## COLLEGE OF ARTS AND SCIENCES

## PROGRAM OF STUDY

## Introduction

The College of Arts and Sciences at Cornell is a community of about 4,000 undergraduates and 600 faculty members. It is composed of those departments that teach and study the humanities and the arts, the basic sciences and mathematics, the social sciences and history. It is also a college within a university of about 18,000 students and 1,630 faculty members, and this wider community provides depth and diversity of applied and professional studies beyond what one undergraduate college alone can offer. Students may draw upon the knowledge and facilities of the other undergraduate colleges at Cornell to supplement their studies. Finally, the college is a graduate school and research center attracting faculty whose writing and research require first-rate academic facilities and whose participation in undergraduate teaching brings to their students the profound questioning and the current ideas of contemporary scholarship. This abundant variety and outstanding quality among many disciplines give the college its distinctive character.

The richness of the curriculum is extraordinary; there is no course that all students must take, and there are nearly two thousand from which they may choose. By choosing courses each semester, students design their own education. They strike a balance between developing known interests and exploring new subjects. They sharpen their verbal and quantitative skills. They also come to understand more thoroughly the Western tradition and leam something about the nonWestern world and its peoples. An education in the liberal arts means honing one's critical capacities, learning more about oneself in nature and culture, and gaining real 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 adviser to select sensible, challenging, and appropriate courses.
Yet the faculty 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 natural sciences, in the social sciences, and in those achievements of intellect and imagination that are the focus of the humanities and the arts. In addition to these general areas of knowledge, students study foreign languages, acquire effective writing and quantitative skills, and concentrate on one particular field to develop, as fully as possible, the powers of imaginative and critical thinking. To accomplish these objectives, the college has certain requirements for graduation.

## Summary of Basic College Requirements for Graduation

1) Freshman Writing Seminars: Two courses. See "John S. Knight Writing Program," p. 547.
2) Foreign language: Proficiency in one language or qualification in two. See below.
3) Distribution Requirements: See below.
4) Breadth requirement: See below
5) Major: See below.
6) Electives: Four or five courses (at least 15 credits) in courses not used to fulfill other 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 criteria to accelerate graduation. See below under "Acceleration."
8) Minimum number of courses: Thirty-four courses. A two-credit course counts as half a course; a six-credit language course counts as one and one-half courses; a one-credit course does not count toward this requirement. See below under "Courses and Credits."
9) Credits: A total of 120 academic credits, of which 100 must be taken in the College of Arts and Sciences. See below under "Non-credit courses."
10) Physical education: Completion of the university requirement (two courses). Please note that physical education credit does not count toward graduation or toward the 12 -credit minimum required for good standing each semester. See p. 13.
11) Application to graduate. See below under "Graduation."

## Foreign Language Requirement

The faculty considers competence in a foreign language essential for an educated person. Studying another language helps students understand language itself, our fundamental intellectual tool, and more fully opens another culture for exploration. The sooner a student acquires competence, the more useful it will be. Hence, work toward the foreign language requirement should be undertaken in the freshman and sophomore years. 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, Classics, German Studies, Modern Languages, Near Eastern Studies, Romance Studies, and Russian Literature.
The language requirement may be satisfied in one of two ways:

1) by attaining proficiency in one language or
2) by attaining qualification in two languages.

## Proficiency

Proficiency is normally attained by passing an intermediate (usually 200-level) Cornell course (or Chinese or Japanese 161). Some introductory language courses are taught at the 300 - or 400-level (for example, Near Eastern Studies 333-334); these do not confer proficiency.
Proficiency can also be earned by examination. A score of 4 or 5 on an AP language exam earns three credits but does not carry with it proficiency. However, by scoring high enough on the CASE (Cornell Advanced Standing Examination), a student who received a score of 4 or 5 on an AP language exam can earn proficiency and an additional three credits. On the other hand, a score of 4 or 5 on an AP literature exam in French, German (German offers a combined language/literature exam), or Spanish earns proficiency, as well as three credits. Such students should also take the CASE to see if they can earn an additional three credits. Students with appropriate scores on Cornell Language Placement tests or SAT II examinations are also eligible to take the CASE (see chart below).

## Qualification

Qualification may be attained in any of the following ways:

1) Three years of high school study in any one language gives qualification in that language. Note that this route to qualification does not guarantee entrance into an intermediate (200-level) course. Students who want to continue studying the language must be placed in the appropriate course by an examination. Being placed below the intermediate (200-level) does not, however, cancel the qualification.
2) Passing the requisite Cornell course: 102, 123 , or 134 in most languages taught by the Department of Modern Languages; Chinese 110,112 , or 114 ; Japanese 160 ; Near Eastern Studies 102 or 122 in Hebrew, 112 in elementary classical Arabic, or 118 in Turkish; Classics 103 or 104 in Greek, 106 or 107 in Latin, 112 in modern Greek; 132 in Sanskrit; AS\&RC 134 in Swahili.
Note: Except in the case of Sanskrit, completion of language sequences 131-132 does not constitute qualification.
3) A score of 600 in French, 580 in German, and 590 in Italian or Spanish on the SAT II taken in high school or a score of 56 or higher on the Cornell LP (Language Placement test) taken during orientation week.
Students may earn a 56 placement test score at the end of a course numbered 122 (second semester of the introductory sequence) and consequently attain qualification without taking 123, the third semester of the introductory sequence. However, with a score of 56, it may be worthwhile to take 123 to be better prepared for the 200-level courses.
4) Placement into a 200 -level course by departmental or (when no placement test is available) individual examination at Cornell.

## Placement in Language Courses and Advanced <br> Placement Credit

Placement into language courses and advanced placement credit are separate results of examinations.

## Placement

Entering students who have had two or more years of high school study in a language or who have been awarded credit for language work at another college or university 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 at Cornell during orientation (LP test). Students may, but need not, retake a language test if a year or more has passed since last taking it. Being placed into a 200 -level course does not earn credit toward the degree. Credit is earned only for high school work equivalent in level to language courses numbered 200 and above at Cornell.

## Placement Tests and Advanced Placement Credit

The type of test depends upon the language and the student's level of achievement:

1) French, German, Italian, and Spanish: students register for the placement tests with the Department of Modern Languages, 203 Morrill Hall. Students who have a score of 65 and above on the appropriate LP test, 690 and above on the SAT test in French, Italian, or Spanish, and 680 and above on the SAT II in German, must take the Cornell Advanced Standing Examination (CASE) in order to be placed in a course. (The minimum score on the older SAT Acheivement Test or a Cornell placement test taken prior to Fall, 1996 is 650 in all languages.) Cornell credit may be granted as a result of this test, depending on the student's score.
2) Arabic: departmental examination, Department of Near Eastern Studies, 360 Rockefeller Hall.
3) Greek, Ancient and Modern: departmental examination, Department of Classics, 120 Goldwin Smith Hall.
4) Hebrew: departmental examination, Deparment of Near Eastern Studies, 360 Rockefeller Hall.
5) Latin: departmental examination, Department of Classics, 120 Goldwin Smith Hall.
6) Russian: Cornell Advanced Standing Exmaination (CASE), Department of Modern Languages, 203 Morrill Hall.
7) Turkish: departmental examination, Deparment of Near Eastern Studies, 360 Rockefeller Hall.
8) Other languages: special examinations, see the instructor who teaches the language. Cornell is able to provide special examinations only when an instructor with the appropriate exertise is a member of the relevant department.

French

| Placement Tests <br> $L P F$ | Language <br> Courses | Literature <br> Courses |  |
| :--- | :--- | :--- | :--- |
| below 37 | below 370 | 121 |  |
| $37-44$ | $370-480$ | 122 |  |
| $45-55$ | $490-590$ | 123 |  |
| $56-64$ | $600-680$ | 200 |  |
|  |  | 203 |  |
|  |  | 205 | 201 |
| $56-59$ | $600-630$ | H Adm 266 |  |
| 60 and above | 640 and above |  | Take CASE for placement |
| 65 and above | 690 and above |  | Take CASE for placement |
| AP 4 or 5 in |  |  | Take CASE for placement |

literature,

3 credits and
proficiency.

## German

| Placement Tests <br> LPG | SAT II | Language <br> Courses | Literature <br> Courses |
| :--- | :--- | :--- | :--- |
| below 37 | below 370 | 121 |  |
| $37-44$ | $370-450$ | 122 |  |
| $45-55$ | $460-570$ | 123 |  |
| $56-64$ | $580-670$ | 203 | 201 |
| 65 and above | 680 and above |  | Take CASE for placement |
| AP 4 or 5, |  |  | Take CASE for placement |
| 3 credits |  |  |  |

3 credits
and proficiency.

## Italian

| Placement Tests <br> LPI | SAT II <br> Courses | Literature <br> Courses |  |
| :--- | :--- | :--- | :--- |
| below 37 | below 370 | 121 |  |
| $37-44$ | $370-450$ | 122 |  |
| $45-55$ | $460-580$ | 123 | 201 |
| $56-64$ | $590-680$ | 203 | 202 |
|  |  |  | 205 |

65 and above
AP 4 or 5
in language,
3 credits.
AP 4 or 5 in Take CASE for placement
literature,
3 credits
and proficiency.

## Russian

Spanish

| Placement Tests <br> LPS | Sanguage <br> Courses | Literature <br> Courses |  |
| :--- | :--- | :--- | :--- |
| below 37 | below 370 | 121 |  |
| $37-44$ | $370-450$ | 112 |  |
| $45-55$ | $460-580$ | 122 |  |
| $56-64$ | $590-680$ | 123 | 201 |
|  |  | 200 | 203 |
| 65 and above | 690 and above |  |  |
| AP 4 or 5 in |  | Take CASE for placement |  |
| language, |  | Take CASE for placement |  |
| 3 credits. |  |  |  |
| AP 4 or 5 in |  |  |  |
| literature, |  |  |  |

Take CASE for placement Take CASE for placement

Take CASE for placement

AP 4 or 5 in
language,
3 credits.
AP 4 or 5 in
literature,
3 credits
and proficiency.

Take CASE for placement Take CASE for placement

## Take CASE for placement

## Distribution Requirements

In satisfying the distribution requirements, students become acquainted with a broad range of subject matter and points of view in the college and liberal arts and sciences, and they explore areas that may be entirely new to them. Fulfilling the distribution requirements is part of the task of freshmen and sophomores. Although students may complete the requirements over the eight semesters, they can take advanced courses in many subjects they find intriguing only if they have previously completed the introductory prerequisites.
Students must take a total of nine courses (of three or more credits each) for the distribution requirements: four courses from Groups 1 and 2 below, at least two of which are from Group 1 and at least one of which is from Group 2 (for example, one chemistry, one physics, one geology, and one mathematics); five courses from Groups 3 and 4 below, with at least two in each group and two in the same department (for example, one course in sociology, one in history, one in history of art, and two in theater arts).

1. Physical and Biological Sciences

In fulfilling the science distribution requirement, students must take at least one course from the list of "primary" courses and may select additional courses from the supplementary list.

## Primary list:

Astronomy: all courses except 233 *
Chemistry: all courses
Geological Sciences: all courses *

## Physics: all courses

Biological Sciences: all courses except 152, 200 (unless permission of the associate dinector is obtained), 208, 209, or 367. The following courses are especially suitable for the distribution requirement because they have no prerequisites: 101-104, 105-106, 107-108, 109-110, 154, 170, 184, 192, 202, 207, 212, 240, 241, 264 plus 266, 275. Note that introductory biology can count for distribution credit only when taken as a two-semester sequence: 109-110, 105106, or 101 and 103 plus 102 and 104, or 107-108, or a combination of the first term of one sequence and the second term of another.

## Supplementary list:

Animal Science: 100, 150, 212
Anthropology: 101, 208, 275, 371, 390, 474, 490
Applied and Engineering Physics: 110
Biology and Society: 301
Entomology: 212
Food: 200
Materials Science and Engineering: 277
Natural Resources: 201, 210, 301
Nutritional Science: 115
Plant Breeding: 225
Psychology: 123
Plant Pathology: 301
Soils, Crops, and Atmospheric Sciences: 131, 231
2. Quantitative and formal reasoning

Biometry and Statistics: 215
City and Regional Planning: 320
Computer Science: 100, 211, 212
Economics: 321
Industrial \& Labor Relations: 210, 211
Linguistics: 216
Mathematics: all courses except 101 , and 109
Operations Research \& Industrial Engineering: 115
Philosophy: 231, 331, 431, 436
Physics: 205, 209, 210
Psychology: 350
Sociology: 301
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.
Under exceptional circumstances and upon petition, certain Cornell courses not listed above under Group 2 (courses such as those appearing on the following auxiliary list) may be used to satisfy the requirement in quantitative and formal reasoning. The petition should provide a persuasive rationale both in terms of the student's course of study and in terms of meeting the goals of the requirement.
Auxiliary list: Agricultural Economics 310; Agricultural Engineering 151; City and Regional Planning 321; Industrial and Labor Relations 312; Linguistics 421, 450 ; Psychology 472-473 (a sequence of two two-credit courses which may count only in its entirety as one course)
3. Social sciences and history

Africana Studies: $171,172,191,204,205$, 220, 231, 271, 280, 290, 300, 301, 311, $370,380,381,410,420,451,459,475$, $478,479,483$
American Studies: 101, 102, 201, 202, 320
Anthropology: all courses except 101, $208,275,371,390,451,452,453,474,490$
Archaeology: 100, 201, 202, 203, 204, $263,275,317,353,355,362,370,405$, 409, 458, 493, 494
Asian Studies: courses in Asian anthropology, economics, government, history, linguistics, or sociology
Biology and Society: 301, 342, 407, 427
City and Regional Planning: 100, 101
Cognitive Studies: 101, 201
Economics: all courses except 317, , 318, 319
Engineering: 250, 292
Government: all courses
History: all courses
6. Linguistics: all courses except 131, 132, 251, 252
Near Eastern Studies: 197, 198, 244 and all other courses in Near Eastern archaeology and history

Psychology: all courses except 123, 205 , $290,307,322,324,326,332,350,361$, $396,410,420,422,424,425,429,431$, $440,441,470,471,472,473,475,478$, 479, 491, 492
Religious Studies: 202, 213, 223, 234, 244, $247,248,249,250,252,257,263,327$, $328,337,344,345,346,348,349,405$, 420, 422, 428, 429, 442, 449, 451, 531
Science and Technology Studies: 201, 233, 250, 281, 282, 287, 292, 311, 350, $352,355,360,391,401,407,427,433$, $442,444,447,467,483,490,645,687$

Sociology: all courses
Women's Studies: 206, 210, 214, 218, 220, $227,234,238,244,262,269,273,277$, 281, 285, 305, 307, 321, 344, 353, 357, $362,368,380,384,406,408,426,435$, $438,442,444,450,455,458,459,467$. $477,478,479,493$
4. Humanities and the arts

Africana Studies: 202, 211, 285, 303, 304, $310,422,425,431,432,435,455$

American Studies: 101, 102, 201, 202, 324
Anthropology: 290, 451, 452, 453, 455
Archaeology: 100, 221, 309, 351, 357, 380, 423, 434, 435, 520, 629
Asian Studies: 208, 211. 212, 215, 218 and other courses in Asian art, literature, religion, or cultural studies
Biology and Society: 205, 206
Classics: courses at the 200-level and above in Classical civilization, art, and archaeology; Classical languages at the 200-level and above
Comparative Literature: all courses
English: all courses
French Literature: all courses
German Literature: all courses
History of Art: all courses
Italian Literature: all courses except 205
Music: one course of at least three credits, excluding musical performance, organizations, and ensembles. If a student chooses to satisfy part of the distribution requirement with more than one music course, an acceptable sequence may include four credits in musical performance, organizations, or ensembles combined with introductory, theory, or history and culture courses. (Students may count performance credits as only one course toward distribution.)
Near Eastern Studies: courses in Near Eastern civilization or literature, including 244 and language courses at the 200 -level and above
Philosophy: all courses except 191 and courses in logic
Religious Studies: 101, 111, 130, 201, 213, 214, 223, 234, 244, 247, 248, 250, 252, $257,262,322,327,328,348,349,355$, $405,421,422,428,441,451,459,476$
Russian Literature: all courses
Science and Technology Studies: 205, 206, 286, 381, 384, 389, 390, 481, 661, 681
Spanish Literature: all courses

Theatre, Film and Dance: all courses except technical production studios
Women's Studies: 210, 251, 263, 264, 279, 294, 341, 348, 349, 355, 358, 363, 370, $374,376,381,404,413,427,431,433$, $445,447,448,451,461,464,465,468$, 470, 471, 475, 481, 486, 490, 491, 492, 493, 530, 594

## Restrictions on Applying Courses to the Distribution Requirements

1) Advanced Placement Credit and Credit from Other Institutions
Students may apply up to two courses of approved advanced placement or transfer credit towards distribution requirements in Groups 1 and 2 (physical/biological sciences and quantitative/formal reasoning), as long as they take at least one course from the primary list in science at Cornell. Transfer credit applied to distribution in Group 2 (quantitative) formal reasoning) must be in mathematics or computer science; it may not be in other quantitative subjects, for example, statistics or logic
Students may apply no advanced placement or transfer credit from other institutions toward satisfaction of the distribution requirements in Groups 3 and 4 (social sciences/history and humantities/arts).

Students who enter the college as transfers from another institution are under the above rules for Advanced Placement credit, but are eligible to have credit for coursework taken at their previous institution count towards all distribution requirements. They will receive a detailed credit evaluation when they are accepted for admission.
2) Freshman writing seminars may not count towards any distribution requirement
3) No single course may satisfy more than one distribution requirement. However, students may count courses in their major towards distribution. Courses offered or cross-listed by their major department may not be counted towards any distribution category beyond the usual category of the major department itself. For example, a history major may not count a course cross-listed between history and a literature department towards distribution in the humanities.

## Breadth Requirements

Students must include in their undergraduate curricula 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 twentieth century. (Arts and Sciences courses about Native American cultures may count toward the geographic breadth requirement if they focus on the cultures themselves and not interaction with European cultures.) Courses that satisfy the geographic breadth requirement are marked with a © when described in this catalog. Courses that satisfy the historical breadth 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 also apply Cornell courses conferring proficiency in a non-

Western language toward the geographical breadth requirement and use courses satisfying distribution, major, or elective (but not writing) requirements in satisfaction of either of the breadth requirements. They may not apply advanced placement or credit awarded by examination or, for students matriculating as freshmen, transfer credit to either of the breadth requirements.

## The Major

In their last two years, students devote roughly one-half their time to acquiring depth and competence in a major subject. The choice of major is not intended to define a student's intellect or character or to lead to a lifetime's occupation, although it may do some of each. By majoring, students focus and develop their imaginative and intellectual capacities on a subject they find especially interesting.

Most departments and programs specify certain prerequisites for admission to the major; they are found in the department and program descriptions on the following pages.
Students may apply for acceptance into the major as soon as they have completed the prerequisites. To apply, they take a copy of their transcript to an appointment with the director of undergraduate studies in their prospective major. Sophomores must be accepted into a major before registering for the junior year. 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 end of the sophomore year should meet with an advising dean.

## Available majors

Majors are offered by each of the departments. There are also majors in American studies, archaeology, biology and society, religious studies, Russian and East European studies, and women's studies.

Some students want to pursue an interest that cannot be met within an established major They may plan, with the help of their faculty adviser, an independent major that includes courses from several departments. See "Independent Major Program," below, under "Special Academic Options."

## Double Majors

One major only is required for graduation. Some students choose to complete two majors. No special permission or procedure is required; students simply become accepted into both majors and find an adviser in each department. Both majors will be posted on the official transcript.

## 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 curriculum. Students must complete at least four courses and at least 15 credits offered outside the major field and not used to fill another requirement. AP credits not otherwise used may be used to fulfill elective requirements. Students may group electives to form a concentration separate from their major or even apply them to a second major. Some simply choose to explore a variety of subjects, while others develop a concentration in one particular
department or subject outside Arts and Sciences to gain practical training or specialized knowledge.

## Residence

The College of Arts and Sciences is primarily a residential college for students who devote their energy and spirit to full-time study. The faculty believes that integrated, full-time 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 A.B. 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 terms and obtain as rich and advanced an education in the liberal arts and sciences as possible.
Transfer students from other institutions must spend a minimum of four semesters on the Cornell campus in Ithaca enrolled in the College of Arts and Sciences. Transfers from other colleges at Cornell must spend four semesters on campus in Ithaca as students in the Internal Transfer Division or in the college.
Approved study abroad, SEA Semester, and Cornell-in-Washington are considered semesters of residence, but not as semesters on the Comell campus. Nonetheless, students may spend no more than two semesters on such programs and must be on campus during their last semester.

Semesters of extramural study in the Division of Continuing Education and Summer Sessions do not count as semesters of residence

Students occasionally enter with advanced placement credit from other institutions, take leaves and complete courses at other institutions, or take summer courses at other institutions. The college will accept credit for such courses, if they are comparable to courses offered by departments at Cornell and are approved by those departments (approval forms are available in the Academic Advising Center, 55 Goldwin Smith Hall). Students may not, however, count such credit as part of the 100 credits required in the College of Arts and Sciences or use such credit to replace a term of residence. Students may not leave the college after fewer than eight semesters of residence and complete their undergraduate degrees with credits earned at other institutions or as part-time or summer students at Cornell.

## Acceleration

Some students decide that they do not need eight semesters of residence to obtain a solid undergraduate education. These students should compress the first four semesters and spend four full semesters in the major. Benefitting from opportunities for advanced, seminar, and independent (sometimes honors) work is what best characterizes undergraduate education in the college. Students considering acceleration should discuss their plans with their major advisor.
Accelerants should apply to graduate two semesters before their intended new graduation date. They should meet with the dean of seniors in the Academic Advising Center, 55 Goldwin Smith Hall to obtain an "Application to Graduate."

1. Accelerants must meet either condition $a$ or $b$ :
a. Complete 60 credits before the beginning of the last four semesters and complete the prerequisites for admission to the major in time to spend four semesters in the major.
b. Pass 48 credits in College of Arts and Sciences courses numbered " 300 " and above. Upper-level courses taken in other colleges at Cornell University may count as College of Arts and Sciences credit only if approved for the major.
2. All accelerants are required to complete 100 credits at "C" or above. Courses completed with a grade of " S " will count toward the 100 credits.
3. Students may not use credits earned while on leave of absence to reduce their terms of residence.
4. Accelerants may not finish the degree with credits earned in summer or winter session, 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, or study abroad. That is, they may not exit through any program other than a regular, full-time Cornell semester in Ithaca.
Students matriculating as freshmen 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.

## Ninth term

Students who can graduate in eight semesters should do so. If a worthy academic plan for a full ninth or tenth semester is presented, the dean of seniors can approve that plan and ask the registrar of the college to enroll the student as a special student for the additional work. Such a status allows enrollment in a full schedule of courses for full tuition and full use of campus resources, but allows financial aid only from loans or outside agencies, not from Cornell funds. Students who need only a part-time schedule of courses in a ninth or tenth term in order to graduate should complete the outstanding courses as part-time students. Students may spend a ninth term with Cornell aid only with permission of the dean of seniors or the Committee on Academic Records. Such permission is normally granted only to:

1. Students who have been ill or have an exceptionally compelling academic plan.
2. Students attracted late to a field with a hierarchical curriculum (for example, physics).
3. Students who were academically underprepared for the curriculum at Cornell and needed to begin with a lighter schedule of courses than normal. (See Dean Turner, Academic Advising Center, 55 Goldwin Smith Hall, about this option.)

## Part-time study

Students in good academic standing may take a personal leave of absence and enroll in the Division of Continuing Education, but such
semesters of part-time study do not count as terms of residence and credits from such semesters may not be used to reduce the terms of residence.
Students in good academic standing who face extraordinary situations or who have documented disabilities may petition the Committee on Academic Records for part-time status and proration of tuition in the college.
The college and university support students (with aid and services) as best they can to make full-time study possible. Rarely and occasionally, however, extraordinary but nonfinancial personal, academic, or medical circumstances make becoming a part-time student necessary and appropriate.
Students requesting part-time status should discuss their situation with Dean Walbridge if their reason is a documented disability that, under the Americans with Disabilities Act, requires appropriate accommodations. Otherwise, students should meet with the dean of their class.
Students may complete their degrees as parttime students 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 term, and could have accelerated.
2) They have received permission to accelerate, but have been forced to drop or delay a course for reasons beyond their control.
3) They are writing an honors thesis in the eighth semester and can complete all degree requirements by taking two or fewer courses, one of which is the thesis itself. They must register for the thesis and at least one additional course.
In all cases, approval of the dean of seniors must be sought in the semester prior to the part-time semester.

## Courses and Credits

Students must complete at least 34 courses to graduate-that is, an average of four courses during each of six semesters and five courses during each of two semesters. A three- or four-credit course counts as one course; a two-credit course counts as one-half course. Single-credit courses do not count as part of the 34 except in certain cases when they form a part of a series and two in the same series can be aggregated to count as one-half course (certain offerings in the Departments of Music and Theatre, Film and Dance). Three onecredit courses do not aggregate to count as one course. A six-credit language course counts as $11 / 2$ courses, while the summer Falcon Programs in Asian languages count as ten credits and $21 / 2$ courses each. Archaeology and geology fieldwork for more than six credits count as two courses each. Biology 281 counts as $11 / 2$ courses. Other five- or six-credit courses count as one course. AP exam scores that result in an award of 3 or 4 credits count as one course; those that result in an award of 8 credits count as two courses.
Students must also complete 120 credits, 100 of which must be from courses taken in the College of Arts and Sciences. Liberal arts courses approved for study abroad during a semester or academic year of full-time study (not summer study) and courses taken in certain off-campus Cornell residential programs may be counted toward the 100
credits required within the college and also toward the required 34 courses. Credits earned in other colleges at Comell, or in any subject at U.S. institutions other than Cornell, do not count as part of the 100 nor, for students matriculating in Fall 1994 or after, do advanced placement credits count as part of the 100 . The only exception is for courses (usually no more than three) that certain departments accept from other colleges at Cornell as fulfilling major requirements.

A course may not be used to fulfill more than one college requirement, with the following exceptions:

1) A course may be used to fulfill a distribution requirement and also a major requirement.
2) A one-semester course in foreign literature (not language) that is acceptable for achieving proficiency in that language may also be used as a partial fulfillment of the distribution requirement in the humanities and the arts.
3) Courses may count toward breadth requirements and toward any other requirement except Freshman Writing Seminars.
4) Courses in a second major may count as electives.

## Repeating courses

Students occasionally repeat courses. If the instructor certifies that the course content has been changed, credit will be granted a second time. If the content has not changed, both grades will appear on the transcript and will be included in any average that is calculated, but credit will be counted toward the degree only once. Students who plan to repeat a course should submit a petition to the college registrar. If the original course grade was F , no petition is necessary.

## Auditing

The college encourages its students to take advantage of its rich curriculum by sitting in on courses that interest them but do not fit into their schedules for credit. As long as the instructor agrees, students are welcome to visit courses. Small seminars and language courses are sometimes not open to visitors. Audited courses do not appear on the student's schedule or transcript.

## Transferring credit

The college evaluates credit earned either at another school or college at Comell 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.
Transfer students must successfully complete at least 60 credits and 16 courses at Comell; they must be in residence in the college for four regular semesters (summer session does not count toward the residence requirement). Evaluations of their transfer credits are normally provided when they are notified of their admission. Advanced placement credit awarded by other colleges, either at Cornell or elsewhere, is subject to a re-evaluation by the college.
Advanced placement credit
See p. 5 .

## Summer session credit

A student may earn credit toward the degree by completing courses in Cornell's summer session or by petitioning to take courses at other colleges. Students should consult their advisers 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 in the Academic Advising Center, 55 Goldwin Smith Hall. Credit earned in summer courses other than those at Comell will not count toward the 100 credits required in the college (including summer or orientation programs abroad) and may be applied only to part of the Group 1 and 2 distribution requirements. Transcripts from other institutions must be sent to the associate registrar, 55 Goldwin Smith Hall.
Entering students who want to receive credit toward the degree for courses completed in a summer session away from Cornell should obtain approval forms as soon as possible and have transcripts sent to the associate registrar, 55 Goldwin Smith Hall, during the summer before matriculation. Credits completed in Cornell summer sessions will be awarded automatically.
Summer session at Cornell or elsewhere does not count toward the eight-semester residence requirement.

## Non-credit courses

The college does not grant credit toward the degree for every course offered by the university. Courses in remedial or developmental reading, high school mathematics, supplemental science and mathematics offered by the Learning Skills Center, keyboarding, shorthand, military training, and service as a teaching assistant are among those for which credit is not given and that do not constitute part of the 12 credits required for good academic standing.
Examples of non-credit courses:
All courses numbered below 100 (with the exception of Computer Science 099)
All courses in Military Science, Naval Science, and Aerospace Studies
Biology G 498
Communications 498
Education 498
Hotel Administration 170
Human Development and Family Studies 403
Human Ecology 100, 101
Human Service Studies 403
Mathematics 109
Nutritional Science 403
Psychology 498

## Physical Education

See "University Requirements for Graduation," p. 13. The college does not count physical education credit toward the 120 credits required for graduation, nor toward the twelve credits required for good standing each semester.

## SPECIAL ACADEMIC OPTIONS

## Degree Programs

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

## Independent Major Program

The Independent Major Program allows students to design their own interdisciplinary majors to pursue a subject that cannot be found within 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 adviser 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 baccalaureate degree. Students should contact the director of the Independent Major Program, Academic Advising Center, 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.

## College Scholar Program

The College Scholar Program frees up to forty students in each class from the usual college requirements for a degree and allows them to design their own curricula. It 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 adviser, a well-designed program of studies. College Scholars do not all design the same kind of program: some, for instance, pursue diverse interests, while others integrate a variety of courses with a common theme
College Scholars must complete 120 credits of course work (100 in the college), 34 courses, and, unless they receive permission from the program to accelerate, eight full terms of undergraduate study. They must complete the physical education requirement. All College Scholars must complete a senior project. They are not required to complete or fulfill the general education requirements, although members of the College Scholar Advisory Board believe that the spirit of the college requirements is a good one.
Each applicant to the College Scholar Program is asked to write an essay, which is due the last Wednesday in April of the freshman year. Mid-year freshmen apply at the end of their first spring semester in the college. Students should contact the Academic Advising Center, 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 Architec-
ture, 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 Dual-Degree 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 five years of financial aid. For further information contact Dean Saraydar, Arts and Sciences Admissions, 172 Goldwin Smith Hall.

Double Registration with Professional Schools
Registration in the senior year of the College of Arts and Sciences and the first year of Comell Law School, Cornell Medical College, or the Johnson Graduate School of Management, is possible. A few exceptionally wellprepared 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.
Students with eight or fewer credits to complete may apply to enter the Master's of Engineering program during the eighth semester; dual-degree students may enter this program no earlier than the ninth semester.
Students interested in the joint program with the Law School or the Graduate School of Management, or the Master's of Engineering program should see the dean of seniors, Academic Advising Center, 55 Goldwin Smith Hall.
Students registering simultaneously in the college and in the Cornell Medical College receive the Bachelor of Arts degree after the first year of medical studies and the Doctor of Medicine degree after the remaining three years of medical college are completed. Interested students should contact the health careers coordinator, 203 Barnes Hall.

Double-registered students must, of course, complete all requirements for the A.B. degree, including 100 credits in College of Arts and Sciences courses.

Teacher Education In Science and Mathematics
Students at Comell may pursue teaching credentials in biology, chemistry, earth science, general science, mathematics, and physics. Teacher Education in Science and Mathematics (TESM) is a university program jointly conducted by the departments of education and mathematics. Although TESM offers options for undergraduate and graduate study, most students enroll in a five-year program, which combines an undergraduate major in mathematics or one of the sciences with a one-year Master of Arts in Teaching degree (MAT). Students from any college at Cornell are eligible to apply to the program as undergraduates, usually during their sophomore year.
For more information, contact the TESM student support specialist at 255-9255 or the program coordinator, D. Trumbull, 255-3108.

## Special-Interest Options

The following options do not alter the college's requirements but enable students to pursue special interests within the usual programs.

## Informal Minors

Some students organize electives within a discipline or department. Such informal minors can be developed with the help of the deparmental directors of undergraduate studies, but are not noted on the transcript.

## Concentrations

Interdisciplinary concentrations, described in the pages following the descriptions of the departments and their curricula, provide structures for organizing electives. Completed concentrations are noted on the transcript.

## 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 program of study and agree to provide continuing supervision of the work. Students must prepare a proposal for independent study (proposal forms are available in the Academic Advising Center, 55 Goldwin Smith Hall). In one semester students may earn up to six credits with one instructor or up to eight credits with more than one instructor.

## Undergraduate Research Program

An excellent way to benefit from being an undergraduate at a research university and at Cornell in particular is to become an apprentice in on-going 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 can test their interest in pursuing a research career. Sometimes they publish their work.
The Undergraduate Research Program gathers information about research opportunities in most disciplines of the liberal arts and sciences, guides students in finding further opportunities-both on campus and elsewhere, and both during the academic year and during the summer-and helps students prepare for research and present themselves as candidates for apprenticeships. Other students locate research opportunities independently through faculty whose courses they have taken, through their major departments, or through published materials.
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.

Students interested in this program should see Dean Williams, Academic Advising Center, 55 Goldwin Smith Hall.

## Language Study

More than forty languages are taught in the College of Arts and Sciences; some of them are taught only at Cornell. A full range of language, literature, and cultural courses are available in most of the major ancient and
modern languages through the joint efforts of the Departments of Linguistics and Modern Languages and the departments that specialize in literary and cultural study: the Africana Studies and Research Center and the departments of Asian Studies, Classics, German Studies, Near Eastern Studies, Romance Studies, and Russian Literature. Semi-intensive courses afford students the option of accelerating the development of language skills.

## FALCON (Full-Year Asian Ianguage

Concentration). FALCON allows students who are interested in the Far East to study Chinese, Indonesian, 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 here to pursue rapid and thorough beginning studies on campus with the objective of studying abroad later-in China, Japan, or Southeast Asia.

## Language House Program

A complement to classroom cultural and linguistic instruction, the Language House Program combines residential and academic opportunities for developing and practicing conversational skills in French, German, Italian, Japanese, Mandarin Chinese, Russian, and Spanish. It helps prepare students who plan to study abroad and helps returning students share their cultural experiences while further increasing their language skills. Students interested in this program should see Academic Administrator Evett, 136 Goldwin Smith Hall.

## Prelaw Study

Law schools neither require nor prefer any particular program of study; they do seek students with sound training in the liberal arts and sciences. It is important that students plan a program in which they are interested and do well. Beyond that, students are advised to take courses that will develop their powers of precise, analytical thinking and proficiency in writing and speaking.
The college offers a concentration in law and society. Students should work toward completion of this concentration because they find it interesting, not because they believe it will convince law schools of their interest.
The adviser for students in the College of Arts and Sciences who are applying to law school is Dean Cox, Arts and Sciences Admissions, 172 Goldwin Smith Hall.

## Premedical Study

The breadth and depth afforded by a liberal arts education are invaluable for people who plan medical careers, whether they intend to practice or go into research. Such training has a profound effect on the doctor's 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.
The adviser for students in the College of Arts and Sciences who are planning careers in
medicine is Dean Turner, Academic Advising Center, 55 Goldwin Smith Hall.

## 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.

## Study Abroad

All students planning to study abroad apply through Cornell Abroad; please see the Cornell Abroad program description in the introductory section of Courses of Study.
Each year about 200 undergraduates in Arts and Sciences include semester- or year-long study abroad as part of their formal undergraduate education. Ideally, study abroad builds upon a broad liberal arts background in the early semesters: area studies, language training, and preparation in the proposed field of study are all essential.
The college encourages wherever possible study at foreign institutions alongside their degree candidates rather than study in selfcontained programs that offer courses specially designed for foreigners. The primary goals of this educational immersion are to learn firsthand the modes of inquiry, methods of analysis, and educational values of higher education offered to students of another country and to involve students in social relationships with peers who may hold a new and unexpected range of social attitudes.

Many students go abroad to pursue work in their majors. Focused academic work in an appropriate institution abroad can prepare students for advanced study or honors work in the final semesters back in Ithaca.
The college advocates study abroad that enables students to become competent enough in another language to experience daily life, develop social relationships, and accomplish formal course work in that language. Students who intend to study abroad in a country where the host language is not English must demonstrate a serious commitment to learning the language through course work before studying abroad. At least one area studies course or one course in the history, culture, economics, politics, or social relations of the country of destination must be part of every student's preparation for study abroad.
Students planning to study abroad need solid academic credentials to do so productively and successfully. The college requires a minimum overall GPA of 3.0 for all Cornell course work and good academic standing in the semester immediately before going abroad.
Study abroad is possible during the sophomore and junior years or during the first semester of the senior year. Study abroad in the final semester is rarely approved. Important steps to prepare for study abroad include

- substantial progress with college distribution requirements;
- admission to a major and a faculty adviser in the major;
- clear academic agenda for study abroad;
- appropriate study of the country or region of destination, especially language study.
Study abroad can earn up to 15 liberal arts and sciences credits per semester of full-time course work as long as the curriculum abroad is consistent with that of the college. Courses that fall outside the scope of the liberal arts and sciences may earn non-Arts credits. Students must carry a full course-load as defined by the host institution. Students may spend up to two semesters abroad. Only those with compelling academic reasons may study in more than one location over two semesters. The college does not approve study abroad that tours more than one country or that is more touristic than scholarly in content and structure. Students must continue study of the host language while abroad. Only in exceptional circumstances will the college approve programs which, in nonEnglish speaking countries, provide no language training.
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, however, become part of the Cornell GPA.
Students who transfer to Cornell must complete a minimum of four semesters of residence on campus in Ithaca and may not study abroad during one of those four semesters.

Applications to study abroad must have the support of a faculty adviser in the major and the approval of Dean Terrell in the Academic Advising Center, 55 Goldwin Smith. Although students investigate options for study abroad and submit final applications through the Cornell Abroad office, Arts and Sciences applicants submit to the college an essay describing the academic rationale for study abroad and an outline of prospective courses to be taken.

## 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 New York State, Central America, Greece, and Italy. Students should contact the Archaeology Program for information about the sites currently available.

## Marine Sclence

Shoals Marine Laboratory is a seasonal field station that offers a variety of courses and experiences designed to introduce undergraduates to the marine sciences. The laboratory is located on Appledore Island, six miles off the Maine/New Hampshire coasts. Students should contact the Division of Biological Sciences for further information.

## Cornell-In-Washington

The Cornell-in-Washington program offers students from all colleges within the university an opportunity to earn full academic credit for a semester in Washington, D.C. Students take courses from Cornell faculty, 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 non-governmental 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. Potential externships are arranged through, and approved by, the Cornell-in-Washington program. For further information, see p. 19 or inquire at 471 Hollister Hall, 255-4090. Seniors who wish to study in Washington during their final semester must petition the college for permission to do so; they should first consult with the dean of seniors, Academic Advising Center, 55 Goldwin Smith Hall, 255-5004.

## Fleldwork

Sometimes it is appropriate for students to include fieldwork as part of their major. A three-member faculty committee helps the student plan the project, arranges for ongoing supervision, and evaluates the project at the end of the term. Fieldwork almost always involves writing a long paper or several short ones, as well as practical experience. All proposals for fieldwork must be presented in advance to the Committee on Academic Records for approval. A maximum of 15 credits in fieldwork may be earned. For further information students should contact an advising dean in the Academic Advising Center, 55 Goldwin Smith Hall or the Office of Admissions, 172 Goldwin Smith Hall.

## ADVISING

The following advisers and offices provide academic advising or information on college procedures and regulations.

## Faculty Advisers

All new students are assigned a faculty adviser. The adviser helps students plan programs of study and advises them about ways to achieve their academic goals. Advisers 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 advisers recognize problems early.
Advisers and new advisees meet first during orientation week to discuss course selection. New students are encouraged to see their advisers again early in the term, before it is too late to drop courses, to discuss their academic program and to become better acquainted. Advisers and advisees meet at least once each semester to discuss courses for the following term and whenever advisees wish to petition for an exception to college rules.

## Student Advisers

Each new student is supplied with a list of student advisers who can provide information about the college's requirements, courses, and instructors and about life at Cornell.

## Major Advisers

After acceptance into a major, students are assigned a major adviser, a faculty member in the major department, with whom they make many of their most important academic decisions at Cornell. The adviser eventually certifies the completion of the major. The major adviser should be consulted by the student about all academic plans, including
honors, study abroad, acceleration, and graduate study. The adviser's support is especially important if a student petitions for an exception to the requirements for the degree.

## Academic Services

The Academic Advising Center, 55 Goldwin Smith Hall, 255-5004 and the Office of Admissions, 172 Goldwin Smith Hall, 255-4833, offer resources for faculty and student advisers and for students themselves and their parents. Advising deans are available to help students define their academic and career goals and to help with special academic options and exceptions to college rules:
Lynne S. Abel, dean of undergraduate education, independent majors and college scholars-255-5004
Thak Chaloemtiarana, dean of seniors-255-4833
Gerry Cox, dean of juniors, pre-law adviser and coordinator of outside scholarships-255-4833
Michele Crane, associate registrar-255-5051
Patricia M. Dougherty, college registrar-255-5051
Daniel H. Evett, academic administrator, Language House-255-6543
Ken Gabard, dean of freshmen (fall matriculants) -255-5004
Lawrence Lamphere, dean of internal transfer students-255-4833
Stephen Saraydar, dean of freshmen (spring matriculants) and dual-degree students-255-4833
Maria S. Terrell, dean of sophomores and adviser for Cornell Abroad Students-255-5004
Janice Turner, dean of minority programs and premedical adviser-255-5004
Peggy Walbridge, dean of transfer students and students with disabilities-255-4833

Marilyn Williams, dean of undergraduate research and scholastic development and Career Center liaison-255-5004

## REGISTRATION AND COURSE SCHEDULING

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

Students enroll in courses through the Academic Advising Center, 55 Goldwin Smith Hall. Any student not officially enrolled in a schedule of courses by the end of the third week of classes may be withdrawn from the college (see below under "Withdrawals").

## New Students

During orientation week, the dean of freshmen and the dean of transfer students conduct briefings on course scheduling for new students.

## Continuing Students

Continuing students are expected pre-register, that is, to select and schedule up to five courses in advance, during the semester prior
to the one in which they will be taken. Students who fail to sign into courses during the designated period must wait until the beginning of the semester; they may well have difficulty securing places in those they most want. Before signing into courses, students should make appointments with their faculty advisers to plan their programs and discuss long-range goals. All students are welcome to discuss programs and plans with an advising dean in the Academic Advising Center, 55 Goldwin Smith Hall, or the Office of Admissions, 172 Goldwin Smith Hall.
At the beginning of each term, students should check their schedules and records on "Just the Facts."

## Limits on 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 should average 15 credits per semester. (AP credit and/or summer credits may reduce these numbers.) At a minimum, students must carry twelve credits per semester; if for compelling personal or academic reasons students need to carry fewer than twelve credits, they should consult their faculty adviser and an advising dean. Permission is by petition only; it is relatively freely given for first-semester students. Completion of fewer than twelve credits without permission results in unsatisfactory academic standing. First-term freshmen must petition to register for more than eighteen credits; other students may register for more than eighteen credits a term only if their previous term's average was a 3.0 or higher. No more than twenty-two credits may be taken in a regular semester without permission of the Committee on Academic Records. Students who fail to receive approval for excess credits from the committee run the risk of having only 18 credits for the semester count toward the degree.

## Attendance

Attendance in classes is a matter between students and their instructors. If a student cannot attend classes because of illness or family crisis, the Academic Advising Center will notify instructors when requested to do so, but students must arrange to make up examinations or other work with their instructors. 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 contact the professor in advance. Alternative arrangements are at the discretion of the instructor.

## Adding and Droppling Courses

After course enrollment (pre-registration), students may not adjust their schedules until the new term begins. During the first three weeks of the semester, students may change courses without petitioning. Add/drop forms are available in the Academic Advising Center, 55 Goldwin Smith Hall.
After the third week of classes, students must petition to add courses. They may drop courses up to the seventh week. Between the seventh and twelfth weeks students may petition to withdraw from courses, if (1) the
instructor approves; (2) the adviser approves, (3) no issue of academic integrity is at stake and (4) an advising dean approves. Students must meet with an advising dean to obtain petition forms.
Courses dropped after the seventh week will be noted on the transcript by a "W" where the grade would normally appear. No petitions to withdraw from courses may be submitted after the end of the twelfth week in the term. Deadlines for short courses will be adjusted according to the length of the courses. After the midpoint of a short course, students who wish to add or drop the course must petition to do so.

## Leaves of Absence

Taking time off from college to think about goals and progress, to gain additional experiences or funds, or just to take a break from studying is sometimes useful. Those in good standing who take a leave before the beginning of any semester or by the end of the seventh week of the semester are welcome to register in the college the following semester. Five years is the maximum length of time a student may be on leave and return without special permission. Leaves of absence are of four types.

1) Personal leaves impose no conditions concerning reentering the college except for the five-year limit. Readmission is automatic upon written request made at least one month before the beginning of the term in which the student wishes to return.
2) Medical leaves, usually for at least six months, are granted by the college only upon recommendation by a physician from Gannett Health Center. In some cases, students must satisfy the Gannett Health Center that the condition requiring the leave has been corrected before they may return. The student's academic standing will also be subject to review at the time of the leave and on return.
3) Conditional leaves may be granted by an advising dean if the student is not in good standing or, in unusual circumstances, after the seventh week of the term. Normally students may not return from conditional leaves for at least two terms or until specific and individual conditions, such as completing unfinished work, have been met.
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 the section "Academic Actions."
Any student who wishes to take a leave of absence should consult an advising dean in the Academic Advising Center, 55 Goldwin Smith or the Office of Admissions, 172 Goldwin Smith Hall. On readmission, the student's graduation date will be recalculated according to the number of terms completed,
Students who take courses elsewhere while on leave may petition to have credits transferred and applied toward the 120 credits needed for graduation, but not toward the 100 credits required in the college. Approval depends on acceptable grades and the judgment of the relevant departments about the quality of the courses. 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. See the section "Residence."

