliferation of courses has been accompanied by a comparable proliferation of perspectives and faculty concerns, e.g., the relationship of national cinemas to national literatures and specific cultures, film's relationships to myth and ideology, the use of film as historical evidence, film's efficacy as a rhetorical medium, and film's contribution to perennial issues in aesthetics, the history of the arts, and studies in cognition. However, foundational courses in film production and in the history, theory, and criticism of film as an art are centered in this department.
This richness of courses and perspectives is matched by the ways in which students may make film the focus of their undergraduate studies. The three ways currently being used are: (1) majoring in film within the
Department of Theatre, Film, and Dance; (2) constructing an individually tailored Independent Major in film (including the possibility of placing film in tandem with another medium or discipline); and (3) focusing on film as a College Scholar. Students
interested in options 2 or 3 should consult both Don Fredericksen and the director of the College Scholar Program or the director of the Independent Major program.
Students who do not wish to major in film may elect to minor in film under guidelines approved by the College of Arts and Sciences. Details of this new option are described below. In addition, students should be aware that the college has a five-course minor in visual studies, which can be taken independently of, or in conjunction with, a major in film. Students interested in the visual studies minor should contact the
undergraduate coordinator, Jessica Smith, in the Department of Art History and Visual Studies.

## Film Major Requirements

The department's film major requires a total of 50 credits in film and related courses. Students should note that a number of film coursesincluding two required "core" courses: (FILM 3750 and 3760)—are offered in alternating years. This means that students cannot fulfill the requirements for the major in less than two years and that they should plan accordingly, in consultation with their major advisor. In particular, students must plan to be in residence at Cornell during the fall semesters of both their junior and senior years to take FILM 3750 and 3760. Within the "core" required courses, FILM 2740, Introduction to Film Analysis, is to be taken during the sophomore year. Note: Prospective majors must earn a grade of $B$ (not $B-$ ) or higher in FILM 2740 to be accepted into the major. Students may not enter the major until they have completed FILM 2740 in the fall semester of their sophomore year.
Majors wishing to use the production courses in a substantial manner must plan carefully and work within certain limits. These courses are FILM 3240, 3250, 3770, 3771, 3830, 4220, 4780, and 4930. Enrollment in each of these courses is limited by the nature of the work and by facilities. Enrollment in FILM 4220, 4780 , and 4930 depends on the quality of previous work in FILM 3770, 3771, and/or 3830; enrollment is not guaranteed. Majors without a strong interest in production can complete the production requirement with one of the following courses: FILM 3770, 3771, 3240 , or 3250 , after they have taken FILM 2740 in their sophomore year. The total credits in production courses cannot exceed 20 hours; this limit is strictly enforced.

1. A core of four film courses:

FILM 2740 Introduction to Film Analysis (offered every fall semester) 4
FILM 3750 History and Theory of Commercial Narrative Film (offered alternate fall semesters; offered fall 2010 and 2012 (prerequisite for film majors: FILM 2740)
[FILM 3760 History and Theory of
Documentary and Experimental Film (offered alternate fall semesters; next offered fall 2011) (prerequisite for film majors: FILM 2740)]
FILM 3770 Introduction to 16 mm and Digital Filmmaking (offered fall 2010) 4 or
FILM 3771 Introduction to 16 mm and Digital Filmmaking: Documentary Projects (offered spring 2011)
2. One of the following theatre courses:

THETR 2500 Fundamentals of Theatre Design/Technology (offered every semester)
THETR 2800 Introduction to Acting (offered every semester)
THETR 3980 Directing I (prerequisite: permission) (offered every fall semester) 3
3. Four courses ( $15-16$ credits) in film offered by Theatre, Film and Dance as below, or (with permission of advisor) by other departments:
FILM 2550 The Crime Film (offered fall 2010)
FILM 2850 Stardom (offered fall 2010) 4
[FILM 2760 Survey of American
Film (offered alternate years; next offered fall 2011)
FILM 2765 Cinema and Migration (offered fall 2010)

4
ITAL 2950 Cinematic Eye of Italy 3
[FILM 3050 Americans Abroad (next offered spring 2012)
FILM 3290 Political Theory and Cinema
FILM 3330 Korean History, Society, and Film
FILM 3420 Edge Cities: Celluloid
New York and Los Angeles (offered spring 2011)
[FILM 3440 American Film
Melodrama (next offered spring 2012)
4]
FILM 3520 Short Cinema
[FILM 3790 Modern Documentary
Film (offered alternate spring semesters; next offered spring 2012)
[FILM 3830 Screenwriting (offered TBA)
FILM 3901 Brazilian Cinema: 1960s to Present
[FILM 3930 International Film of the 1970s (next offered fall 2011)
FILM 4220 Cinematography (offered alternate years; offered fall 2010)

## ASIAN 4410 Chinese Film

ASIAN 4436 Topics in Indian Film
[FILM 4550 Film/History/Ideology:
The Polish Example (offered alternate years; next offered fall 2011)
[FILM 4730 Film and Spiritual Questions (offered alternate spring semesters; next offered spring 2012)
FILM 4740 Jung, Film, and the Process of Self-Knowledge (offered offered 2011-2012) alternate years; offered spring 2011)
FILM 4750 Seminar in the Cinema I (offered most years; offered fall 2010; topic: cinematic structures and viewer psychology)
FILM 4760 Seminar in the Cinema II (offered spring 2011 and 2012; topic for spring 2011: film eco-criticism)
[FILM 4780 Intermediate Film and Video Projects: Workshop (offered alternate years; next

GOVT 4809 Politics of '70s Film FILM 4930 Advanced Film and Video Projects (offered every spring)
4. 15 credits of related course work inside or outside the Department of Theatre, Film, and Dance, as approved by the major advisor. The courses chosen to fulfill this requirement should reinforce each major's particular interest in film and will not necessarily be film courses per se. For example, a student interested in the psychology of film, or in ethnographic film, or in film vis-à-vis intellectual or social history, or in film and social change will be encouraged to choose related course work in those areas.
5. Students must earn at least a B (not B-) in FILM 2740 to enter the major. In all subsequent courses used for the major a grade of C (not C-) must be achieved. Courses in which these minimums are not achieved must be repeated, if the student is to receive credit in the major.
6. Course work in production cannot exceed 20 credit hours.

## Film Minor

The Film Minor serves students in other majors who wish to undertake, and have noted on their transcripts, some substantial study in film. The one path excluded from the minor is the one in film production; in this regard the film minor differs from the theatre and dance minors. The film program is not able to accommodate further demands upon the current film production faculty, facilities, and equipment. It is the judgment of the film faculty that minors need to have a general knowledge of film analysis/theory and film history, thus the prescribed courses in Requirements One and Two. In addition film minors will choose three elective courses devoted to the history, theory, or criticism of film.
The Film minor is open to any student in the university, including those outside the College of Arts and Sciences, with the approval of the director of undergraduate studies.

## Requirements:

1. FILM 2740 Introduction to Film Analysis
2. Either FILM 3750 History and Theory of Narrative Film, or FILM 3760 History and Theory of Documentary and Experimental Film
3. Three additional film courses, chosen from the list of film courses suitable for satisfying Requirement Three in the film major, excluding-except in very special and limited cases-FILM 3770 and 3771 Introduction to 16 mm and Digital Filmmaking, FILM 4220 Cinematography, FILM 4780 Intermediate Film and Video Projects, and FILM 4930 Advanced Film and Video Projects. Also, Freshman Writing Seminars focused on film cannot be used to satisfy this requirement.
4. To enter the minor, a student must earn a C or higher in FILM 2740. (To enter the film major a student must earn a B or higher in this course.)
5. The film minor students cannot be accommodated in the film production sequence (FILM 3770, 3771, 4220, 4780, and 4930), given current demands upon
those courses by the film majors. This restriction does not presently apply to FILM 3240 Animation Workshop, FILM 3250 Animation History and Practice, or FILM 3830 Screenwriting.
For more information, visit our web site at www.arts.cornell.edu/theatrearts/academics/ film/FilmMinorRequirements.asp or go to 223 Schwartz Center for the Performing Arts.

## Computing in the Arts Undergraduate Minor

A minor in Computing in the Arts with an emphasis on film is available both to film majors and to students majoring in other subjects. For more information, see "Computing in the Arts Undergraduate Minor" under "Departments, Programs and Courses" in the "College of Arts and Sciences" or www. cis.cornell.edu/ComputingArts.

## Honors

Students who have maintained a GPA of 3.7 in their film major courses, and an average of 3.2 in all courses, may elect to work for honors in film during their senior year. They must consult with their advisor in the spring of their junior year about the honors program in film. Honors projects are possible in filmmaking and film analysis (history, criticism, theory). Projects in filmmaking require a written analytical component related to the creative work.

## The Advanced Undergraduate Filmmaking Program

Through FILM 4930 course work, the department offers advanced study in filmmaking to students who qualify on the basis of outstanding achievement in film studies and film production courses. Contact Marilyn Rivchin for details.

## Film Study Abroad

The College of Arts and Sciences, through this department and in concert with a number of other American colleges and universities, offers up to a full year of study at the Paris Center for Critical Studies and, through the center, at the University of Paris III. The center's film program is theoretical, critical, and historical. It is most useful to students whose major interest is in the academic study of film and serves as a complement to Cornell's film courses. Fluency in French is required. FILM 2740 and 3750 are prerequisites. Inquiries should be addressed to Professor Fredericksen, Cornell's liaison with the center.
Through the Cornell Abroad office, students have also recently studied film and filmmaking in England, Ireland, Australia, Argentina, and the Czech Republic.

## FILM 1512 Philosophy and Film (also

 PHIL 1512) (KCM-AS)Summer. 3 credits.
For description, see PHIL 1512.

## FILM 2160 Television (also AMST/ENGL/ FGSS/THETR/VISST 2160) (LA-AS)

Fall 4 credits. N. Salvato.
For description, see THETR 2160.

## FILM 2550 The Crime Film (also AMST/ COML/VISST 2550)

Spring. 4 credits. S. Haenni.

Illegal trafficking, locally or globally conceived, often imagines a cultural underground, an alternative network, different ways of thinking about social norms, social conventions, and social affiliations. Such a framework will guide our consideration of the crime film. Screenings will include different kinds of films from different national contexts: gangster films, mafia films, film noir, thrillers, etc. We might consider different types of crime. Readings and discussions will center on the social and cultural contexts of such films, as well as on their style and narrative form.

## FILM 2740 Introduction to Film Analysis: Meaning and Value (also FILM 6740,

 VISST 2174/6174) (LA-AS)Fall. 4 credits. Limited to 40 students.
Graduate students must enroll in FILM 6740. D. Fredericksen.

Intensive consideration of the ways films generate meaning and of the ways we attribute meaning and value to films. Discussion ranges over commercial narrative, art cinema, documentary, and personal film modes. Prospective film majors must enroll in their sophomore year.

## [FILM 2760 Survey of American Film

 (also AMST 2760, VISST 2300) (LA-AS)Fall. 4 credits. Required film screenings; discussion once a week. Next offered 2011-2012. S. Haenni.]

## FILM 2765 Cinema and Migration (also

 AMST 2765) (CA-AS)Fall. 4 credits. S. Haenni.
For description, see AMST 2765.

## FILM 2850 Stardom (CA-AS)

Fall. 4 credits. L. Patti. From heavenly creatures to tabloid trash, this course will explore stardom in cinema, television, and new media. Framed by approaches from semiotics, psychoanalysis, economics, and cultural studies, we will examine histories and theories of stars and star systems, investigating the importance of aesthetic strategies (from three-point lighting to the close-up), technological innovations (from sound to high-definition), industrial formations (from United Artists to SAG), the mass media (from studio publications to online tabloids), and fandom (from autograph auctions to fan fiction). We will discuss Hollywood stardom in tandem with both other national star systems and the transnational circulation of stars. An emphasis on the importance of race and sexuality in the production and reception of stardom will guide our inquiries.
[FILM 2930 Middle Eastern Cinema (also JWST/NES 2793, VISST 2193) @ (LA-AS)
Fall. 4 credits. Next offered 2011-2012. D. Starr.]

## FILM 3000 Independent Study

Fall, spring, or summer. 1-4 credits. Independent study in film allows students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study, which is available in 223 Schwartz Center.

## [FILM 3050 Americans Abroad (also AMST 3050, VISST 3605) (CA-AS) <br> Spring. 4 credits. Next offered 2011-2012 S. Haenni. <br> For description, see AMST 3050.]

FILM 3115 Video and New Media: Art, Theory, Politics (also COML/ENGL/ VISST 3115)
Spring. 4 credits. T. Murray
For description, see COML 3115
FILM 3240 Animation Workshop: Experimental and Traditional Methods (LA-AS)
Summer. 3 credits. Cost for equipment: \$150. M. Tomlinson.
The art of animation involves many dimensions, including time and motion. This course introduces students to the
fundamentals of traditional animation and the mechanics used to capture the illusion of movement.

## FILM 3250 Animation History and

 Practice (LA-AS)Summer. 3 credits. Limited to 12 students. Equipment fee: $\$ 150$. Offered summer 2011. M. Tomlinson.

Beginning with the pre-history of animation, optical toys and magic lantern projections, and continuing through a century of animation history to contemporary work, this course investigates the history of animation from around the world, through a variety of handson production projects, as well as lectures, discussions, research, and screenings. Combining tactile and digital methods, students create weekly collaborative and individual animated films, incorporating lessons from the historical work studied.
[FILM 3290 Political Theory and Cinema (also COML 3300, GERST 3550, GOVT 3705) (CA-AS)
Spring. 4 credits. Next offered 2012-2013. G. Waite.]
[FILM 3440 American Film Melodrama (also AMST/ENGL 3440, FGSS 3450, VISST 3645) (LA-AS)
Spring. 4 credits. Recommended: some background in film analysis. Offered alternate years; next offered 2011-2012. S. Haenni.

Melodramatic styles and themes from the early 20th century to the present; melodrama as a "mode of excess" that registers ideological contradictions and powerfully affects film audiences.]

## FILM 3520 Short Cinema (CA-AS)

Spring. 4 credits. L. Patti.
This course will bring into dialogue a variety of contemporary commercial and experimental cinema and new media to explore the theoretical and historical boundaries of "short cinema" as a genre. We will watch cartoons, music videos, commercials, trailers, webisodes, DVD bonus features (including interviews and outtakes), Youtube clips, cell phone films, Oscar-nominated shorts, and anthology films in order to map the broad terrain of short cinema. Readings will emphasize the industrial and technological underpinnings of short cinema and the commercial, critical, and popular reception of short cinema as we discuss the viability of theorizing short cinema as counter-cinema or minor cinema.

FILM 3745 Fiction and Film Noir (also ENGL 3745)
Fall. 4 credits. I. Balfour.
For description, see ENGL 3745.

FILM 3750 History and Theory of the Commercial Narrative Film (also VISST 3175) (LA-AS)
Fall. 4 credits. Prerequisite for film majors: FILM 2740. Offered alternate years.
S. Haenni.

A survey of narrative cinema from around the world, with emphases on early narrative cinema, cinematic realism, interwar European modernist cinema, popular American film, post-World War II art cinema, and recent global cinema.

## [FILM 3760 History and Theory of Documentary and Experimental Film (also VISST 3176) (LA-AS)

Fall. 4 credits. Highly recommended: FILM 2740. Offered alternate years; next offered 2011-2012. A. Villarejo.
Analyzes canonical works in documentary film to World War II, and canonical works in the avant-garde/experimental/personal film tradition(s) in Europe and the United States from the 1920s to the present.]
FILM 3770 Introduction to $\mathbf{1 6 m m}$ and Digital Filmmaking (LA-AS)
Fall (2010, 2011), spring (2012). 4 credits. Limited to 12 students. Intended primarily for juniors and, in spring, second-semester sophomores (who may need to sign up a year or more in advance), with priority given to film majors. Prerequisite: FILM 2740 (or higher-level film studies course) and permission of instructor. Equipment fee: $\$ 150$ (paid in class). Average cost to each student for materials and processing is \$500. M. Rivchin.
Creative, hands-on production course in filmmaking, emphasizing the development of original ideas and the acquisition of basic technical skills in digital video and 16 mm formats: cinematography, lighting, sound recording, and digital editing. Students complete several exercises and two short projects exploring narrative, documentary, experimental, or animation forms, and a final project, which is shown in a public, opencampus screening at the end of the semester.

## FILM 3771 Introduction to Digital

 Filmmaking: Documentary WorkshopSpring. 4 credits. Prerequisite: permission of instructor. M. Rivchin.
This is an interdisciplinary course in documentary/nonfiction digital filmmaking for film majors and nonmajors. Students will learn basic methods of research, writing, interviewing, digital video production and postproduction through exercises and readings as well as through critiques of contemporary nonfiction examples. Students will then work in groups and crews to develop and produce three to four distinct projects from the following subject areas and issues: social/ political; arts/performance; science/ engineering; or special events or other humanities.

## [FILM 3790 Modern Documentary Film (LA-AS)

Spring. 4 credits. Recommended: previous completion of FILM 3760. Offered alternate years; next offered 2011-2012.
D. Fredericksen.

An intensive consideration of canonical documentary films from 1945 to the present. Emphasis is on the documentary film as an artistic and rhetorical form with a distinct history and set of theoretical questions.]

## [FILM 3830 Screenwriting (LA-AS)

Fall or spring. 4 credits. Limited to 12
students. Offered occasionally. Staff.
This course explores the fundamentals of traditional Hollywood and independent screenplays.]

## [FILM 3930 International Film of the

 1970s (also AMST/COML/VISST 3930) (LA-AS)Fall. 4 credits. Next offered 2011-2012. S. Haenni.

This course considers how the social, political, and cultural upheavals of the late 1960 s (e.g., the student movement, Watergate, Vietnam, terrorism) affected film aesthetics, narrative, and style.]

## FILM 4220 Cinematography (LA-AS)

Fall. 4 credits. Limited to 8 students. Preor corequisite to FILM 4930. Prerequisite: permission of instructor. Letter grades only. Equipment fee: $\$ 150$ (paid in class). Camera, lighting, and directing techniques, designed for students who have taken at least FILM 3770 or FILM 3771. Course includes a focus on acting and directing for the camera (with up to six film students and six acting students); consult the instructor. Offered alternate years. M. Rivchin.

Students work in groups on a series of tests, short exercises, and scene projects using 16 mm cameras, digital video cameras, HD camera movement apparatus, a range of lighting instruments, filters, and gels to expand their knowledge of the technical and aesthetic aspects of cinematography. The course will focus on acting and directing for the camera through scene work.

## [FILM 4550 Film/History/Ideology: The

 Polish Example (LA-AS)Fall. 4 credits. Prerequisite: some film analysis or European history course work. Offered alternate years; next offered 20112012. D. Fredericksen.

What happens when a state attempts to erase a nation's history and impose an alien ideology upon it? This was the situation faced by Poland and other eastern European countries in the aftermath of World War II and the progressive imposition of communist rule. This course will study Polish film from 1945 to 1989 within this context, to include the period of socialist realism, the "Polish school," the cinema of moral concern, Solidarity cinema, and beyond. Readings from Polish history (Norman Davies), film history, state documents (The Black Book of Polish Censorship), cultural analysis (Milosz' The Captive Mind), and others.]

## [FILM 4730 Film and Spiritual Questions (LA-AS)

Spring. 4 credits. Limited to 20 students.
Offered alternate years; next offered 20122013. D. Fredericksen.

The use of film as a medium for the expression of spiritual questions. Special attention is given to the work of Andrey Tarkovsky, the Russian film director and theorist.]

## FILM 4740 Jung, Film, and the Process

 of Self-Knowledge (LA-AS)Spring. 4 credits. Limited to 20 students.
Offered alternate years. D. Fredericksen. "Know thyself" is one of the oldest and most enduring imperatives of the human spirit. This seminar details the Jungian approach to this imperative and then tests its critical capacities with respect to films.

FILM 4750 Seminar in Cinema I (LA-AS)
Fall. 4 credits. D. Frederickson.
Topic for fall 2010: Cinematic Structures and Viewer Psychology. Close analysis of the major forms of narrative, thematic, affective, rhetorical, and poetic structuring in film, as manifested in narrative, documentary, and personal film modes. Focus is also upon the relationship between cinematic structures and audience psychology, including the rhetorical register. Readings to include some of the following texts, among others: Bordwell's Narration in the Fiction Film, Branigan's Narrative Comprehension in Film, Morin's Cinema or The Imaginary Man, Smith's Film Structure and the Emotion System, and Plantinga's Rhetoric and Representation in Nonfiction Film.

## FILM 4760 Seminar in Cinema II (LA-AS)

Spring. 4 credits. D. Frederickson.
Topic for spring 2011: Film Eco-criticism; What Might It Be: Human/Nature/Technology.
Film eco-criticism is a register of film studies still in the process of generating salient questions. Thus, while tending closely to individual films as exemplars of the possible relationships among humanity, nature, and technology, the seminar's readings will cast a wide net among, for example, nature writers (Thoreau, Austin, Muir, Carson, Leopold, Berry), philosophy (Rousseau, Heidegger, Bachelard, E. Casey), poetry (Wordsworth, R. Jeffers, Roethke, Snyder), deep ecology (Sessions, Naess), depth psychology (Jung, Hillman, Romanyshyn, Tacey, Rowland), and eco-psychology (Roszak)—in this manner, seeking those salient questions for film ecocriticism that lead ultimately to the issue of terrestrial sustainability.

## [FILM 4780 Intermediate Film and

 Video Projects: Narrative Workshop (LA-AS)Fall. 4 credits. Limited to 8 students. Intended for juniors and seniors, with priority given to film majors. Prerequisites: FILM 3770 or FILM 3771 as minimum in production; priority given to those who have also taken FILM 3830: THETR 3980 or FILM 4220, and permission of instructor based on proposals. Equipment fee: $\$ 150$ (paid in class). Digital video projects costs: $\$ 100-\$ 200$. Offered alternate years. M. Rivchin.

This narrative workshop will focus on original group productions from developing original scripts to directing, shooting, and digital editing and sound mixing.

## FILM 4844 Strategies in "World Cinema" (also SHUM 4844)

Fall. 4 credits. Limited to 15 students.
K. Dickinson.

For description, see SHUM 4844.

## FILM 4850 Undergraduate Internship

Fall or summer. 1-3 credits.
To be eligible to enroll and receive credit for an internship, students must either be majors or minors in the department. Students are responsible for arranging their own internships. To receive credit within the course, the internship must be unpaid. Students must follow the rules and procedures stated on the departmental internship form.

FILM 4930 Advanced Film and Video Projects (LA-AS)
Spring. 4 credits. Limited to 6-8 students. Intended for seniors, with priority given to film majors. Permission only. Prerequisite: minimum FILM 3770 or FILM 3771, priority given to those who have taken 3240, 4220, or 4780. Recommended: FILM 3830 and THETR 3980. Equipment fee: $\$ 150$. Project costs: \$100-300 in digital video. Offered every spring. M. Rivchin.
Intensive filmmaking course in which students focus on developing and producing a single, already-proposed ( $15-25 \mathrm{~min}$.) digital video project over the semester (HD and 16 mm are options as well). Students direct and edit their own (or collaborative) projects working in crews for digital narrative films or documentaries, or individually for experimental or animation work, and in small groups for technical exercises and assisting others in projects. Readings, revision; directing; scene breakdowns, auditions, and casting; cinematography, lighting, location recording, digital video cameras; sound and editing techniques; and digital editing (e.g., Final Cut Pro, Color AVID, ProTools).

## FILM 4950 Honors Research Tutorial

Fall. 4 credits. Prerequisite: honors students in Film. First of a two-semester sequence (the second is FILM 4960) for seniors engaged in an honors project.

FILM 4954 Yellowface (also SHUM 4954) Spring. 4 credits. Limited to 15 students. Y. Huang.

For description, see SHUM 4954.
FILM 4960 Honors Research Tutorial Spring. 4 credits. Prerequisite: honors students in film.
Second of a two-semester sequence (the first is FILM 4950) for students engaged in an

## honors project.

FILM 6740 Introduction to Film Analysis: Meaning and Value (also FILM 2740, VISST 2174/6174)
Fall. 4 credits. Limited to 10 graduate
students. D. Fredericksen.
Intensive consideration of the ways films generate meaning and of the ways we attribute meaning and value to films. Discussion ranges over commercial narrative, documentary, and personal film modes. Graduate students who intend to teach film at the undergraduate level are especially welcome. In addition to full participation in the work of FILM 2740, graduate students read and discuss primary sources in film theory in weekly group tutorials.