## Withdrawals

A withdrawal is a voluntary, permanent severance from the university and from status as a degree candidate. If a student wants to withdraw after registering for the term, the withdrawal must be requested before the end of the seventh week of classes to avoid grades of "W" on the transcript. A notation of "W" will appear on the transcript for any course dropped after the seventh week. Students seeking readmission after withdrawing from the college must petition the Committee on Academic Records. If a student fails to register for a term and does not request a leave, the student will be withdrawn from the college for failure to register.

## Transferring within Cornell (Internal Transfer)

Internal transfer from one college or school at Cornell into another is attractive for many students whose intellectual interests change. Students who want 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 referred to the Internal Transfer Division. During the term immediately preceding transfer into the College of Arts and Sciences, students should complete at least 12 credits of courses in the College of Arts and Sciences with a B average and without any grades of Incomplete, any S-U grades (unless only S-U grades are offered for that particular course), or any grades 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. Interested students should see Dean Gabard, Arts and Sciences Admissions, 172 Goldwin Smith Hall.

## ACADEMIC STANDING

Students are in good academic standing for the term if they successfully complete at least 12 credits by the end of the term and receive 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 acceptable progress toward satisfying requirements for the degree, and to earn grades of C (not C-) or better in at least 100 of the total credits for the degree. Courses listed above under "Noncredit courses" do not count towards good academic standing.

## Academic Actlons

Students who are not in good academic standing will be considered for academic action by the Committee on Academic Records or by one of the deans of the college.

## Warning

Any student who fails to maintain good standing will, at a minimum, be warned. The warning may be given by an advising dean or by the Committee on Academic Records. A warning is posted on a student's unofficial college transcript 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 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 describe what they did on leave and how they resolved their problems and submit a plan for completing the degree. In some cases the students will be required to fumish evidence that they are ready to return before being allowed to reregister in the college. Students who request to return in less than a year must present to the committee exceptionally strong evidence of their readiness to return.
"Required leave" and the date are posted on the student's transcript.

## Required withdrawal

The Committee on Academic Records may dismiss a student from the college because of a highly unsatisfactory record for one term or for failure to make satisfactory overall progress in grades, credits, or the requirements of the major. This action expels the student permanently from the college. "Required withdrawal" and the date are posted on the student's transcript.
Students being reviewed for academic action are urged to present evidence that will help explain their poor academic performance. Students may appeal a decision or action of the committee if they have new relevant information to present.

## Forgery on Forms

Forging signatures or credentials on college forms is an academic offense; sometimes it constitutes academic fraud. In all cases of forgery on academic forms, the effect of the forged documents shall be negated. Students may then petition properly to do whatever they attempted to do improperly. Such incidents will be recorded in the Academic Integrity Hearing Board confidential file for forgeries. If a student forges more than once or if the forgery would advance the student's academic standing unfairly or fraudulently or if, for any other reason, the situation requires some response in addition to the uniform penalty, the Academic Integrity Hearing Board might make a different recommendation, such as a notation on the student's transcript, suspension, or dismissal.

## GRADES

## Letter Grades

See Grading Guidelines, page 12.

## 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. It is not meant to reduce the amount of work a student completes in a course or the amount of effort a student devotes to a course. Students must select
their grading option during the first three weeks of the term (virtually no exceptions to this deadline are permitted ), although the S-U option is contingent upon the instructor's willingness to assign such grades. 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 S-U; in that case, the final grade appears on the transcript as SX or UX.
Courses that will count toward satisfaction of major requirements should not be taken for an S or U grade unless the department grants permission. Students may elect the S-U option in courses used to satisfy the distribution, language, and elective requirements, provided that such courses do not also count toward major requirements or serve as prerequisites for admission to the major. Students are advised to use the S-U option sparingly if they intend to apply to graduate school or for transfer to another college. There is no limit on the number of courses each term 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.

## Grades of Incomplete

A grade of incomplete signifies that a course was not completed before the end of the term for reasons beyond the student's control that are acceptable to the instructor. Students must have substantial (more than $50 \%$ ) equity in the course; that is, they must be able to complete the remaining work without further registration and must 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 earned if the work is not completed by that date. When a final grade is reported, it is recorded on the official transcript with an asterisk and a footnote explaining that this grade was formerly an incomplete.
Students must resolve any incompletes with their instructors before graduation.

## I Grades

R designates two-semester or year-long courses. The R is recorded on the student's transcript at the end of the first term. The grade recorded at the end of the second term evaluates the student's level of performance in the course for the entire year. The total of credits earned for the whole course is listed each term.

## Grade Reports

Students should periodically check their courses and grades on "Just the Facts" to be sure that they are recorded correctly.

## Class Rank

The college does not compute class rank.

## GRADUATION

## Application to Graduate

In the first semester of their senior year, students must complete an application to graduate so that the college can check each student's plan for fulfilling college requirements. This process 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. Meeting graduation requirements is the student's responsibility; problems that are discovered, even late in the final term, must be resolved by the student before the degree can be granted.

## 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 in the following May.

## The Degree

The College of Arts and Sciences grants only one degree, 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."

## Honors

## Dean's List

Inclusion on the Dean's List for academic excellence is an honor bestowed by the dean of the college. The criteria are subject to change from semester to semester and are available in the Academic Advising Center, 55 Goldwin Smith Hall.

## Bachelor of Arts with Honors

Almost all departments offer honors programs for students who have demonstrated exceptional ability in the major and who have completed original independent research. The honors programs are described by individual departments in the following sections. The degree of Bachelor of Arts with honors will be conferred upon students who, in addition to having completed the requirements for the degree of Bachelor of Arts, have satisfactorily completed the honors program in their major and have been recommended for honors by their major department, the Independent Major Program, or the College Scholar Program. Concentrations 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 Comell;
2) ranked 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) maintained good academic standing, including completing a full schedule of at least 12 credits, in each of their last four terms; and
6) have no Incompletes remaining on their records.

## CALENDAR SUPPLEMENT

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

|  | Fall $1997$ | Spring <br> 1998 |
| :---: | :---: | :---: |
| Last day for adding courses without petition. | Sept. 19 | Feb. 6 |
| Last day for changing grade option to S-U or letter. | Sept. 19 | Feb. 6 |
| First deadline for submitting independent major requests. Go to Academic Advising Center, 55 Goldwin Smith Hall, for further information. | Sept. 29 | Feb. 23 |
| Last day for dropping courses without petition. | Oct. 17 | March 6 |
| Last day to petition to withdraw from a course. | Nov. 21 | April 17 |
| Second deadline for submitting independent major requests. Go to Academic Advising Center, 55 Goldwin Smith Hall, for further information. | Dec. 1 | April 6 |
| Deadline for requesting internal transfer to the College of Arts and Sciences for the following term. | Dec. 5 | May 1 |
| Deadline for applying to the College Scholar Program. |  | April 29 |
| Deadline for applying to study abroad. | See Corn 474 Uris | Abroad Il |
| Course enrollment (pre-registration) for the following term. | TBA | TBA |

## ADMINISTRATION

Phillip Lewis, dean-255-4146
Ronald Hoy, associate dean-255-4147
Biddy Martin, associate dean-255-4147
Lynne S. Abel, associate dean of undergraduate education-255-3386
Thak Chaloemtiarana, associate dean and director of admissions-255-7061

Jane V. Pedersen, director of administration and finance--255-7507

## Courses and Departments

## SPECIAL PROGRAMS AND AREAS OF CONCENTRATION

The college offers a number of interdisciplinary programs described in the section following the departmental program descriptions.

## AFRICANA STUDIES MAJOR

See "Special Programs and Interdisciplinary Studies."

## AKKADIAN

See Department of Near Eastern Studies.

## AMERICAN STUDIES

See "Special Programs and Interdisciplinary Studies."

## ANTHROPOLOGY

P. S. Sangren, chair; M. Small, director of undergraduate studies; R. Ascher, T. Bestor, J. Borneman, J. Fajans, D. Greenwood, J. Henderson, D. Holmberg, B. J. Isbell,
A. T. Kirsch, J. Krier, B. Lambert, K. March,
V. Munasinghe, V. Santiago-Irizarry, J. Siegel, T. Volman. Emeritus: 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, utilizes 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, and it also serves as a major that, when well designed by the student and their adviser, prepares students for a wide range of professional careers, e.g., law, medicine, foreign service, social services, and business, among others.
Courses for non-majors: Anthropology welcomes non-majors into many of its courses. Unless prerequisites are explicitly stated, 200- and 300 -level courses do not have
formal prerequisites and can be taken by students without prior experience in anthropology. Such students are welcome in these upper-level courses. For additional information to assist non-majors and students from other colleges in selecting anthropology courses, see the Anthropology Department web page (hitp://falcon.arts.comell.edu/ ~anthro/).

## The Major

The range and complexity of the field of anthropology requires active collaboration between the student and a faculty adviser in developing an individualized program of study. To enter the anthropology major, a student must pass one course in each of the two broad introductory areas of anthropology: "Nature and Culture" and "Culture and History" listed below under the heading "Introductory Courses." Provisional acceptance into the major is possible before completing these courses, with permission from the director of undergraduate studies in anthropology. When students first enter the major, they work with their adviser to develop a preliminary program of study built around their own interests and goals.
In the first semester of the junior year, the student and adviser formalize a concentration reflecting the special interests of the student and select a set of courses from those listed below as a program of study. Once the concentration is developed, they submit the plan to the Anthropology Curriculum Committee for comment and advice. Examples of possible concentrations are Latin American ethnohistory and contemporary identity politics, nature and culture in human history, prehistory of the Americas, anthropology and literature, anthropology and social change, ethnomusicology, anthropology and the arts, etc. The plan must include a minimum of eight courses in anthropology (including an Anthropology Senior Seminar) totaling 32 credit hours. When warranted, the adviser is free to approve up to two cognate courses from other departments totaling up to eight credit hours to fill this eight-course requirement. Students may revise their program of study in consultation with their adviser as they move through their studies. Our goal is to provide a close and supportive advising relationship and a strong and coherent structure for the student's major
In their senior year, anthropology majors are required to take a Senior Seminar. These seminars meet weekly, are discussion-based, and are limited to anthropology majors. A professor serves as the coordinator for the group. Collaboratively the students and the professor plan the semester to reflect the concentrations and/or research interests of the participating students. Thus, the Senior
Seminar serves as a space where students develop their own synthesis of their undergraduate work in anthropology.

## 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 and has designated Professor Viranjini Munasinghe as the Anthropology Study Abroad adviser.
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 Deparment of Anthropology.
Other antropologically-relevant study abroad options, using existing Comell Abroad and off-campus options, can be worked out in consultation with the major adviser, the Anthropology Study Abroad adviser, and Cornell Abroad.

## Honors

Honors in anthropology are awarded for excellence in the major, which includes overall grade point average and completion of an honors thesis. Anthropology majors interested in the Honors Program should consult the chair of the Honors Committee at the end of their junior year. To qualify for entrance into the Honors Program, a student must have at least a 3.0 GPA overall and 3.3 GPA in the major, and the consent of a faculty member in anthropology who will guide the honors thesis. After applying to the program and being admitted as a candidate by the Honors Committee, the student will conduct research and write a thesis. This thesis will be evaluated by the faculty research adviser and two other faculty members. Honors (i.e., cum laude, magna cum laude, or summa cum laude) are awarded based on the quality of the thesis and the student's overall record. Honors candidates must start this process by consulting their major adviser about the honors program early in their junior year.
While working on the thesis during the senior year, students should make use of the Senior Seminar as a place to develop the ideas for their thesis. In addition, students may enroll in Anthropology 483 (fall or spring) "Honors Thesis Research." To complete the thesis, students must enroll in 491 (fall or spring) "Honors Thesis Write-up." Only Anthropology 483 may count toward hours for completion of the anthropology major requirements. The credit hours for these courses are variable, grades for these courses are given by the faculty research adviser, and they are based on performance during thesis research and writing.
Any honors candidate whose research directly involves working with human subjects must receive approval for the project from the Comell University Committee on Human Subjects.

## 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 (McGraw 303) 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 Anthropology 497, Topics in Anthropology, a course open to a limited number of juniors and seniors who have obtained consent and supervision of a faculty member. Undergraduates should note that many 600 -level courses are open to them by consent of the instructor.
Colloquia: The Department of Anthropology holds colloquia almost every week of the semester on Friday at 3:30 in McGraw 215. Faculty members from Comell 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, pick up a copy of the major brochure (which includes descriptions of the courses not offered during 1997-98), or visit the Anthropology Department web page (http://falcon.arts.cornell.edu/~anthro/).

## I. Introductory Courses

## A. Nature and Culture:

## ANTHR 101 Introduction to Anthropology: Biologlcal Perspectives on the Evolution of Humankind \# <br> Fall. 3 credits. 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. Fee for lab usage and maintenance, $\$ 5$.
## ANTHR 103 The Scope of Anthropology

Spring. 1 credit. Prerequisite: concurrent enrollment in or prior completion of Anthropology 101 or Anthropology 102. S-U grades only. Staff.
This course is intended for majors or prospective majors in anthropology. 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 203 Early People: The

 Archaeologlcal and Fossill Record (also Archaeology 203) "Spring. 3 credits. Not offered 1997-98.]

## ANTHR 211 Nature and Culture

Spring. 4 credits. Staff.
Cultural anthropology, because it encompasses the comparative study of humankind in society, provides a unique vantage on the nature of humanity. One of the focal questions of the discipline is the relationship between the physical/biological and symbolic/ moral worlds in which we live. This inquiry places anthropology squarely at the center of social theory, as all social theorists and political ideologies are founded on premises regarding human nature. Through study of a variety of issues and debates (e.g., "sociobiology, "the origin and meaning of the incest tabu), this course examines a variety of past
and current attempts to explain the relationships between nature and culture in human life.

【ANTHR 275 Human Blology and Evolution (also Blological Scionces 275 and Nutritional Sclences 275)
Fall. 3 credits. Not offered 1997-98]

## B. Culture and History:

## ARKEO 100 Introduction to Archaeology \#

Spring. 3 credits. Staff. A broad introduction to archaeology-the study of material remains to answer questions about the human past. Case studies illustrate current methods and interpretive frameworks. Guest lectures by members of the Cornell Archaeology Program are an integral part of the course

## ANTHR 102 Introduction to

 Anthropology: The Comparison of CulturesSpring. 3 credits. J. Krier. 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 103 The Scope of Anthropology
Spring. 1 credit. Prerequisite: concurrent enrollment in or prior completion of Anthropology 101 or Anthropology 102.
S-U grades only. Staff.
For course description, see section I.A.

## ANTHR 200 Cultural Diversity and Contemporary Issues

Fall. 3 credits. J. Bomeman.
This course will introduce students to the meaning and significance of forms of cultural diversity for understanding 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.

## ANTHR 202 Interpretlve Archaeology

(also Archaeology 202) \#
Fall. 3 credits. Limited to 50. T. Volman. An introduction to the analysis and interpretation of archaeological data, especially stone and ceramic artifacts, and related contextual data, such as the remains of plants and
animals. Emphasis is on the use of archaeological data to answer questions about ancient human behaviors, lifeways, and culture change. Topics include the formation of the archaeological record, the characterization and classification of artifacts, and the analysis of artifact distributions through space and over time. Section meetings include demonstrations, visits to campus facilities, and analyses of artifacts from Cornell archaeological collections.
[ANTHR 204 Ancient Clvilizations (also Archaeology 204) ©융
Fall. 3 credits. Not offered 1997-98.]

## II. Honors and Independent Study

ANTHR 483 Honors Thesis Research Fall or spring. Credit and hours to be arranged. Prerequisite: consent of the Honors Committee. Staff.
Independent work under the close guidance of a faculty member selected by the student.

## ANTHR 491 Honors Thesis Write-up

Fall or spring. Credit and hours to be arranged. Staff.

ANTHR 497 Toples in Anthropology Fall or spring. Credit and hours to be arranged. Intended for undergraduate students only. 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.

## III. Anthropology Major Senior Seminars

In the senior year, anthropology majors are required to take a Senior Seminar. These seminars meet weekly, are discussion-based, and are limited to anthropology majors. A professor serves as the coordinator for the group. Collaboratively the students and the professor plan the semester to reflect the concentrations and/or research interests of the participating students. Thus the Senior Seminar serves as a space where students develop their own synthesis of their undergraduate work in anthropology

## ANTHR 489 Anthropology Senior

 SeminarFall or spring. 4 credits. Limited to 15 students. Prerequisite: Anthropology majors only. Fall: V. Munasinghe; spring, M. Small.

This course is a synthesis of each student's undergraduate concentration in the major. In collaboration, the instructor and the students will develop a series of topics representing the interests of the students. Students will be required to read extensively and present topics.

## IV. Nature and Culture

Thinking about nature and culture and their interaction is central to contemporary anthropology. The courses in this section present a biological and evolutionary perspective on behavior, focus on the interplay between nature and culture, and discuss the controversies surrounding these relationships between these dimensions of human life.
[ANTHR 208 The Evolution of Human Mating
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 344 Male and Female in Chinese Culture and Society (also Women's Studies 344) 항
Fall. 4 credits. Not offered 1997-98.]

## [ANTHR 370 Environmental Archaeology

 (also Anthropology 670 and Archaeology 370/670)Fall. 4 credits. Not offered 1997-98.]
ANTHR 371 Human Paleontology (also Biological Sciences 371) \#
Fall. 4 credits. Prerequisite: one year of introductory biology or Anthropology 101 or permission of instructor. Offered alternate years. K. Kennedy
A broad survey of the fossil evidence for human evolution with special attention to skeletal and dental anatomy, geological contexts, paleoecology, dating methods, archaeological associations, and current theories of human origins and physical diversity.

## [ANTHR 390 Primate Behavior and Ecology <br> Spring. 4 credits. Not offered 1997-98.]

ANTHR 409 Approaches to Archaeology (also Anthropology 609 and Archaeology 409/609)
Spring. 4 credits. Prerequisite: Permission of instructor(s). J. Henderson, T. Volman. An exploration of the concepts that have shaped modern archaeology. The course briefly examines the history of theoretical orientations in archaeology, then considers the variety of perspectives and interpretive frameworks that guide present-day investigations. Case studies illustrate the implications of the nature of the archaeological record for reconstructing subsistence and economic systems, trade, social and political organization, demography, and ideology. An undergraduate seminar especially recommended for undergraduate majors and graduate archaeologists but open to anyone with a serious interest in archaeology.

## ANTHR 475 Evolutionary Theory

 and Human Behavior (also Anthropology 675)Spring. 4 credits. M. Small.
One of the major recent controversies in anthropology focuses on the role of evolution in the behavior of modem humans. Some scholars feel that ever since our species became sentient, and developed ways to override or bypass nature, the rules of Natural Selection were suspended. Others are convinced that buried deep within our consciousness are strategies, thoughts, and desires that were molded long ago but still motivate our lives. This seminar will examine the role of evolution in modern human behavior. First, we will read the evolutionary theory upon which current hypotheses are based. Second, the class will read, discuss, and criticize the most recent literature on the evolution of human behavior. We will ask several questions: Is current human behavior molded by the rules of Natural Selection? Do the modern theorists present a convincing argument? How would their predictions best be tested? What contribution does this work make (or not make) to the larger field of anthropology?
[ANTHR 490 Primates and Evolution Spring. Not offered 1997-98.]

## V. Human History and Archeology

Archaeology tells the story of human origins, the invention of farming and settled life, the rise of complex social institutions and technologies, and the worldviews of the past, while also teaching field and laboratory methods for uncovering the human past.

## ANTHR 317 Stone Age Archaeology (also

 Archaeology 317)Fall. 4 credits. 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 355 Ancient Mexico and Central America (also Archaeology 355) ©\# Spring. 4 credits. Not offered 1997-98.]
[ANTHR 370 Environmental Archaeology (also Anthropology 670 and Archaeology 370/670)
Fall. 4 credits. Not offered 1997-98.]
ANTHR 371 Human Paleontology (also Biological Sciences 371) \#
Fall. 4 credits. Prerequisite: One year of introductory biology or Anthropology 101 or permission of instructor. Offered alternate years. K. Kennedy.
For course description, see section IV.

## [ANTHR 405 Archaeologlcal Research

 Design (also Anthropology 605 and Archaeology 405/605)Spring. 4 credits. Not offered 1997-98.]
ANTHR 409 Approaches to Archaeology (also Anthropology 609 and Archaeology 409/609)
Spring. 4 credits. Prerequisite: Permission of instructor(s). J. Henderson, T. Volman. For course description, see section IV.

## [ANTHR 456 Mesoamerican Religlon,

Science, and History © \#
Fall. 4 credits. Not offered 1997-98.]
ANTHR 458 Archaeological Analysls (also Anthropology 658 and Archaeology 458/658)
Spring. 4 credits. Limited to 15 students. Prerequisite: One course in archaeology or permission of instructor. J. Henderson. An introduction to methods of recording, processing, and analyzing archaeological data. Topics include recording of excavation and survey data in the field; processing artifacts in the laboratory, storing and retrieving data; and basic methods of describing, tabulating, analyzing, and interpreting artifacts (mainly ceramic vessels), stratigraphy, and spatial distributions. Intended for those with some understanding of the uses to which archaeological data are put in regional synthesis and interpretation; previous field experience is helpful.
[ANTHR 493 Seminar in Archaeology (also Archaeology 493) 휼
Fall. 4 credits. Not offered 1997-98.]

## ANTHR 494 Seminar In Archaeology: The Archaeology of Human Origins (also Archaeology 494) ©

Spring. 4 credits. T. Volman.
An exploration of the archaeological record associated with early modern and nearmodern humans as well as their non-modern 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-of-Africa" hypothesis of a recent, African origin for all modern humans?

## VI. Anthropological Thought and Method

As a form of inquiry, anthropology has a long and complex history and utilizes a wide variety of theories and methods. In this section, topics in the history of anthropological thought and a wide variety of anthropological approaches are presented, along with courses focused on the design of anthropological research projects.

## ANTHR 291 Filming Other Cultures (also Anthropology 691 and Theatre Arts 291/691) 웅

Spring. 3 credits. Limited to 20 students. Preference given to students who have taken either Anthropology 102 or Theatre Arts 274. Fee for film screening and maintenance, \$35. R. Ascher. Shortly after the first films were screened, their makers saw in motion pictures a promise for greater understanding among peoples. Was the promise fulfilled? In this discussion course, responses to this question are examined through the study of short, representative films and related readings. The discussions are framed and informed by ideas from anthropology and film studies. For example, we consider: aesthetics, ethics, and responsibility in filming and editing; connections between sound-or lack of it-and image; the implications of film as a product of Euroamerican culture; cultural assumptions in camera movements, film color, and film pace; indigenous people's presentations of themselves and Euroamerican representations of others; and the moving line that separates fiction from non-fiction films. For one meeting each week, two students, in cooperation with the instructor, are responsible for leading the discussion.

## [ANTHR 306 Ethnographic Description

Fall. 4 credits. Not offered 1997-98.]
ANTHR 362 Democratizing Society: Partlcipation, Action, and Research (also Anthropology 662)
Fall. 4 credits. D. J. Greenwood.
This course poses an alternative to distances, "objectivist" social science by reviewing some of the numerous approaches to socially engaged research. Among the approaches discussed are those centering on the pedagogy of liberation, feminism, the industrial democracy movement, and "Southern" participatory action research, action science, and participatory evaluation. There are no prerequisites and undergraduates are welcome.

## [ANTHR 400 The Craft of Anthropology: Ethnographic Field Methods <br> Fall. 4 credits. Not offered 1997-98.]

[ANTHR 405 Archaeology Research Design (also Anthropology 605 and Archaeology 405/605)
Spring. 4 credits. Not offered 1997-98.]

## ANTHR 412 Contemporary

 Anthropological TheorySpring. 4 credits. B. Lambert. A survey of the assumptions anthropologists make concerning the nature of society and culture and the explanations they have proposed for social behavior, values, belief systems, and ritual. Problems of social continuity and change will be addressed by way of theories of process, conflict, and transaction. Problems of cross-cultural understanding will be explored through interpretive and structural studies of symbolism, ritual, mythology, concepts of the person, and cultural logic. Examples will be drawn from Western and non-Western societies, past and present.

## ANTHR 420 Development of Anthropological Thought

Fall. 4 credits. Limited to 15.
A. T. Kirsch.

An examination of the history and development of anthropological theory and practice The course will focus on the differences and continuities among the various national and historical approaches that have come to be regarded as the schools of anthropology

## ANTHR 424 Anthropology Amongst the

 Disciplines ${ }^{9}$Fall. 4 credits. J. T. Siegel.
Anthropology is distinguished amongst the disciplines in depending on a notion of the not-yet conceprualized, the encounter with which is thought to provide an inassimilable element into thinking about culture and society. The course provides a history and assessment of this idea and illustrations of its embodiment, particularly in studies of ritual.

## [ANTHR 451 Anthropologlcal Boundaries

Fall. 4 credits. Not offered 1997-98.]

## [ANTHR 452 Portraits, Profiles, and Llfe Histories @ <br> Spring. 4 credits. Not offered 1997-98.]

## ANTHR 453 Visual Anthropology

Spring. 4 credits. Enrollment is limited by appropriate space for showing work. S-U grades only. Fee for film screening and maintenance, $\$ 20$. R. Ascher.
The expression of ideas about the human condition through original drawings, graphics, paintings, photographs, cinema, sculpture, and video that take person as subject. Writing can be combined with visual expression, as, for example, in concrete poetry or photographic essays. Projects must conform to two general guidelines: (1) the student must have prior knowledge of the medium chosen or concurrent course work in it, and (2) the project must be one that can be developed throughout the course and benefit from its particular setting. In the first half, the creative work of others is studied. For example, we read Spiegelman's MAUS and view films made by both anthropologists and the people whom they visit. The second half is devoted to hourlong progress reports and discussions of the work of people in the course.

ANTHR 458 Archaeological Analysis (also Anthropology 658 and Archaeology 458/658) ;
Spring. 4 credits. Limited to 15 students. Prerequisite: One course in archaeology or permission of instructor. J. Henderson.
For course description, see section V.
[ANTHR 474 Laboratory and Fleld Methods in Human Blology (also Blological Sciences 474)
Spring. 5 credits. Not offered 1997-98.]

## ANTHR 487 Fleld Research Abroad ©

Fall or spring. Credit to be arranged. Intended for undergraduate students only Staff.
Field research abroad as part of the CornellNepal Studies Program, the Cornell-Honduras Program, or other departmentally-approved programs. Topics are selected and project proposals prepared by students in consultation with faculty. Fieldwork typically involves extended research (usually 4-6 weeks) in a foreign setting with faculty supervision, culminating in a major paper or report.

## ANTHR 494 Seminar in Archaeology:

 The Archaeology of Human Origins (also Archaeology 494) ©"Spring. 4 credits. T. Volman.
For course description, see section V
[ANTHR 495 Classic Theorists Seminar Fall. 4 credits. Not offered 1997-98.]

## VII. Understanding Cultures

Anthropologists examine the diversity of human behaviors, social relarionships and structures, economies, political and legal orders, worldviews, logics, languages, symbols, myths, and religions among the many other means human beings invent to create and reproduce social life around the world. Anthropologists work from a holistic perspective to account for differences and similarities across cultures. Anthropologists also take small-scale societies and local sociocultural systems as the object of analysis. They collect data primarily through ethnographic fieldwork, that is, months or years of participating in and observing of the societies they study. Anthropologists see inherent linkages between the practical and the meaningful dimensions of human existence.
A. Anthropological Approaches to Economy, Society, Law, and Politics:
The courses below take as their starting point what are usually defined as the social, political, legal, and economic practices and structures of human life and show how they are shaped culturally and how they shape culture.
[ANTHR 217 Ethnicity, Identity, and the State
Spring. 4 credits. Not offered 1997-98.1
[ANTHR 305 Emotion, Gender, and Culture (also Women's Studies 305)
Spring. 4 credits. Not offered 1997-98.J

## ANTHR 313 Anthropology of the City ©

Spring. 4 credits. Staff.
An examination of the sociocultural structure and process in urban settings, with emphasis on the role of rural migrants, the relationship of urbanism to political and economic development, the role of voluntary associations, and the adjustment of family and
kinship groups to urban life. Asian, African, and Latin American urban centers are emphasized.

## ANTHR 321 Sex and Gender in CrossCultural Perspective (also Women's Studles 321) <br> Fall. 4 credits. Staff.

An introduction to the study of sex roles cross-culturally and to anthropological theories of sex and gender. The course examines various aspects of the place of the sexes in social, political, economic, ideological, and biological systems to emphasize the diversity in gender and sex-role definition around the world.

## ANTHR 323 Kinship and Soclal Organlzation ©

Spring. 4 credits. B. Lambert. Much of this course is a survey of forms of the family, descent groups, and marriage systems. The role of age and sex in the social structure is also considered. The last part of the course is devoted to a history of the British and American family and to its fate in utopian communities.

## [ANTHR 326 Economic Anthropology ©

 Fall. 4 credits. Not offered 1997-98.][ANTHR 328 Conflict, Dispute Resolution, and Law in Cultural Context ©
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 380 state, Natlon, and Everyday Life
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 426 Ideology and Social Reproduction
Spring. 4 credits. Not offered 1997-98.]

## ANTHR 460 Culture and Intermational

 OrderFall. 4 credits. J. Borneman.
This course focuses on the interplay of culture, understood in the broadest anthropological sense, with international order. We will examine how different models of linguistic categorization are replicated by and interact with one another at the level of culture and the international (or world) system. By bringing together research from different domains that tends to be seen as discrete, this seminar hopes to explore how an anthropological perspective can inform the study of international order, and conversely, how an awareness of transnational and transcultural processes can open up more fruitful areas of anthropological research.
[ANTHR 470 Anthropology, Theory, Polltics, Performance (also Government 470)
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 479 Ethnicity and Identity Politics: An Anthropological Perspectlve
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 481 Sex, Money, and Power: Topics In Kinship Theory
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 485 Mothers, Priests, Rebels, and Indlan Chiefs: Now Soclal Movements in Latin America (also Anthropology 685) ©
Fall. 4 credits. Not offered 1997-98.]
B. Interpretive Approaches in Cultural Anthropology:
These courses stress symbolic or textual approaches to human society. They take as their object of analysis structures of meaning in such diverse areas as performance and text, myth and religion, views of the self, gender, and the sociology of knowledge. These same topics arise in many of the area-focused courses as well (Section D), but take center stage in the following courses.
ANTHR 291 Filming Other Cultures (also Anthropology 691 and Theatre Arts 291/691)
Spring. 3 credits. Limited to twenty students. Preference given to students who have taken either Anthropology 102 or Theatre Arts 274. Fee for film screening and maintenance, $\$ 35$. R. Ascher.
For description, see section VI.
ANTHR 320 Myth, Ritual, and Symbol (also Rellglous Studles 320) 뭉
Spring. 4 credits. J. Fajans.
This course examines how systems of thought, symbolic forms, and ritual practice are formulated and expressed in primarily nonWestern societies. It focuses on anthropological interpretations of space, time, cosmology, myth, classificatory systems (such as color, totems, food, dress, kinship), taboo, sacrifice, witchcraft, sorcery, and rites of passage (birth, initiation, marriage, death). It will examine both the roles of specialists (spirit mediums, curer, priests, ascetics, etc.) and nonspecialists in producing these cultural forms.

## ANTHR 322 Magic, Myth, Sclence, and Rellgion (also Religlous Studles 322) ©

Fall. 3 credits ( 4 by arrangement with instructor), Limited enrollment.
A. T. Kirsch.

Surveys various classic anthropological perspectives on the role of religion as a cultural system in human life. Magic, myth, and ritual as cultural markers of and solutions to endemic contradictions, tensions, and transitions are explored. We will ponder the role of science as cultural system and the present state and future prospects for religion in the "modern" and "post-modern" world.
[ANTHR 379 Culture, Language, and Thought
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 406 The Culture of Lives (also Women's Studies 406)
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 408 Gender Symbolism (also Women's Studies 408) (e)
Spring. 4 credits. Not offered 1997--98.]
[ANTHR 417 Person, Gender, and Song (also Women's Studles 416) ©
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 432 Culture and Performance, and Performing Culture 상
Spring. 4 credits. Not offered 1997-98.]

## [ANTHR 451 Anthropological

 BoundariesFall. 4 credits. Not offered 1997-98.
[ANTHR 452 Portralts, Profiles, and Llfe Histories ©
Spring. 4 credits. Not offered 1997-98.]

## ANTHR 453 Visual Anthropology

Spring. 4 credits. Enrollment is limited by appropriate space for showing work. S-U grades only. Fee for film screening and maintenance, \$20. R. Ascher.
For course description, see section VI.
[ANTHR 455 Theatre of Anthropology © Spring. 4 credits. Not offered 1997-98.]
[ANTHR 456 Mesoamerican Religlon, Sclence and History © \#
Fall. 4 credits. Not offered 1997-98.]

## ANTHR 460 Culture and International

 OrderFall. 4 credits. J. Borneman
For course description, see section VII.A.
C. Cultures in Anthropological Perspective:
Anthropology constructs its theories in the comparison of different social and cultural systems and thus depends integrally on knowledge about particular places. The courses below are all focused on the cultures and societies of particular areas of the world and organize knowledge about these areas in reference to key anthropological questions. Students without prior experience in anthropology are welcome in these courses.
[ANTHR 221 Anthropological Representation: Ethnographies on Latino Culture (also Latino Studles Program 221)
Spring. 3 credits. Not offered 1997-98.]

## ANTHR 230 Cultures of Native North

 America ; ${ }^{\text {\# }}$Fall. 4 credits. B. Lambert. A survey of the principal Eskimo and American Indian culture areas north of Mexico. Selected cultures will be examined to bring out distinctive features of the economy, social organization, religion, and worldview. Although the course concentrates on traditional cultures, some lectures and readings deal with changes in native ways of life that have occurred during the period of European-Indian contact.
ANTHR 303 Asians in the Americas: A Comparative Perspective (also Asian American Studies 303)
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 316 Power, Society, and Culture in Island Southeast Asia (e)
Fall. 4 credits. Not offered 1997-98.]

## ANTHR 333 Ethnology of the Andean Region 앙

Fall. 4 credits. B. J. Isbell.
Cultural continuities in the development of Andean societies. The ecological, archaeological, ethnohistorical, and contemporary ethnological record. The Andean heritage as a resource for "modernization."

ANTHR 335 Subsistence, Polity, and Worldview in Mainland Southeast Asia (6)
Spring. 4 credits. Limited to 12 students. A. T. Kirsch.

A survey of the peoples and cultures of Mainland Southeast Asia from prehistoric to contemporary times.
[ANTHR 336 Change and Continuity in the Pacific Islands 상
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 339 Peoples and Cultures of the Himalayas ©
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 343 Religion, Family, and Community in China
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 344 Male and Female in Chinese Culture and Society (also Women's Studies 344) (e)
Fall. 4 credits. Not offered 1997-98.]
ANTHR 345 Japanese Society ©
Fall. 4 credits. Staff.
A survey of the social structure of Japan and a discussion of trends in urban and rural life during the past century. Topics to be emphasized include the family, ancestor worship, community and social organization, and urbanism and modernization.

## ANTHR 350 Topics in the Anthropology

 of EuropeSpring. 4 credits. J. Borneman.
This course explores ways in which Europe can and has been studied anthropologically. Emphasis will be on understanding processes of cultural differentiation and integration. The self-understandings of various peoples of Europe is accounted for in terms of the relation of local culture to national, transnational, and global process. Among the topics to be explored: 1) the role of culture in nation-building; 2) the rise and decline of fascism and communism in the twentieth century; 3) Cold War division and everyday life; 4) the creation and displacement of culture areas (i.e., the Mediterranean, Scandinavia, Mitteleuropa, Slavic culture, the West, and the East).
[ANTHR 355 Ancient Mexico and Central America (also Archaeology 355) 률 Spring. 4 credits. Not offered 1997-98.]
[ANTHR 377 The United States (also Latino Studies Program 377)
Fall. 4 credits. Not offered 1997-98.]

## [ANTHR 433 Andean Thought and

 Culture © \#Spring. 4 credits. Not offered 1997-98.]

ANTHR 443 Religlon and Ritual In Chinese Society (also Religious Studies 443) 링
Fall. 4 credits. P. S. Sangren.
This course explores topics in the anthropological study of Chinese religion, including aspects of cosmology, ritual, and mythology as they relate to Chinese society. A premise of the course is that religion embodies values basic to Chinese culture. Consequently, study of Chinese religion provides important insights into Chinese society. By the same token, Chinese religion must be understood in the context of Chinese social institutions (family, community, state).

## [ANTHR 444 Japanese Social

 Organization ©Spring. 4 credits. Not offered 1997-98.]
[ANTHR 456 Mesoamerican Religion, Science, and History *
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 477 Ethnology of Island Southeast Asia ©
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 493 Seminar In Archaeology (also Archaeology 493) 잉
Fall. 4 credits. Not offered 1997-98.]

## Relevant courses in other departments

## BIOPL 247 Ethnobiology

Fall. 3 credits. D. Bates.
BIOPL 348 The Healing Forest Spring. 2 credits. D. Bates, E. Rodriquez.
[BIOPL 442 Current Toplcs in Ethnobiology
Fall (1998). 2 or 4 credits. E. Rodriquez.]
GOVT 444 Afrocentrism 4 credits. M. Bernal.

HIST 434/WOMNS 477 Gender in the Social History of Africa 4 credits. S. Greene.

MUSIC 245 Gamelan in Indonesian History and Cultures
3 credits. M. Harch.
MUSIC 604 Ethnomusicology: Areas of Study and Methods of Analysis 4 credits. M. Hatch.

## VIII. Graduate Seminars

The graduate program in anthropology is described in much greater detail in the Graduate Program brochure which is available through the Director of Graduate Studies. This document is also found on the Anthropology Department web page
(http://falcon.arts.cornell.edu/~anthro/). The seminars described immediately below pertain to the program in socio-cultural 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 socio-cultural anthropology: Anthropology 600, 601, and 602. Anthropology 603 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 600 Proseminar: Culture and Symbol

Fall. 6 credits. J. Fajans.
This course 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., we will investigate 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 will endeavor to set the stage for a dialectical understanding of social, political, economic, and symbolic activities as interrelated phenomena. The works of de Saussure, Levi-Strauss, Dumont, Geertz, Victor Turner, Sahlins, among others, as well as contemporary theories are given careful attention.

## ANTHR 601 Proseminar: Social

 OrganizationSpring. 6 credits. S. Sangren. This course 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 Marxism 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 602 The Practices of Anthropology

Fall. 4 credits. D. Greenwood.
The course builds on the foundation of the proseminars but broadens the concept of anthropological practices to include issues about the relations between theory and method, practice/theory relationships, the ethnography of anthropological practices themselves, the examination and critique of the concept of "participant observation," and a consideration of "ethical practices" in anthropology. The centerpiece of the seminar is the connection between the students' own
intellectual and existential commitments and their anthropological "practices" and between these and their own emerging research projects.

## ANTHR 603 Research Deslgn

Spring. 4 credits. V. Santiago-Irizarry This seminar focuses on preparing a full-scale proposal for anthropological fieldwork for a dissertation. Topics include identifying of 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 604 Praxls and Culture

Spring. 4 credits. Not offered 1997-98.]
[ANTHR 605 Archaeological Research Design (also Anthropology 405 and Archaeology 405/605)
Spring. 4 credits. Not offered 1997-98.]

## ANTHR 607 Special Problems In

 AnthropologyFall or spring. Credit and hours to be arranged. Intended for graduate students only. 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 609 Approaches to Archaeology

 [also Anthropology 409 and Archaeology 409/609)Spring. 4 credits. Prerequisite: permis-
sion of instructor(s). J. Henderson, T. Volman,

An exploration of the concepts that have shaped modern archaeology. The course briefly examines the history of theoretical orientations in archaeology, then considers the variety of perspectives and interpretive frameworks that guide present-day investigations. Case studies illustrate the implications of the nature of the archaeological record for reconstructing subsistence and economic systems, trade, social and political organization, demography, and ideology. An undergraduate seminar especially recommended for undergraduate majors and graduate archaeologists but open to anyone with a serious interest in archaeology.

## ANTHR 610 Language and Myth

Fall. 4 credits. J. T. Siegel.
An analysis of the theories on language leading to Levi-Strauss and Derrida. Myth and the notion of "the father"

## [ANTHR 614 Readlng in the Ethnographlc Tradition (1880-1960) 숭

Fall. 4 credits. Not offered 1997-98.]

## [ANTHR 615 Reading Contemporary Ethnographles (1960-1990) 항

Fall. 4 credits. Not offered 1997-98.]

## [ANTHR 616 Cultural Production of the Person

Spring. 4 credits. Not offered 1997-98.)

ANTHR 619 Anthropological Approaches to the Study of Buddhisms In Asla © Spring. 4 credits. A. T. Kirsch.
This seminar will examine the various conceptual and analytical strategies employed by social scientists in the study of Buddhism especially in South and Southeast Asia.
Problems of religious complexity, the social correlates of Buddhism, and the role of Buddhism in social change will be explored.

## [ANTHR 621 Gender and Culture (also Women's Studies 621)

Fall. 4 credits. Not offered 1997-98.1
[ANTHR 629 Chinese Ethnology Spring. 4 credits. Not offered 1997-98.]
[ANTHR 632 Andean Symbolism Spring. 4 credits. Not offered 1997-98.]

ANTMR 635 Southeast Asla; Readings In Special Problems (3)
Fall or spring. Credit and hours to be arranged. 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 636 Cognition and Classification
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 637 Theorlizing Social Movements, Human Rights and Democracy in Latin America
Spring. 4 credits. Not offered 1997-98.]
[ANTHR 639 The Feminine Symbolic
Spring. 4 credits. Not offered 1997-98.]
ANTHR 641 South Asla: Readings In Special Problems (e)
Fall or spring. Credit and hours to be arranged. 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 645 Japanese Ethnology e
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 648 Marrlage and Death
Fall. 4 credits. Not offered 1997-98.]

## ANTHR 649 Narrative and the Analysis of Culture

Spring. 4 credits. J. Borneman.
The purpose of the course is to acquaint students with narrative form and the use of narrative tools in the analysis of cultural artifacts. Narrative-a specific set of genres of discourse sharing the property of temporally sequenced clauses-is the subject of much research within many disciplines. Narrative is often said to fashion diverse human experiences into a form assimilable to structures of meaning that are generally human rather than culture-specific. By making personal knowledge communicable, narrative is intrinsic to the making of culture, its representation, and its comprehension. Participants will be introduced to the work of major narrative theorists and to attempts at applying narrative theory to culture. They will also be asked to examine critically a variety of cultural artifacts-including ethnography, performance art, film/video, and law-in terms of the theories discussed.
[ANTHR 653 Myth Onto Film (also Theatre Arts 653)
Fall. 4 credits. Not offered 1997-98.]
ANTHR 655 East Asia: Readings in Special Problems (e)
Fall or spring. Credit and hours to be arranged. 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.

## [ANTMR 656 Maya History

Fall. 4 credits. Not offered 1997-98.]
ANTHR 658 Archaeological Analysis (also Anthropology 458 and Archaeology 458/658) (1)
Spring. 4 credits. Limited to 15 students.
Prerequisite: one course in archaeology or permission of instructor. J. Henderson. An introduction to methods of recording, processing, and analyzing archaeological data Topics include recording of excavation and survey data in the field; processing artifacts in the laboratory, storing and retrieving data; and basic methods of describing, tabulating, analyzing, and interpreting artifacts (mainly ceramic vessels), stratigraphy, and spatial distributions. Intended for those with some understanding of the uses to which archaeological data are put in regional synthesis and interpretation; previous field experience is helpful.

## [ANTHR 660 Latino Languages, Ideology

 and Practice (also Latino Studies Program 660)Spring. 4 credits. Not offered 1997-98.]
ANTHR 662 Democratizing Society: Participation, Action, and Research (also Anthropology 362)
Fall. 4 credits. D. J. Greenwood.
This course poses an alternative to distanced, "objectivist" social science by reviewing some of the many numerous approaches to socially engaged research. Among the approaches discussed are those centering on the pedagogy of liberation, feminism, the industrial democracy movement, and "Southern" participatory action research, action science, and participatory evaluation.

## ANTHR 663 Action Research

Spring. 4 credits. Prerequisite: Anthropology 362/662. Enrollment limited to 20 students. D. J. Greenwood.
This seminar is a practicum in action research (AR) in which the semester becomes a selfmanaging learning environment for the exploration of the techniques and group processes involved in AR, including cogenerative learning, searching, and $A R$ facilitation. Participation in a seminarcentered LISTSERV is expected.

## [ANTHR 665 Topics In Native American Societles and Cultures <br> Spring. 4 credits. Not offered 1997-98.]

[ANTHR 670 Environmental Archaeology (also Anthropology 370 and Archaeology 370/670)
Fall. 4 credits. Not offered 1997-98.]

## [ANTHR 673 Human Evolution:

 Concepts, History and Theory (also Biological Sciences 673)Fall. 4 credits. Not offered 1997-98.]

ANTHR 675 Evolutionary Theory and Human Behavior (also Anthropology 475)
Spring. 4 credits. M. Small
For course description, see ANTHR 475 in section IV.

## ANTHR 680 Theory and Ethnography in the Anthropology of Southeast Asia ©

Fall. 4 credits. Not offered 1997-98.]
ANTHR 682 Perspectives on the Nation (also Asian American Studies 682)
Spring. 4 credits. V. Munasinghe. This course will examine critically the key texts that have informed our understanding of the nation and nationalism. Beginning with some of the founding texts such as Hahn Kohn's The Idea of Nationalism: A Study in Its Origins and Backgrounds (1994), Plamenatz's Two Types of Nationalism (1976), and Renan's What is a Nation (1939), we will then move on to more contenporary writings by Gellner, Hobsbawm, and Anderson and end with alternate analytical approaches that have been informed by the "national question" in the "Third World" such as Partha Chatterjee's Nationalist Thought and the Colonial World A central theme will be how notions of culture, power, and history are implicated in constructions of "the Nation."

## [ANTHR 685 Mothers, Priests, Robels,

 and Indian Chiefs: New Social Movements in Latin AmericaFall. 4 credits. Not offered 1997-98.]
[ANTHR 690 Ritual and Myth: Structure, Process, Practice ©
Spring. 4 credits. Not offered 1997-98.]
ANTHR 691 Filming Other Cultures (also Anthropology 291 and Theatre Arts 291/691) 숭
Spring. 4 credits. Fee for film screening and maintenance, $\$ 35$.
For description, see Anthropology 291 and Theatre, Film and Dance 291. Graduate students who register in this course attend the meetings of 291. In addition, they write indepth studies of one or more films in consultation with the instructor.

ARABIC AND ARAMAIC
See Department of Near Eastern Studies.

## ARCHAEOLOGY

See "Special Programs and Interdisciplinary Studies."

## ASIAN AMERICAN STUDIES

See Special Programs and Interdisciplinary Studies.

## ASIAN STUDIES

K. W. Taylor, chair (388 Rockefeller Hall, 255-5095); B. R. Anderson, R. Barker, M. G. Bernal, K. Brazell, T. Chaloemtiarana, S. Cochran, R. D. Colle, E. W. Coward, Jr., B. de Bary, G. Diffloth, C. d'Orban,
E. C. Erickson, S. Feldman, G. Fields, J. W. Gair, D. Gold, E. M. Gunn, M. Hatch, D. Holmberg, J. Jasanoff, M. Katzenstein, K. A. R. Kennedy, A. T. Kirsch,
J. V. Koschmann, F. Kotas, J. Krier, J. M. Law, L. C. Lee, T. Lyons, B. G. MacDougall,
K. March, T. L. Mei, C. Minkowski,
S. Mohanty, V. Nee, S. J. O'Connor,
C. A. Peterson, J. R. Piggot, T. Poleman,
A. Riedy, N. Sakai, P. S. Sangren, C. L. Shih,
T. Shiraishi, V. Shue, J. T. Siegel, R. J. Smith,
K. Taylor, N. Uphoff, J. Wheatley, J. Whitman, J. U. Wolff, D. Wyatt, M. W. Young

The Department of Asian Studies encompasses the geographical areas of East Asia, South Asia, and Southeast Asia and offers courses in most of the disciplines of the social sciences and the humanities. Asian studies courses through the 400 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 the humanities distribution requirement. Courses listed under Asian Studies offered through other departments may fulfill distribution requirements in history, social sciences, and arts.

## The Major

The applicant for admission to the major in Asian studies must have completed at least one area studies course selected from among those listed under the Department of Asian Studies and must receive permission for admission to the major from the director of undergraduate studies. The student must have received a minimum grade of C in this course and in all other courses counted toward the major
A student majoring in Asian studies is required to complete two courses at the 200 level (a minimum of 6 credits with a grade of C or better) in one of the Asian languages offered at Cornell. The major consists of at least 30 additional credits (which may include up to 6 credits of further language study) selected by the student in consultation with his or her adviser from among the courses listed under the Department of Asian Studies and numbered 250 and above. Majors in Asian studies normally specialize in the language and culture of one country and often choose an additional major in a traditional discipline

## Concentration in South Asia Studies

A candidate for the Bachelor of Arts or Science degree at Cornell may take a concentration in South Asia Studies by completing at least 18 credits of course work in South Asian studies, including Asian Studies 215 (Introduction to South Asia) and four courses or seminars at the intermediate or advanced levels, two of which may be South Asian language courses.

Students taking a concentration in South Asian studies are considered members of the South Asia Program and will have an adviser from the program faculty. (This adviser will be for the student's concentration and is not a substitute for a student's academic adviser in his or her major.)

One South Asian graduate course may be taken for the concentration with consent of both the instructor and the adviser. The same applies for one South Asia-related course with a research paper on a South Asian subject. Additional courses may be added if offered with comparable South Asia content.

## Concentration in Southeast Asla Studies

A candidate for the Bachelor of Arts or Bachelor of Science degree at Comell may take a concentration in Southeast Asia studies by completing 18 credits of course work. A recommended plan would include Asian Studies 208 and four courses at the intermediate or advanced stage, two of which could be a Southeast Asian language. Students taking a concentration in Southeast Asia studies are members of the Southeast Asia Program and are assigned an adviser from the 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 or by studying for one semester at IKIP Malang, Indonesia; Khon Kaen University, Thailand; and Hanoi University, Vietnam; fellowships are available for undergraduates through the Comell Abroad Program.
Honors. To be eligible for honors in Asian studies, a student must have a cumulative grade average of A- in all Asian Studies area courses, exclusive of language study only, 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 term of their junior year. The application must include an outline of the proposed project and the endorsement of a faculty adviser. 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 Studies 401. Students of China, Japan and Southeast Asia must also complete Asian Studies 611, 612 or 613 respectively. By the end of the first term the student must present a detailed outline of the honors essay and have it approved by the faculty sponsor and the director of undergraduate studies. The student is then eligible for Asian Studies 402, the honors course, which entails writing 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.

## Intensive Language Program (FALCON)

For those students desiring to accelerate their acquisition of Chinese, Japanese, or Indonesian, Cornell offers a full-time intensive language program, the Full-Year Asian Language Concentration (FALCON). FALCON students spend six hours a day, five days a week, for periods of up to a full year studying only the language and thus are able to complete as many as twelve hundred hours of supervised classroom and laboratory work in one year. For further information, students should contact the FALCON Program Office, Department of Modern Languages, 413 Morrill Hall (telephone: 607/255-6457, e-mail:
FALCON@comell.edu).

## Study Abroad

Cornell is a member of the Inter-University Center for Chinese Language Study in Taipei and a member of the Council on International Educational Exchange offering study in China at Peking University and Nanjing University These centers offer intensive training in both spoken and written forms of the languages. The Kyoto Center for Japanese Studies (KCJS) is an undergraduate program for students who want to spend one or two semesters in Japan studying both language and culture.
Cornell is a class-A member of the American Institute of Indian Studies, which offers fellowships in India for intensive language study in Hindi, Bengali, and Tamil.
Cornell and the central campus of the Nepalese national university-Tribhuvan-at Kirtipur, Kathmandu, cosponsor an academic semester or year in Nepal. North American students study and live with Nepalese students who come from outside the Kathmandu Valley to Tribhuvan University. Students may participate in one or two semesters. Courses are offered at the Cornell-Nepal Study Program House adjacent to the university. All courses are officially taught in English. A fiveweek, in-country orientation program includes classes in intensive Nepali conversation, cultural orientation programs, and a ten-day field trip and trek. Semester course offerings include Nepali language (Tibetan and/or Newari Languages also possible), contemporary issues in Nepalese studies, field research design and methods in sociology/anthropology and ecology/environment, and guided field research.

Juniors and seniors in good academic standing (3.0 GPA, or higher) from any major field may participate. Students must have a desire to study on the other side of the world, to participate in a multicultural program, and to undertake rigorous field research. No experience in Nepal is necessary and instruction is in English, but some prior Nepali language study is strongly recommended. Students interested in the study abroad in Nepal program should consult with Cornell Abroad (474 Uris Hall) for further information.

Other opportunities include a junior year abroad at IKIP-Malang, in Indonesia, or at the School of Oriental and African Studies, University of London. Many other options for study in Asia exist, including in Indonesia
Thailand, and Vietnam through the Council for International Educational Exchange. Undergraduates should consult Comell Abroad; graduate students should inquire at the East Asia Program, the South Asia Program, or the Southeast Asia Program offices.

## General Education Courses

## ASIAN 208 Introduction to Southeast

 Asia 둥Spring. 3 credits. T. Chaloemtiarana This course is for anyone curious about the part of Asia with the most diversity; it defines Southeast Asia both as the nation-states that have emerged since 1945 (Brunei, Burma, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Viet Nam) and as a larger cultural world extending from southern China to Madagascar and Polynesia. Students will 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, business and marketing. The course aims to teach both basic information and different ways of interpreting that information.

## ASIAN 211 Introduction to Japan

Fall. 3 credits. B. de Bary
An interdisciplinary introduction to Japanese society and its history especially designed for students not majoring in Asian Studies. The first part of the course focuses on the historical changes in Japanese society from the eighth century down to the nineteenth century; the second part analyzes modern society from a variety of perspectives. It also addresses the question of how Japan is represented in the U.S. mass media. Guest lecturers from five or six different fields offer their opinions on Japanese history, culture, and politics.

## ASIAN 212 Introduction to China

Spring. 3 credits ( 4 credits with a special project; consult instructor for information) Staff.
An interdisciplinary introduction to Chinese culture especially designed for students not majoring in Asian Studies

## [ASIAN 215 Introduction to South Asian

 CivilizationSpring. 3 credits ( 4 credits with a special project; consult instructor for information) Not offered 1997-98. C. Minkowski.
An interdisciplinary introduction to the culture and history shared by India and other states of South Asia. Designed for students not majoring in Asian Studies. Guest lecturers will provide the perspective of their disciplines to the general themes of the course: cultural diversity and the role of tradition in contemporary life.]
[ASIAN 218 Introduction to Korea
Spring. 3 credits. Not offered 1997-98 An interdisciplinary introduction to Korean history and culture, including language, literature, art, and music. The course begins with an overview of Korean history from the Three Kingdoms Period to the present. The course then focuses on major events in twentieth-century Korean history: the March 1, 1919, Independence Movement, the Korean War, the 1960 Student Revolution, the 1980 Kwangiu Massacre, and others. Visiting lecturers will speak about Korea from a variety of disciplinary viewpoints, including linguistics, sociology, anthropology, political science, and law.]

## Asia-Literature and Religion Courses

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

## [ASIAN 250 Introduction to Asian Religions (also Rellglous Studies 250) *

Spring. 3 credits. Not offered 1997-98 J. M. Law.

A survey of the major religious traditions of India, China, and Japan, focusing on Vedic ritual and Brahmanical Hinduism; Indian, Chinese, and Japanese Buddhism; the native Chinese traditions of Confucianism and Taoism; and Shinto, Confucianism, and the new religions in Japan. Emphasis will be on
the great traditions of these cultures, with frequent reference to the differing realms of popular religions.]

## (ASIAN 291 Classical Indian Narrative

 (also Classics 291) 융Spring. 3 credits. Not offered 1997-98 C. Minkowski.

Reading in translation from the principal story collection of ancient India. Sources will include the Vedas, the Sanskrit epics, the Buddhist Jatakas, the Kathasaritsagara, the Pancatantra, and related collections. Attention will be given to comparisons with Greek narrative, and to the diffusion of Indian narratives into the world's literature.]

## [ASIAN 310 Pre-Modern Korean Culture and Literature (a) \#

Fall. 4 credits. Not offered 1997-98. Readings in English translation of Korean stories, novels, court diaries, poem, legends, and tales from the seventh century to the end of the nineteenth century.]

## [ASIAN 311 Modern Korean Culture and

 LIterature ©Spring. 4 credits. Offered alternate years. Not offered 1997-98.]
[ASIAN 313 Japanese and Asian Film (also Theatre Arts 313 and Comparative Literature 313) © Spring. 4 credits. Not offered 1997-98. Staff.
The course will explore the relationship between thematic and formal concerns of Japanese film and narratives of modern Japanese history dealing with such issues as the nature of the Meiji Restoration, the rise of Taisho commodity culture, the Pacific War postwar reconstruction, postmodernity and "new nationalism." Weekly analyses of specific films will be accompanied by readings that provide historical context and pose relevant interpretive and theoretical questions, particularly those of gender and cultural difference. Study of works by Ozu
Mizoguchi, Kurosawa, and Naruse will constitute the introductory portions of the course, followed each year by a series featuring recent works of contemporary directors.]

## [ASIAN 338 Democracy and War (also History 338)

Spring. 4 credits. Not offered 1997-98. B. Strauss.

A comparative study, the course will focus on the Korean War (1950-1953) and the Peloponnesian War ( $431-404 \mathrm{BC}$ ). It will examine the relationship between ideas of democracy and democratic government, and the conduct of war to advance or defend them. We will be reading and discussing Korean materials on the background and prosecution of the Korean War; American newspapers and historical records on U.S. involvement; and histories, debates, plays, and other contemporary materials on the Athenian conduct of its war against Sparta.]

## [ASIAN 347 Tantric Traditions (also

 Religious Studies 349) © \#Fall, 4 credits. Not offered 1997-98. D. Gold.

This course treats the development of tantric traditions in the Indian subcontinent and beyond. Philosophical, socio-religious, cultic, and visionary dimensions of tantra will be discussed. We study different Hindu and Indo-Tibetan traditions, with some attention also paid to tantric developments in East Asian Buddhism.]

ASIAN 351 The Religlous Traditions of India (also Religious Studies 351) ©
Spring. 4 credits. D. Gold.
A study of the relationships between the main currents of Indian religion. The course will first focus on the Hindu tradition and its holistic worldview within the context of the caste system. It will then describe the rise of Jainism and Theravada and Mahayana Buddhism, as well as Hindu and Buddhist Tantrism, as religious phenomena reflecting the emergence of individualism.

## ASIAN 354 Indlan Buddhism (also

 Religious Studles 354) © "Fall. 4 credits. C. Minkowski. A survey of Buddhist tradition in India from the life of the Buddha through the formation of the early schools, to the development of the Mahayana and the emergence of tantric Buddhism. Topics to be considered will include Buddhist concerns of human suffering and spiritual liberation, the nature of reality and human understanding, and the importance of compassion and emptiness. Attention will be paid to the institutional identity and social function of the Buddhist movements in classical India.

## [ASIAN 355 Japanese Religions (also Religious Studies 355) 웅

Fall. 4 credits. Not offered 1997-98. J. M. Law

This course is an exploration of major themes in Japanese religion through a focus on the category of religious practice. After an overview of the major sources of Japanese religion, we look at the dominant understanding of sacrality and the human soul. With the syncretic interaction between Shinto and Buddhism as our foundation, we will study four dynamic themes that express aspects of Japanese religious practice: 1) ritual purity and pollution, 2) the concept of matsuri (festival) and girei (rite), 3) the concept of shugyo (cultivation) as expressed in asceticism, pilgrimage, and aesthetic discipline, and 4) religious understandings of the human body, expressed in healing rituals.]
[ASIAN 357 Chinese Religions (also Religious Studies 357) © \#
Fall. 4 credits. Not offered 1997-98.]
[ASIAN 358 Chinese Buddhism (also Religious Studies 356) © \#
Fall. 4 credits. Not offered 1997-98.]
[ASIAN 359 Japanese Buddhism (also Religious Studies 359) © "
Spring. 4 credits. Not offered 1997-98. J. M. Law.]

## ASIAN 360 Buddhist and Confucian

 Cultures of AsiaSpring. 4 credits. K. Taylor.
Confucius and Buddha were contemporaries 2,500 years ago. Teachings attributed to them spread over large parts of Asia and were used to formulate expressions of cultural authority in many times and places. This course surveys historic themes in Buddhist and Confucian studies, such as Theravada and Mahayana, Pure Land, Zen, and other forms of Buddhist thought and practice, including interaction with and adaption to local religions; Confucius and Mencius, Han eclectic Confucianism, Song Chu Hsi Confucianism, and dissenting or variant forms of Confucian thought. This course explores and compares specific examples of these themes in Japan, Korea, China, Vietnam, Thailand, and Burma.

This course is intended for Asian studies majors and other interested students. Premodern focus.

## ASIAN 363 Contemporary Mass Culture

 in Japan and the U.S. (also Comparative Literature 343) ©Fall. 3-4 credits. B. de Bary.
A comparative study of Japanese and American mass cultures. Rather than seeking, through comparison, to delineate distinctive models of national cultures, the course will trace the complex relationships between cultural nationalist impulses and transnational economies, emphasizing processes of hybridity and fusion. The course will introduce students to a small number of important theoretical writings on mass culture. Areas of study will include the analysis of science fiction, comic books, film and video, popular music, and toy industries. Enrollment limited to 25 students.

## ASIAN 371 Chinese Philosophical

 Literature \# \#Fall. 4 credits. T. L. Mei.
Readings in English translation of Confucian, Taoist, and Buddhist works.

## ASIAN 373 Twentleth-Century Chinese

 LiteratureFall. 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.

## [ASIAN 374 Chinese Narrative Llterature \#

Spring. 4 credits. Not offered 1997-98 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.]

## [ASIAN 375 Japanese Poetry and Poetic

 Prose (aSpring. 4 credits. Alternates with Asian
Studies 377. Not offered 1997-98.
K. Brazell.]

## [ASIAN 376 Modern Japanese

 Literature: From Meiji through the Paclflc War (also Comparative Literature 369) 장Fall. 4 credits. Not offered 1997-98. B. de Bary.]

## [ASIAN 377 Japanese Narrative

 Literature \#Spring. 4 credits. Alternates with AS 375.
Not offered 1997-98. N. Sakai.
A study in English translation of major narratives from the eighth to the eighteenth century. Subject matter will include novelistic narratives like The Tale of Genji, biographical stories, poem tales, war tales, and popular stories.]
[ASIAN 378 The Postwar and the Postmodern In Japanese Literature
Fall. 4 credits. Alternates with Asian
Studies 375. Not offered 1997-98.
B. de Bary.]

## [ASIAN 380/680 Vletnamese Literature in Translation *

Spring. 4 credits. Not offered 1997-98.
K. Taylor.

A study of Vietnamese poetry, short stories, and novels available in English translation. The course will focus primarily upon texts from the last three centuries, with particular attention to contemporary literature.]
[ASIAN 382 The Tale of Genji in Art and Theater 융
Spring. 4 credits. Not offered 1997-98.
K. Brazell and M. Watanabe.

After a careful reading of the Tale of Genji and the 12 th-century Genji Picture Scroll, the class will explore representations of the Genji in the noh theater and in a wide variety of art forms. Extensive use will be made of materials in the Johnson Art Museum.]

## ASIAN 383 Introduction to the Arts of China <br> See ART H 380 for description

## ASIAN 385/685 Vietnamese Cultural Studies ©

Spring. 4 credits. K. Taylor.
Issues related to constructions of Vietnamese histories and cultures, including languages and literatures, the visual and performing arts, families and societies, religions and ideologies, politics and governments, traditions and modernities, revolutions and wars, localism and regionalism, nationalism, and globalisms This course will fulfill a humanities distribution requirement.

## [ASIAN 390 Comparative Sanskrit Myth

 and Epic in Translation (also Classics 390) © \#Fall. 4 credits. Not offered 1997-98.
C. Minkowski.

Readings in translation from the two Sanskrit epics, the Mababbarata and the Ramayana, and from the main cycles of the Puranas, the Sanskrit mythological literature. Special attention will be given to parallels and comparisons with Greek myth and epic, especially Homer and Hesiod. Classics 236 or 238 would be useful as background, but not presupposed.]
[ASIAN 393 Images of Humanity in Medieval China (also History 393) ©
Not offered 1997-98. C. Peterson. For description, see HIST 393.]

## [ASIAN 395 Classical Indlan

 Phillosophical Systems (also Classics 395 and Rellgious Studies 395) \#Fall. 4 credits. Prerequisite: some
background in philosophy or in classical
culture. Not offered 1997-98.
C. Minkowski.]

## ASIAN 410 Chinese Performing Arts

 Spring. 4 credits. E. Gunn. The course will survey drama, music theater, and film in twentieth-century China. Some material will require knowledge of Chinese.
## [ASIAN 421 Religious Reflections on

 the Human Body (also Religious Studies 421)Spring. 4 credits. Not offered 1997-98.
J. M. Law.

One undeniable and inescapable fact of human life is that it is experienced in a body. How this fact is understood to define the parameters of religious experience and expression will be the topic of this course. While the format will be comparative, the majority of cases will be drawn from East Asian, primarily Japanese, sources. We will explore how such aspects of the human body as ecstasy, gender, sexual passion, illness, the
dialectic of the physical and the spiritual, and corporeal ascetic discipline reveal models of religious reflection on this fact of human experience. Further, we will study how these models become represented in visual art, narrative, and ritual practice.]
[ASIAN 440 Meditation Schools of East Aslan Buddhism (also Religious Studles 440) "
Spring. 4 credits. Prerequisite: ASLAN 250 or equivalent. Not offered 1997-98.]
[ASIAN 441 Mahayana Buddhism [also Religious Studies 441) 융 Spring. 4 credits. Not offered 1997-98. J. M. Law.

By reading successive examples of Mahayana Buddhist literature, we will study the formation and evolution of the ideal of the bodhisattva; the understanding of transcendental wisdom and the concept of emptiness; and the workings of both the conscious and subconscious mind in the course of spiritual practice. We will include discussion of major philosophical schools, as well as issues of social setting and popular religious practice, in both India and East Asia.]

## ASIAN 449 Mistory and Methods of the Academic Study of Religion (also Rellgious Studles 449) \# <br> Spring. 4 credits. D. Gold. <br> For description, see RELST 449

## [ASIAN 451/825 Children, Literature,

 and Soclety (also Anthropology 441/625) 둥Spring. 4 credits. Not offered 1997-98. S. Shiraishi.]

## [ASIAN 460 Indlan Meditation Texts

 (also Rellgious Studies 460) © \# Spring. 4 credits. Not offered 1997-98. D. Gold.Because texts that record visionary experience, prescribe the practice of contemplation, and present enigmatic utterances are highly valued in Indian tradition, they need to be taken seriously by students of Indian and world civilizations. Yet the special problems of interpretation that they present have often caused meditation texts to be passed over in embarrassed, sometimes reverent silence. In this course we will draw on approaches from literary criticism, anthropology, and religious studies to explore a number of the problems to which these texts give rise: In what ways are the apparent differences in experience presented in meditation texts shaped by different cosmologies and ritual practice? Do different literary genres have particular religious implications? What are the relations between convention and experience in the creation of the texts? Readings will be drawn from the Upanishads and Tantra, devotional verse in the vernaculars, and the classical meditation manuals of Hinduism and Buddhism. Some attention may be given to Indian Sufi materials. No knowledge of Indian languages is required.]

## [ASIAN 463 Readings in HIndi and Urdu Llterature ©

Fall. 4 credits. Not offered 1997-98. D. Gold.

Selected topics in Hindi and Urdu literature, with readings in the original; discussions in Hindi-Urdu and English. May be repeated for additional credit with consent of instructor.]

## [ASIAN 464 Readings In Urdu

 Literature 랑Spring. 2-4 credits. Not offered 1997-98. D. Gold.

Selected topics in Urdu literature, with readings in the original; discussions in Urdu and English.]

## [ASIAN 470 The Japanese Noh Theater

 and Modern Dramatists |also Comparative Llierature 470 and Theater Arts 470) © \#Fall. 4 credits. Alternates with ASIAN 471. Not offered 1997-98. K. Brazell.
Several weeks will be spent studying the literary, performance, and aesthetic aspects of the noh theater. Emphasis will be on noh as a performance system, a total theater in which music, dance, text, costume, and props all interact to create the total effect. Then attention will turn to modern theater people who have reacted to noh in some creative way. Choice of dramatists will depend partly on student interests but will probably include Yeats, Brecht, Britten, Claudel, Grotowski, and Mishima. All readings may be done in English translation.]

## ASIAN 471 Japanese Theatre (also Theatre Arts 471) 륭

Fall. 4 credits. Alternates with ASIAN 470. K. Brazell.

A study of traditional forms of Japanese theatre. Topics will include ritual and theatre, noh and kyogen, kabuki, and the puppet theatres, and contemporary theatrical use of the traditional forms. Special emphasis will be placed on dramaturgy, acting styles, performance aesthetics, and theories of performer training.
[ASIAN 475 Modernization and the Korean Family (also HSS 490 sec 30) ©
Fall. 3 credits. Not offered 1997-98. J. Mueller.]
[ASIAN 481 Translation and Identities a Fall. 4 credits. Not offered 1997-98. N. Sakai.]
[ASIAN 483 Internationallsm, Nationalism, and Modern Japanese Dlscursive Space
Fall. 3 credits. Not offered 1997-98. N. Sakai.

The late 19th century marks an important transitional period; nation-states formed in Britain, France, Japan, Germany, the United States, and elsewhere sought to become imperial powers; and "internationalism" virtually collapsed. Focusing on Japanese examples but not excluding other cases, we will study the discursive spaces of modern national subjectivity with a view to the problems of ethnicity, colonialism, imperial sexism, violence, historical memory, postcoloniality and academic knowledge. A major critical paper will be required.]

## [ASIAN 496 Tokugawa Literature and

 Thought a ${ }^{\text {\# }}$Spring. 4 credits. 1997-98. N. Sakai. An introduction (in English translation) to literary, theatrical, and intellectual works of the Tokugawa period ( $1600-1868$ ). We will examine the characteristics of early Tokugawa literary and theatrical works and see how different they are from the literary works of the later Tokugawa period. We will also read the philosophical and philological works on the classics by writers such as Ogyu Sorai and Motoori Norinaga to understand the ways
contemporary Japanese intellectuals understood cultural activities and literature during the Tokugawa period.]

## Asia-Graduate Seminars

For complete descriptions of courses numbered 600 or above, consult the director of graduate studies.

## ASIAN 601 Seminar: Upland Peoples of Southeast Asia <br> Fall. 3-4 credits. H. Jonsson.

## [ASIAN 602 Southeast Asia Seminar:

 Topic TBASpring. 4 credits. Not offered 1997-98. Staff.
See ASIAN 607.]

## ASIAN 605-606 Master of Arts Seminar

 In Asian Studies605, fall; 606, spring. $2-4$ credits. Staff.

## ASIAN 607-[608] The Plural Society

 Revisited (also Government 653) Spring. 4 credits. 607 may be taken independently for credit; 607 is a prerequisite for 608. B. Anderson.For description, see GOVT 653.
ASIAN 609 Modern Japanese Studies: The Formatlon of the Field in History and Literature (also History 609)
N. Sakai, J. V. Koschmann.

For description, see HIST 609.

## ASIAN 611 Chinese Bibliography and Methodology

Spring. 1 credit. Prerequisite: permission of instructor. Required of honors students and M.A. candidates. C. d'Orban.

## ASIAN 612 Japanese Blbllography and Methodology

Fall. 1 credit. Prerequisite: permission of instructor. Required of honors students and M.A. candidates. F. Kotas.

## ASIAN 613 Southeast Asian Blbliography

 and MethodologyFall. 1 credit. Prerequisite: permission of instructor. A. Riedy.
This course is designed to instruct students in methods of identifying and locating sources for the study of Southeast Asia. Emphasis will be on the practical aspects of using various types of bibliographical tools to identify both primary and secondary sources in Southeast Asian and Western languages. The use of electronic databases and online services as well as traditional printed resources will be covered. Sources which are more general in nature, but have a significant Southeast Asia component will be discussed. Relevant arcana of library science will be explained as necessary. Required of honors students and Master of Arts candidates. No foreign language competence is required but a reading knowledge of at least one Southeast Asian language or other Asian language (especially Chinese or Japanese) and a major European language (especially French, Spanish, or Dutch) is highly desirable.

## [ASIAN 621-622 South Asla Seminar:

Topic to be announced
621, fall; 622, spring. 4 credits. Not offered 1997-98.]

ASIAN 623-624 Topics in South Asia 623 , fall; 624 , spring. 1 credit. Staff. A series designed to introduce as well as enhance and build on students' knowledge of various topics of importance to South Asia (Bangladesh, India, Nepal, Pakistan, and Sri

Lanka). Weekly lectures will survey contemporary themes in South Asian scholarship where visiting scholars and members of the Comell community will discuss a multidisciplinary range of issues. These may include science and nation building; ritual power and resistance; tribal communities and the environment; industrial and agrarian relations; gender and the media; and economic liberalization. A short essay will be required at the end of the course.

## ASIAN 630 Sominar in Translation

 StudiesSpring. 4 credits. K. Taylor.
A graduate seminar designed to introduce students to theoretical writings about, and related to, translation, conceived both as a linguistic exercise and as a broader field of cultural activity; will include the practice of translation. Limited to graduate students by permission of instructor; must have skill in Classical Chinese, French, or Vietnamese sufficient to begin translating.

## [ASIAN 650 Graduate Seminar In Aslan

 RellglonsSpring. $2-4$ credits. Prerequisite:
permission of instructor. Not offered
1997-98. J. M. Law.]

## AsIAN 676 Southeast Asia Research

 Training SeminarFall or spring. 3-4 credits. Staff.

## ASIAN 701-702 Seminar in East Asian

 Llierature701, fall; 702, spring. $1-4$ credits. Staff.

## ASIAN 703-704 Directed Research

703, fall or spring; 704, fall or spring. 1-4 credits. Staff.
For additional courses on Asian religion, see
"Related Courses" in the China and Japan area courses listing.

## Asia-Honors Courses

ASIAN 401 Asian Studles Honors Course Fall or spring. 4 credits. Intended for seniors who have been admitted to the honors program. Staff.
Supervised reading and research on the problem selected for honors work.

## ASIAN 402 Aslan Studies Honors: Senior

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

## ASIAN 403-404 Aslan Studles

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

## Literature in Chinese

## CHLIT 213-214 Introduction to Classical Chinese © \#

213 , fall; 214, spring. 3 credits each term. Prerequisite: qualification in Chinese or permission of instructor. May be taken concurrently with Chinese 101-102,
201-202, 301-302. T. L. Mei.
[CHLIT 420 T'ang and Sung Poetry ©\# Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. T. L. Mei.

Readings in the original Chinese, together with secondary works by Chinese and Western critics.]

CHLIT 421-422 Directed Study
Fall or spring. $2-4$ credits each term. Prerequisite: permission of instructor. Staff.
[CHLIT 424 Readings in Literary Criticism
Fall or spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. T. L. Mei.]
[CHLIT 435 Chinese Buddhist Texts © ${ }^{*}$ Spring. 4 credits. Not offered 1997-98.]
[CHLIT 603 Seminar in Chinese Fiction and Drama
Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. E. Gunn.]
[CHLIT 605 Seminar in Chinese Fletion and Drama
Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. E. Gunn.]
CHLIT 610 Chinese Cultural Crlticism Fall. 4 credits. E. Gunn.

## CHLIT 621-622 Advanced Dlrected

 Reading: Chinese Historlical Syntax 621, fall; 622, spring. 2-4 credits. Prerequisite: permission of instructor. Staff.
## Chinese Language

See Language Courses.

## FALCON Program

FALCON Program office, 255-6457,
J. Wheatley, Director Chinese FALCON,

416 Morrill Hall, 255-9301.

## Literature in Japanese

## JPLIT 406 Introduction to Classical


Spring. 4 credits. Prerequisite: permission of instructor. K. Brazell.

## [JPLIT 407 Advanced Classlcal

 JapaneseSpring. 4 credits, Prerequisite: JPLIT 406 or permission of instructor. Not offered 1997-98. K. Brazell.]

## JPLIT 421-422 Directed Readings

421, fall; 422, spring. $2-4$ credits. Prerequisite: for JPLIT 421, Japanese 402 or equivalent; for JPLIT 422, Japanese 421 or equivalent. Staff.
Note: For complete descriptions of courses numbered 600 or above, consult the appropriate instructor.

## [JPLIT 611 Seminar In Classical

 Japanese LiteratureSpring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1997-98. K. Brazell.]

JPLIT 612 Seminar in Medieval Cenres Spring. 2-4 credits. Prerequisite: permission of instructor. Offered altemate years. K. Brazell.
This seminar will explore medieval literary genres in terms of the contemporary religious, social, political, and aesthetic discourses. Readings will be in classical and modem Japanese as well as in English.
[JPLIT 613 Seminar In Tokugawa Culture and Thought: Othemese, Text, and Body
Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1997-98. N. Sakai.]
[JPLIT 614 Seminar In Modern Japanese Literature
Spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1997-98. N. Sakai.]

## Graduate-Level Reading Courses

[JPLIT 621 Advanced Readings in PreModem Japanese Narrative Literature
Fall or spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1997-98. K. Brazell.]
[JPLIT 622 Advanced Readings In PreModem Japanese Poetry
Spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1997-98. K. Brazell.I
[JPLIT 623 Advanced Readings In PreModern Drama
Fall or spring. 2-4 credits. Prerequisite: permission of instructor. Not offered 1997-98. K. Brazell.]

## [JPLIT 624 Advanced Readings in

 Modem Japanese Literature Fall and spring. 2-4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1997-98. B. de Bary.]Note: See courses listed under Asia-
Literature and Religion courses-for Japanese literature courses in translation.

## Japanese Language

See Language Courses.

## FALCON Program

FALCON Program office, 255-6457, R. Sukle, Director Japan FALCON, 412 Morrill Hall, 255-0734.

## Indonesian Language

See Language Courses.

## FALCON Program

FALCON Program office, 255-6457, J. Wolff, Director Indonesian FALCON, 307 Morrill Hall, 255-0733.

## Literature In Korean

## [KRLIT 405 Readings In Korean

 LiteratureFall. 4 credits. Not offered 1997-98.]

## [KRLIT 406 Korean Literature

 Translation Workshop ©Spring. 2-3 credits. Prerequisite: Korean 301-302 or equiv.; permission of instructor. Not offered 1997-98.]

## Sanskrit

## SANSK 131-132 Elementary Sanskrit

 (also Classics 131-132 and Llngulstics 131-132)131, fall; 132, spring. 4 credits each term. An introduction to the essentials of Sanskrit grammar. Designed to enable the student to read classical and epic Sanskrit as quickly as possible.

## SANSK 251-252 Intermedlate Sanskrit

 (also Classlcs 251-252 and Lingulstlcs 251-252) (ㅂ) \#251, fall; 252, spring. 3 credits each term. Prerequisite: Sanskrit 132 or equivalent. A. Nussbaum, fall; C. Minkowski, spring. Readings from the literature of classical Sanskrit. Fall: selections from the two Sanskrit epics, the Mahabharata and the Ramayana. Spring: more selections from the epics and selections from either Sanskrit story literature or from Sanskrit dramas.

## Literature in Sanskrit

## [SNLIT 467-468 Reading in Sanskrlt

 Llterature: The Vedas © ©Spring. 3 credits. Prerequisite: permission of instructor. Not offered 1997-98. C. Minkowski.]

## Related Courses in Other Departments and Colleges

Check the primary department section for the offering status of the following courses.
Courses in other colleges will count as College of Arts and Sciences credit only for Asian Studies majors.

## Asia/General Courses

ABEN 754 Sociotechnical Aspects of Watershed Development (also ARME 754 and GOVT 644)

ANTHR 313 Anthropology of the City
ANTHR 619 Anthropological Approaches to the Study of Buddhism in Asia

ARME 464 Economics of Agricultural Development (also ECON 464)

ARME 660 The World's Food
ARME 665 Food and Nutrition Policy (also NS 685)

ARME 666 Economics of Development (also ECON 466)

ARME 763 Macro Policy in Developing Countries (also ABEN 754 and GOVT 644)

COMM 424/624 Communication in the Developing Nations

COMM 685 Training and Development: Theory and Practice (also INTAG 685 and

EDUC 685)
CRP 777 Theories of Development and Underdevelopment

ECON 473 Economics of Export-Led Development @

GOVT 348 Politics of Industrial Societies
GOVT 349 Political Role of the Military
GOVT 648 Graduate Seminar in Political Economy of Change: Rural Development in the Third World

ART H 280 Introduction to Art History: Approaches to Asian Art ©

ART H 580 Problems in Asian Art
ILRIC 637 Labor Relations in Asia
R SOC 205 Rural Sociology and International Development

R SOC 492 Development in the Pacific Rim
THETR 307 Asian Dance
THETR 317 Asian Dance II

## China-Area Courses

ANTHR 211 Nature and Culture @
ANTHR 326 Economic Anthropology ©
ANTHR 343 Religion, Family, and Community in China

ANTHR 426 Ideology and Social Production
ANTHR 443 Religion and Ritual in Chinese Society (also RELST 443) ©

ANTHR 655 East Asia: Readings in Specific Problems

ART H 380 Introduction to the Arts of China
ECON 469 Economy of China ©
ECON 772 Economics of Development
GOVT 334 Political Economy of East Asia
GOVT 347 Government and Politics of China (a)
GOVT 382 International Relations of East Asia
GOVT 391 Chinese Foreign Policy ©
GOVT 438 Contemporary China: Political Economy
GOVT 482 International Relations of East and Southeast Asia ©

GOVT 642 Comparative Political Economy: East Asia

GOVT 645 Chinese Politics
HIST 243 China and the West before Imperialism © \#

HIST 293 History of China up to Modem Times \# \#

HIST 294 History of China in Modern Times (a)
HIST 360 Early Warfare, East and West \#
HIST 492 Undergraduate Seminar in Medieval Chinese History @ \#
HIST 493 Problems in Modern Chinese History @

HIST 494 The Japanese in Asia ©
HIST 499 Problems in Modern Chinese History ©

HIST 691 Chinese Historiography and Source Materials

HIST 693-694 Problems in Modern Chinese History

HIST 791-792 Seminar in Medieval Chinese History

ART H 481 The Arts in Modern China (a)
ART H 482 Ceramic Art of China and Southeast Asia \# \#

ILRIC 332-532 Labor in Developing Economies

## China-Language Courses

CHIN 101-102 Elementary Standard Chinese
CHIN 109-110 Beginning Reading and Writing (Standard Chinese)

CHIN 111-112 Beginning Cantonese
CHIN 113-114 Beginning Reading for Cantonese Speakers

CHIN 161-162 FALCON (a)
CHIN 201-202 Intermediate Standard Chinese ©

CHIN 215-216 Mandarin for Cantonese Speakers ©

CHIN 301-302 Advanced Standard Chinese (6)
CHIN 303-304 Advanced Standard Chinese Conversation ©

CHIN 411-412 Advanced Chinese: Focus on Fiction

CHIN 413-414 Advanced Chinese: Focus on Current Events

## Japan-Area Courses

ANTHR 345 Japanese Society ©
ANTHR 645 Japanese Ethnology
ANTHR 655 East Asia: Readings in Specific Problems

GOVT 344 Government and Politics of Southeast Asia

GOVT 346 Modern Japanese Politics
GOVT 396 The Past as Prelude? Japan in Asia, Germany in Europe (also HIST 352) ©
GOVT 482 International Relations of East Asia (e)

GOVT 642 Comparative Political Economy: East Asia

HIST 298 State, Society, and Culture in Modern Japan (3)

HIST 420 Tale of Genji in Historical Perspective (\%

HIST 489 Undergraduate Seminar in Modern Japanese History ©

HIST 494 The Japanese in Asia
HIST 497 Premodern Japan-Historical Perspectives \#

HIST 797-798 Seminar in Japanese Thought
ILRHR 656 International Human Resource Management

ILRHR 690 Comparative Human Resource Management

ILRIC 333/533 Western Europe, United States, and Japan in a Changing World Economy

MUSIC 481 Japanese Music: Style and Tradition NBA 580 Strategies for Global Competitiveness

NBA 589 Business in Japan

## Japan-Language Courses

JAPAN 101-102 Elementary Japanese
JAPAN 123 Accelerated Introductory Japanese
JAPAN 141-142 Beginning Japanese at a Moderate Pace

JAPAN 161-162 FALCON
JAPAN 201-202 Intermediate Japanese Reading 1 ©

JAPAN 203-204 Intermediate Japanese Conversation (a)

JAPAN 241-242 Intermediate Japanese at a Moderate Pace

JAPAN 301-302 Intermediate Japanese Reading II @

JAPAN 303-304 Communicative Competence @

JAPAN 341-342 Advanced Japanese ©
JAPAN 401-402 Advanced Japanese Reading (6)
JAPAN 404 Linguistic Structure of Japanese
JAPAN 407-408 Oral Narration and Public Speaking

JAPAN 410 History of Japanese Language © $\#$
JAPAN 421-422 Directed Readings
JAPAN 543-544 Intermediate Japanese for Business Purposes

JAPAN 545-546 Advanced Japanese for Business Purposes

## South Asla-Arba Courses

ANTHR 275 Human Biology and Evolution (also BIOES 275 and NS 275)

ANTHR 339 Peoples and Cultures of the Himalayas ©

ANTHR 371 Human Paleontology (also BIOES 371)

ANTHR 448 Contemporary Approaches to South Asian Anthropology

ANTHR 619 Anthropological Approaches to the Study of Buddhism in Asia

ANTHR 640-641 South Asia: Readings in Specific Problems

ANTHR 673 Human Evolution: History, Concepts, and Theory (also BIOES 673)

ARCH 342 Architecture as a Cultural System
ARCH 441-442 Special Topics in Architectural Culture and Society

ARCH 445 Architecture and the Mythic Imagination
ARCH 446 Topics in Architecture, Culture, and Society

ARCH 447 Architectural Design and the Utopian Tradition
ARCH 448 The Indian Example and the Visual Tradition in Culture

ARCH 647-648 Architecture in its Cultural Context I \& II

ARCH 649 Graduate Investigations in Architecture, Culture, and Society

ARCH 667-668 Architecture in Its Cultural Context

CRP 671 Seminar in International Planning
CRP 775 Transnational Corporations and Developing Regions

ECON 475 Economic Problems of India
GOVT 351 India: Social and Economic Change in a Democratic Polity (a)

GOVT 367 Politics of Development
GOVT 436 Environmental Politics and Policy
GOVT 640 Political Economy of India
GOVT 648 The Political Economy of Change: Rural Development in the Third World

GOVT 649 Agrarian Political Economy: Land Labor and Nature

GOVT 651 Agrarian Change in South AsiaPolitics, Society, and Culture

GOVT 687 International Environmental Policy
GOVT 692 The Administration of Agriculture and Rural Development

HDFS 436 Language Development (also PSYCH 436 and LING 436)

HDFS 633 Seminar on Language Development
ART H 386 Art of South Asia \#
ART H 489 Miniature Paintings and Drawings of India 웅

LING 701-702 Directed Research
R SOC 425 Gender Relations, Gender Ideologies and Social Change

R SOC 645 Rural Economy and Society
R SOC 725 The Sociology of "Third World" States
South Asla-Language Courses
BENGL. 121-122 Elementary Bengali
BENGL 201-202 Intermediate Bengali Reading (a)

BENGL 203-204 Intermediate Bengali Composition and Conversation (a)

BENGL 303-304 Bengali Literature I, II
HINDI 101-102 Elementary Hindi-Urdu
HINDI 109-110 Accelerated Elementary Hindi-Urdu

HINDI 201-202 Intermediate Hindi Reading ©
HINDI 203-204 Intermediate Composition and Conversation (6)

HINDI 301-302 Advanced Readings in Hindi Literature ©

HINDI 303-304 Advanced Composition and Conversation @

HINDI 305-306 Advanced Hindi Readings (a)
NEPAL 101-102 Elementary Nepali
NEPAL 106 Intensive Nepali
NEPAL 201-202 Intermediate Nepali Conversation ©

NEPAL 203-204 Intermediate Nepali Composition (a)

NEPAL 301-302 Advanced Nepali
PALI 131-132 Elementary Pali
SINHA 101-102 Elementary Sinhala
SINHA 160 Intensive Sinhala
SINHA 201-202 Intermediate Sinhala Reading (a)

SINHA 203-204 Intermediate Composition and Conversation @

TAMIL 101-102 Elementary Tamil
TAMIL 201-202 Intermediate Tamil Conversation
TAMIL 203-204 Intermediate Tamil Composition
CLASS 403-404 Independent Study in Sanskrit Undergraduate

CLASS 703-704 Independent Study in Sanskrit Graduate

## Southeast Asla-Area Courses

ANTHR 306 Ethnographic Description
ANTHR 316 Power, Society and Culture in Island Southeast Asia

ANTHR 322 Magic, Myth, Science, and Religion (also RELST 322) ©

ANTHR 335 People and Cultures of Mainland Southeast Asia (9)

ANTHR 424 Anthropology Amongst Disciplines ©

ANTHR 447 Ethnology of Southeast Asia a
ANTHR 619 Anthropological Approaches to the Study of Buddhism in Asia

ANTHR 628 Political Anthropology: Indonesia
ANTHR 634-635 Southeast Asia: Readings in Special Problems

GOVT 344 Government and Politics of Southeast Asia @

GOVT 349 Political Role of the Military
GOVT 642 Comparative Political Economy: East Asia

GOVT 647 Political Anthropology: Southeast Asia
GOVT 652 Political Problems of Southeast Asia
GOVT 692 The Administration of Agriculture and Rural Development

HIST 395 Southeast Asia to the Eighteenth Century @ \#

HIST 396 Southeast Asian History from the Eighteenth Century (ab

HIST 494 The Japanese in Asia (0)
HIST 695 Early Southeast Asia: Graduate Proseminar

HIST 696 Modern Southeast Asia: Graduate Proseminar

HIST 697 Seminar in Southeast Asian Palaeology
HIST 795-796 Seminar in Southeast Asian History

ART H 396 The Arts of Southeast Asia \# \#
ART H 482 Ceramic Art of China and Southeast Asia © \#

LING 230 Introduction to Southeast Asian Languages and Linguistics @

LING 405-406 Sociolinguistics
LING 600 Field Methods
LING 701-702 Directed Research
MUSIC 245 Gamelan in Indonesian History and Cultures (a)
MUSIC 345-346 Introduction to the Gamelan ©
MUSIC 445-446 Cornell Gamelan Ensemble
MUSIC 680 Topics in Ethnomusicology
Southeast Asia-Language Courses
BURM 103-104 Burmese Conversation Practice
BURM 121-122 Elementary Burmese
BURM 123 Continuing Burmese
BURM 201-202 Intermediate Burmese Reading
BURM 301-302 Advanced Burmese Reading
BURM 401-402 Burmese Directed Individual Study
CEBU 101-102 Elementary Cebuano
INDO 161-162 FALCON ©
INDO 121-122 Elementary Indonesian
INDO 123 Continuing Indonesian
INDO 203-204 Intermediate Composition and Conversation

INDO 205-206 Intermediate Indonesian ©
INDO 300 Linguistic Structure of Indonesian
INDO 301-302 Advanced Readings in Indonesian and Malay
INDO 303-304 Advanced Indonesian Conversation and Composition

INDO 305-306 Directed Individual Study
INDO 401-402 Advanced Readings in Indonesian and Malay Literature

JAVA 131-132 Elementary Javanese
JAVA 133-134 Continuing Javanese
JAVA 203-204 Directed Individual Study
KHMER 101-102 Elementary Khmer
KHMER 201-202 Intermediate Khmer Reading (e)

KHMER 203-204 Intermediate Composition and Conversation ©

KHMER 301-302 Advanced Khmer (3)
KHMER 401-402 Directed Individual Study
KHMER 403-404 Structure of Khmer
TAG 121-122 Elementary Tagalog
TAG 123 Continuing Tagalog
TAG 205-206 Intermediate Tagalog (a)
TAG 300 Linguistic Structure of Tagalog
THAI 101-102 Elementary Thai
THAI 201-202 Intermediate Thai Reading
THAI 203-204 Intermediate Composition and Conversation

THAI 301-302 Advanced Thai

THAI 303-304 Thai Literature
THAI 401-402 Directed Individual Study
VIET 101-102 Elementary Vietnamese
VIET 201-202 Intermediate Vietnamese Reading
VIET 301-302 Advanced Vietnamese
VIET 401-402 Directed Individual Study

## ASTRONOMY

Y. Terzian, chair ( 512 Space Sciences Building, 255-4935); T. L. Herter, director of undergraduate studies ( 212 Space Sciences Building 255-5898); J. A. Burns, D. B. Campbell, D. F. Chernoff, J. M. Cordes, M. M. Davis, P. J. Gierasch, R. Giovanelli, P. F. Goldsmith, M. P. Haynes, J. R. Houck, D. Lai,
P. D. Nicholson, E. E. Salpeter, C. J. Salter,
S. W. Squyres, G. J. Stacey, S. A. Teukolsky, J. F. Veverka, I. M. Wasserman.