## FILM 6750 History and Theory of the

 Commercial Narrative FilmFall. 4 credits. Prerequisite for film majors: FILM 2740. Offered alternate years. S. Haenni.

A survey of narrative cinema from around the word, with emphases on early narrative cinema, cinematic realism, interwar European modernist cinema, popular American film, post-World War II art cinema, and recent global cinema.

## [FILM 6760 History and Theory of

 Documentary and Experimental Film Fall. 4 credits. Highly recommended: FILM 2740. Offered alternate years; next offered 2011-2012. A. Villarejo.Analyzes canonical works in documentary film to World War II, and canonical works in the avant-garde/experimental/personal film
tradition(s) in Europe and the United States from the 1920s to the present.]

## FILM 7220 Independent Study in Film for Graduate Students <br> Fall or spring. 1-4 credits. Staff.

## Related Courses in other Departments

Not all courses are offered in 2010-2011.
Consult instructors and departments.

## AMST 2020 Popular Culture in the United

 States, 1945 to the Present Spring. 4 credits. Altschuler.
## AMST 4306 American Art and the

 MachineSpring. 4 credits. Meixner.
ANTHR 2432 Media, Culture, and Society Fall 3 credits. Boyer.

## ASIAN 3387 Literature and Film of South

 AsiaFall. 4 credits.
COMM 1300 Visual Communication Spring. 3 credits. Scherer.
COMM 3490 Media Technologies Spring. 3 credits. Gillespie.
COMM 4220 Psychology of Television Fall. 3 credits. Shapiro.

ENGL 3702 Desire and Cinema Spring. 4 credits. Hansen.
ENGL 4690 Paranoid Style in Contemporary American Fiction and Film
Spring. 4 credits. Attel.
ENGL 4702 Documentary Record, Writing, and Film
Fall. 4 credits. Braddock.
ENGL 6600 Cinematic Desire
Spring. 4 credits. Hansen.
FGSS 3590 Consuming Passions: Media, Space, and the Body
Spring. 3 credits. Jeffer.
MUSIC 3421 Scoring the Moving Image Using Digital Technology Spring. 4 credits. Ernste.

PSYCH 3050 Visual Perception Fall. 4 credits. Cutting.
VISST 2000 Introduction to Visual Studies
Spring. 4 credits. Fernandez.

## Dance

Faculty: J. Chu, A. Fogelsanger, E. Intemann, J. Kovar, J. Morgenroth, J. Self, B. Suber.

The dance program offers courses in dance technique, improvisation, composition, performance, anatomical analysis of movement, dance technology, music for dance, and the history, theory, and criticism of dance. Technique courses include introductory dance technique, modern dance at three levels, and Western classical dance at three levels. (Other dance forms, such as Indian dance, and capoeira, are offered periodically. A variety of courses in other dance idioms, taken through the Physical Education program, supplement these offerings.) Technique courses develop strength, flexibility, coordination, and the ability to perceive and reproduce phrases of dance movement with
clarity of rhythm, body design, and expression. The more advanced courses require the ability to perform complex phrases in various styles. Students may earn up to 16 academic credits (2 each semester) in technique courses. Students may also satisfy the physical education requirement by taking dance technique courses or other movement courses in the dance program. Students taking technique for academic credit must also register through their own colleges. The schedule for all dance technique courses is available in the main office of the Sheila W. and Richard J. Schwartz Center for the Performing Arts.

The faculty offer rehearsal and performance workshops in which they choreograph and rehearse original dances, performed in public concert. Admission to rehearsal and performance courses is by permission. Students may receive one academic credit per semester (S-U grades only) when performing in student-faculty concerts by registering for DANCE 1250.

## Major in Dance Requirements

Prerequisites: 2 credits in category I below and one course in category II below.
Prerequisites count toward the 40 credits fulfilling the major.

The major: 40 credits (toward which the prerequisites for the major count) are required of all students majoring in dance as follows:
I. 6 credits: six 1 -credit movement courses chosen from Dance Technique (DANCE 1200, 2200, 2210, 2220, 2240, 3210, 3220, 4210, and 4220), Explorations (DANCE 2410, 3410), Improvisation (DANCE 2480), Indian Dance (1320), World Dance Techniques (1300), and other courses approved by the dance faculty. The 6 credits must include at least 2 from Dance Technique courses, and at least 2 from Explorations and Improvisation courses. Any two of these courses taken to satisfy the university's Physical Education requirement may be counted toward the major, thus decreasing the number of academic credits possibly to as low as 38 . Movement courses taken for 0 academic credits do not count toward the major.
II. 14 credits: Dance composition (DANCE 2500 and 3500) and history/theory (DANCE 3141 and 4080 or other 4-credit, 4000-level DANCE seminar course).
III. 2 credits: 1 credit of performance (DANCE 1250) and 1 credit of production (DANCE $1610,1630,2610$, or 2630 )
IV. 18 credits: selected from Dance and related fields, including: at most two additional 1 -credit movement courses beyond those required in category I; at most 4 credits in DANCE 1250, 1610, 1630, 2610, 2630, and 3240 beyond those required in category III; and at most two courses outside of Dance, which may include courses on sound, music, light, world movement forms, design, performance and visual studies, and must be approved by the dance faculty. Otherwise any Dance courses may be used to satisfy category IV.

In all courses used for the dance major, a grade of $C$ (not $\mathrm{C}-$ ) must be achieved. Courses in which this minimum is not
achieved must be repeated if the student is to receive credit in the major.

## Honors

The honors program in dance is intended for students who have shown exceptional accomplishment in the dance major, and it results in the awarding of one of three levels of honors with the degree: cum laude, magna cum laude, or summa cum laude. To be part of the honors program students must maintain a GPA of 3.5 in classes for the dance major and an average of 3.0 in all courses. Qualified students are invited to become candidates by the faculty early in the second semester of their junior years. As soon as possible thereafter, each honors candidate forms a committee of three dance faculty members to guide and evaluate the honors work. Candidates are encouraged to formulate a program based on interdisciplinary work, in which case the committee must include a faculty member from the relevant department in place of one from DANCE.
Candidates propose projects that will allow them to demonstrate their abilities in scholarship and/or practice, culminating in a public presentation of a thesis or creative work (demonstrating choreography, performance, or some other aspect of dance). A performance-oriented project requires a written analytical component related to the creative work, setting it in a historical, theoretical, or aesthetic context. (The paper is not simply a recounting of how a student did the project.) The candidate must distribute a proposal to the committee members before the end of the junior year. Students planning a production component may show work on one of the department concerts, or may produce their own concerts. In this latter case they must inform the production manager of the Department of Theatre, Film and Dance by April 1 of the junior year as there is a limited number of slots for concerts within the Schwartz Center. A student not accepted for one of these slots will have to come up with an alternative proposal. Limited technical support will be available.
Although the honors committees, and in particular their chairs, are responsible for supervising candidates' honors programs and keeping them on schedule, candidates are required to take initiative and show independence in the planning and realizing of their proposed projects, beginning promptly at the start of the senior year on the 8 credits of work expected to be spread evenly throughout the two semesters. Candidates enroll in DANCE 4050-4060 with the chairs of the honors committees as instructors, and must schedule a full committee meeting at the beginning of the senior year and arrange to meet with their chairs on a regular basis thereafter, and with other committee members as necessary. After the public presentation in the spring, comprehensive examinations administered by the candidates' committees are held not later than the first day of finals. The level of honors conferred is based primarily on the candidates' performance in the honors programs, and secondarily on their overall record in departmental courses and activities.

## Dance Minor

The Dance Minor is open to any student in the university, including those outside the

College of Arts and Sciences, with the approval of the Director of Undergraduate Studies.
1 DANCE 2500 Beginning Composition (3 credits).
2. DANCE 3141 History ( 4 credits).
3. Other DANCE courses totaling a minimum 11 credits.
In all courses used for the Dance Minor that offer letter grades, a grade of C (not C-) must be achieved. Courses in which this minimum is not achieved must be repeated if the student is to receive credit in the Minor. For additional information please go to 223 Schwartz Center.

## Computing in the Arts Undergraduate Minor

A minor in Computing in the Arts with an emphasis on dance is available both to dance majors and to students majoring in other subjects. For more information, see
"Computing in the Arts Undergraduate Minor" under "Departments, Programs and Courses" in the "College of Arts and Sciences," or contact the Director of Undergraduate Studies in Dance, danceprogram@cornell.edu. Information is also online at www.cis.cornell. edu/ComputingArts.

## Theatre, Film and Dance Summer Study in Rome and/or Paris/Dublin

Many of the dance courses are also offered during a summer program in Rome, Paris, and Dublin. For more information see www.arts. cornell.edu/theatrearts/academics/dance/ roma2.pdf, or contact the program director, Byron Suber, at pbs6@cornell.edu.

## Dance Technique

Students may register for any Western dance technique course (DANCE 1200, 2200, 2210, 2220, 2240, 3210, 3220, 4210, and 4220) for 1 academic credit, with a limit of 2 credits per semester and 16 credits total. That is, in a single semester students may take at most two 1 -credit dance technique courses. All these courses may be repeated for credit, and students will usually be placed in a given course for at least two semesters.

Dance Improvisation (DANCE 2480),
Explorations in Movement and Performance (DANCE 2410), World Dance Techniques (DANCE 1300), and Indian Dance (DANCE 1320) may be taken for 1 academic credit, which does not count as part of the 2 credit per semester and 16 credits total limit above.
Students also have the option to receive physical education (PE) credit for most of the courses above to satisfy the university's physical education requirement. Students may not get Dance and PE credit simultaneously for the same course.

The courses Dance Technique I (DANCE
1200), World Dance Techniques (DANCE 1300), Dance Improvisation (DANCE 2430), Explorations in Movement and Performance (DANCE 2410), and Indian Dance (DANCE 1320) are introductory courses open to all students. Students registering in Dance may pre-enroll, enroll online, or sign up with the Department of Theatre, Film, and Dance registrar in 223 Schwartz Center before the end of the add period; they will need a drop/ add slip. Students registering in PE may preenroll, or add during the one- or two-day PE
registration before the first day of classes; afterward, registration is not allowed.
The nonintroductory dance technique courses (DANCE 2200, 2210, 2220, 2240, 3210, 3220, 4210 , and 4220) allow online preenrollment and online enrollment, but the instructor will ultimately use his or her own discretion to determine the right classes for a student to attend. All students, and new students in particular, should be prepared for the possibility of being asked to switch courses during the first few weeks of the semester.
The advanced dance technique courses (DANCE 2240, 3210, 3220, 4210, and 4220) may be taken with an additional 1-credit academic component, Writing Dance Criticism (DANCE 3240). Students may also receive credit for performing by being cast in a facultychoreographed dance (DANCE 1250). Any two 1-credit dance courses may be aggregated to count as one-half course for the purpose of satisfying the College of Arts and Sciences 34 -course requirement. They do not satisfy a distribution requirement.

## DANCE 1200 Dance Technique I (also PE

 1180)Fall and spring. 0 to 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. Fall, J. Kovar; spring, J. Chu.
Entry-level class. Covers the fundamentals of elementary dance training. Movement sequences focusing on rhythm, placement, and vitality of performance through an anatomically sound dance technique.
DANCE 1250 Dance Rehearsal and Performance
Fall, spring, and summer. 1 credit. Students must register for course in semester in which credit is earned; requests for retroactive credit are not honored. Prerequisite: students cast in facultychoreographed dances. Students may add this course only after they have been assigned roles. S-U grades only. Faculty. Includes the study, development, and performance of roles in departmental dance

## productions.

## DANCE 1320 Indian Classical Dance (also PE 1190)

Fall. 1 credit. D. Bor.
For description, see PE 1190.

## DANCE 2200 Dance Technique II (also

 PE 1181)Spring. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. J. Self.
Introductory dance technique intended for students with some dance training. Material covered includes attention to rhythm, design, and movement expression.

## DANCE 2210 Dance Technique II/ Classical (also PE 1182)

Spring. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. B. Suber.
Introductory Western classical technique intended for students with some dance training. Includes basic barre and centre work focusing on presence and presentation.

DANCE 2220 Dance Technique II/Modern (also PE 1183)
Fall, summer. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. J. Morgenroth. Introductory modern technique intended for students with some dance training. Material covered includes specific spinal and center work with attention to rhythm, design, and movement expression.

## DANCE 2240 Dance Technique Workshop (also PE 1188, VISST 2540)

Spring and summer. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. Beginners and those with prior dance experience are welcome.
Requirements include attendance at performances with written responses. S-U grades only. Spring: sec 1 , J. Self; sec 2 ,
J. Kovar; summer, B. Suber.

Topic for spring 2011, sec 1: Club Dancing: House, Jerk, Vogue, Pop, Lock, Hip Hop, Waack
Get comfortable with classic and contemporary dance moves, feel more at ease when out with friends, and loosen up those hips and legs. Dance to the most current pop and club music and have a great time earning 1 credit. No experience necessary.
Topic for spring 2011, sec 2: Dancing to Music
Music produces a kind of pleasure that human nature cannot do without. This course will take a journey through movement using music as its driving force. The rhythms of International, Trance, didgeridoo, percussion, and other World Music, both live and recorded, will be used to create receptivity to the flow of energy within the body and to channel it into movement. Explorations will include structured improvisation, solo and partner work, and group choreography, as well as movement games inspired by modern dance and Tai Chi. Beginners and those with prior dance experience are welcome.

## DANCE 2410 Explorations in Movement

 and Performance (also PE 1191)Fall. 1 credit. Limited to 16 students.
Satisfies PE requirement if taken as PE.
Attendance at dance concerts required.
S-U grades only. J. Self.
A physically demanding exploration into various movement realms. Specific subjects covered are genderized movement, erotic power, spiritual power, ritual, and performance. Techniques include extensive use of breath, animal movement, improvisation, and group games. This course requires an eagerness to investigate the nature of performance and explore unfamiliar territory in movement.
DANCE 2430 Hip-Hop, Hollywood, and Home Movies: Exploring Movement and Media (also VISST 2430) (LA-AS)
Fall and summer. 3 credits. Permission of instructor. Requirements include attendance at performances with written responses, selected readings, and home-movie production. Letter grades. Letter grades. J. Self.

This course is a laboratory for generating and exploring contemporary dance forms. Monday sessions are devoted to viewing media and discussion. We will be looking at early B-boy films, recent dance-battle documentaries, classic dance clips from Hollywood films, and other related pieces (Black Dance, Show

Dance, Art Dance). Wednesday is a laboratory for trying out movements and creating simple dance/music videos (home-movies). This course will be of special value for choreographers using popular dance forms and those interested in the history of popular culture. Everyone must be willing and able to improvise dance moves, teach classmates and exchange movement ideas.

## [DANCE 2450 Public Voice and Civic

Gesture (also THETR 2360)
Fall and summer. 1 credit. Next offered 2011-2012. B. Suber.
This course combines acting and movement techniques encouraging process-oriented work.]

## DANCE 2480 Dance Improvisation

Spring and summer. 1 credit; may be repeated. Limited to 12 students.
Attendance at dance concerts required.
S-U grades only. A. Fogelsanger.
The training and practice of skills for the spontaneous collaborative composition of movement performance. Students hone their abilities to invent and respond to each other and their environment to produce dances that engage their audience. This course coaxes inspiration, seeking to make it reliable and to keep it surprising. It offers the possibility of "training" one's movement instincts to respond relevantly and with spontaneity.

## DANCE 3210 Dance Technique III/

 Classical (also PE 1184)Fall, spring, and summer. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. B. Suber. Intermediate Western classical technique Work is done on strengthening the body through a movement technique emphasizing presence and musicality based on harmonic muscular control.

## DANCE 3220 Dance Technique III/Modern

 (also PE 1185)Fall, spring, and summer. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. Fall, J. Chu; spring, J. Morgenroth; summer, B. Suber.

Intermediate modern technique focusing on rhythm, placement, and phrasing for students who are prepared to refine the skills of dancing. Students are challenged by complex phrases and musicality.

## DANCE 3240 Writing Dance Criticism

Fall and spring. 1 credit; may be repeated. Corequisite: DANCE 2240, 3210, 3220, 4210, or 4220. Attendance at two or three concerts required. Fall: J. Chu, B. Suber, or J. Self; spring: J. Self, B. Suber,
J. Morgenroth, J. Chu, or J. Kovar.

Dance criticism for incorporation with technique. Topics rotate depending on instructor, class focus, and relevance to guest dance companies. Attendance at two or three concerts required (same as for dance technique), additional readings and/or viewing of recorded performances as assigned by instructor, and three five- to seven-page analytic papers.

## [DANCE 3250 Repertory

Spring. 1 credit. Prerequisite: permission of instructor. Attendance at dance
performances required. Next offered 20112012. J. Chu.

Reconstructs a dance by an important modern dance choreographer. Through a close examination of the composition process, and with readings, the course studies the historical and aesthetic role of this work and its continued influence today.]
[DANCE 3410 Explorations in Movement and Performance II: Masculine,

## Feminine, or Neutral

Spring. 1 credit. Limited to 16 students. Prerequisite: DANCE 2410, 2480, or permission of instructor. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only.
Next offered 2011-2012. J. Self.
Continues themes from Explorations in Movement and Performance (DANCE 2410), with special emphasis on the differences and similarities between "masculine" or "feminine" expressions in movement and performance.]

## DANCE 4210 Dance Technique IV/

 Classical (also PE 1186, VISST 4210) Fall and spring. 1 credit; may be repeated. Satisfies PE requirement if taken as PE. Attendance at dance concerts required. S-U grades only. B. Suber.Advanced and pre-professional Western classical. A continuation of and supplement to DANCE 3210.
DANCE 4220 Dance Technique IV/Modern (also PE 1187, VISST 4220)
Fall and spring. 1 credit; may be repeated.
Satisfies PE requirement if taken as PE.
Attendance at dance concerts required.
S-U grades only. Fall, J. Self; spring, J. Chu.
Advanced and pre-professional Modern technique. A continuation of and supplement to DANCE 3220.

## DANCE 4290 Dance Technique in New York City

Fall and spring. 1-2 credits. Students take DANCE 4290 during the semester they participate in the Urban Semester Program offered by the College of Human Ecology, and in addition to the 15 credits taken for that program. S-U grades only. Dance faculty.
Allows a student to receive up to 2 credits for taking professional dance technique courses while in residence in New York City. The semester before participating in the Urban Semester Program, the student writes a proposal under the guidance of a member of the dance faculty detailing the dance classes, dance teachers, and dance institutions which the student plans to include in a regular program of dance technique. While the proposal may be revised during the semester in residence in New York, the dance faculty advisor must approve any changes. Credit will not be given retroactively.

## [DANCE 4399 Early Dance (also MUSIC

 4511)Fall. 1 credit. R. Next offered 2012-2013. Harris-Warrick.
For description, see MUSIC 4511.]

## Dance Composition

## DANCE 2500 Beginning Dance

 Composition (also VISST 2511) (LAAS)Fall, spring, and summer. 3 credits.
Attendance at dance concerts required.
Fall: J. Morgenroth; spring: J. Chu; summer: B. Suber or J. Kovar.

Weekly assignments in basic elements of
choreography. Students compose and present
short studies that are discussed and reworked.

Problems are defined and explored through class improvisations. Informal showing at end of semester. Includes informal showing of work.

DANCE 3500 Intermediate Dance Composition I (LA-AS)
Fall, spring, and summer. 3 credits.
Prerequisite: DANCE 2500. Fall,
J. Morgenroth; spring, J. Chu; summer,
B. Suber or J. Kovar.

Intermediate choreographic projects are critiqued in progress by faculty and peers. Consideration of design problems in costuming and lighting. For full description, see DANCE 2500.

## DANCE 3510 Intermediate Dance

 Composition II (LA-AS)Fall, spring, and summer. 3 credits. Prerequisite: DANCE 3500. Co- or prerequisite: DANCE 3530. Attendance at dance concerts required. Fall:
J. Morgenroth; spring: J. Chu; summer: B. Suber or J. Kovar.

Continuation of DANCE 3500. For full description, see DANCE 2500.

## DANCE 3530 Music and Choreography

 (also MUSIC 3513) (LA-AS)Fall. 3 credits. Attendance at dance concerts and music concerts required. A. Fogelsanger.

Intended to expose students to music they probably have not heard and are unlikely to seek out on their own, particularly contemporary "classical" music and music used in modern concert dance; to mark out the possible relationships between music and dance when combined in concert; and to pull apart the compositional construction of musical pieces to consider what musical structuring ideas might be profitably applied by choreographers to making dances. The course also considers examples from film and the plastic arts, provides students with some experience making sound and movement, and includes discussion of and writing about concerts, and audio and video recordings. Reading topics include criticism and aesthetics of dance, music, and the arts in general, in particular concentrating on counterpoint, minimalism, improvisation, and polystylism.

DANCE 4010 Senior Project in Dance
Fall and spring. 3 credits; students receive grade when DANCE 4020 is completed. Prerequisite: DANCE 3510; senior dance majors. NOTE: This course is being phased out and replaced by DANCE 4011 Advanced Project in Dance. Open only to students graduating by May 2010.
First of a two-semester sequence (the second is DANCE 4020) for senior dance majors. Students create a project in choreography and performance, dance, film or video, dance pedagogy, or other appropriate area agreed on with their senior project advisor and committee. In addition, there is a 15 -page paper that expands their work into a historical, theoretical, or aesthetic context. For guidelines see the director of undergraduate studies in dance.

## DANCE 4011 Advanced Project in Dance

Fall and spring. 4-6 credits, variable. Students create a dance project. Possibilities include a choreographic project for performance/presentation, community performance, site-specific work, interdisciplinary collaboration, community teaching, conference organizing, or other
proposals. The student chooses a project advisor, who need not be the student's academic advisor. A proposal is due April 1 if the project will take place in the fall and due November 1 if the project will take place in the spring.
DANCE 4020 Senior Project in Dance II Fall or spring. 3 credits. Prerequisite: DANCE 4010. NOTE: This course is being phased out and replaced by DANCE 4011 Advanced Project in Dance. Open only to students graduating by May 2010.
Second of a two-semester sequence (the first is DANCE 4010) for senior dance majors.

## DANCE 4500 Advanced Dance

Composition I (LA-AS)
Fall, spring, and summer. 3 credits. Prerequisite: DANCE 3510. Attendance at dance concerts required. Fall, J.
Morgenroth; spring, J. Chu; summer,
B. Suber or J. Kovar.

Students work on advanced choreographic problems, to be presented in performance. Work in progress is critiqued by faculty members on a regular basis. For full description, see DANCE 2500.

## DANCE 4510 Advanced Dance

 Composition II (LA-AS)Fall, spring, and summer. 3 credits. Prerequisite: DANCE 4500. Attendance at dance concerts required. Fall: B. Suber; spring: J. Self; summer: B. Suber or J. Kovar.

Continuation of DANCE 4500. For full description, see DANCE 2500.

## History, Criticism, and Theory

## DANCE 3120 The Moving Body: Form and

 Function (PBS supplementary list)Fall. 4 credits. J. Morgenroth.
Examines the bodily systems involved in human movement with particular attention to dance movement. Readings in texts on human anatomy, physiology, and kinesiology.

## DANCE 3141 History: The Body in Performance (LA-AS)

Fall. 4 credits. Prerequisites: readings, viewing of videos, and attendance at live performances. Letter grades only. J. Chu. How does the social production of dance reflect its historical context? What is the meaning of the "beautiful" in dance? Beginning with 16th-century court dances, we will explore how aesthetics have been aligned both with and against politics in various periods and genres of the performing body, looking at dance as insiders' diplomacy and outsiders' rebellion. Is postmodern dance a discourse of its past? What is the contemporary relationship among African, European, and stubbornly American traditions? This course is designed to promote a critical appreciation of dance, its values and its ambitions, by developing an

## historical and cultural understanding.

## DANCE 3730 Special Topics in Dance Research

Spring. 3 credits. J. Self.
A project-based research course focusing on an intensive study of a specific choreographer, period, or form of dance. Topics, prerequisites, and formats will vary from year to year.
Topic for 2011: Archiving Hip Hop Dance
Students collaborate on a project documenting dance moves from the Hip Hop vocabulary and creating a database that will be available to researchers and scholars through the Cornell
library system—specifically the Kulgelberg Collection of Hip Hop Pioneers. Students will be working with research methodologies and multiple media for documentation and archiving. Prior knowledge and experience with Hip Hop dance and permission of the instructor is required.

## DANCE 4000 Paper in Dance

Fall and spring. 4 credits. Prerequisite:
DANCE 4080. Attendance at dance concerts is required.
Under faculty direction, the students write a paper in dance history, criticism, or theory.