Emeritus: T. Gold, T. Hagfors, M. O. Harwit
Cornell's astronomy faculty, research staff, and graduate students are active in diverse areas of modern astronomy ranging from theoretical astrophysics and general relativity to radio and radar astronomy, 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.
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 100 -level courses are designed primarily for non-science majors. The alternative introductory sequence Astronomy 211-212 is geared toward sophomore physical science and engineering majors and requires coregistration in beginning calculus. Astronomy 201 and 202 are intended for students with an interest in astronomy but no scientific background; they are topical rather than survey-oriented. Astronomy 332 is designed for physical science and engineering majors as an introduction to astrophysics. Other courses at the 200 and 300 levels may appeal to students of various backgrounds and interests, as indicated in the individual course descriptions.
Courses numbered above 400 are intended for students who have had two to three years of college physics and at least two years of college mathematics. Astronomy 440, 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 a faculty member 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, a student would normally elect the introductory physics sequence Physics 112-213-214 or 116-217218 and the complementary pathway in mathematics, Mathematics 111-122-221-222 or 191-192-293-294 (or equivalent). Students who anticipate undertaking graduate study are urged to elect the honors physics sequence Physics 116-217-218-318-327 if possible. The sophomore seminar Astronomy 233 "Topics in Astronomy and Astrophysics" will provide an introduction to current research in astronomy and astrophysics for prospective majors, but is not required of students who elect to major in astronomy after the sophomore year. Students are also urged to acquire computer literacy. Acceptance to the major will first be considered after completion of three semesters of introductory physics and mathematics and in general will require a GPA of 3.20 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:

Physics 314 or $318,316,323$ or 327,341 and 443
Mathematics 421 and 422 (or equivalent, e.g. A\&EP 321-2)

Astronomy 410, 431, and 432.
Students interested in planetary studies may substitute one or more appropriate advanced courses upon consent of the major adviser or may pursue an independent major under the program in the Science of Earth Systems. In addition, majors are also encouraged to supplement the above courses with any astronomy, physics, or other appropriate courses at or above the 300 level. Advanced seniors can enroll in astronomy graduate courses with the consent of the instructor. Students are also encouraged to work with faculty members on independent study projects under the course Astronomy 440 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 upperclass 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 Advisers Committee of the astronomy faculty.
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.
Concentration. The concentration in astronomy for other majors normally requires 12 credits, at least 8 of which must be at the 300 level or above. Astronomy 233 is recommended for sophomores planning to concentrate in astronomy.

## Distribution Requirement

All courses in astronomy, except Astronomy 233 , may be used to fulfill the science distribution requirement in the Colleges of Arts and Sciences.

## Courses

ASTRO 101 The Nature of the Universe
Fall. 4 credits. No prerequisites. Labs and discussions limited to 30 students each.
T. Herter; labs: G. Stacey.

The history of the universe and the physical nature of existence. An examination of the universe and our place in it and the possible existence of life and intelligence elsewhere in the cosmos. The nature of stars, galaxies, and quasi-stellar sources. The birth, evolution, and death of stars and the formation of the chemical elements, including discussions of supemovae, pulsars, neutron stars, and black holes. The physical state and composition of the interstellar material and its influence on the evolution of our galaxy. An introduction to the special and general theories of relativity. The nature of time. Modern theories of cosmology and the structure and evolution of the universe. The complete lecture notes are made available on the World Wide Web.

## ASTRO 102 Our Solar System

Spring. 4 credits. No prerequisites. Labs and discussions limited to 30 students
each. J. Veverka; labs: G. Stacey. A survey of the current state and past evolution of our solar system, with emphasis on results from the direct exploration of planets by spacecraft. The course is divided into four parts: theories of formation; the inner planets; the outer solar system; and the search for life in the solar system and elsewhere. Stress is placed on the important processes that have shaped the evolution of planets and satellites.

## ASTRO 103 The Nature of the Universe

## Fall. 3 credits.

Identical to Astronomy 101 except for omission of the laboratory (see description above).

## ASTRO 104 Our Solar System

Spring. 3 credits.
Identical to Astronomy 102 except for omission of the laboratory (see description above).

## ASTRO 105 An Introduction to the Unlverse

Summer. 3 credits.
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 106 Essential Ideas in Relatlvity

 and CosmologySummer. 3 credits. Prerequisites: high school algebra and trigonometry. Einstein's theories of special and general relativity, which brought about a fundamental change in our conceptual understanding of space and time, will be studied. Correspondence to, and conflicts with, common sense will be pointed out. Applications to various areas will be studied: in special relativityspace travel, equivalence of mass and energy, nuclear fission and fusion, and thermonuclear processes in the sun; in general relativitymotion of light and particles in curved spacetime, cosmological models, and the question of whether the universe is open or closed.

## ASTRO 107 An Introduction to the

 UniverseSummer. 4 credits.
Identical to Astronomy 105 except for the addition of the afternoon laboratory.

## ASTRO 195 Observational Astronomy

Fall. 3 credits. Limited to 20 students. G. Stacey.

This course provides a "hands-on" introduction to observational astronomy intended for students at the freshman and sophomore level in the liberal arts. The course has no prerequisites-its goal is to teach how we know what we know about the Universe. The course consists of 14 lectures, 10 to 12 formal laboratory exercises, plus one or two "take home" labs. Planned exercises include a few observational labs (star gazing with binoculars, telescopic investigations of star clusters, nebulae and the planets, and radio observations of the Milky Way Galaxy), computer simulations of planetary orbits, including the effects of orbits and obliquity on planetary weather, construction and use of simple instruments (optical spectroscopes, and sun dials), experiments in radioactive dating and planetary cratering, and cosmological explorations using data from the Hubble Space Telescope available on the World Wide Web.
ASTRO 201 Our Home In the Unlverse
Fall. 3 credits. Assumes no scientific
background. Preference given to freshmen and sophomores. D. Chernoff, Y. Terzian. A general discussion of our relation to the physical universe and how our view of the universe has changed from ancient to modern times. Several main themes are covered over the course of semester: (1) our view of the night sky from the ancient Greeks to the Hubble Space Telescope, (2) the death of stars and the formation of black holes, (3) dark matter and the structure of galaxies and (4) the origin, evolution, and fate of the universe. We present a nonmathematical introduction to these subjects and discuss uncertainties and unresolved issues in our understanding.

## ASTRO 202 Our Home in the Solar

 SystemSpring. 3 credits. Prerequisite: some background in science. Course intended for freshman and sophomores. Staff. A comparison of the Earth with the other worlds in our solar system, with an emphasis on the nature and fragility of planetary environments. Topics to be discussed include the climate and weather, species extinctions, the history of climate change, evolution of the atmosphere of the Earth and other planets, ecology and biological interdependence, and threats to the current global environment-
including ozone layer depletion, greenhouse warming, and nuclear winter. Possible solutions to these problems, including their economic and social costs and their ethical implications, will be considered. The course will attempt to develop skills in writing and in elementary physics and chemistry.

## ASTRO 211 Astronomy: Stars, Galaxies,

 and CosmologyFall. 4 credits. Intended for engineering and physical sciences freshmen and sophomores. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191. J. Houck.
The formation and evolution of normal stars, supernovae, pulsars, quasars, and black holes. The interstellar medium. Cosmology and the structure and evolution of galaxies.

## ASTRO 212 The Solar System: Planets, Satellites, and Rings

Spring. 4 credits. Intended for first and second year engineering and physical sciences students. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191 ; some knowledge of classical physics (mechanics and thermodynamics). P. Gierasch.
Celestial mechanics; tidal evolution; the physics and chemistry of planetary surfaces, atmospheres, and satellites; planetary interiors; planetary rings; asteroids, comets, and meteorites; searches for other planetary systems.

## ASTRO 233 Toplcs in Astronomy and

 AstrophysicsFall. 2 credits. Prerequisites: Physics 112 and 213, Mathematics 112 and 221 , or permission of instructor. Intended for sophomores planning to major in astronomy or related fields. S. Squyres. A seminar course on selected topics in astronomy and astrophysics designed for prospective astronomy majors. Content will vary from year to year, but will include topics from the fields of planetary, galactic, and extragalactic research.

## ASTRO 280 Space Exploration

Fall. 3 credits. S. Squyres.
This course 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. The focus is on methods of collecting information and especially on spacecraft and space missions. Topics will include the design and limitations of instruments. Ethical and political questions associated with space exploration will be discussed. Intended for students with an interest in science, technology, and associated policy issues. No special background in physical sciences, math, or engineering is assumed.
ASTRO 290 Relativity and Astrophysics
Spring. 4 credits. Prerequisites: freshman physics and calculus; knowledge of geometry. I. Wasserman.
This course provides a geometrically based introduction to special and general relativity, followed by consideration of astrophysical applications. Included will be discussion of tests of Einstein's theory of space, time, and gravitation; physics of white dwarfs, neutron stars, and black holes; introduction to modern cosmology.

## ASTRO 299 Search For Life in the

 UniverseSpring. 4 credits. Prerequisites: two courses in any physical science subject or permission of instructor. J. Cordes, Y. Terzian.

The contents of the universe will be surveyed. Theories of cosmic and stellar evolution, and of the formation and evolution of planetary systems, planetary atmospheres and surfaces will be reviewed. Questions regarding the evolution of life and the development of technology will be discussed. Methods to detect extraterrestrial life with emphasis on radio telescopes and associated instrumentation will be presented. Hypothetical communication systems will be developed and discussed

## ASTRO 331 Climate Dynamics (also

 SCAS 331)ASTRO 332 Elements of Astrophysics Spring. 4 credits. Prerequisites: calculus and Physics 213. Physics 214 strongly recommended. P. Nicholson.
An introduction to astronomy, with emphasis on the application of physics to the study of the universe. Physical laws of radiation. Distance, size, mass, and age of stars, galaxies, and the universe; stellar evolution and nucleosynthesis. Supernovae, pulsars, and black holes. Galaxies and quasars. Introduction to cosmology. The structure and evolution of planets and of the solar system. Mainly intended for students of science, engineering and science education, interested in astronomy and astrophysics.

## ASTRO 410 Experimental Astronomy

Fall. 4 credits. Prerequisites: Physics
214/8 (or 310 or 360 ), Physics $323 / 7$ (or co-registration) or permission of instructor. J. Cordes, P. Goldsmith, J. Houck. Observational astrophysics. Major experiments will involve techniques in CCD (charge-coupled-device) imaging, optical photometry, optical spectroscopy, radiometry, radio spectroscopy and radio astronomy. The experiments involve use of the HartungBoothroyd Observatory's 24-inch telescope, a laboratory 2 -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 and galaxies.

## ASTRO 431 Introduction to Astrophysics

 and Space Sciences IFall. 4 credits. Prerequisites: mathematics above the 200 level and physics above the 300 level; co-registration in Physics 341 and 443 is recommended. D. Lai.
A systematic development of modern astrophysical concepts for physical science majors. Atomic and electromagnetic processes in space. Introduction to star formation, stellar structure and evolution, radiative transfer, and the interstellar medium. At the level of Astrophysical Concepts, by Harwit.

## ASTRO 432 Introduction to Astrophysics and Space Sclences II

Spring. 4 credits. Prerequisite: As-
tronomy 431 or permission of instructor. D. Lai.

This course is divided into two broad topics; the astrophysics of the interstellar medium
and cosmology. The interstellar medium section will cover thermal equilibrium and radiative transport in HII regions, atomic gas regions, and molecular clouds. The cosmology section will include expansion of the universe, metrics, Friedmann equations, dark matter, cosmological tests, the early universe, and the cosmological production of the elements. At the level of Astropbysics of Gaseous Nebulae and Galactic Nuclei by Osterbrock.

## [ASTRO 434 The Evolution of Planets

Spring. 4 credits. Not offered 1997-98. An introduction to the physical and chemical processes that have been active in altering the environments of planets and satellites from their original to their present state. Theories of the formation of the solar system are revealed with special emphasis on chemical differentiation of the primeval solar nebula. A critical assessment is made of how well the various theories account for the clues left in the meteorite record and how well they explain the current environments of the planets and satellites. The main ideas about the formation and evolution of terrestrial planets, satellite systems, and asteroids are considered in detail. Some specific topics included are the history of the earth-moon system, the probable evolution of Jupiter's Galilean satellites, and the comparative histories of Venus, Earth, and Mars.]

## ASTRO 440 Independent Study in

 AstronomyFall or spring. 2-4 credits. Prerequisite: permission of instructor. Recommended: familiarity with the topics covered in Astronomy 332, 431, or 434.
Individuals work on selected topics. A program of study is devised by the student and instructor. Students need to fill out an independent study form, have it signed by the instructor, and register in the department office, 510 Space Sciences Building.

## ASTRO 485 Atmospheric and

Ionospheric Physics (also ELE E 485)
Fall. 3 credits. Prerequisites: Physics through 214 or equivalent, introductory chemistry, introductory differential equations. P. Gierasch, D. Farley.
The structure and dynamics of the middle atmosphere and the ionosphere are surveyed Topics include energy balance and thermal structure, global circulation patterns, waves that carry energy from the lower atmosphere to the upper atmosphere, ionization, production and loss of charged particles, coupling of the neutral atmosphere with electric fields, charged particle transports. Observation techniques, including radar and in situ instruments, will be discussed. Comparisons with other planets will be made.

## [ASTRO 490 Senior Seminar Critical

 ThinkingSpring. 3 credits. Not offered 1997-98. J. Cordes, Y. Terzian.

Critical thinking in scientific and nonscientific contexts. Topics will include elements of classical logic and rhetoric, including standards of evidence. Case studies will include examples of competing hypotheses in the history of science, as well as examples from borderline science and medicine, religion, and politics. Stress will be laid on creative generation of alternative hypotheses and their winnowing by critical scrutiny. Topics will include the nature and history of the universe, the nature of reality, the
possibilities of life on other planets, and artificial intelligence.]

## [ASTRO 509 General Relativity

Not offered 1997-98. S. Teukolsky. For description, see PHYS 553]

## [ASTRO 510 Appllcations of General

 RelativityNot offered 1997-98. S. Teukolsky. For description, see PHYS 554.]

## ASTRO 511 Physles of Black Holes, White Dwarfs, and Neutron Stars

 (also Physics 525)Spring, 4 credits. D. Chernoff.
The formation of compact objects; neutrino and gravitational radiation from supernova collapse and neutron stants. Equilibrium. configurations, equations of state, stability criteria and mass limits: the influence of rotation and magnetic fields. Pulsar phenomena. Mass flow in binary systems; spherical and disk accretion; high-temperature radiation processes. Compact X-ray sources and X-ray bursts. Emphasis will be on the application of fundamental physical principles to compact objects. No astronomy or general relativity prerequisites. Text: Physics of Black Holes, White Dwarfs, and Neutron Stars, by Shapiro and Teukolsky.

## [ASTRO 516 Galactic Structure and

 Stellar DynamicsFall. 4 credits. Not offered 1997-98. D. Chernoff.

The kinematics and distribution of stars in the solar neighborhood. The dynamical structure, composition, and evolution of our galaxy Characteristics and classifications of galaxies, galaxy groups, globular clusters, and clusters of galaxies. Theory of N-body systems, stellar encounters, collisional and violent relaxation, and stellar evaporation rates. Dynamical evolution of star cluster and associations. Theory of spiral structure. Binary and rotating star systems.]

## ASTRO 520 Radio Astronomy

Fall. 4 credits. D. Campbell, J. Cordes. Radio astronomy telescopes and electronics; antenna theory; observing procedures and data analysis; concepts of interferometry and aperture synthesis.

## [ASTRO 523 Signal Processing and Data

 Analysis in AstronomyFall. 4 credits. Not offered 1997-98.
Topics will include probability theory, Fourier analysis of discrete and continuous time series, digital filtering, spectral analysis, parameter estimation, statistical inference using Bayesian methods, stochastic and chaotic processes, image formation and analysis, maximum entropy analysis, and cluster analysis. Special topics will include neural networks and genetic algorithms. Examples will be drawn from subject areas in astronomy and astrophysics, geophysics, plasma physics, and electronics.]

## [ASTRO 525 Techniques of Optical/ Infrared and Submillimeter

 AstronomySpring. 4 credits. Not offered 1997-98. Optical/infrared and submillimeter telescopes and instrumentation will be discussed and related to current research in these fields. Special emphasis will be on detector elements, instrument design and construction, data analysis and observing procedures. Intended for students with a thorough understanding of undergraduate physics.]

ASTRO 530 Astrophysical Processes
Spring. 4 credits. D. Chernoff, J. Cordes, P. Goldsmith, T. Herter.

Thermal and nonthermal radiation processes encountered in studies of stars, the interstellar and intergalactic media, galaxies and quasars. Fundamentals of radiative transfer,
bremsstrahlung, synchrotron radiation, and Compton scattering will be covered, as well as spectral line transfer, gas heating and cooling, and topics in atomic and molecular spectroscopy. These topics will be discussed within the framework of astrophysical situations, such as star formation, interstellar gas and dust clouds, jets, active galactic nuclei, clusters of galaxies and cosmology.

## [ASTRO 555 Theory of the Interstellar Medium

Spring. 4 credits. Not offered 1997-98. Global theories of the interstellar mediummass and energy exchange between the different phases. The role of shock waves and energic outflows in the thermal equilibrium and ionization state of gas in the galaxy. Basic astrophysical fluids and plasmas. Galactic dynamics. Observations techiques, current problems and results.]

## [ASTRO 560 Theory of Stellar Structure

 and Evolution (also Physics 667)Fall. 4 credits. Not offered 1997-98. Observational overview; hydrostatic equilibrium; equations of state; radiative and convective energy transport; nuclear burning; solar neutrinos; rotation and magnetic fields; stellar seismology; brown dwarfs; pre-main sequence contraction.]

## ASTRO 570 Physics of the Planets

Fall. 4 credits. P. Nicholson.
An introductory survey of planetary science with an emphasis on the application of physical principles. Planetary dynamics, including satellite orbits, tidal interactions, resonances, and ring dynamics. An introduction to the theory of planetary interiors, gravitational fields, heat sources, and rotational mechanics. Physics and chemistry of planetary atmospheres, including radiative transfer, convection, and thermal structure. Important observational results, including those of ground-based optical, infrared, radio, and radar astronomy, as well as those made by spacecraft, will also be discussed. Intended for students in astronomy, physics, and engineering.

## ASTRO 571 Mechanics of the Solar System (also Theoretical and Applied Mechanlcs 673)

Spring. 3 credits. J. Burns. Gravitational potential, planetary gravity fields. Free and forced rotations. Chandler wobble, polar wander, damping of nutation. Equilibrium tidal theory, tidal heating. Orbital evolution of natural satellites, resonances, spin-orbit coupling. Cassini states. Long-term variations in planetary orbits. Orbital and Rotational Chaos. Dust dynamics. Dynamics of ring systems. Seismic waves, free oscillations. Illustrative examples are drawn from contemporary research.

## [ASTRO 576 Upper Atmosphere Physics

 II (also Electrical Engineering 586)Spring. 3 credits. Not offered 1997-98. High-latitude ionosphere; electric fields in the polar cap and auroral zone; particle precipitation and the aurora; magnetic and ionospheric storms; plasma instabilities in the ionosphere and magnetosphere; structure and physical
processes in the sun, solar corona, and solar wind; interactions between the solar wind and the earth's magnetosphere; trapping,
acceleration, and drift of energetic particles in the magnetosphere.]

## [ASTRO 579 Celestial Mechanics

Not offered 1997-98.
For description, See T\&AM 672.]
[ASTRO 590 Galaxies and the Unlverse
Spring. 4 credits. Not offered 1997-98. The universe, its constituents, its large-scale structure, and its history in the light of the major thrusts of extragalactic research. The morphology, photometry, dynamics, and kinematics of galaxies and their subsystems. Determination of masses, mass-to-light ratios, and the "missing mass." Activity in Seyferts, radio galaxies, and quasars. Binaries, groups, clusters and superclusters. The extragalactic distance scale. Galaxy formation and evolution. Confrontation of cosmological theories with observational results.]

## ASTRO 599 Cosmology (also

 Physics 599)Spring. 4 credits. Prerequisites: statistical physics, quantum mechanics and electromagnetic theory. I. Wasserman. This course is intended to provide a detailed theoretical development of current ideas in cosmology. Topics will include observational overview; growth of irregularities, galaxy formation and clustering; big bang cosmology, recombination, nucleosynthesis; very early universe, symmetry breaking, inflationary scenarios. At the level of Peebles, Principle of Pbysical Cosmology.

## [ASTRO 620 Seminar: Advanced Radio

 AstronomySpring. 2 credits. Prerequisites: some background in extragalactic astronomy and/or radio astronomy suggested. Open to advanced undergraduates by permission of instructor. Not offered 1997-98. Selected topics in observational cosmology at radio wavelengths including: redshift surveys, gas stripping mechanisms, rotation curves and the distributions of mass and light, large scale structure, peculiar motions, atomic and molecular studies at high redshift, the Sunyaev-Zel'dovich effect, evolution of radio luminosity function, and the cosmic microwave background.]

## [ASTRO 621 Seminar: Planetary Radar Astronomy

Spring. 3 credits. Prerequisites: satisfactory completion of undergraduate mathematics and physics sequences for physical science/engineering majors, or permission of instructor. Not offered 1997-98.
Techniques of planetary radar astronomy, results of recent observations, and physical interpretation. Target detectability; the radar equation. Radar observables; delay and Doppler resolution. Instrumentation: antennas, receivers, transmitters, digital hardware. Signal processing and data analysis techniques. Target characterization: scattering laws and polarization properties. DelayDoppler interferometry. Topographic mapping. Radar observations from orbit; bistatic measurements. Synthetic aperture radar. Satellite and STS systems for radar studies of Earth. Pioneer Venus and VRM. Groundbased results: Moon, Venus, Mercury, Mars, asteroids, comets, Galilean satellites, Saturn's rings.]

## ASTRO 640 Advanced Study and

 ResearchFall or spring. Credit to be arranged. Guided reading and seminars on topics not currently covered in regular courses. Students need to register in the department office, 510 Space Sciences Building.
[ASTRO 660 Cosmic Electrodynamics (also Applled and Englneering Physics 608)
Spring. 2 credits. Not offered 1997-98.]
ASTRO 671 Seminar: Planetary Sclence
Fall. 3 credits. J. Veverka.
An informal series of lectures discussing the techniques used to obtain and interpret spacecraft and earth-based remote sensing data to the planets and smaller bodies in the solar system. Intended for graduate students and seniors. The emphasis this year will be on the exploration of asteroids, including recent results obtained by the Galileo spacecraft and data expected from the NEAR spacecraft currently on its way to asteroid 433 Eros.
[ASTRO 673 Seminar: Planetary Atmospheres
Spring. 2 credits. Not offered 1997-98. This course will deal with motions in planetary atmospheres. Among the topics to be discussed are the Venus general circulation, dust and water transports on Mars, alternating jets on the outer planets, and compositional layering in the outer planets.]
[ASTRO 680 Seminari Cosmic Rays and High-Energy Electromagnetlc Radiation
Spring. 2 credits. Not offered 1997-98.]
ASTRO 690 Seminar: Computational Astrophysics (also Physics 680)
Spring. 3 credits. Prerequisites:
working knowledge of FORTRAN.
C. S. Teukolsky.

A course designed to familiarize graduate students with numerical techniques for solving diverse problems in astrophysics. Numerical methods discussed in the course will include solving ordinary and partial differential equations, linear algebra and eigenvalue problems, Monte Carlo techniques, fast Fourier transforms, etc. In contrast to traditional numercial analysis courses, the flavor of the course will be "how-to", rather than theoretical. No theorems will be proved. Students will be allotted computer time to solve, both individually and in small teams, assigned numerical exercises. Text: Numerical Recipes by Press, Teukolsky, Vetterling, and Flannery.
【ASTRO 699 Seminar: Problems in Theoretical Astrophysics (also Physics 665)
Fall. 2 credits. Not offered 1997-98. An informal seminar that will examine "New Directions in Astrophysics." The participants will discuss neutrino astronomy, LIGO (the gravitational wave observatory), high energy gamma rays and cosmic rays, laboratory searches for dark matter, and the future of optical, radio, and infrared astronomy, both on the ground and in space. The seminar is open to all graduate students.]

## [ASTRO 699 Seminar: Theoretical

Astrophysics (also Physics 665)
Spring. 2 credits. Not offered 1997-98. An informal seminar for advanced graduate students in astronomy or physics. Topics will include the Hubble space telescope results.]

## BIOLOGICAL SCIENCES

P. J. Bruns, director (169 Biotechnology Building, 255-5042); H. T. Stinson, associate director and director of undergraduate studies (200 Stimson Hall, 255-5233); B. E. Comella, biology center coordinator (Biology Center, 216 Stimson Hall, 255-3358); M. L. Cox, executive staff assistant ( 200 Stimson Hall, 255-6859)

Biology is a popular subject at many universities for a variety of reasons: It is a science that is in an exciting phase of development; it prepares students for careers in challenging and appealing fields such as human and veterinary medicine, environmental sciences, and biotechnology; and it deals with the inherently interesting questions that arise when we try to understand ourselves and the living world around us. Many of the decisions we face today deal with the opportunities and problems that biology has put before us.
The major in biological sciences at Cornell is offered by the Division of Biological Sciences to students enrolled in either the College of Agriculture and Life Sciences or the College of Arts and Sciences. Student services in the division's Office for Academic Affairs and the Behrman Biology Center are available to students from either college.

The biology major is designed to enable students to acquire the foundations in physical and life sciences necessary to understand modern biology and to pursue advanced studies in a specific area of biology. Programs of study include animal physiology; biochemistry; cell biology; ecology and evolutionary biology; general biology; genetics and development; microbiology; neurobiology and behavior; and plant biology. A special program of study is available for qualified students with an interest in nutrition. Students interested in the marine sciences may consult the Cornell Marine Programs Office (G14 Stimson Hall, 255-3717) for academic advice and career counseling. For more details about the biology curriculum see the section in this catalog on the Division of Biological Sciences

BIOLOGY AND SOCIETY MAJOR
See Special Programs and Interdisciplinary Studies

## BURMESE

See Language Courses under Languages and Linguistics.

## CAMBODIAN

See Language Courses under Languages and Linguistics.

## CEBUANO (BISAYAN)

See Language Courses under Languages and Linguistics

## CHEMISTRY

P. L. Houston, chair (122 Baker Laboratory, 255-4174); J. E. McMurry, director of undergraduate studies; H. D. Abruña, A. C. Albrecht, B. A. Baird, T. P. Begley, J. M. Burlitch, B. K. Carpenter, J. C. Clardy, G. W. Coates, D. B. Collum, H. F. Davis, F. J. DiSalvo, G. S. Ezra, R. C. Fay, J. M. J. Frèchet, J. H. Freed, B. Ganem,
M. A. Hines, R. Hoffmann, R. Loring, J. E. McMurry, J. Meinwald, S. O. Russo, D. Sogah, D. A. Usher, B. Widom, C. F. Wilcox, P. T. Wolczanski, D. B. Zax
S. T. Marcus, associate director of undergraduate studies

The chemistry department offers a full range of courses in physical, organic, inorganic, analytical, theoretical, bioorganic, and biophysical chemistry. In addition to their teaching interests, chemistry 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.

## The Standard Major

The chemistry major at Cornell provides a great deal of flexibility and prepares students for a large variety of career options. In recent years, chemistry majors have gone on to graduate study in chemistry, medicine, law, and business management, as well as directly into positions with chemical, pharmaceutical and other industrial companies. A major in chemistry can also provide the basis for work in related areas such as molecular biology, chemical physics, geochemistry, chemical engineering, materials science, solid state physics, and secondary education. The required courses for the major can be completed in three years, leaving the senior year open for advanced and independent work under the supervision of a professor.
The courses are arranged as a progression, with some (including mathematics and physics) prerequisite to those that are more advanced. During the first year, a student should normally register for general chemistry (preferably Chemistry 215-216 although Chemistry 207-208 is acceptable), mathematics, a freshman writing seminar, a foreign language if necessary, or physics. Chemistry 215-216 is aimed at those students with good preparation and a strong interest in chemistry Students who do not know if their preparation is adequate should consult the instructor. In the second year a student should complete calculus and take physics and organic chemistry (Chemistry 359-360 is preferred to Chemistry 357-358). The second-year laboratory courses include 300, Quantitative Chemistry, if needed, and 301, Experimental Chemistry I. Chemistry 389-390, Physical Chemistry I and II, and Chemistry 302-303, Experimental Chemistry II and III, should be completed in the third year. Chemistry 410 should be completed in the third or fourth year. Advanced work in chemistry and related subjects can be pursued in the fourth year and in the earlier years as well. The opportunity for independent research is also available. All students with questions about the major are encouraged to consult the chair of the Department of Chemistry or the chair's representative. Entering students who are
exceptionally well prepared in chemistry may receive advanced placement credit for Chemistry 207
Prerequisites for admission to a major in chemistry are (1) Chemistry 215-216; or 207208 ; 300 ; or $211-208,300$; or $103,208,300$; (2) Physics 207or 112; and (3) Mathematics 111 or 191. Students are not encouraged to undertake a major in chemistry unless they have passed those prerequisite courses at a good level of proficiency. The minimum additional courses that must be completed for the standard major in chemistry are listed below.

1) Chemistry 301-302-303, 359-360 (357-358 may be substituted), 389-390, and 410
2) Mathematics 112,213 ; or $122,221-222$; or 192-293-294

## 3) Physics 208

Potential majors electing to take Mathematics 213 are strongly urged to do so in their sophomore year to avoid scheduling conflicts with Chemistry 389 in their junior year.
The sequence described above is a basic program in chemistry that students can extend substantially in whatever direction suits their own needs and interests. Those going on to do graduate work in chemistry should recognize that these requirements are minimal and should supplement their programs, where possible, with further courses such as Chemistry 405, 605,606,666,668, and 681 Even students not planning graduate work in chemistry should consider advanced work in physics and mathematics, courses in the biological sciences, and advanced work in chemistry as possible extensions of the basic program.

Honors. The honors program in chemistry offers superior students in the standard major an opportunity to study independently in seminars and to gain additional experience by engaging in research during the senior year. It is particularly recommended to those who plan graduate work in chemistry. Prospective candidates should complete the introductory organic chemistry and physical chemistry sequences by the end of the junior year, although failure to have completed those courses in the junior year does not in itself disqualify a student from the honors program Completion of the program at a high level of performance leads to the degree of Bachelor of Arts with honors in chemistry. Students will be admitted to the program by invitation of the department, with selection based on a superior cumulative average, including chemistry grades, and good performance in a prior research program.
Prospective candidates should discuss their plans with advisers by March 1 of their junior year; participants are notified by early January of their senior year. To be awarded honors, candidates must show outstanding performance in at least 8 credits of undergraduate research such as is offered in Chemistry $421,433,461$, or 477 . In addition, the writing of a thesis in the honors seminar (Chemistry 498) is expected.

## The Alternative Major

The alternative major is a flexible program that provides core coverage of chemistry around which students can design a program to meet their own career goals. Requirements consist of a core program along with four
additional courses chosen by the student.
One of the four must be in chemistry at the 300 level or above; the other three may be in another field but should represent a cohesive plan and must be approved by a departmental committee. Students who select the alternative major are not eligible for the Honors Program.

## The Core Program for the Alternative Major

1) Chemistry 215-216 (or 207-208, 300; or $211,208,300$; or $103,208,300$ ); 251,257 , 287,289 , and 410 (Chem 357-358 or 359-360 can be substituted for Chem 257, or Chem 389-390 can be substituted for Chem 287, thereby fulfilling the requirement for an additional 300-level chemistry course)
2) Mathematics 111-112; or 111, 122; or 191-192
3) Physics 207-208; or 112,213

## AddItional Courses for the Alternatlve Major

Possible plans for the remaining three courses might include programs in Biochemistry; Biology; Physics; Computer Science; Polymers; Materials Science; Science, Technology, and Society; History and Philosophy of Science and Technology; Business and Management; Economics; Education; and others
Premedical students and those interested in pursuing double majors might find the alternative major particularly attractive. The course requirements for admission to the alternative major are the same as those for the standard major.

## 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. Additional information is available from Susie Slack, 424 Kennedy Hall, 255-9255 or Prof. Deborah Trumbull, 426 Kennedy Hall, 255-3108.

## Laboratory Course Regulations

Students registered for laboratory courses who do not appear at the first meeting of the laboratory will forfeit their registration in that course.

Students and members of the teaching staff are required to wear safety goggles and lab aprons in all chemistry laboratories. Closetoed 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 laboratories.

Students 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 $\$ 10$ fee in addition to charges for any breakage.

## Courses

Note: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.

Preliminary examinations for all courses may be given in the evening.

## CHEM 103 Introduction to General

 ChemistryFall or summer. 4 credits. Enrollment limited. Recommended for students who have not had high school chemistry and for those needing a less intensive course than Chemistry 207-208. Lecs, M W F 11:15; lab, T R or F 8:00-11:00, or M W or F 1:25-4:25. Prelims: 7:30-9 p.m., Oct. 7. Nov. 13. D. Y. Sogah.
An introduction to general chemistry, with emphasis on important principles and facts. Chemistry 103 covers much of the same material as Chemistry 207 plus chemical equilibrium and introduction to chemical kinetics, but does so at a slower pace.

CHEM 203 Strategles In Sclence: The World of Chemistry
Spring. 3 credits. No prerequisite. This course plus Chemistry 103, 204, or 207 or 211 satisfies the College of Arts and Sciences physical science distribution requirement. Chemistry 203 also satisfies the C.A.L.S. physical science requirement of one course in chemistry. S-U or letter grades. Lecs, M W F 11:15. Prelims:
7:30-9 p.m., Feb. 24, March 31.
F. J. DiSalvo.

A general appreciation of chemistry in the everyday world which will highlight for nonscientists the way the scientific method works. Using several case studies, the course will focus not only on what modern chemistry has accomplished, but more generally on the way scientists think, how they function, what their modus operandi is. Selected topics include (a) the chemistry of food, food additives, and the effect of diet on health; (b) drugs and medicines; (c) air and water pollution, pesticides, herbicides, acid rain, and other environmental chemistry; (d) the chemistry of plastics, polymers, and other modem materials; (e) the chemistry of taste and smell, including flavors, perfumes, and cosmetics; and (f) biotechnology and genetic chemistry. Other topics to be discussed are the influence of the media on scientific issues, the decision-making process in science, scientific publishing, and fraud in science.
[CHEM 204 The Language of Chemistry Fall. 3 credits. This course contributes to meeting the College of Arts and Sciences "Physical and Biological Sciences" (Group I) distribution requirement, as well as the C.A.L.S. physical science requirement of one course in chemistry. S-U or letter grades. Lecs, M W F 12:20. Prelims: 12:20 p.m. Not offered 1997-98.

## J. Meinwald.

In his autobiography, A. Kornberg (Nobel Laureate in Medicine, 1959) wrote, "much of life can be understood in rational terms if expressed in the language of chemistry. It is
an international language, a language for all time, a language that explains where we came from, what we are, and where the physical world will allow us to go." Through careful examination of a few milestone investigations of naturally occurring biologically important compounds (such as the antimalarial quinine, bombykol, and the sperm attractants of algae), the principles of chemistry to which Kornberg refers will be developed. Methods of analyzing chemical problems will be emphasized, rather than the memorization of specific results or formulas. There will be an opportunity for students, working in small groups, to prepare and present short reports on topics of particular current interest at the interface between chemistry and biology.]

## CHEM 207-208 General Chemistry

207 , fall or summer; 208, spring or summer. 4 credits each term. Enrollment limited. Recommended for those students who will take further courses in chemistry Prerequisite for Chemistry 207: high school chemistry. Prerequisite for Chemistry 208: Chemistry 207 or 103. Lecs: T R 10:10 or 12:20. Lab: T R F 8-12 or M T W RF 12:20-4:25. Prelims: 7:30-9 p.m., Oct. 7, Nov. 13, Feb. 24, April 9. Fall: J. E. McMurry and D. B. Zax; spring: R. C. Fay.
The fundamental chemical principles and descriptive facts are covered, with considerable attention given to the quantitative aspects and to the techniques important for further work in chemistry. Second-term laboratory includes a systematic study of qualitative analysis.
Note: 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.

## CHEM 211 Chemistry for the Applied

 SclencesFall or spring. 4 credits. Recommended for those students who intend to take only one term of chemistry. Enrollment limited Prerequisite: high school chemistry or permission of instructor. Corequisite: a calculus course at the level of Mathematics 111 or 191. Lecs: M W F 12:20. Lab: fall and spring, M T W R F 1:25-4:25. Prelims: 7:30-9 p.m., Sept. 23, Oct. 23, Nov. 20, Feb. 12, March 10, April 14.
Fall: F. J. DiSalvo; spring: H. F. Davis. The important chemical principles and facts are covered with the objective of understanding the role of chemistry in other fields. Emphasis is on topics such as solid-state materials, periodic trends, and specific classes of compounds, such as polymers.
Note: 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.

## CHEM 215-216 General and Inorganic

 Chemistry215 , fall; 216, spring. Fall, 4 credits; spring, 5 credits. Recommended for students who intend to specialize in chemistry or in related fields. Enrollment limited. Prerequisites: good performance in high school chemistry and physics and in mathematics SAT. Corequisite: a calculus course at the level of Mathematics 111 or 191 for students who have not taken high school calculus. Prerequisite for Chemistry 216: Chemistry 215. Fall: lecs, M W F 12:20; lab, M T W R or F 1:25-4:25. Spring: lecs, M W F 12:20; two labs, M W 1:25-4:25, or T R 1:25-4:25. Prelims: 7:30-9 p.m., Oct. 7, Nov. 6, Feb. 12, March 10, April 14. Fall: R. Hoffmann; spring: P. T. Wolczanski.

An intensive systematic study of the laws and concepts of chemistry, with considerable emphasis on quantitative aspects, Second term includes systematics of inorganic chemistry. Laboratory work covers both qualitative and quantitative analysis

## [CHEM 222 Molecular Messengers In Nature

Spring. 3 credits. Prerequisite: one year of high school chemistry, Chemistry 103 or 207, or permission of instructor. Not offered 1997-98.
Organisms communicate with one another in nature chiefly by means of chemical signals. We will examine this intriguing mode of communication as it applies to a wide variety of species ranging from bacteria to insects and mammals, including humans. Essential concepts of organic chemistry and biology will be introduced and illustrated. Each student will be expected to prepare a term paper, and there will be an opportunity for oral presentation of some of these papers for class discussion.]

## CHEM 251 Introduction to Experimental

 Organle ChemlstryFall, spring, or summer. 2 credits. Recommended for non-chemistry majors Enrollment limited. Prerequisites: coregistration in Chemistry 257 or 357. Lecs: fall, R 11:15 or F 8:00; spring, F 8 ; lab, M T W R or F 1:25-4:25, or T or R 8-11. Prelims: 7:30-9 p.m., Fall: Nov. 6. Spring: April 7. Fall: S. Russo; Spring: S. Russo.

Introduction to the synthesis, separation, and handling of materials, including applications of many types of chromatography, simple and fractional distillation, crystallization, extraction, and others.

## CHEM 252 Elementary Experimental

 Organic ChemistrySpring or summer. 2 credits. Recommended for non-chemistry majors.
Prerequisite: Chemistry 251. Lec, R $11: 15$; lab, M T W R or F 1:25-4:25, or T or R
8-11. Prelims: 7:30-9 p.m. April 7. S. Russo.

A continuation of Chemistry 251.

## CHEM 257 Introduction to Organic and

 Blological ChemistrySpring. 3 credits. Prerequisite: Chemistry 103 or 207. Because Chemistry 257 is only a three-credit course, it does not provide a practical route to satisfying medical school requirements. Lecs, M W F 11:15. Prelims: 7:30-9:00 p.m., Feb. 26, April 9.
D. A. Usher.

An introduction to organic chemistry with an emphasis on those structures and reactions of organic compounds having particular relevance to biological chemistry. The course offers a physical picture of the factors controlling chemical reactivity. The main elements of biological chemistry will be presented from the perspective of an organic chemist.

## CHEM 287-288 Introductory Physical Chemistry

287, fall; 288, spring. 3 credits each term Prerequisites: Chemistry 208 or 216 and Mathematics 111-112, or permission of instructor. Prerequisite for Chemistry 288 Chemistry 287 or 389. Lecs, M W F 9:05; 287: rec, M or W 1:25, T 9:05; 288: rec, M or W 1:25. Prelims: 7:30-9 p.m., 287 Sept. 30, Nov. 6, Dec. 2. 288: March 5, April 16. Fall: H. D. Abruña; spring A. C. Albrecht

A systematic treatment of the fundamental principles of physical chemistry, focusing in the fall on thermodynamics and the quantum mechanics of the periodic table and chemical bonding. In the spring the course will be oriented to the application of physical chemistry to biological systems, including transport, kinetics, electrochemistry, spectroscopy. Chemistry 287 satisfies the minimum requirement for physical chemistry in the alternative chemistry major.

## CHEM 289-290 Introductory Physical

 Chemistry Laboratory289, fall; 290, spring. 2 credits each term. Lecs: fall, R 8:00 a.m.; spring, R 9:05. Lab: fall, M T 1:25-4:25; spring, M T W R F 1:25-4:25. Fall: J. H. Freed; spring: T. McCarrick

Quantitative and qualitative methods basic to the experimental study of physical chemistry.

## CHEM 300 Quantitative Chemlstry

 Fall. 2 credits. Prerequisite: Chemistry 208 or advanced placement in chemistry. Lec, R 10:10; lab, M T W R F 12:20-4:25 or T 8-12. Prelim: 7:30-9 p.m., Oct. 23, Nov. 20. J. M. Burlitch.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 301 Experimental Chemistry I

Spring. 4 credits. Prerequisites: Chemistry 216 or 300 , and 253 or 357 or 359. Lec, M W F 8:00; 2 labs, M W 1:25-4:25 or T R 8-11 or T R 1:25-4:25. T. P. Begley An introduction to the techniques of synthetic organic chemistry. A representative selection of the most important classes of organic reactions will be explored in the laboratory. The theoretical basis for these reactions and for the separation techniques used will be discussed in the lectures.

## CHEM 302 Experimental Chemistry II

 Fall. 4 credits. Enrollment limited; preference given to chemistry majors. Prerequisite: Chemistry 301. Lecs, M W F 9:05; 2 labs, M W 1:25-4:25, T R 8-11 or T R 1:25-4:25. M. A. HinesInstrumental methods of analysis, including UV, IR and AA spectroscopies, gas chromatography, and electrochemical methods. The design of experiments is stressed.

CHEM 303 Experimental Chemistry III Spring. 4 credits. Each lab limited to 11 students. Prerequisites: Chemistry 302, 389,390 ; coregistration in the latter is permissible. Lecs, M W F 9:05; 2 labs, M W 1:25-4:25, or T R 9:00-12 or T R 1:25-4:25. M. Hines.
An introduction to experimental physical chemistry, including topics in calorimetry, spectroscopy and kinetics. The analysis and numerical simulation of experimental data is stressed.