## DANCE 4080 Seminar in Dance Studies

 (also VISST 4580) (CA-AS)Spring and summer. 4 credits. Limited to 15 students. Spring, J. Chu; summer, B. Suber and J. Chu.

Topic for spring 2011: Performing Modernism in the Chinese Body.
What is the history of dance in China, inside and outside the opera, and how far is the Asian body expressed or effaced in modern dance? Does the Asian body in performance make a categorical difference in Western eyes? Is there a dynamic between cultures that is subtler than dialogue and that only the body can produce? This course is designed to realize the possibility of historical understanding through dance.
Topic for summer 2011: Performativity in Paris
This course is a critical survey of the history of Western concert dance beginning in the 16th century into the court of Louis XIV, the early 19th-century Romantic period, the Franco/Russian Diaghilev Period, and 20th-century modern dance, including the work of Josephine Baker and the African American presence in Paris and 21st-century form of martial art/dance called Parkour, developed in the banlieu in the periphery of Paris. Special attention is paid to connections between the body and material space and place in the built domain of urban Paris. Dance, architecture, and urban development will be studied in tandem as reflections of western ideology looking to see how these art forms have contributed to, perpetuated, or confronted issues of classicism, modernity, race, class, gender, sexuality, and political and social power.
[DANCE 4089 Formalist Aesthetics of Modernism and Postmodernism in Music, Dance, and Painting
Spring. 4 credits. Limited to 15 students
Next offered 2011-2012. A. Fogelsanger
This seminar examines the formalist side of the aesthetics of modernism from the idea of absolute music and the rise of abstraction in painting, through atonality, modern dance, minimalism, and postmodernism.]

## Interdisciplinary Courses

DANCE 1540 Computing in the Arts (also CS/CIS/ENGRI 1610, FILM 1750, MUSIC 1465, PSYCH 1650) (LA-AS)
Fall. 3 credits. G. Bailey.
For description, see CS 1610

## [DANCE 2580 Courses of Action: Producing Performance Locally, Regionally, Globally (LA-AS)

Fall. 3 credits. Next offered 2011-2012. J. Self.

This course is a hands-on, pro-active course devoted to studying current performance venues on the Cornell campus, and in

Tompkins County, New York State, and beyond.]

## DANCE 3550 Technology and the Moving Body I (LA-AS)

Fall. 4 credits. B. Suber.
Formally titled "technosomakinesics," this class works to expand the specific aesthetics. Included in the process is the analysis of built environments that both inspire and are designed to be inhabited by these disciplines. This studio course explores the resulting neoperformance forms being created within the range of digital media processing; such as gallery installations, multimedia dance-theatre, personal interactive media (games and digital art) and web projects. Computer-imaging and sound-production programs are examined and used in the class work (human formanimation software [Life Forms], vocal recording and digital editing [Protools and Hyperprism], digital-imaging tools [Photoshop, Final Cut Pro, Flash, Dreamweaver, and Director]. The new context of digital performance raises questions concerning the use of traditional lighting, set, costume, and sound-design techniques that are examined as they are repositioned by digital-translation tools with the goal of creating experimental and/or conceptual multimedia performance and/or installation work. Theoretical texts on dance and theatrical performance, film studies, the dynamic social body, architecture, and digital technology are also used to support conceptual creative work.
DANCE 3555 Transpositioning the Body I
Fall and spring. 1 credit. B. Suber.
This course will cultivate collaborations between the practice and study of dance with fields such as architecture, engineering, landscape architecture, painting, digital arts, and other design and creative fields. The process of movement creation, spatial definition, and spatial analyses will be paralleled and interchanges will be made on a continual basis between chosen fields for each semester. Transposing between two, three, and four dimensional representations, concepts of framing, language (vocabulary), historical processes, concepts of performance and performativity, and concepts of audience are some of the topics that will be examined. The first two projects will engage with an architecture studio taught by Professor Mark Morris focusing on the concept of framing. Another will engage with students from Engineering Professor Francis Moon's kinetic sculpture course involving his 19th-century kinetic machine models designed by Rouleaux and on exhibit in Duffield Hall.
DANCE 3560 Interactive Performance Technology (also MUSIC 3441, THETR 3690) (LA-AS)
Spring. 3 credits. Laptop computer and MAX/MSP software required, see www. cycling74.com/shop/discounts for student software pricing. (As of April 17, 2010, a one-time, nine-month Max 5 authorization costs $\$ 59$.) Lab performance at end of semester. W. Cross and A. Fogelsanger.

## For description, see THETR 3690.

## [DANCE 3570 Media Arts Studio I (also FILM/MUSIC 3910) (LA-AS)

Fall or spring. 3 credits. Prerequisite: permission of instructor and junior standing, minimum FILM 2770 or 3770 , or DANCE 3550. Equipment fee: $\$ 50$ (paid in class). Next offered 2011-2012.

Participating faculty include M. Rivchin, film; B. Suber, dance
A collaborative interdisciplinary studio course in a variety of digital and electronic media, including art, architecture, music, dance, film, and video.]

## DANCE 3580 Ancient/Modern Corpo Realities (also FILM/ITAL 3270, VISST 3210)

Summer. 4 credits. B. Suber, J. Rhodes, and B. Milles.

Held in Rome, this course examines that modern city as it interfaces with its past, by analyzing corporeal/spatial epistemologies through the analyses of films that used Rome as a location, visiting those location sites that extend from the historic center to as far as the suburb LEUR. Topics include examination of the ways in which class relates to social and public space and urban space as performance. Additional course work in film production, performance, and writing allows students to re-inscribe their spatial/corporeal experiences into an alternative exhibition space of the city street or the written page. In addition, each student will be required to produce formal textual documentation and full textual analyses of this process and final performance, installation, or text-based product.

DANCE 3590 Music, Dance, and Light (also THETR 3190, VISST 3519) (LA-AS)
Spring. 3 credits. Attendance at dance concerts and music concerts required.
E. Intemann and A. Fogelsanger.

Artistic values, parameters, and concerns of music (sound design), dance, and lighting design are compared and contrasted, and the combination of these design elements is analyzed in contemporary dance. Includes writing in response to readings, audio and video recordings, and performances. Some classes are devoted to creating sound, movement, and lighting.

DANCE 4377 Ritual Puppetry in a Global Context (also ASIAN/RELST 4444) @ \# (CA-AS)
Fall. 4 credits. J. M. Law.
For description, see ASIAN 4444.
DANCE 4550 Techno Soma Kinesics II: Repositioning the Performing Body in Space through the Lenses of Digital Media (LA-AS)
Spring. 4 credits. B. Suber.
Continuation of DANCE 3550. DANCE 4550 expands on principles using more complex and interactive software using MAX/MSP and Jitter, Director, DVD Studio Pro, and Dreamweaver.

## DANCE 4555 Transpositioning the

 Body IIFall and spring. 2 credits. B. Suber. Intended for advanced students, this course continues the work done in Transpositioning the Body I. At an advanced level, this course will further explore the choreographic and design principles of contemporary choreographer, William Forsythe, who begins his tenure as an A.D. White Professor-at-Large in 2010. The course will begin by using tools developed by Forsythe in his CD ROM, Improvisation Technologies and will continue to be structured through student and faculty consultation with Mr. Forsythe in his visits to Cornell. The long term goal is to establish curriculum that can continue to develop in Forsythe's absence fostering new performance and installation work based on Forsythe's
philosophies in his various fields of interests and how they relate to concert dance. Collaborations between fields such as dance, architecture, engineering and other design fields will be cultivated.

## DANCE 4848 Communities in

Multicultural Practice (also HE 4800)
Fall and spring. 6 credits. S. Beck.
This course is the same as HE 4800 but the DANCE number is for DANCE students from the Department of Theatre, Film and Dance who wish to participate in the Urban Semester Program, or for other students in the College of Arts and Sciences who wish to receive credit within the college. Students from DANCE will, whenever possible, have their community service assignments within appropriate dance organizations or activities. For these purposes, the instructor will be assisted by various DANCE faculty and alumni.

## DANCE 4849 Multicultural Practice (also

 HE 4900)Fall and spring. 6 credits. S. Beck. This course is the same as HE 4900 but the DANCE number is for DANCE students from the Department of Theatre, Film and Dance who wish to participate in the Urban Semester Program, or for other students in the College of Arts and Sciences who wish to receive credit within the college. Students from DANCE will, whenever possible, have their internship assignments within appropriate dance organizations or activities. For these purposes, the instructor will be assisted by various DANCE faculty and alumni.

## Production

DANCE 1610 Dance Production

## Laboratory I

Fall and spring. 1-3 credits; may be repeated for credit. Prerequisite: permission of instructor. No experience required. Orientation meeting at 7:30 p.m. first Tuesday of classes each semester in Kiplinger Theatre at Schwartz Center. P. Lillard.

Provides practical experiences in running stage crew or dresser crew for dance.

## DANCE 1630 Dance Stage Management

 Production Laboratory IFall and spring. 1-2 credits; may be repeated for credit. Before registering, students must attend orientation meeting at 7:30 p.m. in Kiplinger Theatre at Schwartz Center on first Tuesday of classes.
Prerequisite: permission of instructor. P. Lillard.

Practical experience in dance production as assistant stage manager for a dance theatre concert under the supervision of the faculty production manager. THETR 3700 complements this course.

## DANCE 2610 Dance Production

 Laboratory IIFall and spring. 1-3 credits; may be repeated for credit. Prerequisite: permission of instructor. Orientation meeting at 7:30 p.m. on first Tuesday of classes each semester in Kiplinger Theatre at Schwartz Center. P. Lillard, D. Hall,
F. Sellers, and R. MacPike.

Practical experience in dance production, as a light board operator, sound board operator, video operator, or head dresser.

DANCE 2630 Dance Stage Management Laboratory II
Fall and spring. 1-4 credits; may be repeated for credit. Before registering, students must attend orientation meeting at 7:30 p.m. in Kiplinger Theatre at Schwartz Center on first Tuesday of classes.
Prerequisite: permission of instructor. P. Lillard.

Practical experience in theatrical production as assistant stage manager for the dance mainstage concert under the supervision of the faculty production manager. THETR 3700 complements this course.

## DANCE 3660 Lighting Design Studio I

 (also THETR/VISST 3620) (LA-AS)Fall. 4 credits. E. Intemann.
For description, see THETR 3620.
DANCE 3680 Sound Design and Digital Audio (also MUSIC 3431, THETR 3680) (LA-AS)

Fall and spring. 3 credits. W. Cross.

## For description, see THETR 3680.

## DANCE 4660 Lighting Design Studio II

 (also THETR 4620, VISST 4563) (LAAS)Spring. 4 credits. C. Intemann.
For description, see THETR 4620.

## Independent Study, Internships, and Honors <br> DANCE 3000 Independent Study

Summer, fall, or spring. 1-4 credits. Independent study in the dance allows students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's instructor for the course must approve the student's program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study, which is available in 223 Schwartz Center.
DANCE 4050 Honors Research Tutorial I
Fall or spring. 4 credits. Prerequisite: honors students in dance.
First of a two-semester sequence (the second is DANCE 4060) for seniors engaged in an honors project. For guidelines, see the director of undergraduate studies in dance.

## DANCE 4060 Honors Research Tutorial II

Fall or spring. 4 credits. Prerequisite:
honors students in dance.
Second of a two-semester sequence (the first is DANCE 4050) for students engaged in an honors project.

## DANCE 4850 Undergraduate Internship

Fall, spring, or summer. 1-3 credits. To be eligible to enroll and receive credit for an internship, students must be majors in the department. Students are responsible for arranging their own internships in consultation with the faculty in their area of choice before preregistration for the semester in which the internship is planned to take place. To receive credit within this course, the internship must be unpaid. Students must follow the rules and procedures stated in the departmental internship form.