## CHEM 357-358 Organic Chemistry for the Llfe Sciences

357 , fall or summer; 358, spring or summer. 3 credits each term. Prerequisite for Chemistry 357: Chemistry 208 or 216 or advanced placement; recommended: concurrent registration in Chemistry 251 or 300. Prerequisite for Chemistry 358: Chemistry 357 or permission of the instructor. Lecs, M W F 9:05 or 10:10, optional rec may be offered. Prelims: 7:30-9 p.m., Sept. 23, Oct. 21, Nov. 18, Feb. 12, March 10, April 14. Fall: B. K. Carpenter; spring: J. C. Clardy. A study of the more important classes of carbon compounds especially those encountered in the biological sciences. Emphasis will be placed on their threedimensional structures, mechanisms of their characteristic reactions, their synthesis in nature and the laboratory, methods of identifying them, and their role in modern science and technology.

Note: Because of duplication of material, students who take both Chemistry 257 and 357 will receive graduation credit only for Chemistry 257.

## CHEM 359-360 Organic Chemistry

 I and II359, fall; 360 , spring. 4 credits each term. Recommended for students who intend to specialize in chemistry or closely related fields. Enrollment limited. Prerequisites: Chemistry 216 with a grade of B or better, Chemistry 208 with a grade of A or better, or permission of instructor. Prerequisite for Chemistry 360: Chemistry 359
Recommended: coregistration in
Chemistry 300-301-302. Lecs, M W F 9:05; dis sec, W 7:30 p.m.; prelims, 7:30-9:00 p.m., Sept. 24, Oct. 22, Nov. 12, Spring: 7:30-9:00 p.m., Feb. 25, April 8. Fall: D. A. Usher; spring, D. B. Collum.

A 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 389-390 Physical Chomistry

 I and II389, fall; 390, spring. 4 credits each term. Prerequisites: Mathematics 213 or, ideally, 221-222; Physics 208; Chemistry 208 or 216 or permission of instructor. Prerequisite for Chemistry 390: Chemistry 389. Lecs, 389: M W F 10:10; rec M or W 1:25 or T 9:05. Lecs, 390: M W F 10:10; prelims: 7:30-9 p.m. 389: Oct. 21, Nov. 20. 390: Feb. 12, March 10, April 14. Fall: G. S. Ezra; spring: 390: R. Loring.

The principles of physical chemistry are studied from the standpoint of the laws of thermodynamics, kinetic theory, statistical mechanics, and quantum chemistry.

## CHEM 391 Physical Chemistry II (also

 CHEM E 391)Spring. 4 credits. Enrollment limited to engineering students only. Prerequisites: Mathematics 293; Physics 112, 213; Chemistry 208 or 216 or permission of instructor. Co-requisite: Math 294. Prerequisite for Chemistry 391: Chemistry 389. Lecs, M W F 9:05; rec M or T 9:05; prelims: 7:30-9 p.m. Mar. 3, Apr. 7. B. Anton.

The principles of physical chemistry are studied from the standpoint of the laws of thermodynamics, kinetic theory, statistical mechanics, and quantum chemistry.
[CHEM 405 Techniques of Modern Synthetic Chemistry
Spring. 3 or 6 credits. Enrollment limited. Prerequisites: Chemistry 302 and permission of instructor. To receive three credits, students must perform a minimum of three two-week experiments. Six credits will be given for three additional experiments. Completion of five exercises in elementary glass-blowing will count as one experiment. Lab time required: 16 hours each week, including at least two 4-hour sessions in one section (M W 1:25). First meeting will be at 1:30 on first class day of semester. Lec, first week only, at times to be arranged. Not offered 1997-98. J. M. Burlitch.
The syntheses of complex organic, organometallic, and inorganic molecules are carried out with emphasis on the following techniques: vacuum line, high pressure, hightemperature solid state, inert atmosphere, nonaqueous solvents, radioactive labeling, solgel, photochemical and electrochemical methods, solid phase peptide synthesis, and polymer synthesis. Elementary glassblowing.]

## CHEM 410 Inorganic Chemistry

Fall. 4 credits. Prerequisites: Chemistry 253,358 or 360 , and 287 or 390 . Lecs, M W F 11:15. Prelims: 7:30-9:00 p.m., Sept. 25, Oct. 23, Nov. 20. R. C. Fay. A systematic study of the synthesis, structure, bonding, reactivity and uses of inorganic molecular and solid state compounds.

## CHEM 421 Introduction to Inorganic

 Chemistry ResearchFall or spring. 2-4 credits. Prerequisites: Chemistry 303 and 389-390, or Chemistry 287-288, and Chemistry 289-290 with an 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 433 Introduction to Analytical

 Chemistry ResearchFall or spring. 2-4 credits. Prerequisites: Chemistry 303 and 390 with an average of B - or 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 461 Introduction to Organic

 Chemistry ResearchFall or spring. 2-4 credits. Prerequisites: Chemistry 302 and 358 or 360 with a 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 477 Introduction to Physical Chemistry Research
Fall or spring. $2-4$ credits. Prerequisite: Chemistry 390 with an 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 498 Honors Seminar

Spring. No credit. Admission to standard chemistry majors only by departmental invitation. Additional prerequisites or corequisites: outstanding performance in either (1) two coherent 4-credit units of research in a course such as Chemistry $421,433,461$, or 477 ; or (2) one 4 -credit unit in a course such as Chemistry 421 , 433,461 , or 477 and summer research equivalent to at least 4 credits in the same subject.W 2:30-4. R. Hoffmann.
Informal presentations and discussions of selected topics in which all students participate. Chemistry as a profession, chemistry in culture. Individual research is on advanced problems in chemistry or a related subject under the guidance of a faculty member, culminating in a written report.

## CHEM 600-601 General Chemistry

## Colloquium

600, fall; 601 , spring. No credit. Required of all graduate students except those majoring in organic or bioorganic chemistry. Juniors and seniors are encouraged to attend. R 11:15. Fall:
J. H. Freed; spring: R. Hoffmann. A series of talks representative of all fields of current research interest in chemistry other than organic chemistry, given by distinguished visitors and faculty members.

## CHEM 602 Information Literacy for the

 Physical ScientistSpring. 1 credit. Primarily for undergraduate chemistry majors doing research and first-year graduate students. Lec, W 4:456:00. P. O'Neill.
An introduction to physical science information research methods, including use of paper and electronic resources. With the continued information explosion, much time can be wasted and important information missed unless an efficient information research strategy is developed. This course demonstrates the use of library and information resources as a method to start and critically evaluate the success of research projects. Text: Journal Literature of the Pbysical Sciences by Alice Leffer Primack and Cbemical Information Sources by Gary Wiggins.
CHEM 605 Advanced Inorganic Chemistry l: Symmetry, Structure, and Reactivity
Fall. 4 credits. Prerequisite: Chemistry 389-390 or equivalent or permission of instructor. Lecs, M W F 11:15.
J. M. Burlitch.

Selected topics in structure, bonding, and reactivity of inorganic compounds with emphasis on main group elements; at the level of Chemistry of the Elements, by Greenwood and Earnshaw. Group theory applications: hybrid orbitals, molecular orbitals, molecular vibrations, and ligand field theory; at the level of Cotton's Chemical Applications of Group Theory.

CHEM 606 Advanced Inorganic Chemistry Il: Synthesis, Structure, and Reactivity of Inorganic and Organotransition Metal Compounds
Fall. 4 credits. Lecs, M W F 10:10.
P. T. Wolczanski.

Synthesis, structure, and reactivity of coordination compounds and organometallic complexes. Emphasis on bonding models, structure, and reactivity, including the elucidation of mechanisms. Readings at the level of Purcell and Kotz's Inonganic Chemistry, and Collman, Hegedus, Finke, and Norton's Principles and Applications of Organotransition Metal Cbemistry.
[CHEM 607 Advanced Inorganic Chemistry III: Solid-State Chemistry
Spring. 4 credits. Prerequisite: Chemistry
605 or permission of instructor. Lecs, M W
F 11:15. Not offered 1997-98.
F. J. DiSalvo.

The third of a three-term sequence. Interdisciplinary approach to solids. Topics include solid-state structure and X-ray diffraction, synthesis methods, defects in solids, phase diagrams, electronic structure, and chemical and physical properties of solids. Text: Solid State Chemistry and Its Applications, by West. Readings from inorganic chemistry and solidstate physics texts.]
[CHEM 622 Chemical Communication
Fall. 3 credits. Not offered 1997-98.
J. Meinwald.

For description, see BIONB 623.)
CHEM 625 Advanced Analytical Chemistry I
Fall. 4 credits. Prerequisite: Chemistry 288 or 390 or equivalent. Lecs, M W F 9:05; occasional prelims W 7:30 p.m. C. F. Wilcox.

The application of molecular spectroscopy to chemical problems. Topics in infrared, NMR, and mass spectroscopy are discussed.

## CHEM 627 Advanced Analytical

 Chemistry IISpring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 390 or equivalent; but Chemistry 793 or equivalent would be helpful. Lecs, M W F 12:20. D. B. Zax.

Modern techniques in nuclear magnetic resonance. Little overlap is expected with Chem 625, as this course will focus on more general questions of experimental design, understanding of multipulse experiments, and aspects of coherent averaging theory. Example to be taken from both liquid and solid-state NMR. May also be of interest to other coherent spectroscopies.

CHEM 628 Trace Element and Isotopic Analysis (also Nutritional

## Sciences 690)

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 , or Chemistry 208 and Mathematics 112, or permission of instructor. Offered alternate years. Lecs, T R 10:10.
J. T. Brenna.

Modern trace, micro, and surface methods of analysis, including atomic spectrometry, solids mass spectrometry, high precision isotope ratio techniques, microscopic, microprobe, and electron spectroscopy. Applications to biological and solid state problems.

## CHEM 629 Electrochemistry

Fall. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: Chemistry 390 or equivalent (Mathematics 213 helpful). Lecs, T R 8:40-9:55. H. D. Abruña
Fundamentals and applications of electrochemistry. Topics will include the fundamentals of electrode kinetics, electron transfer theory, the electrical double layer, diffusion, and other modes of transport. A wide range of techniques and their application as well as instrumental aspects will be covered.

## CHEM 650-851 Organic and

Organometallic Chemistry Seminar 650 , fall; 651 , spring. No credit. Required of all graduate students majoring in organic or bioorganic chemistry. Juniors and seniors are encouraged to attend. M 4. D. B. Collum.
A series of talks representative of all fields of current research interest in organic and organometallic chemistry, given by research associates, faculty members, and distinguished visitors.

CHEM 865 Advanced Organic Chemistry
Fall. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisites: Chemistry 253 or 358 or 360 , and 390 or equivalents or permission of instructor. Lecs, M W F 12:20. D. B. Collum.

A survey of reaction mechanisms and reactive intermediates in organic chemistry.

CHEM 666 Synthetic Organic Chomistry Spring. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisite: Chemistry 665 or permission of instructor. Lecs, T R 10:10-11:25. B. Ganem.

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 668 Chemical Aspects of Blological Processes

Fall. 4 credits. Prerequisite: Chemistry 360 or equivalent. Lecs, T R 8:40-9:55. T. P. Begley.

A representative selection of the most important classes of enzyme-catalyzed reactions will be examined from a mechanistic perspective. Topics discussed will 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 will be emphasized.

## CHEM 670 Fundamental Princlples of

 Polymer ChomlstryFall. 4 credits. Prerequisite: Physical Chemistry 389/390 and Organic Chemistry $359 / 360$ or equivalent or by permission of instructor. Primarily for graduate students and advanced undergraduates. No previous knowledge of polymers is required. Lecs, T R 10:00-11:15.
G. W. Coates.

This course emphasizes general concepts and fundamental principles of polymer chemistry. The first part of the course deals with general introduction to classes of polymers, molar masses and their distributions, and a brief
survey of major methods of polymer
synthesis-radical, step growth, ionic, group transfer, Ziegler-Narta and metathesis polymerization methods-with emphasis on kinetics and mechanisms rather than on structure. The second part deals with characterization and physical properties. These include: solution properties-solubility and solubility parameters, solution viscosity, molecular weight characterizations [gel permeation chromatography, viscometry, light scattering, osmometry]; bulk propertiesthermal and mechanical properties; and structure-property relationships. The discussions will focus on chemistry rather than engineering of polymers.

## CHEM 671 Synthetic Polymer Chemlstry (also Materlals Science and Engineering 671 and Chemical Engineering 675)

Spring. 4 credits. Prerequisite: Chemistry 359-360 or equivalent or permission of instructor; recommended: knowledge of material covered in Chemistry 670 will be useful but not required; Materials Science and Engineering 620. Lecs, T R 8:3010:00. D. Y. Sogah.
Modern concepts in synthetic polymer chemistry. The application of organic synthetic methods to the development of new polymers and copolymers and the control of their architecture. Topics include chain and step-growth polymerizations, reactions of polymers, block and graft copolymers, dendrimers and star polymers. A broad spectrum of applications from recent literature will also be discussed.

## CHEM 672 Protein KInetlcs

Fall. 4 credits. Primarily for graduate students in Chemistry and Biochemistry. Prerequisite: Chemistry 390, Biological Sciences 331, or equivalents or permission of instructor. Lecs, M W F 10:10.

## B. A. Baird

Focus is on protein interactions with ligands and consequent changes in structure and activity. Topics include: protein structure and dynamics; thermodynamics and kinetics of ligand binding; steady state and transient enzyme kinetics; enzyme catalysis and regulation; role of cell membrane receptors in regulating cellular activities.

## [CHEM 677 Chemistry of Nuclelic Acids

Spring. 4 credits. Primarily for graduate students. Prerequisites: Chemistry 358 or 360 , and 390 or equivalents. S-U grades only. Lecs, $M$ W $10-11: 10$. Not offered 1997-98. D. A. Usher.
Properties, synthesis, reactions, and biochemical reactions of nucleic acids.]

## CHEM 678 Statistical Thermodynamics

Fall. 4 credits. Primarily for graduate
students. Prerequisite: Chemistry 288 or 390 or equivalents. Lecs, M W F 10:10. B. Widom.

Classical thermodynamics followed by the principles of statistical thermodynamics. Ensemble averages, Boltzmann distribution, partition functions, and thermodynamic quantities. Ideal gases and crystals. Evaluating thermodynamic properties from spectroscopic and structural data. Chemical equilibrium. Dense gases; the second virial coefficient. Statistical mechanics of solutions. Bose-Einstein statistics: photons, phonons. Fermi-Dirac Statistics: electrons in metals. At the level of the first twelve chapters of Statistical Mechanics by McQuarrie.
[CHEM 681 Physical Chemistry III
Fall. 4 credits. Prerequisites: Chemistry 288 or 390; Mathematics 213 and Physics 208; or equivalents. Not offered 1997-98. An introduction to the principles of quantum theory and statistical mechanics, atomic and molecular spectra, and elementary valence theory. At the level of Quantum Cbemistry, by Levine.]

## [CHEM 686 Physical Chemistry of

 ProteinsSpring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalents. S-U grades. Letter grades for undergraduates. Offered alternate years. Not offered 1997-98. Chemical constitution, molecular weight, and structural basis of proteins; thermodynamic, hydrodynamic, optical, spectroscopic, and electrical properties; protein and enzyme reactions; statistical mechanics of helix-coil transition in biopolymers; conformation of biopolymers; protein folding.J

## CHEM 700 Baker Lectures

Fall, on dates to be announced. No credit. Distinguished scientists who have made significant contributions to chemistry present lectures for periods varying from a few weeks to a full term. This year's lecturer: Prof. Michael E. Fisher, University Maryland.
[CHEM 701-702 Introductory Graduate Seminar in Analytical, Inorganic, and Phyalcal Chemlstry
701, fall; 702, spring. No credit. Required of all first-year graduate students majoring in analytical, inorganic, physical, theoretical, and biophysical chemistry.]
[CHEM 716 Special Topics In Advanced Inorganic Chemistry (Bonding in Molecules
Spring. 3 credits. Prerequisite: some exposure to (or a course in) quantum mechanics. A good undergraduate physical chemistry course may be sufficient, while Physics 443 or Chemistry 793 or Chemistry 794 are at a substantially higher level than what is needed. Lecs, M W F 12:20. Not offered 1997-98. R. Hoffman.

The purpose of this course is to build a qualitative picture of the bonding in all molecules, including organic, inorganic, organometallic systems and extended structures (polymers, surfaces and threedimensional materials). The approach uses molecular orbital theory to shape a language of orbital interactions. Most quantum mechanic ideas needed will be taught along the way; the course is specifically directed at organic, inorganic, and polymer chemists who are not theoreticians.]

## [CHEM 745 Physlical Polymer Sclence I

 (also Chemical Engineering 745)Fall. 3 credits. Prerequisite: a graduatelevel thermodynamics statistical course. Offered alternative years. Lecs, M W 2:554:10. Not offered 1997-98. C. Cohen. Thermodynamic properties of dilute, semidilute, and concentrated solutions from both classical and scaling approaches. Characterization techniques of dilute solutions: osmometry, light scattering, viscometry, and sedimentation. Rubber elasticity; mechanical and thermodynamic properties of gels. Polymer melts: equations of state and glass transition phenomenon.)
[CHEM 762 Special Topics In Organlc Chemistry: Fundamentals of Polymer Chemlstry
Fall. 4 credits. Prerequisite: Physical Chem 389/390 and Organic Chem 359/360 or equivalent or permission of instructor. Primarily for graduate and advanced undergraduate students. Lecs, T R 8:3010:00. Not offered 1997-98.
Introduction to polymer physical chemistry. Kinetics and mechanisms of Polymerization methods: Ionic, radical, step-growth and group transfer polymerization. Polymer
Stereochemistry. Solution properties:
Molecular weight characterization and polymer solubility. Mechanical and Thermal Properties. Structure-Property Relations. The discussions will focus on chemistry rather than engineering of polymers and examples will be taken from current literature.]
CHEM 765 Physical Organic Chemistry I
Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 665 or permission of instructor. Lecs, M W F 10:10. C. F. Wilcox.
Application of computational and experimental techniques to studies of organic reaction mechanisms and the properties of reactive intermediates.

## [CHEM 766 Physical Organic Chemistry II

Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 765 or permission of instructor. Not offered 1997-98.]

## [CHEM 774 Chemistry of Natural Products

Fall. 3 credits. Primarily for graduate students. Prerequisites: Chemistry 665666. Lecs, T R 10:10-11:30. Not offered 1997-98. D. B. Collum.
Particular attention is devoted to methods of structure determination and synthesis as applied to selected terpenes, steroids, alkaloids, and antibiotics.]

## CHEM 780 Principles of Chemical Kinetics

Fall. 4 credits. Prerequisite: Chemistry 681 or permission of instructor. Lecs, T R 10:10-11:25. H. F. Davis.
Principles and theories of chemical kinetics; special topics such as surface reactions, photochemistry, enzymatic reactions, energy transfer, and molecular beams.

## [CHEM 782 Special Topics in Biophysical

 and Bioorganic ChemistrySpring. 3 credits. Lecs, T R 11:15. Not offered 1997-98.
Topics vary from year to year.l

## [CHEM 788 Macromolecular

 Crystallography (also BIOBM 738) Spring. 3 credits. S-U grades optional. Prerequisite: permission of instructor. Offered alternate years. Lecs, M W F 10:10. Not offered 1997-98. S. A. Ealick, P. A. Karplus, J. C. Clardy.Lectures briefly cover the fundamentals of crystallography and focus on methods for determining the 3-dimensional strucures of macromolecules. These include crystallization, data collection, multiple isomorphous replacement, molecular replacement, model building, refinement, and structure interpretation.]
[CHEM 789 X-ray Crystallography
Spring. 4 credits. Prerequisite: Chemistry 288 or 390 or permission of instructor.
Offered alternate years. Lecs, M W F
10:10. Not offered 1997-98. J. Clardy. A beginning course in the applications of X-ray crystallography to chemistry. Topics include symmetry properties of crystals, diffraction of X-rays by crystals, interpretation of diffraction data, and refinement of structures. The chemical information available from a diffraction experiment is stressed, and practical aspects are incorporated.]

## CHEM 791 Spectroscopy

Fall. 4 credits. Prerequisite: Chemistry
793 or Physics 443 or equivalent. Lecs, T R 8:40-9:55. A. C. Albrecht. This course will explore the interaction of light with matter. We will start with the quantum mechanical foundations of spectroscopy and develop its statistical basis in the density matrix language. Emphasis will be on the many electric-field-based linear and nonlinear spectroscopies from vibrational to electronic.
[CHEM 792 Molecular Collision Theory
Spring. 4 credits. Lecs, T R 10:10-11:25.
Not offered 1997-98. 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 Tbeory and Taylor's Scattering Theory.]

## CHEM 793 Quantum Mechanics I

Fall. 4 credits. Prerequisites: Chemistry
390 , coregistration in A\&EP 321 or
equivalents or permission of instructor.
Lecs, M W F 11:15. R. Loring. Schrodinger's equation, wave packets, uncertainty principle, WKB theory, matrix mechanics, orbital and spin angular momentum, exclusion principle, perturbation theory, variational principle. At the level of CohenTannoudji's Quantum Mechanics.
CHEM 794 Quantum Mechanics II
Spring. 4 credits. Prerequisites: Chemistry 793 or equivalent and the equivalent of or coregistration in Physics 432 and
Mathematics 422, or permission of
instructor. Lecs, M W F 9:05. G. S. Ezra. Quantum structure of atoms and molecules. Time-dependent phenomena in quantum mechanics and light/matter interaction. Molecular spectroscopy. Group theory. At the level of Weissbluth's Atoms and Molecules, Levine's Quantum Chemistry, and Sakurai's Modern Quantum Mechanics.

## CHEM 796 Statistical Mechanics

 Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 678 and 793 or equivalent. Lecs, T R 8:30-9:55. B. Widom.Statistical mechanics of systems of interacting molecules. Structure and thermodynamics of classical liquids. Phase transitions and critical phenomena. Inhomogeneous fluids. Introduction to non-equilibrium statistical mechanics. Students are presumed to have taken a course in statistical thermodynamics at the level of the first twelve chapters of Statistical Mechanics, by McQuarrie.
[CHEM 798 Special Topics In Physleal Chemistry
Spring. 4 credits. Prerequisite: Chemistry 605 , or 681 , or 793 , or Physics 443 , or the equivalent. Lecs, T R 10:10-11:25. Not offered 1997-98. R. Hoffmann.]

## CHINESE

See Language Courses under Languages and Linguistics.
FALCON Program (Chinese)
J. Wheatley, 416 Morrill Hall, 255-9301.

## CLASSICS

J. Rusten (chair), L. S. Abel, F. M. Ahl,
C. Brittain, K. Clinton, J. E. Coleman, J. R. Ginsburg, E. Hohendahl,
G. Holst-Warhaft, G. M. Kirkwood (emeritus), H. Kolias, M. Landon, D. Mankin (director of undergraduate studies), G. M. Messing (emeritus), C. Minkowski, A. Nussbaum, H. Pelliccia (director of graduate studies), P. Pucci, H. R. Rawlings III, J. Reed,
D. R. Shanzer (acting chair, 1997-98)

Cornell University has long recognized the importance of studying the civilizations of ancient Greece and Rome. Particularly in an age of increasing specialization, study of the Classics is widely viewed as an excellent means of acquiring a liberal education; at Cornell, we are deeply interested in the continuing humanistic values contained in the literature of the ancient world and in gaining a fuller understanding of these important cultures and their imprint upon subsequent ages.
The Department of Classics at Comell is one of the oldest and largest in the country. With nineteen faculty members, together with professors of related interests in the departments of History, Philosophy, Comparative Literature, History of Art, Modern Languages and Linguistics, and Near Eastern Studies and in the Archaeology, Medieval Studies, and Religious Studies programs, the range of instruction available is very large, including not only the traditional study of language, literature, and ancient history, but also newer developments in the field, such as comparative study of Mediterranean civilizations and modern literary theory.
Although Classics, like other areas of humanistic study, does not aim at providing specific preprofessional training, over the years Classics majors from Cornell have gone on to a wide variety of careers: in law, teaching, medicine, diplomacy, management, educational administration, government, and many others.
The department offers courses in Bronze Age and Classical archaeology and is active in field projects in Classical lands. It sponsors archaeological excavations at Halai in Greece, which serves as a field training school for Cornell undergraduate and graduate students. On campus there are also collections of ancient artifacts, reproductions of ancient sculpture, and one of the few laboratories in the world to concentrate on the tree-ring dating of ancient monuments from Greece, Cyprus, and Turkey. The archaeology courses may be used to satisfy some of the require-
ments for the Intercollegiate Program in Archaeology or for the major in Classical Civilization. They require no knowledge of either Greek or Latin. Similarly, the department offers a variety of courses and seminars in English on such subjects as Greek mythology, Greek and Roman mystery religions, early Christianity, and Greek and Roman society, as well as ancient epic, tragedy, history, and philosophy. For those whose interest in things Greek and Roman extends no further than a desire to understand the English language a little better, the department offers one course in the Greek and Latin elements that make up a huge proportion of the vocabulary of Modern English, and another that deals more specifically with the Greek and Latin ingredients of bioscientific vocabulary. Programs in Greek and Latin at the elementary level are also offered, of course; and for the more ambitious there are courses involving reading, in the original, of Greek and Latin authors from Homer to St. Augustine and Bede and, periodically, the Latin works of Dante, Petrarch, and Milton. Sanskrit, the classical language of ancient India, is also offered, along with courses in translation on Indic religion, myth, and literature. The department makes every attempt to adapt its program to the needs of each student. If there is a Classical writer you would like to study, the department will do its best to help you do so whether you are a major in the department or not.

## Majors

The Department of Classics offers majors in Classics, Greek, Latin, and Classical Civilization.

## Classics

Those who major in Classics must complete 24 credits in advanced Greek or Latin (numbered 201 or above) and 15 credits in related subjects selected in consultation with the adviser.

## Classical Clvilization

Those who major in Classical Civilization must complete (a) qualification in Latin and Greek or proficiency in either; (b) 24 credits selected from the courses listed under Classical civilization, Classical archaeology, Latin, and Greek; and (c) 15 credits in related subjects selected in consultation with the adviser.

## Greak

Those who major in Greek must complete 24 credits of advanced courses in Greek and 15 credits in related subjects (including Latin).

## Latin

Requirements for the major in Latin parallel those of the major in Greek

## 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 study as given above and must also successfully complete the special honors courses 370, 471, and 472. Credit for honors courses may be included in the credits required for the major study. Students who wish to become candidates for honors, who have a cumulative average of $\mathrm{B}+$ or better, and who have demonstrated
superior performance in Classical courses (Greek, Latin, and Classical Civilization), submit an outline of their proposed honors work to the honors committee during the first month of their fifth semester. The chair will appoint a committee of three faculty members for each candidate, and the committee will be responsible for evaluating the candidate's proposal and subsequently supervising his or her work. At the completion of the honors thesis, which must demonstrate knowledge of the main bibliographical sources, give promise of scholarly talent, and show creativity, the committee will determine the level of honors to be awarded.

## Study Abroad

Cornell participates in the Intercollegiate Center for Classical Studies in Rome, which offers courses in Latin, Greek, ancient history, art, archaeology, and Italian. Another opportunity for a semester's study abroad is available through Cornell Abroad in Greece at the Athens Centre. (Consult Cornell Abroad for details.) In addition, Cornell is a member institution of the American School of Classical Studies at Athens, whose Summer Program is open to graduate students and qualified undergraduates. The American Academy in Rome, of which Cornell is also a member institution, offers full-year and summer programs for qualified graduate students. For graduate students the Department of Classics offers a few travel grants each year from the Townsend Memorial Fund. Detailed information on these programs is available in the Department of Classics Office, 120 Goldwin Smith Hall.

## Summer Support for Language Study

The Beatrice R. Kanders Memorial Scholarship (for the summer immediately following the freshman or sophomore year; preference given to dyslexic students) and a certain amount of tuition aid made possible by gifts from the Constantinos C. Polychronis Foundation are normally available to students who want 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 Classics undergraduate majors, and other students needing Latin or Greek for completion of their majors.
Applications are due to the chair of the Department of Classics by March 27.

## Placement in Latin, Ancient Greek, and Modern Greek

Placement of first-year students in Latin, ancient Greek, and modern Greek courses is determined by an examination given by the Department of Classics during orientation week or by arrangement with the director of undergraduate studies

## Freshman Writing Seminars

The department offers freshman writing seminars on a variety of topics. Consult John S. Knight Writing Seminar Program brochures for times, instructors, and descriptions.

## Classical Clvilization

Class 100 Word Power: Groek and Latin Elomonts In the English Language
Spring. 3 credits. I. Hohendahl.
This course gives the student with no
knowledge of the Classical languages an understanding of how the Greek and Latin elements that make up over half our English vocabulary operate in both literary and scientific English usage. Attention is paid to how words acquire their meaning and to enlarging each student's working knowledge of vocabulary and grammar.

## CLASS 102 Bioscientlfic Terminology

Summer. 3 credits. 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 usually can recognize the basic meaning of any unfamiliar word in that field. The class also gives attention to misformations and words still in use that reflect outmoded scientific theories.

CLASS 211 The Greek Experience
Fall. 3 credits. Limited to 50 students. F. Ahl.

An introduction to the literature and thought of ancient Greece. Topics will include epic and lyric poetry, tragedy and comedy, and historical, political, philosophical, and scientific writings. Some attention will also be given to the daily life of ordinary citizens, supplemented by slides of ancient art and architecture

## CLASS 212 The Roman Experience *

Spring. 3 credits. Limited to 100 students.
D. Mankin.

An introduction to the civilization of the Romans as expressed in their literature, religion, and social and political institutions.

## CLASS 217 Initiation to Creek Culture *

Fall. 4 credits. Limited to 18 students. This course is intended especially for freshmen (a few exceptionally motivated sophomores or upperclass students may be accepted). Apply in writing to the chair,
Department of Classics, 120 Goldwin Smith Hall. P. Pucci and J. Reed.
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-hour (occasionally twohour) session, during which the class will participate in workshops with specially invited guests.
This course will examine the development in Greek thought from mythological to philosophical explanations of the world and man's place in it. Readings will include Homer, Aeschylus, Sophocles, Euripides, the preSocratics, Plato, and Aristotle, as well as works by such seminal modern thinkers as Hegel, Nietzche, Heidegger, and Derrida
[CLASS 223 The Comic Theater (also Comparative Literature 223 and Theatre Arts 223) \#
Next offered summer 1998 and spring 1999. 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, seventeenth-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. All readings in English.]

## CLASS 231 Ancient Phllosophy (also

 Philosophy 211) "Fall. 4 credits. C. Brittain
For description, see PHIL 211.

## CLASS 236 Greek Mythology (also

 Comparatlve Llterature 236) "Fall 1997 and summer 1998. 3 credits. Limited to 200 students. D. Mankin. A 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 237 Greek Religion and Mystery

 Cults (also Religious Studies 237) \#3 credits. Not offered 1997-98; next offered 1998-99. K. Clinton.
Greek religion constitutes one of the essential features of ancient Greek civilization and distinguishes it from later Western civilization. Since religion permeates Greek culture, including the major art forms (epic poetry, tragedy, comedy, architecture, painting, and sculpture), the course will investigate the interaction of religion with these forms-an investigation that is fruitful both for the understanding of Greek religion and the forms themselves, some of which, like tragedy, originated in cult. A representative variety of cults and their history will be studied with special emphasis on mystery cults, such as the Eleusinian mysteries of Demeter and Persephone, the Kabiroi, the Great Gods of Samothrace, and Bacchic rites.]
[CLASS 238 The Ancient Epic and Beyond "
Fall. 3 credits. Not offered 1997-98; next offered fall 1998. H. Pelliccia.
We will move, Odysseus-like, to the West: beginning with Homer's Iliad (and including the British poet Christopher Logue's "account" of the opening books) and Odyssey, we will continue in the Hellenistic and Augustan eras with Apollonius of Rhodes' Argonautica and Virgil's Aeneid. A violent shift in space and time will have us conclude with two New World maritime epics: Herman Melville's Moby Dick and Derek Walcott's Omenos.]
[CLASS 291 Classical Indian Narrative \{also Aslan Studies 291] *
Spring. 3 credits. Not offered 1997-98. C. Minkowski.

For description, see ASLAN 291.]
[CLASS 333 Greek and Roman Mystery Cults and Early Christianity (also Religious Studles 333)
4 credits. A previous course in Classics (civilization or language) or Religious Studies 101 is recommended. Not offered 1997-98; next offered 1999-2000.
K. Clinton.

A study of the controversial question of religious continuity between paganism and early Christianity. After a brief survey of Classical mystery cults and Hellenistic religion, the course will focus on such Hellenistic cults
as the mystery cults of Isis, Bacchus, and Attis and the Great Mother and on the distinctive features that contributed to their success. Discussion of Christian liturgy and beliefs both in the East and the West to determine what Christianity owed to its pagan predecessors and to isolate the factors that contributed to its triumph over the "rival" pagan cults of late antiquity.]

## CLASS 345 The Traglc Theater (also Comparative LIterature 344 and Theatre Arts 345) "

Spring. 4 credits. Limited to 40 students. 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. Works studied will include: Aeschylus' Agamemnon; Sophocles' Oedipus Tyrannus, Pbiloctetes, Euripides' Alcestis, Helen, Iphigeneia in Aulis, Orestes, Seneca's Tbyestes, Trojan Women; Shakespeare's Julius Caesar, Titus Andronicus, Othello, Strindberg's The Father, Dürrenmatt's The Visit, Bergman's Seventh Seal; Cacoyannis' Iphigeneia.
CLASS 363 Representations of Women In Ancient Greece and Rome (also History 367 and Women's Studles 363) "
Spring. 4 credits. L. S. Abel and J. Ginsburg.

The task of this course is to analyze ancient Greek and Roman representations of women--some famous, some infamous, some nameless-within their historical and cultural contexts and the assumptions that underlie these representations. Using literary, historical, legal, and artistic sources (in translation) and examining the historiographical and methodological problems the use of such evidence poses, the class will assess the changing social conditions that relate to the roles, status, and images of women in antiquity. Among the topics considered are myth and ideology, women's role in the family and society, views of the female body and female sexuality, the place of women in creative art.

## [CLASs 382 Greeks, Romans, and Vlctorians (also Comparative Llternture 382) 畨

Spring. 4 credits. Not offered 1997-98; next offered 1998-99. F. Ahl
Modern popular and scholarly views of Greek and Latin literature were shaped in the Victorian years of the nineteenth century, between the years of Republican and Marxist revolution. This course explores some of the ways in which nineteenth-century social and intellectual upheavals, and changes in scholarly techniques and approaches, may have affected how English and Irish writers presented Greco-Roman antiquity and, especially, how they began to discard an idealized past based on a Roman model for one based on a Greek model. The focus will be on poets and dramatists (and a few artists and novelists) rather than on philosophers and scientists. 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 writers such as Thomas More, Shelley, Byron, Swinbume, Amold, Tennyson, W. S. Gilbert, Oscar Wilde, Samuel Butler, and others, including important artists such as Aubrey Beardsley.]
[CLASS 390 Comparative Sanskrit Myth and Epic (also Asian Studles 390) \#
Fall. 4 credits. Not offered 1997-98. C. Minkowski.

For description, see ASIAN 390.]
[CLASS 395 Classical Indian Philosophical Systems (also Asian Studies 395 and Religlous Studies 395) © "

4 credits. Prerequisite: some background in philosophy or in classical Indian culture. Not offered 1997-98. C. Minkowski. For description, see ASIAN 395.]
[CLASS 463 Gender and Polltics In the Roman World (also Hlstory 463 and Momen's Studies 464) "
4 credits. Not offered 1997-98; next offered fall 1998. J. Ginsburg.
An undergraduate seminar examining the relationship between gender and politics in the late Roman Republic and early Empire. Among the questions this course will address are: was politics the exclusive domain of men in Roman society (as is generally assumed) or does a broader definition of politics and an understanding of the various forms political activity in ancient Rome might take allow a place for women in Roman political life? what role does gender have in Roman political discourse and ideology? why do issues such as family, marriage, and sexuality become subjects of political debate and legislation?]

CLASS 465-466 Independent Study in Classical Clvillzation, Undergraduate Level
465, fall; 466, spring. Up to 4 credits.
CLASS 480 Roman Society and Polltics under the Julio-Claudians (also History 473) "
Spring. 4 credits. Prerequisite: Classics 212 , History 268 , or permission of instructor. J. Ginsburg.
This course examines several of the important social and political changes in Roman society under Augustus and his successors, the JulioClaudians. Topics to be investigated include Augustus's consolidation of power through political and social revolution, the Augustan attempt to regulate family life and social relations by legislation, the relation of the emperor Tiberius with the members of the old ruling class, the growth of the imperial bureaucracy and the new opportunities for social mobility, the political opposition to Claudius and Nero, Nero's cultural and provincial policy, and the manipulation of the imperial cult. All readings will be in English.

## CLASS 711-712 Independent Study for

 Graduate Students in Classical Civilization711, fall; 712, spring. Up to 4 credits.

## Greek

CLASS 101 Greek for Beginners
Fall. 4 credits. H. Pelliccia.
Introduction to Attic Greek. Designed to enable the student to read the ancient authors as soon as possible.

## CLASS 103 Attic Greek

Spring. 4 credits. Prerequisite: 101 or equivalent. M. Landon.
A continuation of Classics 101.

## CLASS 104 Intensive Greek

Summer. 6 credits. Staff.
An intensive introduction to the fundamentals of ancient Greek grammar. Prepares students in one term for 200 -level Greek.

## [CLASS 111-112 Modern Greek

111, fall; 112, spring. 3 credits each term. Not offered 1997-98. H. Kolias.]

CLASS 201 Attic Authors \# Fall. 3 credits. Prerequisite: Classics 103 or 104 or equivalent. H. Pelliccia.
Selected readings from Greek prose
[CLASS 202 The Greek New Testament (also Near Eastem Studies 220 and Religious Studies 202) "
3 credits. Prerequisite: at least one year of ancient Greek (Classics 101-103) or permission of instructor. Not offered 1997-98. Staff.
Selections in Greek from all four gospels, the letters of Paul and Acts.]
class 203 Homer *
Spring. 3 credits. Prerequisite: Classics 103 or equivalent. P. Pucci.
Readings in the Homeric epic with emphasis on formulaic style.
[CLASS 206 Herodotus \#
Spring. 3 credits. Prerequisite: Classics 103 or 104 or equivalent. Not offered 1997-98.
Selected readings from Herodotus' Histories,]

## [CLASS 209 Greek Composition

Fall. 3 credits. Prerequisite: one term of 200-level Greek or equivalent. Not offered 1997-98; next offered 1998-99.]

## CLASS 213 Intermediate Modem Greek

 Fall. 3 credits. Prerequisite: Classics 112 or placement by departmental examination. G. Holst-Warhaft.This course, designed for students who have completed introductory modern Greek or have a reading knowledge of the language, will give attention to developing facility in conversational and written expression, usually in connection with assigned readings reflecting Greek history and culture.

## CLASS 310 Greek Undergraduate

 Seminar \#Fall and spring. 4 credits. Prerequisite: two 200-level courses in Greek or permission of instructor. Fall topic: Aristophanes. P. Pucci. Spring topic: Aeschylus. F. Ahl.

## CLASS 311 Greek Philosophical Texts:

 (also Phllosophy 411) *Fall and spring: up to 4 credits. Prerequisites: Knowledge of Greek and permission of instructor. Fall, C. Shields; spring, C. Brittain.

Readings of Greek philosophical texts in the original.

## [CLASS 313 Greok Eple

Fall. 4 credits. Prerequisite: Classics 206 or equivalent. Not offered 1997-98.]
CLASs 401-402 Independent Study in Greek, Undergraduate Level
401, fall; 402, spring. Up to 4 credits.

## CLASS 417 Advanced Readings In Greek: Hellenistic Pootry <br> Spring. 4 credits. J. Reed.

## CLASS 419 Advanced Oreek

 CompositionSpring. 3 credits. Prerequisite: Classics 209 or equivalent. K. Clinton.
[CLAss 433 Greek Mystery Cults (also Classlcs 633 and Religious Studies 433) \#
4 credits. Prerequisite: one term of 300 -
level Greek or permission of instructor.
Not offered 1997-98. K. Clinton.
Discussion of the major Greek mystery cultsthe Mysteria at Eleusis, the cult of the Great Gods at Samothrace, and Dionysiac myster-ies-with the aim of elucidating the structure and religious purpose of these cults and the nature of the initiates' experience. The evidence includes: the Homeric Hymn to Demeter, Plato's Symposium, works of Christian Fathers, inscriptions, artistic representations, and archaeological data.]

## [CLASS 501 Introduction to Greek

 Eplgraphy3 credits. Prerequisite: one term of 300 level Greek. Not offered 1997-98; next offered 1998-99. K. Clinton.]

## [CLASs 555 Graduate Proseminar

Fall. 1 credit. Not offered 1997-98; next offered 1998-99. H. Pelliccia and staff. Graduate students will be introduced to the tools, techniques, and methods of Classical scholarship.]

## [CLASS 633 Greek Mystery Cults (also

 Classics 433) "4 credits. Not offered 1997-98.
K. Clinton.

For description, see Classics 433.]
CLASS 671 Graduate Seminar in Greek: Religion
Fall. 4 credits. K. Clinton.
CLASS 672 Graduate Seminar in Greek: Heslod
Spring. 4 credits. P. Pucci.
CLASS 701-702 Independent Study for Graduate Students in Greek
701 , fall; 702 , spring. Up to 4 credits.

## Latin

## CLASS 105 Latin for Beginners

Fall. 4 credits. Staff.
An introductory course in the essentials of Latin, designed for rapid progress toward reading the principal Latin writers.
CLASS 106 Elementary Latin Spring. 4 credits. Prerequisite: 105 or equivalent. Staff.
A continuation of Classics 105 , using readings from various authors.

## CLASS 107 Intensive Latin

Spring and summer. 6 credits. Staff. Prepares students in one term for 200-level Latin.

## CLASS 205 Intermediate Latin \#

Fall. 3 credits. Prerequisite: Classics 106, 107 , or placement by departmental examination. Section 1, J. Ginsburg; section 2, C. Brittain.
Readings in Latin prose.

## [CLASS 207 Catullus \#

3 credits. Prerequisite: Classics 106, 107, or one term of 200 -level Latin. Not offered 1997-98; next offered 1998-99.]
[CLASS 208 Roman Drama \# 3 credits. Prerequisite: Classics 106, 107, or one term of 200 -level Latin. Not offered 1997-98.]

CLASS 216 Vergil
Spring. 3 credits. Prerequisite: Classics 106,107 , or one term of 200 -level Latin. D. Mankin.

## CLASS 241 Latin Composition

Fall. 3 credits. Prerequisite: Classics 106, 107 , or equivalent. K. Clinton.

## CLaSS 312 Latin Undergraduate

 Seminar: VIrgll and Mls Models 带 Fall. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. J. Reed.[CLASS 314 The Augustan Age 4 credits. Prerequisite: two terms of $200-$ level Latin or permission of instructor. Not offered 1997-98.]
[CLASS 317 Roman Historiography \# 4 credits. Prerequisite: one term of 300 level Latin or permission of instructor. Not offered 1997-98; next offered 1998-99. J. Ginsburg.

CLASS 338 Latin Undergraduate Seminar: Clcero's Tusculan Disputations \#
Spring. 4 credits. Prerequisite: two terms of 200 -level Latin or permission of instructor. C. Brittain.

CLASS 411 Advanced Readings In Latin Literature: Satire \#
Fall. 4 credits. D. Shanzer
[CLASS 412 Advanced Readings in Latin Literature *
Spring. 4 credits. Not offered spring 1998.]
[CLASS 441 Advanced Latin Composition 3 credits. For undergraduates who have completed Latin 241 and for graduate students. Not offered 1997-98; next offered 1998-99.]
CLASS 451-452 Independent Study in Latin, Undergraduate Level
451, fall; 452, spring. Up to 4 credits.
[CLASS 555 Graduate Proseminar Fall. 1 credit. Not offered 1997-98; next offered 1998-99. H. Pelliccia and staff. Graduate students will be introduced to the tools, techniques, and methods of Classical scholarship.]
[CLASS 603 Later Latin Literature Fall. 4 credits. Not offered 1997-98. D. Shanzer.]

## CLASS 679 Graduate Seminar In Latin:

 AenoldFall. 4 credits. F. Ahl.
CLASS 680 Graduate Seminar in Latin: Lucretius
Spring. 4 credits. C. Brittain
CLASS 751-752 Independent Study for Graduate Students in Latin
751, fall; 752, spring. Up to 4 credits.

## Classical Art and Archaeology

## CLASS 220 Introduction to Art History: The Classical World (also History of Art 220)

Fall. 4 credits. A. Ramage
An overview of the art and archaeology of the Greek and Roman world. 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 late empire.
[CLASS 221 Minoan-Mycenaean Art and Archaeology (also Archaeology 221 and HIstory of Art 221) *
3 credits. Not offered 1997-98; next offered spring 1999. J. Coleman.
The birth of civilization in Greece and the Aegean islands during the Bronze Age. The main focus is on the rise and fall of Minoan Crete and Mycenaean Greece, with consideration given to the nature and significance of Aegean interactions with Egypt, the Near East, and Anatolia.]
[CLASS 232 Archaeology in Action I (also Archaeology 232 and History of Art 224)
Fall. 3 credits. Prerequisite: permission of instructor. Not offered fall 1997.
P. I. Kuniholm.]
[CLASS 233 Archaeology in Action II (also Archaeology 233 and Mlstory of Art 225) \#
Spring. 3 credits. Prerequisite: permission of instructor. Not offered spring 1998. P. 1. Kuniholm.)

CLASS 309 Dendrochronology of the Aegean (also Archaeology 309 and History of Art 309)
Fall and spring. 4 credits. Prerequisite: permission of instructor. Limited to 10 students. P. I. Kuniholm.
For description, see ART H 309.
【CLASS 320 The Archaeology of Classical Greece (also History of Art 320) \#
4 credits. Not offered 1997-98
A. Ramage.]