## Tracks toward admission into the advanced undergraduate theatre program

Design, Technology, and Stage Management
Recommended for individuals interested in a
Design, Technology, or Stage Management track:
THETR 2500 Fundamentals of Theatre Design and Technology
THETR 1510 and 2510 Production Lab I and II (at least 1 credit of each)
Recommended for Scenic Design emphasis:
THETR 3400 Theatrical Drafting and
Technical Drawing Studio
THETR 3510 Production Lab III (as design assistant)
THETR 3540 Stagecraft Studio
THETR 3640 Scene Design Studio
Upon admission to the program:
THETR 4510 Production Lab IV (at least 1 credit)
Recommended for costume design or costume shop management emphasis:
THETR 3510 Production Lab III (as design assistant)
THETR 3560 Costume Construction Studio THETR 3660 Costume Design Studio I THETR 3710 Costume Design Studio II
Upon admission to the program:
THETR 4510 Production Lab IV (at least 1 credit)
Recommended for Lighting Design or costume shop management emphasis:
THETR 2520 Technical Production Studio I
THETR 3510 Production Lab III (as student electrician)
THETR 3510 Production Lab III (as design assistant)
THETR 3620 Lighting Design Studio I
Upon admission to the program:
THETR 4510 Production Lab IV (at least 1 credit)
Recommended for Sound Design emphasis:
THETR 2510 Production Lab II (as student sound technician)
THETR 2520 Technical Production Studio I THETR 3510 Production Lab III (as design assistant)
THETR 3680 Sound Design Studio
Upon admission to the program:
THETR 4510 Production Lab IV (at least 1 credit)
Recommended for Technical Direction emphasis:
THETR 2520 Technical Production Studio I
THETR 2560 Technical Production Studio II THETR 3400 Theatrical Drafting and Technical Drawing Studio
THETR 3510 Production Lab III (as assistant technical director)
THETR 3540 Stagecraft Studio
Upon admission to the program:
THETR 4510 Production Lab IV (at least 1 credit)
Recommended for Stage Management emphasis:
THETR 2530 or 3530 Stage Management Lab II or III-two assignments
THETR 2800 Introduction to Acting
THETR 3700 Stage Management Studio
THETR 3980 Fundamentals of Directing I
Upon admission to the program:
THETR 4530 Stage Management Lab IV

## Directing

Recommended for individuals interested in a directing track:
THETR 1510 and THETR 2510 Production Lab I and II (at least 2 combined credits)
THETR 2400/THETR 2410 Introduction to
Western Theatre (one semester only)
THETR 2500 Fundamentals of Design and Technology
THETR 2800 Introduction to Acting
THETR 3980 Directing I
THETR 4980 Directing II

## Playwriting

Recommended for individuals interested in a playwriting track:
THETR 2400/2410 Introduction to Western
Theatre (one semester only)
THETR 2500 Fundamentals of Design and Technology
THETR 2800 Introduction to Acting
THETR 3480 Playwriting
THETR 3490 Advanced Playwriting
Students in the advanced undergraduate
theatre program may also elect to take FILM
4850 (Undergraduate Internship) in addition to or in place of one production assignment.

## TURKISH

See "Near Eastern Studies."

## TWI/AKAN

See "Africana Studies and Research Center."

## UKRAINIAN

See "Department of Russian."

URDU
See "Department of Asian Studies."

## VIETNAMESE

See "Department of Asian Studies."

## VISUAL STUDIES UNDERGRADUATE MINOR

Visual studies is a minor that provides students with an interdisciplinary approach to visual art, media (including digital works), performance, and perception. Faculty from departments throughout the college offer courses toward the minor, drawing on such various disciplines as the history of art, film, literary studies, psychology, theatre, and others. Requirements for the minor include the core course VISST 2000 Introduction to Visual Studies, which introduces students to critical thinking about visual studies as well as close textual analysis in social and historical contexts. Responsibility for teaching the core course rotates among faculty affiliated with the minor, and the course, as much as possible, entail interdepartmental collaboration in the form of team-teaching or visiting lectures. In addition to the core course,
students must take one course within the Theory/Practice group plus three additional courses at the 3000 level or above. No more than two courses from the minor may be double-counted toward a student's major. All courses must be taken for a letter grade.
Students interested in pursuing the minor should first discuss it with their current advisors, and then either download the form from the visual studies web site (www.arts. cornell.edu/histart/vstudies.html) or contact the visual studies undergraduate coordinator, Jessica Smith. After completing the form, students should attach a copy of their transcript and submit it to Jessica Smith in GM08 Goldwin Smith Hall. Students who have not been in contact with a visual studies advisor will have one selected for them from among the minor's affiliated faculty.

## Interdisciplinary Graduate Concentration

The concentration in visual studies is not meant to substitute for disciplinary training, which will not be waived by the addition of interdisciplinary courses. The "Course List in Visual Studies for 2010-2011" alerts incoming students to courses that may be relevant to their interests, and aids them in discovering the network of professors working in visual studies, spanning multiple departments and schools at Cornell.

## Visual Studies Minor Course List

## VISST 1101 Design Studio I (also DEA

## 1010)

Fall. 3 credits. J. Elliott.
For description, see DEA 1010
VISST 2000 Introduction to Visual Studies (also ARTH/COML 2000, ENGL 2920) (LA-AS)
Spring. 4 credits. Requirement for undergraduate concentrators.
M. Fernandez.

Provides a broad introduction of modes of vision and the historical impact of visual images, visual structures, and visual space on culture, communication, and politics. The question of "how we see" is discussed in terms of (1) procedures of sight (from optical machines to the psychology of vision and the philosophy of aesthetics); (2) spaces of vision (from landscapes to maps to cities); (3) objects of vision (from sacred sites to illuminated books to digital art); and (4) performances of vision (race, sexualities, ethnicities, cultures). Of importance to the course is the practical and conceptual relation of 20th-century visual technologies (photography, cinema, video, and computing) to their historical corollaries in the arts. The course draws on the visual traditions of both Western and non-Western societies and study texts that have defined the premises and analytic vocabularies of the visual. Through viewings, screenings, collaborative writing, and art projects, students develop the critical skills necessary to appreciate how the approaches that define visual studies complicate traditional models of defining and analyzing art objects. Guest lecturers occasionally address the class. Requirements: two objective midterm exams; occasional listserve postings; two five-page papers.

## VISST 2160 Television (also AMST/ENGL/

 FGSS/FILM/THETR 2160) (LA-AS)Fall. 4 credits. N. Salvato.
For description, see THETR 2160.

VISST 2174/6174 Introduction to Film Analysis: Meaning and Value (also FILM 2740/6740) (LA-AS)
Fall. 4 credits. Limited to 40 students. Graduate students should enroll in FILM 6740. D. Fredericksen.

For description, see FILM 2740.
VISST 2190 Thinking Surrealisms (also ARTH 2019, COML 2200) (LA-AS)
Fall. 4 credits. B. Maxwell.
For description, see COML 2200.
[VISST 2300 Survey of American Film (also AMST/FILM 2760) (LA-AS)
Spring. 3 credits. Next offered 2011-2012. S. Haenni.]
[VISST 2360 Public Voice and Civic Gesture (also DANCE 2450, THETR 2360)

Fall. 1 credit. Next offered 2011-2012.
For description, see DANCE 2450.]

## VISST 2430 Hip-Hop Hollywood (also

 DANCE 2430) (LA-AS)Fall and summer. 3 credits. J. Self.
For description, see DANCE 2430

## VISST 2511 Beginning Dance

## Composition (also DANCE 2500)

 (LA-AS)Fall, spring, and summer. 3 credits. For description, see DANCE 2500
VISST 2530 Explorations in Movement and Performance (also DANCE 2410, PE 1191)
Fall. 1 credit. J. Self.
For description, see DANCE 2410.
VISST 2540 Dance Technique Workshop (also DANCE 2240, PE 1188)
Spring and summer. 0-1 credit. S-U grades only.
For description, see DANCE 2240.

## VISST 2550 The Crime Film (also AMST/

 COML/FILM 2550)Spring. 4 credits. S. Haenni.
For description, see FILM 2550.
VISST 2645 Intro to Art History: Renaissance and Baroque (also ARTH 2400) \# (HA-AS)
Fall. 4 credits. Each student must enroll in a sec. C. Lazzaro.
For description, see ARTH 2400.
VISST 2744 Gamelan in Indonesian History and Cultures (also ASIAN 2245, MUSIC 1341) @ (LA-AS)
Fall and spring. 3 credits. No previous
knowledge of musical notation or
performance experience required. C. Miller.
For description, see MUSIC 1341.
VISST 2765 Cinema and Migration (also AMST/FILM 2765) (CA-AS)
Fall. 4 credits. S. Haenni.
For description, see AMST 2765.
VISST 3115 Video and New Media: Art, Theory, Politics (also COML/ENGL/ FILM 3115)
Spring. 4 credits. T. Murray.
For description, see COML 3115.
VISST 3175 History and Theory of Commercial Narrative Film (also FILM 3750) (LA-AS)
Fall. 4 credits. Fee for screening expenses:
$\$ 10$ (paid in class). S. Haenni.
For description, see FILM 3750.
[VISST 3176 History and Theory of Documentary and Experimental Film (also FILM 3760/6760) (LA-AS)
Fall. 4 credits. Next offered 2011-2012. Fee for screen expenses: $\$ 10$ (paid in class).
A. Villarejo.

For description, see FILM 3760.]
VISST 3210 Ancient/Modern CorpoRealtites (also DANCE 3580, FILM ITAL 32709) \# (LA-AS)
Summer. 4 credits. B. Suber, J. Rhodes, and B. Milles.

For description, see DANCE 3580.

## VISST 3305 Visual Perception (also

 PSYCH 3050)Spring. 4 credits. Limited to 20 students.
Prerequisite: PSYCH 2050 or permission of
instructor. J. Cutting.
For description, see PSYCH 3050.
[VISST 3318 Literature and Media in Japan (also ASIAN 3318, COML 3150) @ (CA-AS)

Spring. 3 credits. Next offered 2011-2012. B. deBary.]

VISST 3342 Human Perception: Application to Computer Graphics, Art, and Visual Display (also COGST/ PSYCH 3420, PSYCH 6420) (KCM-AS)
Fall. 3 or 4 credits; 4-credit option involves term paper. Prerequisite: PSYCH 1101 or permission of instructor. PSYCH 2050
strongly recommended. D. Field.
For description, see PSYCH 3420.
VISST 3419 Rembrandt's Circle: Technologies of Vision (also ARTH 3419) \# (CA-AS)

Fall. 4 credits. L. Pincus.
For description, see ARTH 3419.
[VISST 3443 Leonardo, Michelangelo, and Raphael (also ARTH 3440) \# (HA-AS)
Spring. 4 credits. Next offered 2011-2012. C. Lazzaro.]

VISST 3500 African American Art (also AMST/ARTH/ASRC 3500) (LA-AS)
Fall. 4 credits. C. Finley.
For description, see ARTH 3500.
[VISST 3519 Music, Dance, and Light (also DANCE 3590, THETR 3190) (LA-AS)
Spring. 3 credits. Next offered 2011-2012.
E. Intemann and A. Fogelsanger.

For description, see DANCE 3590.]
VISST 3560 Computing Cultures (also COMM 3560, INFO/STS 3561) (CA-AS)
Spring. 4 credits. R. Prentice.
For description, see STS 3561.
VISST 3620 Lighting Design Studio I (also DANCE 3660, THETR 3620) (LA-AS)
Fall. 4 credits. E. Intemann.
For description, see THETR 3620.
[VISST 3645 American Film Melodrama (also AMST/ENGL/FILM 3440, FGSS 3450) (LA-AS)

Spring. 3 credits. Next offered 2011-2012. S. Haenni.]
[VISST 3650 History and Theory of Digital Art (also ARTH 3650, INFO 3660) (CA-AS)

Fall. 4 credits. Next offered 2011-2012.
M. Fernandez.

For description, see ARTH 3650.]

VISST 3655 The House and the World: Architecture of Asia (also ARTH 3855, ASIAN 3394) @ \# (HA-AS)
Fall. 4 credits. K. McGowan.
For description, see ARTH 3855.
[VISST 3662 Impressionism in Society (also ARTH 3760) \# (CA-AS)
Spring. 4 credits. Not open to freshmen. Next offered 2011-2012. L. Meixner.]
[VISST 3672 The Art of the Historical Avant-Garde (also ARTH 3672, COML 3840, GERST/ROMS 3770) (LA-AS)
Spring. 4 credits. Next offered 2012-2013.
P. McBride.

For description, see GERST 3770.]
VISST 3696 Arts of Southeast Asia (also ARTH 3850, ASIAN 3350) @ \# (CA-AS)
Spring. 4 credits. K. McGowan.
For description, see ARTH 3850.
[VISST 3735 Performative Modernism (also ENGL/THETR 3350) (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
N. Salvato.]
[VISST 3740 Painting 19th-Century America (also AMST/ARTH 3740) \# (CA-AS)
Fall. 4 credits. Next offered 2011-2012.
L. Meixner.]