〔CLASS 322 Oreeks and Their Nelghbors falso History of Art 328) \#
4 credits. Prerequisite: Classics 220 or
221 , or permission of instructor. Not
offered 1997-98; next offered 1999-2000.
J. Coleman.

A study of the archaeological and other evidence for the interaction between Greek civilization and the peoples of the eastem and western Mediterranean from the thirteenth to the fourth centuries B.C.E. The course will focus on Greek relationships with Egypt, Phoenicia, Cyprus, Anatolia, and Italy in the post-Bronze Age period.]
[CLASS 323 Painting in the Greek and Roman World (also History of Art 323)
4 credits. Not offered 1997-98
A. Ramage.]

CLASS 325 Greek Vase Painting (also History of Art 325) \#
Spring. 4 credits. A. Ramage.
For description, see ART H 325.
[CLASS 326 Greek Citles and Towns (also History of Art 326) "
4 credits. Not offered 1997-98; next offered 1998-99. J. Coleman
Ancient Greek cities and towns from an archaeological perspective. Topics include the city in its geographical setting, the development of the fortified city, town planning, the Classical house and household, official and religious life versus private life, the territory and boundaries of cities and towns, regional states and leagues, warfare between cities and regions, and roads and sea routes. Examples will mostly be drawn from Athens/ Attica and central Greece. Two short oral presentations, presented after consultation in written form, and a final examination.]

Class 327 Greek and Roman Coins (also History of Art 327)
Fall. 4 credits. A. Ramage.
For description, see ART H 327.
[CLASS 329 Greek Sculpture (also History of Art 329)
4 credits. Not offered 1997-98.
J. Coleman.

An examination of ancient Greek sculpture, both three-dimensional and two-dimensional, from the Archaic to the Hellenistic period. Aspects of the works studied include: technological advances, changing ideology of the sculptors, regionalism of styles, and taste of individual patrons.]
[CLASS 350 Arts of the Roman Emplre (also History of Art 322) \#
Spring. 4 credits. Not offered 1997-98. A. Ramage

For description, see ART H 322.]
Class 351 The Clity of Rome falso Archaeology 351 and History of Art 321) \#
Fall. 3 credits. M. Landon.
A detailed survey of the architectural development of the Roman capital from the early Iron Age to the 4th century A.D. Students will be introduced to the principal ancient monuments through slide lectures and selected readings from ancient and modern written sources. Special attention will be given to recent archaeological discoveries and to the social and historical currents that helped to shape the appearance of the largest city in the ancient world.

## CLASS 360 Field Archmeology ín Greece

 (also Archaeology 360) \#Summer 1998. 6 credits.
A six-week archaeological field training program in conjunction with the Cornell Halai and East Lokris Project. For information and application forms, contact Professor
John E. Coleman, Department of Classics, 120 Goldwin Smith Hall.
[CLASS 423 Ceramics (also Archaeology 423 and Mistory of Art 423)
Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. Staff.]
[CLASS 430 Seminar on the Bronze Age Architecture of Asia Minor (also Archaeology 425 and History of Art 425) \#
4 credits. Not offered 1997-98.
P. I. Kuniholm.

For description, see ART H 425.]
[CLASS 432 Sardis and the Clities of Asia Minor (also Archaeology 432 and History of Art 424) \#
4 credits. Prerequisite: permission of instructor. Not offered 1997-98.
A. Ramage.]

CLASS 434 The Rise of Classical Greece (also Archaeology 434 and History of Art 434) \#
Spring. 4 credits. Recommended:
Classics 220 or 221, History of Art 220 or
221 , or permission of instructor.
P. 1. Kuniholm.

For description, see ART H 434.
CLASS 435 Sominar on Roman Art and Archaeology (also Archaeology 435 and History of Art 427) \#
Spring. 4 credits. Prerequisite: permission of instructor. A. Ramage.
For description, see ART H 427.
CLASS 475-476 Independent Study in Classical Archaeology, Undergraduate Level
475 , fall; 476 , spring. Up to 4 credits.
[CLASS 629 The Prehistoric Aegean (also Archaeology 629)
4 credits. Not offered 1997-98; next
offered spring 1999. J. Coleman.
Seminar with focus on the Aegean and
neighboring regions in the Neolithic and Early Bronze Ages.]
CLASS 630 Seminar in Classical Archaeology (also Archaeology 520 and History of Art 520)
Fall. 4 credits. P. I. Kuniholm.
For description, see ART H 520.
CLASS 721-722 Independent Study for Graduate Students in Classical Archaeology
721, fall; 722, spring. Up to 4 credits.

## Greek and Latin Linguistics

CLASS 421 Greek Comparative Grammar (also LInguistics 609) "
4 credits. Prerequisite: thorough
familiarity with the morphology of classical Greek. A. Nussbaum.
The prehistory and evolution of the sounds and forms of ancient Greek as reconsuructed by comparison with the other Indo-European languages.
[CLASS 422 Latin Comparative Grammar (also Lingulstics 610) "
4 credits. Prerequisite: thorough
familiarity with the morphology of classical
Latin. Not offered 1997-98; next offered
1998-99. A. Nussbaum.
The prehistory and evolution of the sounds and forms of Classical Latin as reconstructed by comparison with the other Indo-European languages.]
[CLASS 424 Italic Dialects (also Lingulstics 612)
4 credits. Not offered 1997-98
A. Nussbaum.]
[CLASS 425 Greek Dialects (also LInguistics 611| "
4 credits. Not offered 1997-98; next offered 1998-99. A. Nussbaum.]

## [CLASS 426 Archaic Latin (also LIngulstics 614) "

4 credits. Prerequisite: reading knowledge of Latin. Not offered 1997-98; next offered 1999-2000. A. Nussbaum.]
[CLASS 427 Homeric Philology (also Linguistics 613) \#
4 credits. Prerequisite: ability to read Homeric Greek. Not offered 1997-98; next offered 1999-2000. A. Nussbaum. The language of the Homeric epics: dialect background, archaisms, modernizations. The notion of a Kunstsprache: its constitution, use, and internal consistency. The phonological and morphological aspects of epic compositional technique.]

## [CLASS 429 Mycenaean Greok (also

 Lingulstics 615) \#4 credits. Prerequisite: thorough
familiarity with the morphology of Classical Greek. Not offered 1997-98. A. Nussbaum.]

## Sanskrit

CLASS 131-132 Elementary Sanskrit (also Linguistics 131-132 and Sanskrit 131-132)
131, fall; 132 , spring. 4 credits each term. C. Minkowski.

An introduction to the essentials of Sanskrit grammar. Designed to enable the student to read classical and epic Sanskrit as quickly as possible.
[CLASS 251-252 Intermediate Sanskrit (also Linguistics 251-252 and

## Sanskrlt 251-252) © \#

251, fall; 252, spring. 3 credits each term. Prerequisite: Classics 132 or equivalent. Not offered 1997-98; next offered 1998-99. C. Minkowski.

Readings from the literature of Classical Sanskrit. Fall: selections from the two Sanskrit epics, the Mababbarata and the Ramayana. Spring: more selections from the epics, and from either Sanskrit story literature or from Sanskrit dramas.]

## CLASS 403-404 Independent Study In

 Sanskrlt, Undergraduate Level 403 , fall; 404 , spring. Up to 4 credits. C. Minkowski.CLASS 703-704 Independent Study for Graduate Students in Sanskrit
703, fall; 704 , spring. Up to 4 credits. C. Minkowski.

Also see Classics 291, 390, and 395 (Classical Civilization listings).

## Honors Courses

## Class 370 Honors Course

A program of reading and conferences centered on an author or topic chosen in accordance with the special interests of the student and instructor.

## CLASS 471 Honors Course

A continuation of Classics 370, with change of author or topic.
Class 472 Honors Course: Senlor Essay
Spring. 4 credits. For students who have successfully completed Classics 471.
Topics must be approved by the student's honors committee at the end of the first term of the senior year.

## Related Courses in Other Departments and Programs

See listings under:
Archaeology
Asian Studies
Comparative Literature
English
History
History of Art
Medieval Studies
Linguistics
Near Eastern Studies
Philosophy
Religious Studies
Society for the Humanities
Women's Studies

## COMPARATIVE LITERATURE

E.S. Apter, chair ( 141 Goldwin Smith, 255-5798); directors of undergraduate studies: fall: Calum Carmichael ( 139 Goldwin Smith, 255-8265), spring: E. Rosenberg ( 133 Goldwin Smith, 255-3544); W. J. Kennedy, director of graduate studies ( 163 Goldwin Smith, 255-3398); G. Gibian, director of the senior essay colloquium (236B Goldwin Smith, 255-8347). C.M. Arroyo, A. Caputi (Emeritus), D. Castillo, W. Cohen, J. Culler, B. deBary, D. Grossvogel, P. Hohendahl, W. Holdheim (Emeritus), N. Melas, J. Monroe, J. Porte, L. Waugh, W. Wetherbee

Also cooperating: A. Adams, D. Bathrick, J. Bishop, R. Brann, S. Buck-Morss, P. Carden, E. Hanson, C. Kaske, D. Mankin, B. Maxwell, M. Migiel, A. R. Parker, R. Schneider, R. Sellars, M. Steinberg, A. Vidler, G. Waite

The Department of Comparative Literature provides a broad range of courses in European as well as non-European literatures. Courses variously 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, psychoanalysis.

## The Major

The major enables students to develop an integrated knowledge of Western literature, to strengthen their reading and writing abilities, and to prepare for careers demanding analytical, interpretive, and evaluative skills. Prospective majors should consult with the director of undergraduate studies. After declaring a major, a student chooses an adviser from the department's faculty. The requirements for the major are designed to allow each student to follow a course of study that combines intellectual rigor with the pursuit of personal interests. The specific contours of such a program are worked out in consultation with the student's adviser.

## Requirements for the Major

1) Five courses in Comparative Literature at the 200 level and above, including the core course listed below. A student may include up to two literature courses from other departments.
2) One core course in Comparative Literature (for 1997-98 Comparative Literature 411 [spring]), to be taken by all majors in their junior or senior year. At the discretion of the department, students may enroll in core courses in both their junior and senior years.
3) Five courses in literature and other areas of the humanities at the 200 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 language course (conversation, composition, etc.) towards fulfilling the language requirement.
4) An honor's essay (Comparative Literature 493) of roughly fifty pages, 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.
The department also encourages:
5) a program that includes broad historical coverage (e.g., Comparative Literature 201-202: Great Books); intensive study of a single genre (e.g., Comparative Literature 363-364: The European Novel, Comparative Literature 365: Contemporary Fiction); analysis of problems in literary theory (e.g., Comparative Literature 302: Literature and Theory, Comparative Literature 448: Subject to Translation). Beginning in 1998-99, the department will offer a number of strongly recommended 200-level courses designed to acquaint undergraduates with the discipline: Comparative Literature 203: "Introduction to Comparative Literature," as well as broadranging introductory courses in World Fiction (Comparative Literature 204) and World Poetry (Comparative Literature 205), with emphasis on the nineteenth and twentieth centuries.
6) a second foreign language, especially for students interested in graduate work in literature.

## Honors

A student who completes the requirements for the major is eligible for the degree of Bachelor of Arts with honors in comparative literature. The department bases its decision on the student's achieving grades of at least B+in the senior essay and in course work for the major, and on overall academic performance at Cornell.

## Freshman Writing Seminars

Most 100 -level courses may be used toward satisfying the freshman writing seminar requirements. See "John S. Knight Writing Program" for a full description of the freshman seminar program.

## Courses

Note: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide updated information as soon as possible.

## COM L 201\#-202 Great Books

201, fall; 202, spring. 4 credits. Comparative Literature 201 and 202 may be taken independently of each other. COM L 202
also offered summer 1998. Fall: M W F 11:15-12:05, W. J. Kennedy; spring: T R 10:10-11:25, B. Maxwell.
A reading each semester 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.
201: Selections from the Bible, Homer, Dante, Rabelais, Shakespeare, and others.
202: World literature of the last 300 years, emphasizing the response to European worldwide expansion first in the colonizing countries, then in the colonized. The persistence of certain themes (such as slavery, monstrosity, overreaching, coercion, and vengeance) will be a central concern in many of the texts studied. A certain amount of attention will be given to an examination of differing ideological perspectives on the notion of "Great Books." Readings chosen from texts by Shakespeare, Defoe, Swift, Voltaire, Goethe, Mary Shelley, Balzac, Poe, Melville, Marx, Flaubert, Conrad, Kipling, Brecht, Woolf, Cesaire, Tutuola, Brathwaite, Naipaul, and Armah.

## [COM L 203 Introduction to Comparative Literature

4 credits. To be offered in 1998-99. Staff. The course is intended to answer the question persistently asked by undergraduates: "What is comparative literature, anyway?" The format of the course is designed to acquaint prospective majors, or interested undergraduates generally, with the range and variety of the field by having the members of the department take turns in presenting those aspects which reflect the areas of their expertise and their methods of teaching. Each faculty member will give a manageable reading assignment; of the two meetings each week, the first will generally take the form of a lecture; the second will be a discussion of the assigned text.]

## [COM L 204 Global Fictions

4 credits. To be offered in 1998-99. Staff. An introduction to the enormously rich field of the novel, from the astonishingly modern fiction to emerge from the medieval and postmedieval Far East to both Eurocentric and Third World Literature of the twentieth century. Translated into names, our roster would implicate people from Lady Murasaki to Vladimir Nabokov-and beyond. We shall be reading some shorter and longer fictions which have been generally considered milestones in the history of the novel and the novella, including works by Cervantes, Defoe, Austen,Flaubert, Henry James, Joyce, Kafka, and Borges and/or "essential" writers not covered in the more advanced novel courses.]

## [COM L 205 Introduction to Poetry, Chiefly Modern

4 credits. To be offered in 1998-99. Staff. Unlike Comparative Literature 207, 205 is intended to be a survey that concentrates largely (but of course not exclusively) on foreign poetry. The course will cut across historical periods and poetic genres, from conventional "strict" genres of the sonnetvariety to forms more nearly associated with our own times: free verse, "the prose poem," etc. Difficult as it may be to avoid poets on the order of Shakespeare, Milton, Goethe, and Keats, we propose to focus on the practitioners of the craft from Baudelaire, Whitman, Hopkins, Mallarmé, and Rilke on down.]

## COM L 206 Introduction to Literary

 CriticlsmSpring. 4 credits. TR 2:55-4:10. R. Sellars.

More advanced undergraduate seminars naturally tend to focus on contemporary literary theory; after all, it is essential for students of literature to be well-informed about contemporary theoretical debates, methodologies, and problems. But literary theory and criticism did not begin with the structuralist revolution of the 1960 s, and it is also essential for students to understand earlier developments-many of which still have the power to provoke and inspire. Critical historicization should begin at home, with an awareness of how different the forms, practices, institutions and politics of literary criticism have been, and this course will thus introduce students to the vast field of pre-1960 debates. We will examine the historical evolution of key terms now more or less taken for granted as part of critical vocabulary, and we will pay particular attention to the (relatively recent) emergence of literature itself as a category of study. Critics and theorists will be chosen from among Plato, Aristotle, Cicero, Horace, and Augustine; Renaissance and neo-classical critics such as Spenser, Dryden, and Dr. Johnson; Enlightenment, Romantic and post-Romantic theorists such as Kant, Hegel, Schiller, Coleridge, Wilde, and Pater; and such major twentieth-century figures as Heidegger, Bataille, Sartre, Benjamin, Adorno, and I. A. Richards. No prior knowledge of the subject will be assumed, and all texts will be read in English.

## COML 208 Shakespeare and the 20th Century (also ENGL 208)

Fall. 4 credits. M W F 10:10-11
W. Cohen.

What is the relationship between the plays of Shakespeare in their own time and the various ways they have functioned in modern culture? We will compare selected works of Shakespeare with their adaptations in fiction, theater, film, the educational system, government, and popular culture. The discussion of each play will be organized around one or more critical approaches. The course as a whole will attempt to provide a systematic introduction to the contemporary study of literature and culture.
[COM L 223 The Comic Theater (also CLASS 223 and THETR 223) " 3 credits. Next offered summer 1998 and spring 1999.]

## COM L 236 Greek Mythology (also

 CLASS 236)Fall. 3 credits. T R 11:40-12:55. Limited to 200. (Also offered summer '98). D. Mankin.

For description, see Classics 236.
COM L 239 Cultural History of the Jews of Spain (also NES 239, JWST 239, Rel. St. 239 and SPAN L 239)
Fall. 3 credits. M W F 10:10-11:00. R. Brann.

For description, please see Near Eastern Studies 239.
COM L 302 Literature and Theory (also COM L 622 and ENGL 302/602)
Fall. 4 credits. M W F 9:05-9:55.
J. Culler.

Study of issues in contemporary theoretical debates, with particular attention to structuralism, deconstruction, psychoanalysis, and feminism. Readings from Barthes, Derrida,

Foucault, J. Butler, B. Johnson, and others. No previous knowlege of literary theory is assumed.

## COM L 305 Irony: An Introduction

 Fall. 4 credits. M W F 1:25-2:15. R. Sellars.Oscar Wilde suggested that all bad poetry is sincere. Was he being ironic? Irony is an aspect of literature (and everyday life) that is very common and of fundamental importance but misunderstood and even distrusted. This course will confront the theory and politics of irony. Our approach will be historical, philosophical, and literary but will never lose sight of practical questions that students necessarily face: must we-or can we-mean what we say? How can we analyze irony in a text? In what sense is the performance of a drag queen ironic? Texts about irony-or ironic texts - to be studied will include Plato, Kierkegaard, Swift, Flaubert, and German idealists. We will also investigate nonverbal irony in twentieth-century music from Mahler to Madonna.

## COM L 323 Encounters with the Dead

 (also ITAL L 323/623)Spring. 4 credits. TR 10:10-11:25.
M. Migiel.

For description, please see Italian Literature 323/623.
COM L 328 Literature of the Old Testament (also Rel. St. 328) © Fall. 4 credits. T R 2:55-4:10.
C. M. Carmichael.

Analysis of small sections of well-known material for in-depth discussion.
COM L 330 Political Theory and Cinema (also GERST 330, GOVT 370 and THETR 329)
Fall. 4 credits. T R 1:25-2:40. G. Waite. For description, please see Theatre Arts 329.
COM L 334 Muslims, Christians and Jews in Islamic Spain: Literature and Society (also NES 339/639, JWST 339, Rel. St. 334 and SPAN L 339/699) 륭
Spring. 4 credits. T R $10: 10-11: 25$. R. Brann.

For description, please see Near Eastern Studies 339.

COM L 336 European Drama 1660-1900: Molidre to lbsen (also ENGL 335 and THETR 333) \#
Spring. 4 credits. T R 10:10-11:25.
A. R. Parker.

Major works by such writers as Moliere, Congreve, Goethe, Schiller, Kleist, Shelley, Byron, Buchner, Ibsen, and Chekhov.
Attention to influential theater traditions (commedia dell'arte, melodrama, pantomime); theories and styles of acting (Diderot, Garrick, Kean); the role of theater in the cultural politics of Enlightenment and Revolutionary Europe (Rousseau, Burke).
COM L 343 Contemporary Mass Culture in Japan and in the U.S. |also Asian St 363)
Spring. 4 credits. Enrollment limited to 25. M W 11:15-12:25. B. deBary.

For description, please see Asian Studies 363.
COM L 352 European Cultural History, 1750-1870 (also HIST 362)
Spring. 4 credits. TBA. M. Steinberg. For description, please see History 362.

COM L 355 Decadence (also ENGL 355 and WOMNS 355
Fall. 4 credits. M W F 10:10-11 E. Hanson

For description, please see English 355.
COML 362 The Culture of the Renaissance II (also ENGL 325, HIST 364, MUS 390, ART H 351 and Rel. St. 362) *
Fall. 4 credits. T R 11:40-12:55 plus discussion section to be announced. C. Kaske, W. J. Kennedy

Members of various departments will lecture on Luther, Michelangelo, Edmund Spenser, Cervantes, Copernicus, Galileo, and Monteverdi. Guest lectures will include Peter Dear, History; Esther Dotson, History of Art; and Rebecca Harris-Warrick, Music. Lectures and discussion will introduce different methods of interpretation and of historical analysis. Written requirements: two short papers and a final take-home examination

## COM L 363\#-364 The European

 Novel363 , fall; 364 , spring. 4 credits. Comparative Literature 363 and 364 may be taken independently of each other. Fall: T R 10:10-11:25. C. M. Arroyo. Spring; M W F 10:10-11. G. Gibian.
363: From Boccaccio to Goethe. Survey of the history of the novel from its origins to the end of the eighteenth century. The new genre of Humanism and the medieval romances of chivalry. Ambiguities derived from the lack of the word "novel." Different steps in the conquest of realism. The novel and intellectual history in different epochs: character and structure in the novels and contemporary philosophical views on man, cosmos, gender, and social classes. Readings include Boccaccio's Fiammetta; G. Pérez's Lazarillo de Tormes; Cervantes's Don Quixote, Mme de Lafayette's The Princess of Cleves; Defoe's Robinson Crusoe, Horace Walpole's The Castle of Otranto, and Goethe's The Sorrows of Young Werther, as well as a short package containing theoretical statements about the genre from Giraldi Cinthio to Goethe. All texts read in English.

364: From Stendhal to the present (in translation). Close reading of novels from the 19th and 20th centuries: Stendhal's The Red and the Black, Flaubert's Madame Bovary; Dostoevsky's Crime and Punishment, Joyce's Portrait of the Artist as a Young Man; Kafka's The Metamorphosis, and Kundera's The Unbearable Lightness of Being. Study of the changing ways of representing recurring themes: the role of the creative imagination; the city and country; rebellions and revolutions; communities and solidarity; dominant groups and minorities (social, ethnic, religious, psychological); interplay of politics, sex, and humor. Artistic and structural developments: coherence, connectedness, fragmentation; from realism to modernism

## COML 365 Contemporary Fiction

Fall. 4 credits. T R 1:25-2:40. B. Maxwell. A study of European fiction and drama largely drawing on texts from the first half of the twentieth century. We will pay particular attention to the making of literary types and characters; to traces of utopian and messianic elements; to the relations between memory and political revolution; and to the motive of ressentiment. Readings (in translation) chosen from the following: Robert Walser, Snowwhite and The Walk, Franz Kafka, The Trial; Thomas Mann, Death in Venice, Bertolt Brecht, The

Rise and Fall of the City of Mabagonny; Joseph Roth, Hotel Savoy; Alfred Doblin, Berlin Alexanderplatz; Christa Wolf, The Quest for Cbrista T,; Louis Aragon, Paris Peasant, LouisFerdinand Celine, Death on the Installment Plan; Elio Vittorini, In Sicily; Natalia Ginzburg, stories; and Isaac Babel, stories. Collateral theoretical readings by Georg Lukàcs, Emst Bloch, Bertolt Brecht, Walter Benjamin, Siegfried Kracauer, Gershom Scholem, Elias Canetti, and Christa Wolf

## COM L 367 The Russian Novel (also

 RUSS L 367) 웅Fall. 4 credits. M W F 2:30-3:20. G. Gibian.

For description, please see Russian Literature 367.

COM L 368 Visual Culture and Social Theory (also GOVT 375 and ART H 370)
Fall. 4 credits. M W F 1:25-2:15.
S. Buck-Morss, A. Vidler.

For description, please see Government 375.
COM L 387 Interpretation and/as Vlolence
Spring. 4 credits. T R 11:40-12:55.
R. Sellars.

This course is a response to the approach of the millennium and the increase of violence that seems destined to accompany it. The working hypothesis of the course is that reading should be a process of radical patience which resists the millenarian drive towards apocalypse, and that 'reading' should be distinguished from 'interpretation.' The course will introduce students to the history and theory of interpretation and will show how it has implied a certain kind of violence at least since the beginnings of Christianity. We will begin by exploring how the New Testament comes into being as a more or less violent interpretation of Jewish scriptures, and how Christianity sets up a strong interpretative regime that continues to exert its power today Given that the ethics of interpretation is becoming increasingly urgent, we will focus on how literary interpretation becomes institutionalized in order to rethink what happens when a reader meets a text. Particular attention will be given to developments in nineteenth-century Germany, where theological categories gradually became secularized as part of the founding process of the modern university.

## COM L 395 Fin de Siècle or Belle Epoque?: Parisian Culture Around 1900 (also FRLIT 393)

Spring. 4 credits. TR 1:25-2:40. E. Apter. Focusing on Parisian culture between 1880 and 1914, a period in which artists and intellectuals confronted a startingly new world wrought by industrial production, urban concentration, and political reorganization, this course will consider the relationship between decadence and modernity, with special attention to sexuality and the subject of modernity in the Belle Epoque. Themes to be considered will include: 1) theories of pathology, decadence, and difference; 2) city spectacle and mass entertainment; 3) the retreat to the interior as a site of psychological exploration and artistic innovation; 4) feminine culture and the New Woman; 5) spaces of the demimonde (the culture of courtesans, sapphism 1900); 6) identity and technological innovation. Short critical texts will be read in relation to well-known authors of the period such as Max Nordau, Zola, Huysmans, Rachilde, Colette, and Proust

Requirements will include short oral presentations and a term paper.

## COM L 396 German Film (also GERST 396 and THETR 396)

Spring. 4 credits. Requirements:
participation in class discussion, one
paper, midterm, and final. TBA.
D. Bathrick.

For description, please see Theatre Arts 396.
COM L 404 History Into Fiction: Nazis and the Literary Imagination (also ENGL 404 and CERST 414)
Fall. 4 credits. M W F 11:15-12:05.
E. Rosenberg.

For description, see ENGL 404.
COM L 410 Semiotics and Language (also LING 400 and Fr Rom St 400)
Spring. 4 credits. Prerequisite: some
background in an area relevant to
semiotics: e.g., linguistics, philosophy, psychology, anthropology, or literature; or permission of instructor. TBA. L. Waugh. For description, please see Linguistics 400 .

COM L 411 The Short Novel from Flaubert and James to the Present
Spring. 4 credits. Enrollment limited
Core course for 1997-98. M W F
11:15-12:05. E. Rosenberg.
Discussion of some ten authors who excelled in the form of the novella and whose names are thus up to a point "given": in addition to James and Flaubert, writers like Conrad, Tolstoy, Mann, Kafka, Joyce, Faulkner, Marquez, Morrison. One novella each week or week and a half, but not in canonical order; e.g., Conrad's Heart of Darkness, Kafka's Penal Colony, and Ozick's The Shawl as versions of modern politics (or atrocities); the question of "status" as this is reflected in the relations between employer and domestic in things like Flaubert's Simple Heart, Tolstoy's Master and Man, and Gertrude Stein's The Good Anna; versions of the récit-specifically on the conditions of marriage-in Tolstoy's Kreutzer Sonata and (to stick with Beethoven) André Gide's Pastoral Symphony, same-sex relations in James's Pupil and Mann's Death in Venice, then also varieties of the fantastic in, say, Jekyll and Hyde, Turn of the Screw, Dostoevski's Double.

## COML 413 Death, Culture and the Literary Monument

Fall. 4 credits. TR 1:25-2:40. N. Melas. Beginning with Homer's Iliad, this course will inquire into the monumental transformation of death into immortality in the literary composition. How do death's negations become fiction's triumph? We will pay particular attention to the fate of this procedure when its subjects are no longer heroic warriors but slaves and women. How do colonial domination and gender difference alter the aesthetic procedures and assumptions underlying commemoration and literary immortality? In addition to death and language, we will consider such themes as the relation of antiquity to the present, of identity to its dissolution and of politics to culture. Readings of literary texts drawn from a variety of languages and traditions will be attended by selected readings in critical theory and a glance at visual culture, particularly surrounding monuments commemorating the emancipation of slaves and the holocaust. Authors will include Homer, Derek Walcott, Simone Schwartz-Bart, Virginia Woolf, Krista Wolf, Tayeb Salih, Maurice Blanchot, Hegel, Orlando Patterson, Walter Benjamin.

COM L 419-420 Independent Study
419 , fall; 420, spring. Variable credit. Comparative Literature 419 and 420 may be taken independently of each other.
Applications available in 145 G.S.

## COML 429 Readings in the New Testament (also NES 429, Rel.St. 429 and ENGL 429)

Fall. 4 credits. Limited to 40 students. M W F 10:10-11. J. P. Bishop. Close readings of representative texts from the New Testament in modern scholarly editions, with the help of appropriate introductory and specialized commentary. The focus for 1997 will be on Acts and the letters of Paul. All readings will be in English, but repeated reference to the Greek original will be made Graduate students and undergraduates from other colleges who are interested in the material should not feel inhibited from enrolling. The approach will be primarily exegetical; that is, we will try to find out what the texts say and what they mean by what they say. Thus we can hope to stay open to scholarly and religious issues alike.

## COM L 455 Caribbean Literature (also

 Africana St, 455)Fall. 4 credits. Enrollment limited to 15. M 2:00-4:25. A. Adams.
For description, please see Africana Studies 455.

COM L. 456 Boccacccio: Gender, Power, and the Medieval Text (also Ital L 445/645 and WOMNS 448/648)
Fall. 4 credits. M 2:30-4:25. M. Migiel. For description, please see Italian Literature 445/645

## COML 493 Senlor Essay

Fall and spring. 8 credits.
Hours to be arranged individually in consultation with the director of the Senior Essay Colloquium. Approximately fifty pages to be written over the course of two semesters in the student's senior year under the direction of the student's adviser. An "R" grade will be assigned on the basis of research and a preliminary draft completed in the first semester. A letter grade will be awarded on completion of the second semester.

## COM L 604 Translation and the Global Marketplace

Fall. 4 credits. W 2:30-4:25. E. Apter. The seminar will investigate the global politics of translation, focusing on how works are picked up (or not) for international circulation. Issues to be examined will include: how the politics of local censorship restrict or enable visibility; how the problem of cultural essentialism is packaged and marketed transnationally; how cultural and national identity come through (or not) in translation; how experiments in non-standard English (ebonics, cubonics, crêolité, drug argot, and class slang) disturb or reaffirm linguistic identity politics. In addition to critical texts, the course will engage with textual studies of Ken Saro-wiwa's Sozaboy: A Novel Written in Rotten English, Salmon Rushdie's The Santanic Verses, Theresa Hak Cha's Dictëe, Patrick Chamoiseau's Texaco, Irvine Welsh's Trainspotting, and Gustavo Perez Firmat's Life on the Hypben. The final section of the seminar will be devoted to exploring ways in which a growing number of non-western writers have begun to break out of traditionalist narrative modes in order to "translate" the effects of new media on literary representa-
tion, from Afro-futurism to postcolonial cyberpunk.

## COML609 Comparison and Cultural

 DifferenceFall. 4 credits. T 10:10-12:05. N. Melas. This course will be a wide-ranging investigation of the pitfalls and possibilities for crosscultural comparison. We will examine the structure and mechanisms of comparison, both as a disciplinary method and as a concept or practice: to what extent and in what circumstance can comparison produce cultural difference, consolidate it, dissolve it, erect borders, inhabit borderlands, propose a global ecumene? With particular attention to colonialism and globalization, we will inquire into the relation between various modes of comparison and broader contexts and ideologies. Though focused on the humanities and on theoretical texts, readings will include incursions into the social sciences and selected poetry and film. Authors may include Lyotard, Foucault, Fanon, Tilley, Gilroy, Clifford, Appadurai, Bhabha, Lanser, Kincaid, Walcott.

## COM L 619-620 Independent Study

619 , fall; 620 , spring. Variable credit Comparative Literature 619 and 620 may be taken independently of each other. Applications available in 145 G.S.

COML 622 Literature and Theory (also Com L 302 and ENGL 302/602)
Fall. 4 credits. M W F 9:05-9:55.
J. Culler.

For description, please see Comparative Literature 302.

## COM L 626 Baroque (also GER ST 627)

Fall. 4 credits. T 4:30-6:30. G. Waite. For description, please see German Studies 627.

## COM L 641 Bakhtin as Reader (also RUSS L 641)

Spring. 4 credits. Also open to undergraduates with permission of instructor. W 3:35-5:30. P. Carden.
For description, please see Russian Literature 641.

## Com L 657 Seminar In Dramatic Theory

 (also THETR 637)Spring. 4 credits. Prerequisite: permission of instructor. TBA. R. Schneider. For description, please see Theatre Arts 637.

COML674 Contemporary Poetry and Culture: 1968-1998 (also ENGL 697, and GERST 674)
Spring. 4 credits. W 1:25-3:20.
J. Monroe.

The redrawing of cultural and political boundaries underway since the late 1980's has made it possible to conceive of the poetry of the Cold War era with a degree of closure unimaginable only a few years ago. In light of this changed situation, we will focus on the second half of the post-1945 period-the thirty years extending from 1968 to the present-with particular attention to the past two decades. Exploring issues of emerging and evolving importance for a poetry of the present moment in light of the recent past, we will consider dominant modes as well as alternative practices; canon formation, gender, and multiculturalism; the roles of the publishing industry, popular culture, creative writing programs, and new computer technologies in shaping reading habits and writing communities.

COM L 675 After the Dlvide: German Critical Theory of the Seventies and Eightles (also GERST 675 and HIST 675)
Fall. 4 credits. W 2:30-4:25.
P. Hohendahl.

For description, please see German Studies 675.

## COM L 699 German Film Theory (also

 GERST 699 and THETR 699)Fall. 4 credits. M 2:30-4:25. D. Bathrick. For description, please see Theatre Arts 699.

## COMPUTER SCIENCE

R. L. Constable, chair; K. Birman, C. Cardie, T. Coleman, M. Godfrey, D. Gries, J. Halpern, J. Hartmanis, J. E. Hopcroft, D. Huttenlocher,
S. Keshav, J. Kleinberg, D. Kozen,
G. Morrisett, K. Pingali, R. A. Rubinfeld,
F. B. Schneider, P. Seshadri, B. Smith,
E. Tardos, R. Teitelbaum, S. Toueg,
C. Van Loan, S. Vavasis, T. vonEicken,
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 World Wide Web site at http://www.cs.cornell.edu/ Info/Ugrad

## The Major

CS majors take courses in algorithms, data structures, logic, programming languages, scientific computing, systems, and theory. Electives in artificial intelligence, computer graphics, computer vision, databases, multimedia, and networks are also possible. Requirements include:

- four semesters of calculus (MATH 111-122-221-222 or 191-192-293-294)
- two semesters of introductory computer programming (COMS 100 and 211 or 212)
- a seven-course computer science core (COM S 222, 280, 314, 381, 410, 414, and 482)
- two $400+$ computer science electives, totaling at least 6 credits
- a computer science project course (COM S 413, 415, 418, 433, or 473)
- a $3+$ credit mathematical elective course (OR\&IE 270, MATH 300+, T\&AM 300+, etc.)
- two 300+ courses that are technical in nature and total at least six credits
- three courses which are related to one another from a discipline other than computer science. These courses must be numbered 300 -level or greater and total at least eleven credits.

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

The prerequisites for admission to the major are:

1) Completion of Computer Science 100-211 (or 212)-280 (or equivalent)
2) Completion of Mathematics 111-122-221 or Mathematics 191-192-293
3) A 2.75 grade-point average in all computer science and mathematics courses
4) Acceptance by the department's admissions committee
After admission, students are expected to maintain at least a 2.75 grade-point average in their major courses. Any grade below C- in a core course or related elective is not acceptable.
Honors. To qualify for deparmental honors a student must have:

- maintained a cumulative GPA $>=3.5$
- completed 8 credit hours of COM S course work at or above the 500 level
- completed 6 credit hours of $\operatorname{CS} 490$ research with a COM S faculty member, spread over at least two semesters and obtaining grades of $\mathrm{A}-$ or better.

Note: Honors courses may not be used to satisfy the COM S $400+$ elective requirement or the COM S project requirement.

## Courses

For complete course descriptions, see the computer science listing in the College of Engineering section.

## COM S 099 Fundamental Programming

 ConceptsFall, summer. 2 credits. S-U grades only No prerequisites.

## COM S 100 Introduction to Computer

 ProgrammingFall, spring, or summer. 4 credits. During the fall semester, two versions of COM S 100 (COM S 100a and COM S 100b) are available as described in the computer science listing in the College of Engineering.

COM $\mathbf{S} 101$ Introduction to Cognitive Sclence (also COGST 101, LING 170, and PSYCH 102)
Fall. 3 credits
COM S 113 Introduction to $\mathbf{C}$
Fall, spring. 1 credit. Weeks 5-8. Prerequisite: COM S 100 or equivalent programming experience. Credit is granted for both COMS 113 and 213 only if 113 is taken first. S-U grades only.

## COM S 114 Unix Tools

Fall, spring. 1 credit. Weeks $1-4$. Prerequisite: COM S 100 or equivalent programming experience. S-U grades only.

COM S 130 Creating Web Documents Fall. 3 credits.

COM 5211 Computers and Programming (also ENGRD 211)
Fall, spring, or summer. 3 credits. Prerequisite: COM S 100 or equivalent programming experience. Credit will not be granted for both COM S 211 and 212.

COM S 212 Structure and Interpretation of Computer Programs (also ENGRD 212)
Fall, spring. 4 credits. Prerequisite: COM S 100 or equivalent programming experience. Credit will not be granted for both COM S 211 and 212

COM S 213 C++ Programming Fall, spring. 2 credits. Prerequisite: COM S 211 or 212 or equivalent programming experience. Students who plan to take COMS 113 and 213 must take 113 first. S-U grades only.

COM S 222 Introduction to Scientific Computation (also ENGRD 222)
Spring, summer. 3 credits. Prerequisites: COM S 100 and (MATH 222 or MATH 294).

COM S 280 Discrete Structures
Fall or spring. 4 credits. Prerequisite: COM S 211 or 212 or permission of instructor.

## COM S 314 Introduction to Digital

 Systems and Computer OrganizationFall, spring. 4 credits. Prerequisite:
COM S 211 or 212 , or equivalent
COM S 381 Introduction to Theory of Computing
Fall, summer. 4 credits. Prerequisite: COM S 280 or permission of instructor.

COM 5400 The Science of Programming Spring. 4 credits. Prerequisite: COM S 280 or equivalent. Not offered every year; next offered spring 1998.

COM S 410 Data Structures
Fall, spring, summer. 4 credits. Prerequisite: COM S 280 or permission of instructor.
[COM S 411 Programming Languages and Logics
Fall. 4 credits. Prerequisites: COM S 410 or permission of instructor. Not offered every year; semester to be announced.]

COM S 412 Introduction to Compilers and Translators
Spring. 3 credits. Prerequisites: COM S 314,381 , and 410 . Corequisite: COM S 413.

COM S 413 Practicum in Compilers and Translators
Spring. 2 credits. Prerequisites: COM S
314, 381, 410. Corequisite: COM S 412.
A compiler implementation project related to COM S 412.

COM S 414 Systems Programming and Operating Systems
Fall, summer. 3 credits. Prerequisite:
COM S 314 or permission of instructor.
COM S 415 Practicum in Operating Systems
Fall. 2 credits. Prerequisite: COM S 410.
Corequisite: COM S 414.
COM S 417 Computer Graphics and Visualization (also ARCH 374)
Spring. 3 credits. Prerequisite: COM S 211 or 212.

COM $\$ 418$ Practicum in Computer Graphics (also ARCH 375)
Spring. 2 credits. Enrollment limited. Permission of instructor. Prerequisite: COM S 211 or 212. Recommended: COM S 314. Corequisite: COM S 417.

COM S 421 Numerlcal Analysis
Fall. 4 credits. Prerequisites: MATH 294 or equivalent, one additional mathematics course numbered 300 or above, and knowledge of programming.

## COM S 432 Introduction To Database

 5ystemsFall. 3 credits. Prerequisites: COM S 211 or 212 and COM S 410. Recommended: COM S 213.

COM S 433 Practicum in Database Systems
Fall. 2 credits. Corequisite: COM S 432 .
COM 5444 Distributed Systems and Algorithms
Fall. 4 credits. Prerequisite/co-requisite:
COM S 414 or permission of instructor.
Not offered every year; next offered fall 1998.

COM S 472 Foundations of Artificial Intelligence
Fall. 3 credits. Prerequisites: COM S 211 or 212 , and COM S 280 or equivalent.
COM S 473 Practicum in Artificial Intelligence
Fall. 2 credits. Prerequisites: COM S 211 or 212 , and COM S 280 or equivalent. Corequisite: COM S 472.
COM S 481 Introduction to Theory of Computing
Fall. 4 credits. Prerequisite: COM S 280 or permission of instructor. Credit will not be granted for both COM S 381 and 481.
A faster-moving and deeper version of COM S 381. Corrective transfers between COM S 481 and 381 (in either direction) are encouraged during the first few weeks of instruction.

COM S 482 Introduction to Analysls of Algorithms
Spring, summer. 4 credits. Prerequisites: COM S 410 and COM S 381 or 481 , or permission of instructor.

## COM S 486 Applied Logic (also

 MATH 486)Fall or spring. 4 credits. Prerequisites: MATH 222 or 294 , COM S 280 or equivalent (such as MATH 332, 432, 434, 481), and some course in mathematics or theoretical computer science.
COM S 490 Independent Reading and Research
Fall or spring. $1-4$ credits.
COM S 501 Software Engineering: Technology and Technique Fall. 4 credits. Prerequisite: COM S 410 and knowledge of the C programming language.

COM S 514 Practical Distributed Computing
Fall or spring. 4 credits. Prerequisites:
COM S 414 or permission of instructor.
COM S 515 Practicum in Distributed Systems
Fall or spring. 1-2 credits. Co-rerequisite: COM S 514.

COM S 516 High-Performance Computer Architecture
Spring. 4 credits. Prerequisite: COM S 314 required; COMS 412 or 414 highly recommended.

## COM S 519 Engineering Computer

 NetworksFall. 4 credits. Prerequisites: COM S 214,
314 , and 410 , or permission of instructor.
[COM S 522 Software Tools for Computatlonal Science
Spring. 4 credits. Prerequisites: a numerical analysis course such as (COM S 222 or 421 ) or PHYS 480; willingness to work in Matlab and C or Fortran; interest in mathematics and the natural sciences. Not offered every year; semester to be announced.]
COM 5572 Introduction to Automated Reasoning
Spring. 3 credits.
COM \$ 601 System Concepts
Fall. 3 credits. Prerequisite: open to students enrolled in the COM S Ph.D. program. Not offered every year; next
offered spring 1997.
COM 5611 Advanced Programming Languages
Fall. 4 credits. Prerequisites: graduate standing or permission of instructor.
COM S 612 Compller Design for HighPerformance Architectures
Spring. 4 credits. Prerequisites: COM S
314 and 412 , or permission of instructor.
COM S 613 Concurrent Programming
Spring. 4 credits. Prerequisites: COM S
414 or permission of instructor. Not offered every year; semester to be announced.

## COM S 614 Advanced Systems

Spring. 4 credits. Prerequisite: COM S
414 or permission of instructor.
COM 5618 Princlples of Distrlbuted Computing-Message Passing
Fall. 4 credits. Prerequisites: COM S 444
or permission of instructor.
COM S 621 Matrix Computations
Fall. 4 credits. Prerequisites: MATH 411
and 431 or permission of instructor.
[COM 5622 Numerical Optimization and Monlinear Algebraic Equations
Spring. 4 credits. Prerequisite: COM S
621. Offered in odd-numbered years.]

COM S 624 Numerlcal Solution of Differential Equations
Spring. 4 credits. Prerequisite: Previous exposure to numerical analysis, mathematical analysis including Fourier methods, and differential equations. Offered in even-numbered years.

## COM S 631 Multimedia Systems

Fall. 4 credits. Prerequisite: COM S 414
or permission of instructor.
COM 5632 Advanced Database Systems
Spring. 4 credits. Prerequisite: COM S
432/433 or permission of instructor.

## COM S 664 Machine Vislon

Spring. 4 credits. Prerequisites: under-
graduate-level understanding of algorithms
and Mathematics 221 or equivalent.
COM S 671 Introduction to Automated Reasoning
Fall. 4 credits. Prerequisite: graduate standing and COM S 611 or permission of instructor.

COM S 674 Natural Language Processing Spring. 4 credits. Prerequisites: COM S 472 or permission of instructor. Not offered every year; semester to be announced.
[COM 5676 Reasoning About Knowledge Fall. 4 credits. Prerequisites: mathematical maturity and an acquaintance with propositional logic. Not offered every year; next offered fall 1998.]
COM $\mathbf{S 6 7 7}$ Reasoning About Uncertalnty
Fall. 4 credits. Prerequisites: mathematical maturity and an acquaintance with propositional logic. Not offered every year; next offered fall 1997.
COM $\mathbf{S 6 8 1}$ Analysis of Algorithms Fall. 4 credits. Prerequisite: COM S 381 or 481 , or permission of instructor.
COM $\mathbf{5} \mathbf{6 8 2}$ Theory of Computing Spring. 4 credits. Prerequisite: (COM S 381 or 481 ) and (COM S 482 or 681 ), or permission of instructor.

COM $\mathbf{S} 709$ Computer Science Colloquium
Fall, spring. 1 credit. S-U grades only. For staff, visitors, and graduate students interested in computer science.
COM $\mathbf{S} 713$ Seminar in Systems and Methodology
Fall, spring. 4 credits. Prerequisites: a graduate course employing formal reasoning, such as COM S $600,611,613$, 615,671 , a logic course, or permission of instructor. Not offered every year; semester to be announced.
COM 5715 Seminar In Programming Refinement Logics
Fall, spring. 4 credits. Prerequisite: permission of instructor.