VISST 3758 Technology and the Moving Body I (also DANCE 3550/4550, VISST 4758) (LA-AS)
Fall. 3 credits. P. Suber.
For description, see DANCE 3550.
VISST 3798 Fundamentals of Directing I (also THETR 3980) (LA-AS)
Fall. 3 credits. Limited to 10 students.
Prerequisite: permission of instructor.
Special consideration given to students
who have completed THETR 2800 or intend to continue in area of stage or screen directing. Students should see instructor one year in advance to sign up
for course. D. Feldshuh.
For description, see THETR 3980.
VISST 3812 Edge Cities: Celluloid New York and Los Angeles (also AMST/ ARCH 3812) (CA-AS)
Spring. 3 credits. S. Haenni and M. Woods. For description, see AMST 3812.
VISST 3850 Commedia: A
Contemporization of Physical Acting Styles and the Comic Approach (also THETR 3840) (LA-AS)
Spring. 4 credits. B. Milles.
For description, see THETR 3840.
[VISST 3851 Partition/Fiction and Film (also ASIAN 3389, COML 3850) @ (HA-AS)
Fall. 4 credits. Next offered 2011-2012.
A. Banerjee.]
[VISST 3870 Literature and Film of South Asia (also ASIAN 3387, COML 3860) @ (LA-AS)
Spring. 4 credits. Next offered 2011-2012. A. Banerjee.]

VISST 4144 Responsive Environments (also VISST 6144, ARTH 4144/6144) (CA-AS)
Spring. 4 credits. M. Fernandez.
For description, see ARTH 4144.

VISST 4150 Intro to Critical Theory (also VISST 6150, ARTH 4150/6150) (CA-AS)
Fall. 4 credits. M. Fernandez.
For description, see ARTH 4150.
[VISST 4151 Topics in Media Arts (also VISST 6151, ARTH 4151/6151)
Spring. 4 credits. Next offered 2011-2012. M. Fernandez.]
[VISST 4155 Topics in Latin American Arts (also VISST 6155, ARTH 4155/6155)
Fall. 4 credits. Next offered 2011-2012.
M. Fernandez.]

VISST 4200 Proseminar (also ARTH 4100/6100) (HA-AS)
Spring. 4 credits. Limited enrollment.
Prerequisite: History of Art majors only.
I. Dadi.

For description, see ARTH 4100.
VISST 4210 Dance Technique IV/ Classical (also DANCE 4210, PE 1186)

Fall and spring. 1 credit; may be repeated.
Satisfies PE requirement if taken as PE.
Attendance at dance concerts required.
S-U grades only. J. Chu and J. Self.
For description, see DANCE 4210.
VISST 4220 Dance Technique IV/Modern (also DANCE 4220, PE 1187)
Fall and spring. 1 credit. By placement
only; no pre-enrollment. Attendance at
dance concerts required. J. Chu and J. Self. For description, see DANCE 4220.
VISST 4260 Adaptation: Text/Theatrically (also THETR 4260) (LA-AS)
Spring. 4 credits. B. Milles.
For description, see THETR 4260.

## VISST 4410 Chinese Film (also ASIAN

 4410)Fall. 4 credits. E. Gunn.
For description, see ASIAN 4410.
[VISST 4436 Topics in Indian Film (also ASIAN 4436) @ (LA-AS)
Fall. 4 credits. Next offered 2011-2012.
D. Gold.]

VISST 4445 Nature, Cultural Landscape, and Gardens in Early Modern Europe (also ARTH 4445/6445, VISST 6445)
Fall. 4 credits. C. Lazzaro.
For description, see ARTH 4445.
[VISST 4451 Prints and Visual Culture in Early Modern Europe (also ARTH 4451/6451) \# (HA-AS)
Fall. 4 credits. Meets at the Johnson Museum. Next offered 2011-2012.
C. Lazzaro.]

VISST 4545 Text Analysis for Production: How to Get from the Text onto the Stage (also ENGL 4441, THETR 4450)

Spring. 4 credits. Limited to 15 students.
Prerequisite: THETR 2500 or 2810 or 3890 ,
or permission of instructor. B. Levitt.
For description, see THETR 4450.
VISST 4546 Shakespeare in (Con)text (also ENGL 4210, THETR 4460) \# (LA-AS)
Fall. 4 credits. B. Levitt.
For description, see THETR 4460.

VISST 4563 Lighting Design Studio II (also DANCE 4660, THETR 4620) (LA-AS)
Spring. 4 credits. Limited to 6 students; may be repeated for credit. Prerequisite: THETR 2500 or 3620 , or permission of instructor. E. Intemann.
For description, see THETR 4620.

## VISST 4580 Seminar in Dance Studies (also DANCE 4080) (CA-AS)

Spring and summer. 4 credits. Limited to 15 students. Spring, J. Chu; summer, B. Suber and J. Chu.

For description, see DANCE 4080.
VISST 4602 Buildings and Bodies: Constructing Spaces in Early Modern Art (also VISST 6602, ARTH 4602/6602)
Spring. 4 credits. L. Pincus.
For description, see ARTH 4602.

## VISST 4607 The Museum and the Object

 (also ARTH 4107) (CA-AS)Fall. 4 credits. Not open to freshmen or sophomores without permission of instructor. All classes meet in Johnson Art Museum Study Gallery. C. Finley.
For description, see ARTH 4107.
VISST 4641 Comparative Modernities
(also ARTH 4690/6690, COML 4910) (also ARTH 4690/6690, COML 4910) @ (CA-AS)
Fall. 4 credits. I. Dadi.
For description, see ARTH 4690.

## [VISST 4761 Art and Social Histories

 (also ARTH 4761) (CA-AS)Fall and spring. 4 credits. Permission of instructor required; auditing not permitted. Not open to freshmen. Next offered 2011-
2012. L. Meixner.]

## VISST 4951 Photography and Decolonial

 Imagination (also ARTH/ASRC/HIST/ SHUM 4951, COML 4067)Spring. 4 credits. Limited to 15 students.
J. Bajorek.

For description, see SHUM 4951.
VISST 4955 Sensation and Indigenous Intent (also ARTH/SHUM 4955)
Spring. 4 credits. Limited to 15 students.
J. Rickard.

For description, see SHUM 4955.
VISST 6060 Visual Ideology (also ARTH 6060, COML 6660, GERST 6600)
Spring. 4 credits. G. Waite.
For description, see GERST 6600.
VISST 6144 Responsive Environments (also VISST 4144, ARTH 4144/6144)
Spring. 4 credits. M. Fernandez.
For description, see ARTH 4144.

## VISST 6150 Intro to Critical Theory (also

 VISST 4150, ARTH 4150/6150)Fall. 4 credits. M. Fernandez.
For description, see ARTH 4150.
[VISST 6151 Topics in Media Arts (also VISST 4151, ARTH 4151/6151)
Spring. 4 credits. Next offered 2011-2012. M. Fernandez.]
[VISST 6155 Topics in Latin American Art (also VISST 4155, ARTH 4155/6155)
Fall. 4 credits. Next offered 2011-2012. M. Fernandez.]

VISST 6174 Introduction to Film Analysis (also FILM 2740/6740, VISST 2174)
Fall. 4 credits. D. Fredericksen.
For description, see FILM 2740.

VISST 6341 Aesthetic of Excess: Psychophilosophical Approaches to Technology (also COML 6341)
Fall. 4 credits. T. Murray.
For description, see COML 6341.
VISST 6445 Nature, Cultural Landscape, and Gardens in Early Modern Europe (also ARTH 4445/6445, VISST 4445)
Fall. 4 credits. C. Lazzaro.
For description, see ARTH 4445.

## VISST 6602 Buildings and Bodies:

 Constructing Spaces in Early Modern Art (also VISST 4602, ARTH 4602/6602)Spring. 4 credits. L. Pincus.
For description, see ARTH 4602.

## WELSH

See "Department of Linguistics."

## WRITING PROGRAM

See "John S. Knight Institute for Writing in the Disciplines."

## YIDDISH

See "Department of Near Eastern Studies."

## ZULU

See "Africana Studies and Research Center."

## FACULTY ROSTER

For Arts and Sciences Biology faculty see "Biological Sciences."
Abrams, Meyer H., Ph.D., Harvard U. Class of 1916 Professor of English Emeritus, English
Abruña, Hector D., Ph.D., U. of North Carolina, Chapel Hill. Emile M. Chamot Professor of Chemistry, Chemistry and Chemical Biology
Abusch, Dorit, Ph.D., U. of Massachusetts, Amherst. Prof., Linguistics
Aching, Gerard, Ph.D., Cornell U. Prof., Romance Studies
Adams, Anne, Ph.D., U. of Michigan. Prof. Emerita, Africana Studies and Research Center
Adams, Barry B., Ph.D., U. of North Carolina. Prof. Emeritus, English
Adelson, Leslie A., Ph.D., Washington U. Prof., German Studies
Adeymoyo, Adeolu A., M.A., Obafemi Awolowo U. (Nigeria) Sr. Lec., Africana Studies and Research Center
Ahl, Frederick M., Ph.D., U. of Texas, Austin. Prof., Classics/Comparative Literature
Alexander, James P., Ph.D., U. of Chicago. Prof., Physics/LEPP
Alexandridis, Annetta, Ph.D., Ludwig-Maximilians-U. Munich (Germany). Asst. Prof., History of Art
Alkire, Elbern H., Ph.D., Cornell U. Sr. Lec., Romance Studies
Al-Masri, Hanada, Ph.D., Purdue U. Reis Sr. Lec., Near Eastern Studies

Allmendinger, Richard W., Ph.D., Stanford U. Prof., Earth and Atmospheric Sciences/ INSTOC\#
Allmon, Warren, Ph.D., Harvard U. Hunter R. Rawlings III Professor of Paleontology, Earth and Atmospheric Sciences
Altschuler, Glenn C., Ph.D., Cornell U. The Thomas and Dorothy Litwin Professor of American Studies, American Studies
Ambegaokar, Vinay, Ph.D., Carnegie Inst. of Technology. Goldwin Smith Professor of Physics Emeritus, Physics/LASSP*
Amigo-Silvestre, Silvia., M.A., U. of Oregon. Sr. Lec., Romance Studies
Anderson, Benedict R., Ph.D., Cornell U. Aaron L. Binenkorb Professor of International Studies Emeritus, Government
Anderson, Christopher J., Ph.D., Washington U. Prof., Government

Andronicos, Christopher L., Ph.D., Princeton U. Assoc. Prof., Earth and Atmospheric Sciences
Anker, Elizabeth, Ph.D., U. of Virginia. Asst. Prof., English
Arcadi, Adam Clark, Ph.D., U. of Michigan. Assoc. Prof., Anthropology
Archer, Richard J., M.A., U. of Missouri, Kansas City. Assoc. Prof., Theatre, Film, and Dance
Arias, Tomas A., Ph.D., Massachusetts Inst. of Technology. Prof., Physics/LASSP*
Arms, William, Ph.D., U. of Sussex (UK). Prof., Information Science
Arroyo, Ciriaco M., Ph.D., U. of Munich (Germany). Emerson-Hinchliff Prof. Emeritus, Romance Studies/Comparative Literature
Ascher, Robert, Ph.D., U. of California, Los Angeles. Prof. Emeritus, Anthropology
Ashcroft, Neil W., Ph.D., Cambridge U. (UK). Horace White Professor of Physics Emeritus, Physics/LASSP*
Assié-Lumumba, N'Dri, Ph.D., U. of Chicago. Prof., Africana Studies and Research Center
Attell, Kevin, Ph.D., U. of California, Berkeley. Asst. Prof., English
Back, Allen H., Ph.D., U. of California, Berkeley. Sr. Lec., Mathematics
Bailey, Graeme, Ph.D., U. of Birmingham (UK). Prof., Computer Science
Baird, Barbara, Ph.D., Cornell U. Prof., Chemistry and Chemical Biology
Bala, Kavita, Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Computer Science
Balsa, Miguel A., M.A., Tisch School of the Arts/M.A. Universidad Complutense de Madrid (Spain)
Banerjee, Anindita, Ph.D., U. of California, Los Angeles. Asst. Prof., Comparative Literature
Baptist, Edward, Ph.D., U. of Pennsylvania. Assoc. Prof., History
Bar, Talia, Ph.D., Yale U. Sr. Lec., Economics
Baraldi, Michela, B.A. equivalent, U. of Bologna (Italy). Lec., Romance Studies
Barazangi, Muawia, Ph.D., Columbia U. Prof. Emeritus, Earth and Atmospheric Sciences/ INSTOC\#
Barbasch, Dan, Ph.D., U. of Illinois. Prof., Mathematics
Barseghyan, Levon, Ph.D., Northwestern U. Asst. Prof., Economics
Bassett, William A., Ph.D., Columbia U. Prof. Emeritus, Earth and Atmospheric Sciences
Basu, Kaushik, Ph.D., London School of Economics (UK). Carl Marks Prof. of International Studies, Economics
Bathrick, David, Ph.D., U. of Chicago. Prof. Emeritus, German Studies/Theatre, Film, and Dance
Bättig von Wittelsbach, Kora, M.A., U. of Zagreb (Croatia)/M.A., Brown U. Sr. Lec., Romance Studies