COM 5717 Topics in Parallel Architectures
Fall. 4 credits. Prerequisite: COM S 612 or permission of instructor. Not offered every year; semester to be announced.
COM 5719 Seminar In Programming Languages
Fall, spring. 4 credits. Prerequisite: COM S 611 or permission of instructor. S-U grades only.
COM $\mathbf{S} 722$ Toplcs in Numerical Analysis Fall, spring. 4 credits. Prerequisite: COM S 621 or 622 or permission of instructor. Not offered every year; semester to be announced.

## COM 5729 Seminar in Numerical Analysis/ACRI

Fall, spring. 1-4 credits (to be arranged). Prerequisite: permission of instructor. S-U grades only.
COM 5754 Seminar in Work In ProgressDistributed Systems
Fall, spring. 1 credit.
COM $5773 / 774$ Proseminar In Cognitive Studles I \& II (also COGST, PHIL, LING, and PSYCH 773/774)
Fall and spring. 2 credits.
COM $\$ 775$ Seminar In Natural Language Understanding
Fall, spring. 2 credits.

COM S 789 Seminar In Theory of Algorithms and Computing Fall, spring. 2-4 credits. Prerequisite: permission of instructor. S-U grades only.

COM $\mathbf{S} 790$ Special Investigations in Computer Sclence
Fall, spring. Prerequisite: permission of a computer science adviser. Letter grade only. Independent research or Master of Engineering project.
COM S 890 Special Inveatigations In Computer Sclence
Fall, spring. Prerequisite: permission of a computer science adviser. S-U grades only. Master of Science degree research.

COM $\mathbf{S} 990$ Speclal Investigations in Computer Science
Fall, spring. Prerequisite: permission of a computer science adviser. S-U grades only. Doctoral research.

## CZECH

See Language Courses under Languages and Linguistics.

## DANCE

See listings under Department of Theatre, Film and Dance.

## DANISH

See Language Courses under Languages and Linguistics.

## DUTCH

See Language Courses under Languages and Linguistics.

## ECONOMICS

T. Mitra, chair; R. Masson, graduate field representative; $\mathbf{T}$. Lyons, director of undergraduate studies; K. Basu, L. Blume, M. Conlin, T. E. Davis, D. Easley, R. Ehrenberg, R. Frank, G. Hay, Y. Hong, N. Kiefer, P. D. McClelland, M. Majumdar, T. O'Donoghue, U. Possen, R. E. Schuler, K. Shell, G. J. Staller, S. Subramanian, E. Thorbecke, M. Veracierto, T. Vogelsang, H. Y. Wan, Jr., J. Wissink. Emeritus: W. Isard, A. Kahn, P. O'Leary, 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.

## Social Science Distribution Requirement

The microeconomics distribution requirement can be fulfilled with any of the following:

Economics 101, Economics 301, or Economics 313.
The macroeconomics distribution requirement can be satisfied with any of the following

Economics 102, Economics 302, or Economics 314.

## The Major

Prerequisites
Economics 101 and 102 and Math 111 (or equivalents, with approval of the director of undergraduate studies), all with grades of C or better.

Economics 301 with a grade of C or better substitutes for 101; Economics 302 with a grade of C or better substitutes for 102 .

## Requirements

Eight courses listed by the Department of Economics at the 300 level or above, or approved by the student's major adviser, all with grades of C - or better.
These eight courses must include:
(1) Economics 313 and 314,
(2) Economics 321 or Economics 319 and 320 ,
(3) at least 3 courses from the following: $318,320,322-62,364-98,404,467$
Economics 301 with a grade of $B$ or better substitutes for both 101 and 313; Economics 302 with a grade of B or better substitutes for both 102 and 314.
If Economics 321 is applied toward the major, neither 319 nor 320 can be applied.
Economics 399, 363, and 499 cannot be counted toward the eight-course requirement
An honors program is currently being offered. Students should consult the director of undergraduate studies before May of their junior year for more information.

Students planning graduate work in economics and business are strongly encouraged to prepare themselves well in mathematics and econometrics. These students are strongly encouraged to enroll in Economics 319-320 rather than Economics 321.

## Courses

ECON 101 Introductory Microeconomics
Fall, spring, winter, and summer.
3 credits. Economics 101 is not a prerequisite for 102.
Explanation and evaluation of how the price system operates in determining what goods are produced, how goods are produced, and who receives income, and how the price system is modified and influenced by private organizations and government policy.
ECON 102 Introductory Macroeconomics Fall, spring, winter, and summer
3 credits. Economics 101 is not a prerequisite for 102 .
Analysis of aggregate economic activity in relation to the level, stability, and growth of national income. Topics discussed 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 301 Microeconomics

Fall. 4 credits. Prerequisite: calculus. Intended for students with strong analytical skills who have not taken Economics 101, 102. Can be used to replace both Economics 101 and 313. (Can replace 313 only with grade of B or better). This course covers the topics taught in Economics 101 and 313. An introduction to the theory of consumer and producer behavior and to the functioning of the price system.

ECON 302 Macroeconomics
Spring. 4 credits. Prerequisite: Economics 301.
Intended for students with strong analytical skills who have not taken Economics 101, 102. Can be used to replace both Economics 102 and 314. This course covers the topics taught in Economics 102 and 314. (Can replace 314 only with grade of B or better). An introduction to the theory of national income determination, unemployment, growth, and inflation.

ECON 307 Introduction to Peace Science (also CRP 495.18 and Introduction to Peace Science)
Winter session. 4 credits. Prerequisites: Economics 101-102 or permission of instructor.
Introduction to the theories of and research on conflict resolution. Topics include conflict, its role and impact on society; theories of aggression and altruism; causes of war; game theory; conflict management procedures and other analytical tools and methods of peace science; alternatives to war.

## ECON 313 Intermediate Microeconomic Theory $A$

Fall, spring, and summer. 4 credits. Prerequisites: Economics 101-102 and calculus.
The pricing process 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 314 Intermediate Macroeconomic

 Theory $\mathbb{B}$Fall, spring, and summer. 4 credits.
Prerequisites: Economics 101-102 and calculus.
The theory of national income and determination and economic growth in alternative models of the national economy is introduced. The interaction and relation of these models to empirical aggregate economic data is examined.

## [ECON 317 Intermediate Mathematical

 Economics IFall. 4 credits. Prerequisites: Economics 101-102 and Math 111-112. Not offered 1997-98.
Introduction of calculus and matrix algebra; problems of maximization of a function of several variables. Economic examples are used to illustrate and teach the mathematical concepts.]

## ECON 318 Intermediate Mathematical

 Economics IISpring. 4 credits. Prerequisites: Economics 101-102 and Math 111-112.
Advanced techniques of optimization and application to economic theory.

ECON 319 Introduction to Statistics and Probability
Fall. 4 credits. Prerequisites: Economics 101-102 and Mathematics 111-112.
This course 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 320 Introduction to Econometrics

Spring. 4 credits. Prerequisites: Economics 101-102, 319, or equivalent. fo 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 321 Applied Econometrics
Fall, spring and summer. 4 credits.
Prerequisites: Economics 101-102 and calculus.
This course provides an introduction to statistical methods and principles of probability. Topics to be covered 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 323 American Economic

History \#
Fall. 4 credits. Prerequisites: Economics 101-102 or equivalent.
Problems in American economic history from the first settlements to early industrialization are surveyed.

## ECON 324 Amerlcan Economic

 History \#Spring. 4 credits. Prerequisites: Economics 101-102 or equivalent.
A survey of problems in American economic history from the Civil War to World War I.

## ECON 324A American Economic

 History \#Spring. 4 credits. Prerequisites: Economics 101-102 or equivalent. Instructor's permission required.
Same material as Economics 324, seminar limited to 12 students.

## ECON 331 Money and Credit

Spring. 4 credits. Prerequisites: Economics 101-102 and 314.
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 333 Financlal Economics

Fall. 4 credits. Prerequisites: Economics 313 and 314.
The theory and decision making in the presence of uncertainty and the practical aspects of particular asset markets are examined.

## ECON 335 Publle Finance: The

## Microeconomics of Government

Fall. 4 credits. Prerequisites: Economics 101-102 and 313, or their equivalent, and one semester of calculus
The role of government in a free market economy is analyzed. Topics covered include
public goods, market failures, allocation mechanisms, optimal taxation, effects of taxation, and benefit-cost analysis. Current topics of an applied nature will vary from term to term.

ECON 336 Public Finance: Resource Allocation and Fiscal Policy
Spring. 4 credits. Prerequisites: Economics 101-102, 313 or their equivalent and one semester of calculus.
This course covers the revenue side of public finance and special topics. Subjects covered 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 341 Labor Economics

For description, see ILRLE 240

## ECON 351 Industrial Organization

 Fall. 4 credits. Prerequisite: Economics 313 or its equivalentA study of markets that differ from the ideal of perfect competition (e.g., monopoly and oligopoly) and the efforts of our legal system through the antitrust laws to deal with the kinds of problems that arise in such markets. Specific topics covered include mergers, price fixing, price discrimination, predatory pricing, and vertical restraints such as resale price maintenance.

ECON 352 Advanced Topics in Industrial Organization
Spring. 4 credits. Prerequisites: Economics 351.
This course is an extension of 351 and will emphasize (a) more-advanced topics in the theory of industrial organization with special attention to recent developments in the literature; and (b) empirical analysis of numerous issues relating to the structure of markets and their performance.

## ECON 361 International Trade Theory and Policy

Fall. 4 credits. Prerequisites: Economics 101-102 and 313.
This course surveys the sources of comparative advantage. It studies commerical policy and analyzes the welfare economics of trade between countries. Some attention is paid to the institutional aspects of the world trading system.

## ECON 362 International Monetary Theory and Pollcy

Spring and summer. 4 credits. Prerequisites: Economics 101-102 and 314.
This course surveys the determination of exchange rates and theories of balance of payments adjustments. It also explores open economy macroeconomics, and it analyzes some of the institutional details of foreign exchange markets, balance of payments accounting, and the international monetary system.

## ECON 363 International Economics

Spring and summer. 4 credits. Prerequisite: Economics 101-102 or equivalent. This course surveys international economics in one semester. First, it surveys the sources of comparative advantage, and it analyzes commercial policy and the institutional aspects of the world trading system. Second, it discusses exchange rates, and it studies theories of balance of payments adjustments. This course is intended primarily for government majors who are comfortable with a less
technical approach to international economics. (Cannot be applied to the economics major.)

## ECON 371 Economic Development

Spring. 4 credits. Prerequisites: Economics 313 or equivalent.
Study of the problem of sustaining accelerated economic growth in less-developed countries. Trade-offs between growth, welfare, and equity; the legacy of colonialism; relevance of history and economic theory; problems of capital formation, economic planning and international specialization; and the interaction of industrialization, agricultural development, and population change are emphasized.

## [ECON 372 Applied Economic

## Development

Fall or spring. 4 credits. Prerequisite:
Economics 101-102. Not offered 1997-98.
This course examines several special topics in the economics of developing countries Among the topics covered recently are the concepts of development and underdevelopment, the debate over development economics, the peasant household and its place in the world economy, the debt crisis, the state vs. market debate and the role of the state in economic development, and the question of sustainable development.]

## ECON 399 Readings in Economics

Fall or spring. Variable credit.
Independent study.

## ECON 404 Economics and the Law

Fall. 4 credits. Prerequisite: Economics 101.

An examination, 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 408 Production Economics
For description, see ARME 608.

## ECON 409 Environmental Economics

 For description, see ARME 451.
## ECON 413 Economics of Consumer

 DemandFor description, see CEH 613.

## ECON 415 Price Analysis

For description, see ARME 415.
[ECON 416 Intertemporal Economics Spring. 4 credits. Prerequisites: Economics 313. Not offered 1997-98. This course is intended for advanced economics majors who are especially interested in economic theory. Topics to be covered: (a) review of the one good Ramsey model of optimal savings and accumulation; conditions for intertemporal efficiency in production; comparative dynamics and sensitivity analysis; (b) some earlier models of capital accumulation; the roles of present value and internal rate of retum in guiding investment decisions; (c) growth, exhaustible resources; pollution and conservation: discussion of the trade-offs facing a society.]

## ECON 417 History of Economic

 Analysis "Fall and spring. 4 credits. Prerequisites: Economics 101-102 or permission of instructor.
Early writings in economics and their relationship to current economic analysis and policy issues, for example, 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 419 Economic Decisions under

 UncertaintyFall. 4 credits. Prerequisites: Economics
313 and 319. Not offered 1997-98.
This course provides an introduction to the theory of decision making under uncertainty with emphasis on economic applications of the theory.]

## ECON 420 Economics of Family Policy-

 AdultsEconomics 420 and 421 together, count as
one course for the Economics major.
For description, see CEH 320.

## ECON 421 Economics of Family Policy-

 ChildrenEconomics 420 and 421 together, count as one course for the Economics major.
For description, see CEH 321.
ECON 422 The Economics of Infrastructure and a Sustainable Environment
For description, see CEE 422.
ECON 424 Economics of Household Behavior
For description, see CEH 624
ECON 425 Economic History of Latin America © ${ }^{\text {a }}$
Spring. 4 credits.
A survey of changing economic institutions and policies from pre-Columbian to modern times.

## ECON 426 History of American Enterprise \#

Spring. 4 credits. Prerequisites: Econom-
ics 101-102 or equivalent.
History of the changing structure of American business from 1800 to the present, with major emphasis upon developments after the Civil War. The focus of the course will be the changing structure of challenges (for example, the rise of unions, development of a national capital market, changing role of govemment) and the various responses of business organizations and entrepreneurs to those challenges.
ECON 428 Technology: Management and Economic Issues
For description, see ARME 428.
ECON 430 Policy Analysis: Welfare Theory, Agriculture, and Trade For description, see ARME 630.
ECON 435 Information and Regulation
For description, see CEH 635.
ECON 436 Projects in Environmental Management
For description, see NBA 573.

## ECON 440 Analysis of Agriculture

 MarketsEconomics 440 and 441 together, count as one course for the Economics major.
For description, see ARME 640.

ECON 441 Commodity Futures Markets
Economics 440 and 441 together, count as one course for the Economics major.
For description, see ARME 641.
ECON 444 Modern European Economic History
For description, see ILRLE 444.
[ECON 445 Topics in Microeconomic Analysis-Markets and Planning
Fall. 4 credits. Prerequisites: Economics 313. Not offered 1997-98.

This is a course of economic theory designed for upperclass undergraduates. Course contents may vary from year to year. Issues that may be examined include (1) How can economic activities be efficiently organized through the market mechanism? Why is the presence of many traders essential to efficiency? (2) What can be done if the indivisibility in production processes becomes an important hindrance to competitive pricing? (3) How can economic planning be decentralized efficiently? This course serves two purposes: (1) to introduce concepts that are novel to undergraduates and relevant to public policy but require only a modicum of analytic tooling up, and (2) to illustrate the deductive approach of modern economic analysis-how to define concepts unambiguously, how to form propositions in clear-cut fashion, and how to follow up logical implications sequentially to the conclusion.]

## [ECON 446 Toplcs in Macroeconomic

 Analysis-Is Keynesianism Dead?Fall or spring. 4 credits. Prerequisites:
Economics 314. Not offered 1997-98
The coverage of this course may vary from term to term. Presently the content of the course deals with the range of criticisms against Keynesian theory by the New Classical Economics, alias the Equilibrium School, alias the Rational Expectations School. Despite the fact that almost all intermediate macroeconomic textbooks are Keynesian in perspective, clearly Keynesian economics is currently at bay. We shall review critically, critiques to Keynesian theory.]

ECON 448 Housing Economics
For description, see CEH 648.
ECON 451 Economic Security
For description, see ILRLE 340
ECON 452 Corporate Finance
For description, see ILRLE 345.
ECON 453 The Economics of Unemployment
For description, see ILRLE 348.
ECON 454 The Economics of Health Care For description, see ILRLE 440.
ECON 455 Income Dlstribution
For description, see ILRLE 441.
ECON 456 The Economics of Employee Benefits
For description, see ILRLE 442.
ECON 457 Women In the Economy For description, see ILRLE 445.
ECON 458 Toplcs in Twentieth Century Economic History
For description, see ILRLE 448.
ECON 459 Economic Hlstory of British Labor 1750-1940
For description, see ILRLE 640.

## ECON 460 Economic Analysis of the Welfare State

For description, see ILRLE 642.

## ECON 461 The Economics of Occupatlonal Safety and Health

 For description, see ILRLE 644.
## ECON 462 Labor in Developing

 EconomlesFor description, see ILRIC 332
ECON 464 Economics of Agricultural Development
For description, see ARME 464.
ECON 465 Food and Nutrition Policy
For description, see ARME 665.
ECON 466 Economics of Dovelopment For description, see ARME 666.
ECON 467 Game Theory
Spring, 4 credits. Prerequisites: Economics 313 and 319.
This course studies mathematical models of conflict and cooperation in situations of uncertainty (about nature and about decision makers).

## ECON 468 Economic Problems of Latin

 America ©Spring. 4 credits. Prerequisites: Economics 101-102.
Current topics include, international debt, capital flight, economic integration, stabilization programs, etc.
ECON 469 The Economy of China
Fall. 4 credits. Prerequisites: Economics
101-102 or permission of instructor.
Examines the development of the Chinese economy and the evolution of China's economic system since 1949.
[ECON 471 The Economies of the Former Soviet Union and of Central Europe: From Central Planning to Markets
Fall. 4 credits. Prerequisites: Economics 313 and 314. Not offered 1997-98. The course will introduce first the basic features of a centrally planned economy and proceed to consider the most important example: the rise and fall of the Soviet Union. Secondly, the analysis will be extended to what used to be known as "Eastern Europe" (e.g., Czechoslovakia, Hungary, Poland). From this necessary historical background, the course will proceed to current attempts to move away from Socialist central planning and its legacies to market economy,
privatization, and independence.]

## [ECON 472 Comparative Economic Systems: East and West

Fall. 4 credits. Prerequisites: Economics 101-102. Not offered 1997-98.
The course will develop first a framework for studying economic systems and national economies and present three simple stylized systemic models: capitalist market, socialist market, and central planning. Secondly, the course will consider economic goals to be achieved (such as growth, stability, and productivity) and introduce quantitative measures used in the evaluation of the performance. Thirdly, comparative studies of selected national economies representing the models will be carried out.]

## ECON 473 Economics of Expart-led

 Development (a)Spring. 4 credits. Prerequisites: Economics 313,314 , or their equivalent.
This course will examine the phenomenon of export-led development from both the theoretical and empirical points of view. Concentration will be on experiences within the West Pacific Rim.

## ECON 474 National and International Food Economics <br> For description, see NS 457.

ECON 475 Economic Problems of India
Fall. 4 credits. Prerequisite: Economics
101-102 or equivalent background.
This course will present the major economics and development problems of contemporary India and to examine the country's future economic prospects. It will, however, be our aim to discuss these problems in their proper historical perspectives. Hence, the course will start with a brief outline of the social and political history of India. It will then turn to a more detailed account of the economic history of India in two stages.

## ECON 499 Honors Program

Fall and spring. 8 credits.
Consult the Director of Undergraduate Studies for details. Interested students should apply to the program in the spring semester of their junior year.

## Graduate Courses and Seminars

ECON 609 Microeconomic Theory I

## Fall. 4 credits.

Topics in consumer and producer theory.
ECON 610 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 613 Macroeconomic Theory I

 Fall. 4 credits.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. ModiglianiMiller theorem. Asset pricing. Recursive competitive equilibrium. The Neoclassical Growth Model. Calibration. Introduction to dynamic programming.

## ECON 614 Macroeconomic Theory II

Spring. 4 credits.
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. Endogenous growth.

## ECON 616 Applied Price Theory

Spring. 4 credits.
The course emphasizes the applications of the principles of price theory to a variety of problems taken from concrete, practical settings.

## ECON 617 Intermediate Mathematical Economics

Fall. 4 credits. Prerequisites: Calculus II and intermediate linear algebra.
The course will cover 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 618 Intermediate Mathematical Economics II

Spring. 4 credits.
A continuation of Economics 617, the course develops additional mathematical techniques for applications in economics. Topics covered could include study of dynamic systems (linear and nonlinear difference equations, differential equation, chaotic behavior), dynamic optimization methods (optimal control theory, nonstochastic and stochastic dynamic programming), game theory (repeated dynamic and evolutionary games).

## ECON 619 Econometrics I

Fall. 4 credits. Prerequisites: Economics
319-320 or permission of instructor. This course gives the probabilistic and statistical background for meaningful application of econometric techniques. Topics to be covered are (1) 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; (2) statistics: sample statistics, sufficiency, exponential families of distributions. Further topics in statistics will be considered in Economics 620.

## ECON 620 Econometrics II

Spring. 4 credits. Prerequisite: Economics 619.
This course is a continuation of Economics 619 (Econometrics I) covering (1) 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 (2) econometrics: the general linear model, generalized least squares, specification tests, instrumental variables, dynamic regression models, linear simultaneous equation models, nonlinear models, and applications.

## ECON 639 Public Polltical Economy (also CEE 528)

Spring. 4 credits. Prerequisite: Economics 313 or equivalent.
Designed as part of the core curriculum for MPA students in Cornell's Institute for Public Affairs, this course emphasizes the application of economic concepts and methods in the identification, formulation, administration and evaluation of public policy. It is open to all students with a policy interest who have met the prerequisite.
Topics covered include the intrinsic nature of goods and services, decreasing cost of production, externalities and congestion, attributes and government regulation essential for an effective market, the efficient role of government in non-market resource allocation methods, methods for inferring the demand for public goods, efficient public decisionmaking, the supply of public services and
raising revenue through taxes and user-fees. Particular emphasis will be placed on the intersection between fairness and efficiency in resolving conflicts over public good provision, including defining jurisdictions for the provision of particular services. Examples will emphasize the proper provision of infrastructure services: physical (transportation, utilities, tele-information); human-capital (education and R\&D) and biological (renewable resources, species diversity and the environment).

## ECON 699 Readings in Economics

Fall or spring. Variable credit.
Independent study.
ECON 703 Seminar in Peace Science Fall. 4 credits.
Among topics to be 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 710 Stochastic Economics: Concepts and Techniques

Spring. 4 credits. Prerequisites: Economics $609,610,613,614,619$, and 620. This course will review a number of techniques that have been useful in developing stochastic models of economic behavior. Among these are (a) discrete-time Markov processes, (b) dynamic programming under uncertainty, and (c) continuous-time diffusion processes. Examples of economic models will be drawn from recent literature on optimal capital accumulation and optimal savings and portfolio selection problems; permanent income hypothesis; dynamic models of price adjustment, etc. Advanced graduate students contemplating work in economic theory and econometric theory will be able to get some exposure to current research.

## ECON 711 Advanced Microeconomic Theory: "The Mathematics of Institutions"

4 credits.
The objectives of this class are to provide the tools to study institutions and to analyze some particular institutions. We will borrow from many literatures: game theory, social choice, political science, macroeconomics,
microeconomics. The structure of the class will be rather informal. The syllabus will only be an indicator of the material that will be covered during the class. In particular, depending upon the number of students that attend and their interests, we can decide to shorten some parts of this syllabus and to spend more time on other parts.

## ECON 712 Advanced Macroeconomics

 4 credits.The purpose of this course is to introduce the student to some of the topics and analytic techniques of current macroeconomic research. The course will fall into three parts: dynamic programming, new Keynesian economics, and recent theories of economic growth. The dynamic programming section will include models of consumption, investment, and real business cycles. The new Keynesian section will cover models of wage and price rigidity, coordination failure and credit markets. The section on endogenous growth will look at recent efforts to add non-convexities to models of optimal growth. These topics are intended to complement the material on overlapping generations covered elsewhere.

ECON 717 Mathematical Economics 4 credits. Prerequisites: ECON 609-610 (or equivalent training in micro theory) and MATH 413-414 (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 718 Topics in Mathematical Economics

4 credits.

## ECON 719 Advanced Topics in

 Econometrics IFall. 4 credits. Prerequisites: Economics 619-620 or permission of instructor. 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 720 Advanced Topics in Econometrics II

Spring. 4 credits. Prerequisites: Economics 619-620 or permission of instructor. For description see Economics 719.

## ECON 721 Time Series Econometrics

 Spring. 4 credits. Prerequisites: Economics 619-620 or permission of instructor. This course covers traditional and current time series techniques that are widely used in econometrics. Topics include the theory of stationary stochastic processes including univariate ARMA( $p, q$ ) models, spectral density analysis, and vector autoregressive models; parametric and semi-parametric estimation; current developments in distributional theory; estimation and testing in models with integrated regressors including, unit root tests, cointegration, and permanent vs. transitory components.ECON 731 Monetary Theory and Policy Spring. 4 credits. Preequisites: Economics 614 or permission of the instructor. Advanced topics in monetary economics, macroeconomics, and economic growthsuch as overlapping-generations, taxes and transfers denominated in money, transactions demand for money, multi-asset accumulation, exchange rates, and financial intermediation.
ECON 732 Monetary Theory and Policy Fall. 4 credits. Prerequisites: Economics 731 or permission of the instructor. Advanced topics in monetary economics, macroeconomics, and economic growthsuch 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 735 Public Finance: Resource Allocation and Fiscal Pollcy Spring. 4 credits.
This course 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 covered 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 upon faculty research interests.

## ECON 736 Publlc Finance: Resource Allocation and Flscal Policy

Fall. 4 credits
This course 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 737 Location Theory and

 Regional AnalyslsFall. 4 credits. Prerequisites: Economics 609, 617, and Econometrics. Not offered 1997-98.
Economic principles influencing the location of economic activity, its spatial equilibrium structure, and dynamic forces. Topics include spatial pricing policies, price competition, and relocation by firms; residential location patterns; patterns of regional growth and decline; and patterns of urbanization.]
ECON 741 Seminar In Labor Economics For description see ILRLE 744.

ECON 742 Seminar In Labor Economics For description see ILRLE 745.

ECON 747 Economics of Evaluation (also Industrial and Labor Relations 647)
For description see ILRLE 647

## ECON 748 Issues In Latin American

 DevelopmentFall. 4 credits.
The topics include: "informal sector" (or multi-part labor markets), evolving capital markets (particularly the market for shortterm, domestic currency denominated public sector debt, privatization, etc.). The emphasis will be placed on the impact of these institutional (or structural) changes on economic growth.

## ECON 751 Industrial Organlzation and Regulation <br> Fall. 4 credits.

This course focuses primarily on recent theoretical advances in the study of industrial organization. Topics covered include market structure, non-linear pricing, quality, durability, location selection, advertising, repeated games, collusion, entry deterrence, managerial incentives, switching costs and government intervention. These topics are discussed in a game-theoretic context.

ECON 752 Industrial Organization and Regulation
Spring. 4 credits. Prerequisites: Economics 609 and 651
This course rounds out some topics in the Theory of Industrial Organization with the specific intent of addressing the empirical implications of the theory. The course reviews empirical literature in the SCP paradigm and in the NEIO paradigm.

## [ECON 753 Public Pollcy Issues for Industrial Organizations

Spring. 4 credits. Prerequisites: Economics 609, 610, and 751. Not offered 1997-98.
The course takes an in-depth view of the interaction between the government and business. Methods of business control, including antitrust, price regulation, entry regulation, and safety regulation. Emphasis will be not only on the economic effects on business, but on the economics of selecting and evolving the method of control.]

## [ECON 755 Rivalry and Cooperation

 Fall. 4 credits. Prerequisites: Economics Graduate Core or instructor's permission Not offered 1997-98.In standard models, economic interaction is impersonal. Agents respond to price signals and measure their own welfare not in relative but in absolute terms; and cooperative behavior emerges only when it coincides with narrow self-interest. This course will explore the details of rivalry and cooperation in an effort to synthesize broader views of economic interaction. Topics will include the effect of concerns about relative income on wage rates, consumption, savings, and regulation; the effect of concerns about faimess on prices and wages; the conditions that foster trust and cooperation; and the role of positional competition in the distribution of economic rewards.]

## ECON 756 Noncooperatlve Game Theory

Fall. 4 credits. Prerequisites: Economics 609-610 and 619.
This course surveys equilibrium concepts for non-cooperative games. We will cover Nash equilibrium and a variety of equilibrium refinements, including perfect equilibrium proper equilibrium, sequential equilibrium and more! We will pay attention to important special classes of games, including bargaining games, signalling games, and games of incomplete information. Most of our analysis will be from the strict decision-theoretic point of view, but we will also survey some models of bounded rationality in games, including games played by automata

## ECON 757 Economics of Imperfect

 InformationSpring. 4 credits. Prerequisites: Economics 609-610 and 619 .
The purpose of this course is to consider some major topics in the economics of uncertain information. Although the precise topics considered will vary from year to year, subjects such as markets with asymmetric information, signalling theory, sequential choice theory, and record theory will be discussed.

## ECON 760 Toplics In Polltical Economy

Fall. 4 credits. Prerequisite: Economics 313 or equivalent.
This course will develop critiques and extensions of economic theory, taking into account the political and social moorings of
economic activity and equilibria. The formation and persistence of social norms; the meaning and emergence of property rights; the role of policy advice in influencing economic outcomes; and the effect of political power and ideology on economic variables will be studied. While these topics were popular in the classic works of political economy, recent advances in game theory and, more generally, game-theoretic thinking allows us to approach these topics from a new perspective. Hence, the course will begin by devoting some lectures to elementary ideas in game-theory and strategic analysis.

## ECON 761 Intornational Economics:

 Trade Theory and PolicyFall. 4 credits.
This course surveys the sources of comparative advantage. It 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 762 Intematlonal Economics: International Finance and Open Economy Macroeconomlcs

Spring. 4 credits.
This course surveys the determination of exchange rates and theories of balance of payment adjustments. It explores open economy macroeconomics by analyzing models of monetary economies. Topics in monetary economics and econometrics as applied to international economics will be covered.

## ECON 771 Economic Development and Development Planning

Spring. 4 credits.
Reviews the existing literature on the determinants of economic growth and the interrelationship between growth and income distribution through the process of economic development. A general equilibrium approach to development is taken. Computable general equilibrium models, based on social accounting matrices, are used to explore the performance of a variety of developing countries. Among the topics explored are: impact of structural adjustment and stabilization policies on growth, equity and internal and external equilibrium; sectoral interrelationship and interdependence through the growth process. Critical review and evaluation of national, sectoral and regional development models built for such developing countries as India, Brazil, Indonesia and Ecuador.

ECON 772 Economics of Development
Spring. 4 credits. Prerequisites: first-year graduate economic theory and econometrics.
Analytical approaches to the economic problems of developing nations. Topics to be covered include: some old and new directions in development economics thinking, the welfare economics of poverty and inequality, empirical evidence on who benefits from economic development, labor market models, project analysis with application to the economics of education, and development policy.

## ECON 773 Economic Development

Fall. 4 credits. Prerequisites: Economics 609 and 620.
The course is 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 774 Economic Systems

Spring. 4 credits.
The course deals with economic systems, with the formerly centrally planned economies, and with the economies in transition.

ECON 784 Seminars in Advanced Economics
Fall and spring. 4 credits.

## ENGLISH

J. Culler, chair; B. B. Adams, director of undergraduate studies (255-3492); D. Mermin, director of graduate studies (255-7989);
H. S. McMillin, director of honors program;
A. R. Anmons, J. P. Bishop, A. Boehm,
F. V. Bogel, L. Bogel, Laura Brown,

Lois Brown, C. Chase, B. Correll, S. Davis,
L. Fakundiny, R. T. Farrell, D. Fried,
A. Galloway, R. Gilbert, J. Goldsby,
K. Gottschalk, E. Hanson, L. Herrin, T. D. Hill,
M. Hite, M. Jacobus, P. Janowitz, B. Jeyifo,
C. V. Kaske. M. Koch, C. S. Levy, A. Lurie,
D. E. McCall, K. A. McClane, M. McCoy,
B. Maxwell, S. P. Mohanty, D. Moore,
R. Morgan, T. Murray, B. V. Olguín, R. Parker,
J. Porte, E. Rosenberg, N. Saccamano,
S. Samuels, P. Sawyer, D. R. Schwarz,
M. Seltzer, K. Shanley, H. E. Shaw, S. Siegel, H. Spillers, G. Teskey, S. Vaughn,
H. M. Viramontes, W. Wetherbee, S. Wong. Enceriti: M. H. Abrams, J. F. Blackall, A. Caputi, D. Eddy, S. Elledge, R. Elias, P. Marcus, J. R. McConkey, S. Parrish, M. A. Radzinowicz, S. C. Strout

The Deparment of English offers a wide range of courses in English, American, and Anglophone literature as well as in creative writing, expository writing, and film. Literature courses focus variously on the close reading of texts, the study of particular authors and genres, questions of critical theory and method, and the relationship of literary works to their historical periods and to other disciplines. The departunent seeks not only to foster analytical reading and lucid writing but also, through the study of literary texts, to teach students to think about the nature of language, and to be alert to the rigors and pleasures of that ordinary and peculiar activity, reading.
Students who major in English develop their own programs of study in consultation with their advisers. Some focus on a particular historical period or literary genre; others combine sustained work in creative writing with the study of literature. Others pursue special interests in such areas as women's literature, African-American literature, literature and the visual arts, or critical theory.
There are also many ways for students informally to supplement their course work in English, by attending the frequent lectures and poetry readings sponsored by the department, or by writing for campus literary magazines.

## The Major

The Department of English recommends that its students prepare themselves for the English major by taking at least one introductory course. Freshmen interested in majoring in English are encouraged to take one of the following freshman seminars: The Reading of Fiction (English 270), The Reading of Poetry (English 271), Introduction to Drama (English 272). The courses concentrate on the skills basic to the English major and to much other academic work, responsive, sensitive reading and lucid, effective writing. English 270, 271, and 272 , which may be used to satisfy the freshman writing seminar requirement, are open to all second-term freshmen. First-term freshmen with a score of 700 or above on the CEEB College Placement Tests in English composition or literature, or 4 or 5 on the CEEB Advanced Placement Examination in English, may enroll in English 270, 271, 272 as space permits (all students who have taken one freshman seminar are permitted to enroll in these courses as space permits).
English 201 and 202, a survey of major British writers, though not required for the major, are strongly recommended for majors and prospective majors, since they afford an overview of the history of English literature, providing an introduction to periods, authors, and genres that allows students to make a more informed choice of advanced courses. The American Literary Tradition (English 275), Creative Writing (English 280 or 281), and the Essay in English (English 295) are especially suitable in preparation for the major.

## Course Requirements

English majors are required to complete, with passing letter grades, six credits of foreign language study in courses for which qualification is a prerequisite. These courses should be in the literature of the foreign language. (Advanced Placement credit DOES NOT fulfill this requirement, nor does the study of foreign literature in translation.) Majors are urged to complete this requirement by the end of their sophomore year, and those who enter Comell without sufficient preparation should begin their language study at once.
Besides fulfilling the English Department language requirement, each major must complete with passing letter grades at least 36 credit hours in courses approved for the major. Courses approved for the major inclucle English 201 and 202, and all English courses numbered 300 or above. In addition to English 201 and 202, students may count up to two additional 200-level courses for the major (except those courses which specify they do not count). English majors may use the same courses to satisfy both College of Arts and Sciences distribution requirements and English major requirements.
Of the 36 credits required for the major, 12 credits (three courses) must be taken in literature written before 1800. Students may count toward the English major a maximum of 12 credits in courses in literature and creative writing, at the 300 level or above, given by such departments as Comparative Literature, Theatre Arts, foreign languages, the Africana Studies and Research Center, and the Society for the Humanities. Double majors may count courses at the 300 level or above taken in their other major toward these 12 credits if such courses are approved by their English Department adviser as relevant to the study of literature,

## The Major in English with Honors

Prospective candidates for the degree of Bachelor of Arts with honors in English should read the brochure "Honors in English," available in the English office. These students should discuss their qualifications with the chair of the Honors Committee during the spring term of their sophomore year, when they will be admitted provisionally to the program. During their junior year, honors candidates must take one honors seminar (English 491 or 492 ), which will reflect a dominant area of interest, address methods of scholarly research, and require the composition of a long end-of-term essay. Honors students are strongly encouraged to take an additional 400 -level course in the field in which they plan to concentrate. On the basis of their performance, students will be officially admitted to the program at the end of the junior year. Seniors in honors enroll in a year-long tutorial (English 493 and 494) in which they work closely with a faculty member especially qualified to supervise the topic of the candidate's choosing; the year's work culminates in the writing of a scholarly honors thesis. (All seniors in the program are expected to attend informal sessions in which they discuss their work-in-progress.) More information about the program may be found in the department's brochure for honors candidates.

## Courses for Nonmajors

For students not majoring in English, the department makes available a variety of courses at all levels. Some courses at the 200 level are open to qualified freshmen, and all of them are open to sophomores. Courses at the 300 level are open to juniors and seniors and to underclass students with permission of the instructor. The suitability of courses at the 400 level for nonmajors will vary from topic to topic, and permission of the instructor is required.

## Freshman Writing Seminars

As part of the Freshman Writing Program, the Department of English offers many onesemester courses concerned with various forms of writing (narrative, biographical, expository), with the study of specific areas in English and American literature, and with the relation of literature to culture. Students may elect any two of these courses during their first year to satisfy the Freshman Writing Seminar requirement. Descriptions of Freshman Writing Program offerings may be found in the Freshman Writing Program listings, available from college registrars in August for the fall term and in November for the spring term.

## Freshman Writing Seminars Recommended for Prospective Majors

ENGL 270 The Reading of Fiction Fall, spring, each summer. 3 credits. Each section limited to 17 students. Freshman Writing Seminar. Recommended for prospective majors in English.
English 270 examines modern fiction, with an emphasis on the short story and novella. Students will write critical essays on English, American, and continental authors who flourished between 1870 and the present, such as Joyce, Woolf, James, Lawrence, Tolstoy, Kafka, Fitzgerald, Faulkner, Rhys, Welty,

Salinger, and Morrison. Instructors may include the reading of a novel. This course does not satisfy requirements for the English major.

## ENGL 271 The Reading of Poetry

Fall, spring. 3 credits. Each section limited to 17 students. Freshman Writing Seminar. Recommended for prospective majors in English. This course does not satisfy requirements for the English major. Designed to sharpen the student's ability to understand and respond to poetry, through readings in the major periods, modes, and genres of poetry written in English. This course does not satisfy requirements for the English major.

## ENGL 272 Introduction to Drama

Fall, spring. 3 credits Each section limited to 17 students. Freshman Writing Seminar. Students in this seminar study plays, older and newer, in a variety of dramatic idioms and cultural traditions. A typical reading list might include works by Sophocles, Shakespeare, Moliere, Chekhov, Brecht, Miller, Williams, Beckett, and O'Casey. Course work consists of writing and discussion and the occasional viewing of live or filmed performances. This course does not satisfy requirements for the English major.

## Expository Writing

## ENGL 288-289 Expository Writing

Fall and spring. 3 credits. Each section limited to 16 students. Students must have completed their colleges' freshman writing requirements. S. Davis and staff
English 288-89 offers guidance and an audience for students who wish to gain skill in expository writing. Each section provides a context for writing defined by a form or use 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 each other'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. English 288-289 does not satisfy requirements for the English major.
Fall 1997:
Section $1-$ Coming of Age in the CityN. Revoyr

Section 2-Speech Acts and the First Amendment-H. Schweber
Section 3-Reading the News, Examining the Media-D. Donaghy

Section 4 -The Essay: Personal to PublicD. E. Williams

Section 5-The Reflective Essay-A. Boehm
Section 6-Minding the Body-A. Boehm
Section 7-Writing in the Electronic AgeS. Davis

Section 8-Issues and AudiencesB. LeGendre.

Section 9-Human Intelligence-D. Shapiro
Spring 1997: To be announced.

See English Department Guide to Course Scheduling for full fall and spring section descriptions.

## ENGL 381 Reading as Writing

Fall. 4 credits. Course limited to 15 students. Prerequisite: permission of the instructor on the basis of a writing sample (critical/interpretive prose), which should reach the instructor by the first day of class. S. Davis.
This course practices and studies related arts reading selected 19 th- and 20 th-century prose fictions and poems and writing interpretive essays about them-but, in addition, writing as a reader of one's own work and revising in the light of others' responses to it. Course members will work with a fairly small number of texts-lentatively, Wordsworth's two-part Prelude, Brontě's Jane Eyre, James' Turn of the Screw, Rhys's Wide Sargasso Sea, Wilde's Dorian Gray, and Nabokov's Pale Fire-and build sustained essays from shorter (written) "readings" of them. Students will present their work to the group at various stages of completion and develop a portfolio of wellcrafted prose for submission at the end of the term. With the help of a few theorists of reading, they will also pay conscious attention to the ways in which both critical readers and creative writers "rewrite" the texts they read. This is a course for English majors and nonmajors who wish to extend their mastery of critical and interpretive prose and their understanding of what they do when they write it. It will be advantageous for students planning to write honors theses in English or another discipline.

## ENGL 386 Philosophic Fictions

Spring. 4 credits. Course limited to 15 students. Prerequisite: permission of the instructor on the basis of a writing sample (critical/interpretive prose), which should reach the instructor by the first day of class. S. Davis.
"Fictions" of voice, audience, plot, point of view, figurative language, and thoughtabound in good expository writing; they stand out in works that deliberately test and play with ideas: dialogues, satires, parodies, parables, philosophic tales, and "thoughtexperiments." Students will write critically about such works and the issues they raise and will experiment with writing in similar forms. The "fictions" read and written in this course are not conventional realistic narratives or evocations of personal experience; they are the vehicles and animating resources of writers who want to argue flexibly, provoke thought, ridicule vice or folly, play games, answer questions, or involve readers in pleasingly or disturbingly insoluble problems. Readings will include such works as Plato's Republic, Swift's "Modest Proposal," Voltaire's Candide, Carroll's Alice books, short fictions by Borges and Octavia Butler, essays by Richard Rorty and Anthony Appiah, selections from Wittgenstein's Pbilosophical Investigations, and Stoppard's Dogg's Hamlet, Caboot's Macbeth.

ENGL 388-389 The Art of the Essay Fall or spring. 4 credits. Limited to 15 students. Prerequisite: permission of instructor on the basis of one or more pleces of recent writing (prose) submitted before the beginning of term, preferably at pre-registration time. 388: fall: C. Levy; 389: spring: L. Fakundiny.

388: For both English majors and non-majors who have done well in freshman writing seminars or in such courses as English 288 289 , and who desire intensive practice in writing essays. Particular, but not exclusive, emphasis on expository techniques of analysis and persuasion. Interested students should submit writing samples to the instructor before the beginning of term, preferably during Course Scheduling. C. Levy.
389: Interested students should submit one or more pieces of recent writing (prose) to the instructor before the beginning of the term, preferably at preregistration. L. Fakundiny.

For both English majors and non-majors who have done distinguished work in freshman writing seminars and in such courses as English 280-281, 288-289, and who desire intensive practice in writing personal essays The course assumes a high degree of selfmotivation, a capacity for independent work, and critical interest in the work of other writers; it aims for a portfolio of creative nonfiction that is conceptually rich and stylistically polished.

## Creative Writing

Students usually begin their work in Creative Writing with English 280 or 281, and only after completion of the Freshman Writing Seminar requirement. Please note that either English 280 or English 281 is the recommended prerequisite for 300 -level creative writing courses. English 280 and 281 may satisfy a distribution requirement in your college (please check with your college adviser). English 382-383, 384-385, and 480-481 are approved for the English major.

## ENGL 280-281 Creative Writing

Fall, spring, summer, winter session.
3 credits. Prerequisites: completion of the
Freshman Seminar requirement. Limited to 18 students.
Majors and prospective majors, please note. Although recommended for prospective English majors, English 280-281 cannot be counted towards the 36 credits required for completion of the English major. It is a prerequisite for 300 -level courses in writing, which count towards the major. English 280 is not a prerequisite for English 281
An introductory course in 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 382-383 Narrative Writing
Fall, 382; spring, 383. 4 credits each term. Each section limited to 15 students. Previous enrollment in English 280 or 281 recommended. Prerequisite: permission of instructor, normally on the basis of a manuscript. Fall: Sec. 1, S. Vaughn; sec. 2,
D. McCail; sec. 3, M. McCoy. Spring:
D. McCall, L. Herrin, M. Koch.

The writing of fiction; study of models; analysis of students' work.

## ENGL 384-385 Verse Writing

Fall or summer, 384 ; spring, 385. 4 credits each term. Each section limited to 15 students. Prerequisites: English 280 or 281, or permission of instructor. Fall: P. Janowitz, L. Powell. Spring: A. R. Ammons.

The writing of poetry; study of models; analysis of students' poems; personal conferences.

ENGL 480-481 Seminar in Writing
Fall: 480; spring 481.4 credits each term.
Each section limited to 15 students. Students are encouraged to take English 280 or 281 and at least one 300 -level writing course. Prerequisites: permission of instructor, normally on the basis of a manuscript. Fall: Sec. 1, L. Herrin; sec. 2,
S. Vaughn. Spring: M. McCoy, S. Vaughn. Intended for those writers who have already gained a basic mastery of technique.
Although English 480 is not a prerequisite for 481, students normally enroll for both terms 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.

## 200-Level Courses Approved for the Major

Students may take up to four 200-level courses for credit toward the English major

## Introductions to Literary Studies

These courses have no prerequisites and are open to freshmen and non-majors as well as majors and prospective majors.

## ENGL 201-202 The English Literary

 Tradition \#201: Fall. 4 credits. Open to undergraduates who have completed the freshman writing requirement. English 201 is not a prerequisite for 202. This course may be used as one of the three pre- 1800 courses required of English majors. G. Teskey. An introduction to the study of English literature, examining its historical development and many of its highest achievements. Works to be read include Sir Gawain and the Green Knight; selections from Chaucer's Canterbury Tales and Spenser's Faerie Queene, Shakespeare's A Midsummer Night's Dream; poems by Jonson, Donne, and Herbert; and Milton's Paradise Lost.