Bauer, Simon H., Ph.D., U. of Chicago. Prof. Emeritus, Chemistry and Chemical Biology Baugh, Daniel A., Ph.D., Cambridge U. (UK). Prof. Emeritus, History
Bazarov, Ivan, Ph.D., Far Eastern State U. (Russia). Asst. Prof., Physics/LEPP $\|$
Bean, Rachel E., Ph.D., Imperial College (UK). Asst. Prof., Astronomy/CRSR $\dagger$
Bell, James F., Ph.D., U. of Hawaii. Prof., Astronomy/CRSR $\dagger$
Bem, Daryl J., Ph.D., U. of Michigan. Prof. Emeritus, Psychology
Bem, Sandra L., Ph.D., U. of Michigan. Prof., Psychology
Benería, Lourdes, Ph.D., Columbia U. Prof., City and Regional Planning/Feminist, Gender, \& Sexuality Studies
Benjamin, Daniel, Ph.D., Harvard U. Asst. Prof., Economics
Bennett, Karen, Ph.D., U. of Michigan. Assoc. Prof., Philosophy
Bensel, Richard, Ph.D., Cornell U. Prof., Government
Béreaud, Jacques, Doctorat d'Univ., U. of Lille (France). Prof. Emeritus, Romance Studies
Berest, Yuri, Ph.D., U. of Montreal (Canada). Assoc. Prof., Mathematics
Berezin, Mabel, Ph.D., Harvard U. Assoc. Prof. Sociology
Berger, Anne, Ph.D., U. Paris VIII (France) Adj Prof., Romance Studies
Bernal, Martin G., Ph.D., Cambridge U. (UK). Prof. Emeritus, Government/Near Eastern Studies
Bernstein, Sarah E., M.F.A., Yale U. Sr. Lec., Theatre, Film, and Dance
Bernstock, Judith, Ph.D., Columbia U. Assoc. Prof., History of Art
Berry, James, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Economics
Besharov, Gregory, Ph.D., Stanford U. Sr. Lec., Economics.
Beviá, Monica, M.A., U. of Nevada, Reno. Lec., Romance Studies
Beviá, Tomás, M.A., U. of Nevada, Reno. Sr. Lec., Romance Studies
Billera, Louis J., Ph.D., City U. of New York. Prof., Mathematics
Bindel, David, Ph.D., U. of California, Berkeley. Asst. Prof., Computer Science
Bilson, Malcolm, D.M.A., U. of Illinois. Frederic J. Whiton Professor of Music Emeritus

Bird, John M., Ph.D., Rensselaer Polytechnic Inst. Prof. Emeritus, Earth and Atmospheric Sciences
Birman, Kenneth P., Ph.D., U. of California, Berkeley. N. Rama Rao Professor of Computer Science
Bjerken, Xak, D.M.A., Peabody Conservatory of Music. Assoc. Prof., Music
Blackall, Jean F., Ph.D., Harvard U. Prof. Emerita, English
Blackburn, Anne M., Ph.D., U. of Chicago. Assoc. Prof., Asian Studies
Bloom, Arthur L., Ph.D., Yale U. Prof. Emeritus, Earth and Atmospheric Sciences
Blume, Lawrence E., Ph.D., U. of California, Berkeley. Goldwin Smith Professor of Economics
Blumin, Stuart M., Ph.D., U. of Pennsylvania. Prof. Emeritus, History
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Bodenschatz, Eberhard, Ph.D., U. of Bayreuth (Germany). Adj. Prof., Physics/LASSP*
Boettcher, Bonna, D.M.A., U. of Iowa. Adj. Prof., Music
Bogel, Fredric V., Ph.D., Yale U. Prof., English Bosteels, Bruno, Ph.D., U. of Pennsylvania. Assoc. Prof., Romance Studies

Boucher, Daniel, Ph.D., U. of Pennsylvania. Assoc. Prof. and H. Stanley Krusen Professor of World Religions, Asian Studies
Bowers, John S., Ph.D., Massachusetts Inst. of Technology. Prof., Linguistics
Bowes, Kimberly, Ph.D., Princeton U. Asst. Prof., Classics
Boyce Davies, Carole, Ph.D., U. of Ibadan (Nigeria). Prof., Africana Studies and Research Center/English
Boyd, Richard N., Ph.D., Massachusetts Inst. of Technology. Prof., Philosophy/Science and Technology Studies
Braddock, Jeremy, Ph.D., U. of Pennsylvania. Asst. Prof., English
Brady, Mary Pat, Ph.D., U. of California, Los Angeles. Assoc. Prof., English
Bramble, James H., Ph.D., U. of Maryland. Prof. Emeritus, Mathematics
Brann, Ross, Ph.D., New York U. Milton R. Konvitz Professor of Judeo-Islamic Studies, Near Eastern Studies
Brashears, Matthew, Ph.D., U. of Arizona. Asst. Prof., Sociology
Brazell, Karen W., Ph.D., Columbia U. Prof. Emerita, Japanese Literature, Asian Studies
Brennan, Tad, Ph.D., Princeton U. Prof., Philosophy/Classics
Briggs, Martijna Arts, M.A., O.M.O. Utrecht (The Netherlands). Sr. Lec., German Studies
Brittain, Charles F., D. Phil., Oxford U. (UK). Prof., Classics/Philosophy
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Carden, Patricia J., Ph.D., Columbia U. Prof., Russian
Cardie, Claire, Ph.D., U. of Massachusetts. Prof., Computer Science
Carlson, Allen, Ph.D., Yale U. Assoc. Prof., Government
Carmichael, Calum M., LL.D., Glasgow U. (UK). Prof., Comparative Literature/Biblical Studies

Caron, Vicki, Ph.D., Columbia U. Prof., Thomas and Diann Mann Chair in Modern Jewish Studies, History/Jewish Studies Program
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Case, Holly, Ph.D., Stanford U. Assoc. Prof., History
Cassel, David G., Ph.D., Princeton U. Prof., Physics/LEPP $\quad$ I
Castillo, Debra, Ph.D., U. of Wisconsin, Milwaukee. Emerson-Hinchliff Prof., Romance Studies/Comparative Literature
Cathles, Lawrence M., III, Ph.D., Princeton U. Prof., Earth and Atmospheric Sciences
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Chan, Garnet Kin-Lic, Ph.D., Christ's Coll. Asst. Prof., Chemistry and Chemical Biology
Chang, Derek, Ph.D., Duke U. Assoc. Prof., History/Asian American Studies
Chase, Cynthia, Ph.D., Yale U. Prof., English/ Comparative Literature
Chase, Stephen U., Ph.D., U. of Chicago. Prof. Emeritus, Mathematics
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Chen, Jian, Ph.D., South Illinois. Prof., The Michael J. Zak Chair of History for USChina
Relations, History/China and Asia-Pacific Studies
Chen, Peng, Ph.D., Stanford U. Asst. Prof., Chemistry and Chemical Biology
Chen, Zhihong, Ph.D., U. of Cologne (Germany). Adj. Assoc. Prof., History
Chernoff, David F., Ph.D., U. of California, Berkeley. Prof., Astronomy/CRSR $\dagger$
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Cheyfitz, Eric, Ph.D., Johns Hopkins U. Prof., English
Chignell, Andrew, Ph.D., Yale U. Asst. Prof., Philosophy
Chirik, Paul J., Ph.D., California Inst. of Technology. Prof., Chemistry and Chemical Biology
Christiansen, Morten, Ph.D., U. of Edinburgh (UK). Assoc. Prof., Psychology
Chu, Jumay Ruth, B.A., U. of California, Berkeley. Sr. Lec., Theatre, Film and Dance
Cisne, John L., Ph.D., U. of Chicago. Prof., Earth and Atmospheric Sciences/INSTOC\#
Cleland, Clinton, Kevin M., Ph.D., Johns Hopkins U. Prof., Classics
Cleland, Thomas, Ph.D., U. of California. Asst. Prof., Psychology
Coate, Stephen, Ph.D., Northwestern U. Kiplinger Professor of Economic Policy, Economics
Coates, Geoffrey, Ph.D., Stanford U. Prof., Chemistry and Chemical Biology
Cochran, Sherman, Ph.D., Yale U. Hushih Professor of History, History
Cohen, Itai, Ph.D., U. of Chicago. Asst. Prof., Physics/LASSP*
Cohen, Marshall M., Ph.D., U. of Michigan. Prof. Emeritus, Mathematics
Cohen, Walter I., Ph.D., U. of California, Berkeley. Prof., Comparative Literature
Cohn, Abigail C., Ph.D., U. of California, Los Angeles. Prof., Linguistics

Colby-Hall, Alice M., Ph.D., Columbia U. Prof. Emerita, Romance Studies
Collum, David B., Ph.D., Columbia U. Prof., Chemistry and Chemical Biology
Colucci, Stephen J., Ph.D., SUNY Albany. Prof., Earth and Atmospheric Sciences
Connelly, Robert, Ph.D., U. of Michigan. Prof., Mathematics
Constable, Robert L., Ph.D., U. of Wisconsin. Prof., Computer Science
Cooke, W. Donald, Ph.D., U. of Pennsylvania. Prof. Emeritus, Chemistry and Chemical Biology
Cordes, James M., Ph.D., U. of California, San Diego. Prof., Astronomy/NAIC $\ddagger$
Cornwell, Benjamin, Ph.D., U. of Chicago. Asst. Prof., Sociology
Corpis, Duane J., Ph.D., New York U. Asst. Prof., History
Correll, Barbara, Ph.D., U. of Wisconsin. Assoc. Prof., English
Corson, Dale R., Ph.D., U. of California, Berkeley. Prof. Emeritus, Physics
Cotts, Robert M., Ph.D., U. of California, Berkeley. Prof. Emeritus, Physics/LASSP*
Craib, Raymond, Ph.D., Yale U. Assoc. Prof., History
Crane, Brian R., Ph.D., Scripps Research Inst. Asst. Prof., Chemistry and Chemical Biology
Crawford, Margo, Ph.D., Yale U. Assoc. Prof., English
Cross, Warren Dennis, B.A., SUNY Stony Brook. Sr. Lec., Theatre, Film, and Dance
Cruz de Jesús, David, Ph.D., U. at Albany, SUNY. Adj. Prof., Romance Studies
Csaki, Csaba, Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Physics/LEPP $\mathbb{I}$
Culler, Jonathan D., D. of Phil., Oxford U. (UK). Class of 1916 Professor, English/ Comparative Literature
Cutting, James E., Ph.D., Yale U. Prof., Psychology
Dadi, Iftikhar, Ph.D., Cornell U. Asst. Prof., History of Art
Dannhauser, Werner J., Ph.D., U. of Chicago. Prof. Emeritus, Government
Darlington, Richard B., Ph.D., U. of Minnesota Prof. Emeritus, Psychology
Davis, H. Floyd, Ph.D., U. of California, Berkeley. Prof., Chemistry and Chemical Biology
Davis, J. C. Seamus, Ph.D., U. of California, Berkeley. Prof., Physics/LASSP*
Davis, Stuart Arrowsmith, M.Phil., Yale U. Sr. Lec., English
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[^0]:    ANTHR 4437 Anthropology of Development (also ANTHR 7437) @ (CA-AS)
    Fall. 4 credits. M. Welker.

[^1]:    ECON 3440 Development of Economic
    Thought and Institutions (HA-AS)
    For description, see ILRLE 3440.

[^2]:    [ARTH 3611 Art of South Asia, 1500present (also ASIAN 3382) @ \# (CA-AS)
    Spring. 4 credits. Next offered 2011-2012. I. Dadi.]

[^3]:    LING 2219 Language and History in the British Isles \# (HA-AS)
    Spring. 4 credits. W. Harbert.