202: Spring. 4 credits. F. Bogel A survey of English literature from the late seventeenth century to the early twentieth century, including poetry and some prose works from the Restoration and eighteenth century, the Romantic period, the Victorian period, and Modernism. Lectures and discussion sections.
ENGL 204 Mostly Pooms and Stories Spring. 4credits. R. Parker. Introduction to the pleasures of close reading, with special emphasis on analyzing the forms, structures, and rhetorical dynamics that characterize poems, prose narratives, and drama and contribute to their appeal. Some attention also to the ways that ideologies of power, involving issues of gender, race, and cultural difference, impinge on how readers interpret literary works. The syllabus will include works from older as well as more recent periods: among them this semester will be poems by George Herbert, Walt Whitman, Elizabeth Bishop, and Seamus Heaney; stories by Nathaniel Hawthorne, Flannery O'Connor,
and Julian Barnes; and such novels as George Eliot's Adam Bede and Toni Morrison's Jazz.

## ENGL 208 Shakespeare and the Twentieth Century (also Comparative Literature 208)

Fall. 4 credits. W. Cohen.
What is the relationship between
Shakespeare's plays in their own time and the various ways they have functioned in modern culture? We will compare selected works of Shakespeare with their adaptations in fiction, theater, film, the educational system, government, and popular culture. The discussion of each play will be organized around one or more critical approaches. The course as a whole will attempt to provide a systematic introduction to the contemporary study of literature and culture.

## ENGL 227 Shakespeare

Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. B. Correll. The course will survey formal, historical and thematic aspects of representative Shakespearean drama: comedies, tragedies and history plays. (Majors and non-majors, see also Engl 327 Shakespeare.)

## Major Genres and Areas

These courses are designed for freshmen and sophomores but are open to all srudents.

## ENGL 203 Major Poets

Spring. 4 credits. J. Culler.
Intensive reading in the work of eight to ten poets chosen to represent important periods and modes of poetry. Poets to be studied may include William Shakespeare, John Milton, John Keats, Emily Dickinson, Walt Whitman, Gerard Manley Hopkins, Robert Frost, and A R. Ammons.
ENGL 205 Readings in English Literature
Spring. 3 credits. This course does not satisfy requirements for the English major. R. Farrell.

English Literature to 1800: This course is intended for non-majors, and is open to any student interested in literature and culture. Authors covered include Chaucer, Shakespeare, Jonson, Swift, and Pope. There will be a take-home mid-term and final, both open book. Students will be strongly encouraged to follow their own interests in two brief papers.

## ENGL 207 Readings in Modern Poetry

 Fall. 4 credits. R. Gilbert andA. R. Ammons.

This course will sample the vast array of poetic modes and forms employed over the past century and a half, with primary emphasis on the work of American poets. Our focus in the course will be on the poems themselves-how they feel, sound, look, mean, and behave. Lectures, discussions, and written assignments will emphasize both the craft of writing poetry and the discipline of reading it with understanding and appreciation. No previous study of poetry required.

## ENGL 209 Introduction to Cultural

 StudiesFall. 4 credits. B. Correll.
An introduction to the kinds of cultural forms we encounter in our studies and in our lives and to some of the literature that has been written about them. Examples will be selected from a range of texts, both "high" and
"low"-literature, cinema, advertisements, music-chosen from historical and contemporary sources. The course will follow a lecturediscussion format.

## [ENGL 210 Medieval Romance: The

 Voyage to the Otherworld \#3 credits. This course does not satisfy requirements for the English major. To be offered 1998-99]

## ENGL 255 African Literature

Spring. 4 credits. B. Jeyifo.
An introduction to major African writers and literary traditions. Authors to be studied may include Wole Soyinka, Chinua Achebe, Bessie Head, Ayi Kwei Armah, Ama Ata Aidoo,
Tayeb Salih and Ousmane Sembene.

## ENGL 260 Introduction to American

 Indian Literatures (also American Studies 260)Fall. 4 credits. D. Moore.
An introduction to Native American literatures. We will read a variety of genres-novels, short fiction, autobiography, poetry, oral traditions-spanning Indian publications through the last two centuries. Issues arising from the texts include aesthetics of orality and literacy; cultural change and survival; colonial identity politics; mythic histories; world views and ideologies; and contemporary tribal sovereignty. A goal of the course is to read historical American contexts through the eyes of Native American texts.
ENGL 264 Ethnic Literature: Bridges and Boundaries
Spring. 4 credits. K. Shanley and
S. Wong.

The American literature that, William Carlos Williams noted, came "from the mouths of Polish mothers" has also been shaped by the oral and written traditions of Native Americans, African Americans, U.S. Latinos, and Asian Americans whose literary production will be examined in this course. Works by writers in these traditions will be studied as sites marking the emergence of a contemporary American language and literature capable of representing the diverse and particular realities of a multicultural nation. This course will focus especially on how each ethnic tradition uses the contested territories of geography, language, and gender in texts that both refer to and imaginatively construct communities and traditions based on collective experience.
[ENGL 265 Contemporary African American Literature
4 credits. To be offered 1998-99.1
ENGL 274 Scottish Literature and Culture \#
Fall. 3 or 4 credits. This course may be used as one of the three pre- 1800 courses required of English majors. The course may be taken for 3 or 4 credits; those taking it for 4 credits will complete an additional writing project. This course only counts towards the English major when taken for 4 credits. Non-majors are welcome. Enrollment limited to 20 . T. Hill and H. Shaw.

Scotland was an independent kingdom during most of its history. Although it is now politically united with England, it preserves its cultural distinctiveness. This course provides an introduction to Scottish literature and its cultural context. We will focus on important Scottish literary texts, with special emphasis on the medieval period and the eighteenth
and nineteenth centuries. The course should appeal to those who wish to learn more about their Scottish heritage, to those who wish to view in a new perspective works normally considered monuments of "English" literarure, and to those who simply wish to know more about a remarkable culture and the literature it produced. Some of the texts will be read in Scots, but no familiarity with Scots or earlier English is presumed. Authors studied will include Henryson, Dunbar, Anonymous (the Scottish Ballads), Hume, Burns, Scott, Hogg, Stevenson, and Grassic Gibbon.

## ENGL 275 The Amerlcan Literary Tradition (also American

 Studies 275)Fall and spring. 4 credits. Fall, B. Maxwell; spring, D. Moore.

The problem of an American national literature is explored through the reading, discussion, and close analysis of texts across the range of American literary history. Not a survey, this course focuses on the relations of the texts to each other, the shaping of national identities in those relationships, and the assumptions about history, language, and the self that underlie them.

ENGL 295 The Essay in English \#
Spring. 4 credits. Prerequisite: completion of freshman seminar requirement.
This course may be counted as one of the three pre-1800 literature courses required of English majors. L. Fakundiny.
What is an essay and what is it for? How does it work as prose discourse, as a text of the self? Impelled by such generic questions and others raised by Montaigne's French Essais (1588), this course explores the invention of the essay in English during the sixteenth and seventeenth centuries and its flowering in the periodicals and magazines of the eighteenth and nineteenth centuries. Readings include selections from the work of Bacon, Cornwallis, Donne, Earle, Cowley, Temple, Swift, Addison, Steele, Johnson, Franklin, Goldsmith, Lamb, Hazlitt, Irving, and Dequincey. Essays by earlier writers are matched rhetorically and/or thematically with readings from more recent practitioners of the genre including Dubois, Woolf, Orwell, Welty, Baldwin, Selzer, Ozick, Achebe, Didion, S. Naipaul, Dillard, Sanders, and others. This is a course for students interested in reading essays and in thinking about how this nonfiction prose genre developed and how it works. No special background in literary history is assumed.

## Special Topics

## ENOL 263 Studles in Film Analysis

Fall and spring. 4 credits. Enrollment
limited to 20 students. Preference given to English majors. L. Bogel.
Fall: Special topic: Interpreting Hitchcock. Through detailed analysis of at least twelve of Hitchcock's major films-from British silents such as The Lodger and the British talkies of the 30's (The Thirty-Nine Steps) to the early 40's work in Hollywood (Spellbound, Notorious), and major American films of his late period (Rear Window, The Birds)-we will consider Hitchcock as a major technical and stylistic innovator in the history of cinema. As texts for psychoanalytic and feminist approaches to study, his films invite questions about film language, the ethics of spectatorship, and the nature of desire and sexuality. Frequent short essays and viewing
exercises encourage students to engage through their writing the course's critical concerns. Students must be free to attend regular evening screenings and video showings of the films once or twice a week. Lab fee.

Spring: Special topic: Interpreting Melodrama and the Woman's Film of the 40 s and 50 s .
With some attention to melodrama's roots in nineteenth-century fiction and theatre and in twentieth-century women's fiction and popular Freudianism, we will work to define Hollywood's melodrama as both a genre and a way of viewing the world. Psychoanalytic and feminist analyses of melodrama will help us pose larger questions about gender and culture, about gendered spectatorship, about the relation of these films to American culture about Hollywood's changing constructions of "woman," the "maternal," and the "feminine," and questions about desire, pleasure, fantasy, and ideology in relation to the melodramatic heroine. Required weekly, evening screenings of such films as: Picnic, Now, Voyager; Rebecca; Mildred Pierce; The Women; Imitation of Life; Gilda; Leave Her to Heaven; Gaslight. Regular critical readings, frequent viewing questions, two longer essays, no exam. Students must be free to attend regular evening screenings and video showings of the films once or twice a week. Lab fee

## ENGL 268 The Culture of the 1960s

Spring. 4 credits. P. Sawyer.
The 1960s survive today as a quasi-mythical period and a constant reference-point for contemporary events. But what are the most useful ways to remember that turbulent decade? Was it a time of dangerous experimentation with drugs, sex, and alternative lifestyles on the part of a pampered generation that gradually learned to straighten up and join the mainstream? Or was it a time of revolutionary hopefulness, when the civil rights movement and the Vietnam War stimulated a principled and impassioned critique of American society? What can the experiences of young "boomers" contribute to a later generation, the last of the twentieth century? The course explores these and other questions through a reading of novels, poems, films, journalism, manifestoes, and works of history. Texts will include Slaugbterbouse 5 , The Autobiograpby of Malcolm X, Dispatches, the speeches of Martin Luther King, The Electric Kool-Aid Acid Test, the poems of Allen Ginsberg and Adrienne Rich, and the film Dr. Strangelove.

## [ENGL 279 Lesbian Personae (also

 Women's Studles 279)4 credits. To be offered 1998-99.]
[ENGL 291 American 1920s: Literature and Culture (also American Studies 291)
4 credits. To be offered 1998-99.]

## Courses for Sophomores, Juniors, and Seniors

Courses at the 300 level are open to sophomores, juniors, and seniors and to others with the permission of the instructor.

## ENGL 302 Literature and Theory lalso English 602 and Comparative Literature 302 and 622)

Fall. 4 credits. J. Culler
Study of issues in contemporary theoretical debates, with particular attention to structuralism, deconstruction, psychoanalysis, and feminism. Readings by Roland Barthes, Jacques Derrida, Michel Foucault, Barbara Johnson, Jacqueline Rose, and others. No previous knowledge of literary theory is assumed.

## ENGL 308 Icelandle Family Sagas

Spring. 4 credits. T. Hill.
An introduction to the Icelandic family sagathe "native" heroic literary genre of Icelandic tradition. Texts will vary but will normally include the Prose Edda, the Poetic Edda, Hrafnkels Saga, Njals Saga, Laxdaela Saga, and Grettirs Saga. All readings will be in translation.

ENOL 311 Oid English (also Engilsh 611) Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. R. Farrell. This course will provide a grounding in the Old English language, and precede the reading of some major texts in poetry, such as The Wanderer and The Battle of Maldon. No previous knowledge of Old or Middle English is required or expected. There will be both a mid term and a final, plus oral reports. Students will be encouraged to follow their own interests. Graduate students will be expected to do a substantial paper, or other research exercise.

ENaL 312 Beowulf (also English 612)
Spring. 4 credits. This course may be
used as one of the three pre- 1800 courses required of English majors. T. Hill. A close reading of Beowulf. Attention will be given to relevant literary, cultural, and linguistic issues. One semester's study, or the equivalent, of Old English is a prerequisite.
ENGL 319 Chaucer
Fall. 4 credits. This course may be used as one of the three pre- 1800 courses
required of English majors. R. Farrell.
This course will begin with the study of the major Canterbury Tales, and some of Chaucer's minor works, such as The Book of the Duchess. All works will be read in Middle English, but ample time will be devoted to learning the language, for it is impossible to read Chaucer as a poet without Middle English. Lectures will cover Chaucer's life, society, literary and religious content. There will be take home mid- and end-of-term exams, and student presentations.

## ENGL 320 Literature of the English

 Renaissance (1500-1660) \#Spring. 4 credits. This course may be used
as one of the three pre- 1800 courses
required of English majors. B. Adams.
Verse and prose (principally non-dramatic)
from More to Milton, including selected works of Skelton, Wyatt, Surrey, Sidney, Spenser, Marlowe, Shakespeare, Jonson, Donne,
Herbert, Bacon, Marvell, Suckling, Lovelace, Burton, and Browne. Contexts (political, social, intellectual, religious) as well as texts.
[ENGL 321 Spenser and Malory \# 4 credits. Limited to 45 students. This course may be used as one of the three pre-1800 courses required of English majors. To be offered 1998-99-]

## ENGL 325 The Culture of the

 Renaissance II (also Comparative Literature 362, and History 364)Fall. 4 credits. C. Kaske and W. Kennedy. For complete description, see Comparative Literature 362.

## ENGL 327 Shakespeare

Spring. 4 credits. This course may be used as one of the three pre- 1800 courses required of English majors. Limited to 25 students. C. Levy.
For both non-majors and majors in English who wish to encompass the reading and small-class discussion of some ten representative plays in the work of a single semester

## ENGL 328 The Bible

Spring. 4 credits. G. Teskey. The purpose of the course is to provide students of English literature with a basic knowledge of that literature's most important, underlying text. Students will learn not only the significance of the polemical division of the Bible into "old" and "new" testaments but of the important divisions within those two parts. The Old Testament will be examined with an eye to generic differences between, for example, the early narrative books (Genesis and Exodus), the books of the law (e.g., Leviticus), the prophetic books (e.g., Ezekiel), and the epic, historical books (e.g., first and second Kings). The New Testament will likewise be examined with an eye to differences: between the four gospel accounts of Jesus, between the various epistles of Paul on the meaning of Jesus for the institution of the church, and between the relatively straightforward history of the early church (in Acts) and the final, apocalyptic vision of the end of history (Revelation). Some account will be given of the historical contexts for the various parts of the Bible, in particular the fate of the Hebrew nation from about the sixth century B.C. and of the early Christian church under the Roman empire. But the main purpose of this account will be to elucidate the literary, indeed symbolic historiography of the Bible, that is, of the poetic idea of human experience in time as having a total form. This form lay behind the organization of a vast array of separate writings in Hebrew, Aramaic, and Greek into one surprisingly coherent design. It is not the writings from which the Bible was made but rather this inner design that William Blake was referring to when he called the Bible "the great code of art." The King James Version (1611) will be used.
ENGL 329 Milton \#
Fall. 4 credits. This course may be used as one of the three pre- 1800 courses required of English majors. G. Teskey. An introduction to the life, poetry, and thought of John Milton, the most important English poet after Shakespeare.

## ENGL 330 Restoration and EighteenthCentury Literature \#

Spring. 4 credits. This course may be used as one of the three pre- 1800 courses required of English majors. N. Saccamano. Close reading of texts in a variety of genres (poetry, fiction, drama, autobiography) will be guided by such topics as the nature of satire,
irony, and mock-forms; the languages of the ridiculous and the sublime; the authority and fallibility of human knowledge; connections among melancholy, madness, and imagination. Works by such writers as Rochester, Dryden, Swift, Gay, Defoe, Johnson, Boswell, Sterne, and Cowper.

## ENGL 333 The Eighteenth-Century English Novel \#

Fall. 4 credits. This course may be used as one of the three pre- 1800 courses required of English majors. R. Bogel. A study of form and theme in the British novel tradition. The course focuses on representative novels mostly from the eighteenth century, paying close attention to language and structure but also to cultural contexts and to the development of the novel form itself. We explore such topics as truth and fiction; romance, realism, satire, and the gothic; heroic and mock-heroic modes; sentiment, sensibility, and sexuality; race and gender; and the forms and uses of narrative. Readings may include Behn's Oroonoko, Defoe's A Journal of the Plague Year, Richardson's Clarissa, Fielding's Joseph Andrews, Cleland's Memoirs of a Woman of Pleasure, Johnson's Rasselas, Walpole's The Castle of Otranto, Sterne's Tristram Shandy, Mackenzie's The Man of Feeling and Austen's Pride and Prejudice.

## ENGL 335 European Drama 1660-1900: Molière to Ibsen (also Comparative Literature 336) <br> Spring. 4 credits. R. Parker. <br> For complete description, see Comparative Literature 336.

## ENGL 336 American Drama and Theatre (also Theatre Arts 336)

Spring. 4 credits. J. E. Gainor.
For complete description, see Theatre Arts 336.

## ENGL 340 The English Romantic Period \#

Fall. 4 credits. C. Chase.
Readings in various writers from the late 1780 s through the 1820 s-among them Blake, Burke, Wordsworth, Wollstonecraft, Coleridge, Byron, Mary Shelley, Percy Shelley, and Keats-with major emphasis on poetry but substantial collateral attention also to prose fiction, drama, letters, and criticism. The course will be concerned both with formal experiments in narrative, lyric, and dramatic representation and with political and cultural contexts in an age of national reform and international revolution.

## ENGL 345 The Victorian Period *

Spring. 4 credits. S. Siegel.
How did the Victorians view themselves? This course will explore some of the controversies that divided literary culture: Should universities award higher degrees to women? Is "manliness" revealed through "character" or "behavior"? What kind of behavior is "masculine"? Does the study of "primitive man" reveal truths about the present? Should the "Colonies" be allowed to rule themselves? Should women be allowed to vote? Should some artworks be censored? Do machines degrade the workman? Can "esthetic" experience replace "religious" experience? Is our time marked by progress or decline? Readings will include the poetry of the Brownings, the Rossettis, Swinburne, Tennyson and Yeats; prose by Arnold, Carlyle, Morris, Pater, and Ruskin; paintings by Burne-Jones, Hunt, Shaw, and Whistler;
and three novels: Great Expectations, The Mill on the Floss and The Picture of Dorian Gray.

## ENGL 350 The Modern Tradition I:

 1890-1930Fall. 4 credits. D. Schwarz.
Critical study of major works by Hardy, Conrad, Lawrence, Joyce, Woolf, Eliot, Yeats, Hopkins, Wilde, Wallace Stevens and others. While the emphasis will be on close reading of individual works we shall place the authors and works within the context of literary 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.

## ENGL 351 The Modern Tradition II:

 Modernism and the Two World WarsSpring. 4 credits. English 350 is not a prerequisite. M. Hite.
This class will examine the relation of important English, Irish and U.S. modernist poetry, fiction and essays to the violence and ideological upheavals of the first half of the century. We will pay special attention to working and personal relationships among some (but not all) of the following writers: W. B. Yeats, Ezra Pound, H. D., T. S. Eliot, James Joyce, Mina Loy, Virginia Woolf, W. H. Auden, Marianne Moore, Ford Madox Ford and Jean Rhys. Requirements include online newsgroup discussion assignments, two critical papers, a take-home midterm and a take-home final.

## ENaL 353 Postcolonial Literature

Spring. 4 credits. S. Mohanty.
Topic: Modem Indian Literature and Culture. A survey of twentieth-century literature, film, and other cultural productions from the Indian subcontinent. Our approach will be thematic and historical, and the course will include some works by historians, anthropologists, and social theorists (e.g., Karl Marx, Bipan Chandra, M. N. Srinivas, Romila Thapar). Literary works by Anglophone writers as well as those from various regional traditions such as Hindi, Oriya, Marathi, Bengali, and Tamil (to be read in translation). Texts will be selected in part to represent the variety and diversity of styles, attitudes, and voices that constitute modern "Indian" writing-from R. K. Narayan and Rabindranath Tagore to Nissim Ezekiel and Jayanta Mohapatra, and from Salman Rushdie and Anita Desai to Gopinath Mohanty, Mahasveta Devi, and Agha Shahid Ali. Films and videos will be used to deepen our understanding of emerging cultural trends and social movements.
Engl 355 Decadence (also Comparative Literature 355 and Women's Studies 355)
Fall. 4 credits. E. Hanson
"My existence is a scandal," Oscar Wilde once wrote, summing up in an epigram the effect of his carefully cultivated style of perversity and paradox. Through their valorization of aestheticism and all that was considered artificial, unnatural, or morbid, the so-called "decadent" writers of the late-nineteenth century sought to free the pleasures of beauty and sexual desire from their more conventional ethical moorings. We will focus primarily on the various ways that decadence
became a powerful trope for the articulation of proscribed sexual pleasures. We will focus in particular on five writers, Charles Baudelaire, Leopold von Sacher-Masoch, J.-K Huysmans, Walter Pater, and Oscar Wilde. Topics for discussion will include homophobia and sexual encoding, androgyny and sexual inversion, sodomy and satanism, lesbianism and vampirism, cultural and linguistic degeneration, hysteria and paranoia, masochism and mysticism, chastity and sublimation, Catholicism and Hellenism, and the dandy.

## ENGL 356 Postmodernist Fiction

Fall. 4 credits. M. Hite
This class will explore experimental (i.e., weird, counterrealist, "difficult") fiction written in the post-World War II period by some (but not all) of the following writers: Kathy Acker, Margaret Atwood, John Barth, Jorge Luis Borges, Christine Brooke-Rose, Angela Carter, Theresa Hak Kyung Cha, Robert Coover, Don De Lillo, Nathaniel Mackey, Vladimir Nabokov, Thomas Pynchon, Ishmael Reed, Salman Rushdie, Joanna Russ, Meredith Steinbach, Kurt Vonnegut, Fay Weldon. We will also read some criticism and theory dealing with the period, condition, or movement described as "postmodern." Requirements include online newsgroup participation, two critical papers, a take-home midterm and a take-home final.

## ENGL 361 Early Amerlcan Literature

 (also American Studies 361)Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. S. Samuels.
An exploration of national identities in the formative British colonial period, including the relation of sexualities, religions, narrative practices, and encounters with other cultures to the contested formulations of destiny and free will in determining and explaining an American national character. Moving from early contact narratives through the conflicts that led to the American Revolution and beyond, this course will consider American writing from the 1630 s to the 1830 s; among other sources, we will read sermons, diaries, journals and poetry of the Puritans, captivity and emancipation narratives, autobiographical writings by Jonathan Edwards and Benjamin Franklin, political writings by Crevecoeur, Paine, and Jefferson, fiction by Brockden Brown, Irving, Sedgwick, Child, and Cooper and the early work of Poe, Hawthorne, and Emerson.

## ENGL 362 The American Renalasance

 (also American Studies 362)Spring. 4 credits. J. Porte.
American writing from the 1830s through the 1850s, with emphasis on the major literary achievements of Emerson, Poe, Hawthorne, Thoreau, Melville, Whitman and Dickinson. We shall also study Douglass's 1845 Narrative and Stowe's Uncle Tom's Cabin.

## ENGL 363 The Age of Realism and Naturalism (also American Studies 363)

Spring. 4 credits. J. Goldsby. Literary history tells us that realism was an aesthetic movement that emerged in American fiction at the turn of the 19th century. Cultural histories of the era tell us that realism emerged as a social ideal debated by Americans as they coped with the revolutionary changes that turned their worlds upside down between the Civil and First World Wars.

This course moves between these two accounts in order to appreciate the varied styles and issues that comprised the literature of American realism at the tum of the 19th century. Principal authors may include: Charles Chesnutt, Stephen Crane, Rebecca Harding Davis, Theodore Dreiser, Charlotte Perkins Gilman, William Dean Howells, Henry James, Mark Twain, and Edith Wharton.

## ENGL 364 American Literature Between the Wars (also American Studies 364)

Spring. 4 credits. L. Herrin.
This course will concern itself with American writers between the two World Wars. Fiction writers may include Faulkner, Hemingway, Porter, Fitzgerald, Richard Wright, and others. Poets will include William Carlos Williams and T. S. Eliot and other poets. We will also read non-fiction prose writers, and, perhaps, dramatists (O'Neill). Interpretive papers and a final.

## Engl 365 American Literature Since 1945 (also American Studies 365)

Spring. 4 credits. B. Maxwell.
At one moment the literature of the last half of the twentieth century may appear wholly contemporary, and at the next sunken or embedded in a world that is historically and aesthetically remote. We will approach the literature of the last fifty years mindful of this double perspective of closeness and distance, familiarity and strangeness. Topics will include the particular difficulties of judging contemporary writing; the establishment, maintenance, and decay of literary reputations within the context of cultural institutions; the literary disruption of Cold War consensus models; the redefinitions of American literature in the wake of the social movements of the period; historicity and referentiality in poetry and poetics; and problematic populist revivifications of poetry via rap and performance poetry. The reading list will be chosen from the following: fiction by Saul Bellow, Paul Bowles, Carson McCullers, Jack Kerouac, Vladimir Nabokov, Tillie Olsen, Alexander Trocchi, N. Scott Momaday, Walter Abish, Don DeLillo, and Carolivia Herron; poetry by George Oppen, Charles Olson, Amiri Baraka, Denise Levertov and others; essays by James Baldwin, Norman Mailer, and Joan Didion. Time permitting, we will look at a recent collection of illustrated stories, Ben Katchor's Julius Knipl, Real Estate Pbotographer.
[ENGL 366 The Nineteenth-Century American Novel (also American Studies 366) \#
To be offered 1998-99.]
[ENGL 370 Nineteenth-Century English Novel (also Women's Studies 370) \# 4 credits. To be offered 1998-99.]

## [ENGL 371 American Poetry to 1950

 (also American Studles 371) 4 credits. To be offered 1998-99.1ENGL 372 English Drama to 1700 (also Theatre Arts 372)
Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. S. McMillin. Major plays and other events in the English theatre, from the medieval craft cycles through the age of Shakespeare and into the Restoration period. Writers include Marlowe, Kyd, Shakespeare, Dekker, Jonson, Middleton, Beaumont and Fletcher, Webster, Wycherley and Congreve.
[ENGL 373 English Drama from 1700 to the Present (also THETR 373)
4 credits. To be offered 1998-99.]

## ENGL 374 Nineteenth-Century American Women Writers (also Women's Studies 374 and American Studles 374)

Spring. 4 credits. Lois Brown. In this cross-cultural examination of nine-teenth-century American women writers, we will contrast a variety of nineteenth-century works of fiction, political/feminist manifestos, and slave narratives. We will investigate the ways in which these writers used their texts to construct culturally valuable and authentic selves. We will also consider tensions between "sentimental" idealism and political pragmatism, passionless femininity and expressed sexuality, restrictive domesticity and dangerous but vital autonomy. Readings will include works by authors such as
Louisa May Alcott, Lydia Marie Child,
Kate Chopin, Sui Sin Far, Margaret Fuller,
Pauline Hopkins, Sarah Winnemuca Hopkins, Frances Harper, Harriet Beecher Stowe, and Harriet Wilson.

## ENGL 375 Survey in African Amerlcan

 Literature to 1917 (formerly Engilsh 369) (also American Studles 375)Fall. 4 credits. J. Goldsby.
This course surveys the first half-century of African American novel production (1853-1912), with these as our founding propositions: what prompts African American authors to embrace the novel as a specific mode of expression in these years? How do they incorporate the major traditions of American novel writing (e.g., romanticism, sentimentalism, realism, naturalism, and modernism) into their aesthetic vocabularies? And how do the social fictions of race not only require but inspire these writers to invent narrative strategies that challenge the conventions of the novel as such? Authors will include Frederick Douglass, William Wells Brown, Harriet Wilson, Charles Chesnutt, Pauline Hopkins, Paul Laurence Dunbar, and James Weldon Johnson.

## ENGL 376 Survey in African American

 Literature: 1918 to presentSpring. 4 credits. H. Spillers.
This course will select its readings from the genres of poetry, drama, fiction, and nonfiction produced by black American writers from the period of the Harlem Renaissance, to the present. Readings will include poems by Harlem Renaissance poets, the poets of African-American modernism, i.e., Gwendolyn Brooks and Robert Hayden, and some of the poetry of the Black Arts Movement of the 60s, by way of Leroi Jones/Imamu Baraka's and Larry Neal's Black Fine, plays by Lorraine Hansberry, Ed Bullins, and August Wilson; non-fictional and fictional writings by Malcolm X, Martin Luther King, Nella Larsen, Jean Toomer, Zora Neale Hurston, Toni Morrison, and Nate Mackey. (Cane, The Autobiography of an Ex-Colored Man, Passing, The Autobiograpby of Malcolm X, Letter from an Birmingbam Jail, Black Boy, Invisible Man, Flight to Canada, Oxberding Tales, Middle Passage, Jazz, and The Bedouin Hornbook will be among the selected texts for the spring term.) The course is designed for majors, but will be open to all interested students.
[ENGL 377 Gay Fiction (also Womna 376) 4 credits. To be offered 1998-99.]

ENGL 381 Reading as Writing
See complete course description in section headed Expository Writing.

ENGL 382-383 Narrative Writing
See complete course description in section headed Creative Writing.

ENGL 384-385 Verse Writing
See complete course description in section headed Creative Writing.
ENCL 386 Philosophic Fictions
See complete course description in section headed Expository Writing.
ENGL 388-389 The Art of the Essay
See complete course description in section headed Expository Writing.

## ENGL 390 Autobiography: Memoir,

 Memory, and HistoryFall. 4 credits. L. Fakundiny.
Central to this course is the question: how does the life constructed in memoir, through the personal activity of "remembering," assimilate and position the "public," or cultural, context of that life? How, in other words, does history inhabit memory and how does memory personalize history? How aware is the constructed self (the life that is being remembered) of his or her historical moment, and to what ends is the self historicized in a given memoiristic text? A core list of readings might be chosen from the following modern works in English: Nabokov's Speak Memory, Wright's American Hunger (the restored 1991 edition of Black Boy), Hurston's Dust Tracks on a Road, Hemingway's A Movable Feast, Welty's One Writer's Beginnings, Crews's Cbildhood: The Autobiography of a Place, Soyinka's Ake: The Years of Childbood, Nir's The Lost Childbood, Hoffman's Lost in Translation, Min's Red Azalea, Suleri's Meatless Days, Gates's Colored People, Wolff's In Pharoab's Army, Conway's Road from Coorain, Lessing's Under My Skin, Santiago's When I was Puerto Rican, Karr's The Liars' Club. Additional texts-considered (in excerpt) for their self-conscious and/or fictive enactments of memoiristic conventionsmight include Kaplan's French Lessons, Stein's The Autobiography of Alice B. Toklas, Naipaul's A Way in the World. Also required: a critical reading journal, two substantial critical papers or a critical paper and an essaylength memoir.

## [ENGL 391 Irish Studies: Since the Eighteenth Century

4 credits. To be offered 1998-99]

## ENGL 392 Asian American Literature (also Asian American Studies 392 and American Studies 392)

Fall. 4 credits. S. Wong.
This course will introduce students to a range of writing by Asian Americans and to some critical issues concerning the production and the reception of Asian American texts. In reading through selected works of prose, poetry and drama, we will be asking questions about the relation berween literary forms and the sociohistorical context within which they take on their meanings, and about the historical formation of Asian American identities.

## ENGL 393 Survey in U.S. Latina/o

 Literatures (also LSP 393 )Spring. 4 credits. H. M. Viramontes. This course seeks to introduce students to the growing body of literature across time, space
and genre (poetry, fiction, theater, performance art, testimonial narrative) that is being produced by the various Latina/o communities that have maintained or recently established a strong presence in the "United States of America." Concurrent with our study of literature as belles lettres the course will examine how Latina/o authors of various heritages-Chicano (Mexican American), Puerto Rican, Cuban American, Dominican American, Salvadoran American and "Mixed-Blood"-converge and diverge as they explore issues of race and class, gender and sexuality, as well as ideology, identity and culture in general. For example, what is the relation of a given text to the history of the Latino group to which the author belongs? How do the various literary forms and formats deployed by Latina/o authors interact with particular historical exigencies such as the various Black, Native American and Latino Civil Rights Movements? What, for instance, is the significance of Spanish, Calo, Nahuatl, English and various forms of bilingualism and multilingualism in Chicano and "Nuyorican" verse in the 1960s? Furthermore, how are various paradigms of cultural nationalism revisited in subsequent eras by Latinas and Latinos? How is popular culture manifested in these texts, and what types of ideological statements are being made by these representations? What do these authors reveal about the limits of various sociological models of analysis such as notions of acculturation, assimilation, accommodation? What does post-modernism offer U.S. Latinos, or should this question be inverted? And, in general, how are various power relations-articulated along gender, race, class and culturenegotiated? Authors examined include Julia Alvarez, Lorna Dee Cervantes, Junot Díaz, Cristina García, Oscar Hijuelos, Cherrie Moraga, Willie Perdomo, Miguél Pinero, Tomas Rivera, Esmeralda Santiaga, Helena Maria Viramontes, and others.

ENGL 394 Topics in American Indian Lifterature (also American Indlan Studles 394 and American Studles 394)
Spring. 4 credits. D. Moore.
Native Cultural Studies. The course is an interdisciplinary exploration of the literature, history, and politics of various indigenous American cultures and their conceptual universes. Questions range from comparative studies of land-based versus transcendental religions to issues of cultural appropriation, economic development, tribal sovereignty, and other contemporary contexts of Native American literature.
[ENGL 395 Video: Art, Theory, Politics (also Theatre Arts 395)
4 credits. Not offered 1998-99.]

## Courses for Advanced Undergraduates

Enrollment in courses at the 400 level is
generally limited by prerequisite or permission of the instructor.

## ENGL 401 The Sexual Child (also

 English 601 and Society for the Humanities 418)Fall. 4 credits. E. Hanson.
For complete course description, see Society for the Humanities 418.
[ENGL 402 Literature as Moral Inquiry Fall. 4 credits. To be offered 1998-99.]
[ENGL 403 Studies In American Poetry 4 credits. Not offered 1998-99.]
ENGL 404 History into Fiction: Nazis and the Literary Imagination [also Comparative Literature 404 and German Studies 414)
Fall. 4 credits. E. Rosenberg.
The twelve years of Hitler's rule remain the most critical, "longest" years of the 20th century. We shall read some seven or eight texts by Anglophone and Continental novelists (and a few playwrights and poets) that explore the salient features of the regime: Weimar, Hitler's scenario and his rise to power (e.g., Mann's "Mario and the Magician," Isherwood's Goodbye to Berlin, Faulkner's "Percy Grimm"); civilian life in Nazi Germany and the rise of anti-Semitism (Brecht's "The Jewish Wife" and other one-acters, Sartre's "Childhood of a Leader," Grass's Tin Drum); World War II and the occupation of Europe (Camus's The Plague, Heinrich Böll's short fiction, Anne Frank's Diary); genocide and a glimpse at post-War Germany (e.g., Weiss' The Investigation, Borowski's This Way for the Gas, Spiegelman's Maus I or Maus II, lyrics by Celan, Nelly Sachs, Anthony Hecht). Brief ancillary selections by historians and memorialists (Arendt, Primo Levi,
Bruno Bettelheim). Two papers; no exam.

## ENGL 405 The Polltics of Contemporary

 CriticismFall. 4 credits. S. Mohanty.
An introduction to some of the major issues in contemporary criticism and theory, with primary focus on such questions as: What is a (literary or cultural) text? What is interpretation and what are its limits? What views about knowledge, society, and politics underlie particular critical strategies and methodological choices? Drawing on representative essays and books from a variety of critical schools and traditions (from New Criticism to deconstruction, marxism, and feminism), we will examine the competing claims of the various positions and focus on the implications of answers to the above questions in actual critical analysis. Readings from Cleanth Brooks, Paul de Man, Jacques Derrida, Shoshana Felman, Michel Foucault, Hans-Georg Gadamer, Fredric Jameson, Toni Morrison, Barbara Herrnstein Smith, Charles Taylor, and Richard Rorty, among others. Two papers and a weekly journal.
ENGL 407 The Geography of Race (also Asian American Studies 407) Fall. 4 credits. S. Wong. The frontier, the Marlboro Man, the open road, riding the rails-just a few of the defining topoi of an American understanding of space and its role in the making of Americans. In recent years, the longstanding-and highly cherishedAmerican romance with mobility has been retooled by its encounter with a postmodernist celebration of liminality, border-crossing and ephemerality. This course looks at how this encounter holds both promises and perils for minority subject formation, and for the production and the reception of Asian American and African American literature. Other topoi to be visited along the way may include nationalism, transnationalism, diaspora, and travelling. Readings will include works by some of the following writers: Gwendolyn Brooks, Carlos Bulosan, Joy Kogawa, Toni Morrison, Li-Young Lee, Bharati Mukherjee, Ann Petry, Frank Chin, Jessica Hagedorn, James Weldon Johnson,

James Baldwin, Carolivia Herron, Theresa Cha, and Shawn Wong.

413 Middle English (also English 613)
Fall. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. T. Hill. This course surveys the literature of later medieval England, beginning with the cultural, literary, and linguistic collapse of standard Old English and proceeding to the age of Chaucer and perhaps a bit beyond. Readings will move through chronicles, homilies, lyrics, and acknowledged literary masterpieces such as The Owl and the Nightingale, the works of the Pearl poet, selections from Piers Plowman, and other poems from the "alliterative revival."

## [ENGL 416 Chaucer and the Pollitics

 of Love \#Spring. 4 credits. This course may be used as one of the three pre- 1800 courses required of English majors. To be offered 1998-99.]
[ENGL 417 Early Medleval Archaeology and Literature (Also Engl 617, Archeo 417, \& 617)
Spring. 4 credits. Permission of the professor is required, and the number of students will be limited to fifteen. This course may be used as one of the three pre-1800 courses required of English majors. To be offered 1998-99.]

420 Objects Lost and Found: Psychoanalysis and the Scene of Reading (also English 620 and Society for the Humanities 420) Spring. 4 credits. M. Jacobus.
For complete course description, see Society for the Humanities 420 .
[ENGL 423 Seventeenth-Century Lyric \# 4 credits. To be offered 1998-99.]

ENGL 424 Freud and Since: Trauma and the Object (also English 624 and Soclety for the Humanitles 405)
Fall. 4 credits. M. Jacobus
For complete course description, see Society for the Humanities 405

## [ENGL 425 Elizabethan and Jacobean

 Drama \#4 credits. This course may be used as one of the three pre-1800 courses required of English majors. To be offered 1998-99.]

ENGL 427 Shakespeare \#
Fall and Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors.
Fall: Romance and Courtesy C. Levy A study of themes and patterns in Shakespeare's later history plays ( Richard II, Parts I and II, Henry $I$, and Henry $V$ ) in the perspective afforded particularly by Castiglione's Book of the Courtier, Machiavelli's Prince, A Mirror for Magistrates, and Sidney's The Countess of Pembrokes Arcadia. Among topics to be explored are growth, responsibility, play, order, and community. Two short papers and a term-paper of about ten pages. Each student will conduct class-discussion on topics he or she has explored for two of those papers and on at least one other topic. No final examination.

Spring: Later Shakespeare S. McMillin.
A reading of major plays from the second half of Shakespeare's career, with particular emphasis on Othello and Winter's Tale. Particular attention to the theory of theatre
and acting implied by these texts. Prerequisite: English 327 , or a comparable survey of Shakespeare.
ENGL 429 Readings in the New Testament (also Near Eastern Studles 429, Comparative Literature 429 and Religious Studies 429) \#
Fall. 4 credits. J. Bishop.
For complete description, see Comparative Literature 429
[ENGL 431 Studies In Enlightenment (also Women's Studies 431) " 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. To be offered 1998-99.]

ENGL 433 The Invention of Mumanity: Passion and Experience in the 17th and 18th Century
Spring. 4 credits. This course may be used as one of the three pre-1800 courses required of English majors. N. Saccamano. This course will investigate the role played by the passions in "inventing" the notion of a "common humanity" that has been dominant in our culture for over two centuries. We will examine the ways in which the stress on the body, individual experience, and sexuality in writings of the seventeenth and eighteenth centuries challenged earlier definitions of human nature and gave rise to new forms of discourse (autobiographical essay, genealogical history, novel). Concentrating primarily on literary works of various genres, we will also read some moral and political philosophy. Topics will include the social and political significance of passion from "possessive individualism" to the gender politics of sentimentality; the "savage" in histories of cultural development; the body as origin and limit of knowledge; the emergence of sexual identity as a psychological and materialist category (a sex machine) in the pornographic novel. Works by Montaigne, Hobbes, Rochester, Cavendish, Swift, Defoe, La Mettrie, Cleland, Rousseau, and Sterne.
ENGL 434 Electronic Art, Cultural Memory, Baroque Theory (also English 634 and Soclety for the Humanities 421)
Spring. 4 credits. T. Murray
For complete course description, please see Society for the Humanities 421 .

## ENGL 437 Fictions of Apartheld and

 Modes of Liberalism 장Fall. 4 credits. B. Jeyifo.
This course involves a study of selected works of four major contemporary white South African authors, Athol Fugard, Nadine Gordimer, Andre Brink, and J. M. Coetzee. The genres include drama, fiction, and the essay. Issues to be examined include apartheid and the deformations of a reified modernity, interpellations of racialized and gendered identity by the juridical and cultural texts and practices of apartheid, multiracialism in the South African context, the place of the aesthetic artifact in the dismantling of apartheid and the transition to a postApartheid South Africa.
[ENGL 439 Austen and the Elghteenth Century \#
4 credits. To be offered 1998-99.]
[ENGL 443 The Dandy in London and Dublin: 1790-1890
4 credits. To be offered 1998-99.]
[ENGL 446 Victorian Poetry
4 credits. To be offered 1998-99.]

## [ENGL 448 The American Short Story

 4 credits. To be offered 1998-99.]
## ENGL 450 The History of the Book

Spring. 4 credits. Limited to 20 students.
Prerequisite: permission of the instructor. D. Eddy.

A study of the physical aspect of books printed during the last six centuries. Included are papermaking, typography and printing, bookbinding, and the history of book illustrations; the transmission of texts and bibliographical descriptions of hand-printed and modern trade books. Above all, this is the study of the book as a work of art.
ENGL 454 American Musical Theatre (also Music 490 and Theatre Arte 454)
Spring. 4 credits. Prerequisite: English 272 or Theatre Arts $240-41$ plus ability to read music at the level of Music 105. S. McMillin.

A close reading of some seven or eight leading examples of the American musical, together with their sources, from Sbowboat to Sweeney Todd. A chronological approach will give a historical basis to the course, but the primary concern will be learning how to analyze musical drama and how to handle the problems and opportunities of interpretation integral to this complex theatrical form. Readings will include Rogers and
Hammerstein's Carousel and its source, Molnar's Liliom; the Gershwins' Pongy and Bess and its source, Dubose Heyward's novel Porgy; Loesser and Burrows's Guy and Dolls, and its source, stories by Damon Runyon; Bernstein's West Side Story and its source, Romeo and Juliet.

## ENGL 457 The Pathological Puble

 Sphere (also English 657 and Society for the Mumanities 409)Fall. 4 credits. M. Seltzer.
For complete course description, see Society for the Humanities 409.
[ENGL 459 Contemporary British Drama 4 credits. To be offered 1998-99.]
ENGL 463 Problems In the Novel: Murder and Crimewriting
Spring, 4 credits. M. Seltzer.
An investigation of the representation of murder across a range of novels, non-fictional accounts, and film. Focus on tum of the century and recent materials.

ENGL 465 Proseminar in American Studies (also AmSt 465)
Spring. 4 credits. J. Porte.
For complete description, see American Studies 465.

ENCL 467 Studies in American Flction: 1870-1915 (also American Studles 467)
Fall. 4 credits. Prerequisite: a lower-level course in American literature. Limited to 15. J. Porte.

A study of novels and stories by such writers as Mark Twain, Henry James,
William Dean Howells, Sarah Orne Jewett, Stephen Crane, Kate Chopin,
Theodore Dreiser, Gertrude Stein,
Edith Wharton, James Weldon Johnson, and Willa Cather.

ENGL 469 William Faulkner
Fall. 4 credits. H. Spillers.
This course will examine selected writings of William Faulkner, beginning with some of the early novels (The Sound and the Fury, Light in August, Absalom, Absalom!) and concluding with A Fable. We will consider Faulkner's impact as a maker of myth and as one of the leading figures of a literary discourse that creates a modernist sensibility in American letters. As a southern writer, Faulkner is traditionally confined to the character study of exotic types, but his systematic functional exploration of "violence and the sacred" provides a powerful clue to the larger issue of a national identity. Faulkner, in his own terms, dared to imagine "culture" as a problem for fiction. This course will attempt to consider the outcome.
ENGL 470 Studies in the Novel: Reading Joyce's Ulysses
Spring. 4 credits. D. Schwarz. A thorough episode-by-episode study of the art and meaning of Joyce's 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 modernism-especially painting and sculpture-and show how Ulysses redefines the concepts of epic, hero, and reader. We shall discuss how Ulysses raises major issues in literary study and tests various critical and scholarly approaches. Such a self-conscious inquiry into theories and methods should prepare students to confront other complex texts. No previous experience with Joyce is required.
ENOL 471 Amerlcan Indlan Women's Literature (also Women's Studies 471 and American Indian

## Studies 471)

Fall. 4 credits. K. Shanley.
Through a variety of genres-fiction, poetry, the non-fictional essay, and autobiographyas well as media other than writing, we will explore what it means and has meant to be an indigenous woman in North America. Although our focus will be on American Indian women in the United States, we will touch on the experiences of Canadian Native women. Beginning with early tribal histories as expressed in "as-told-to autobiographies," we will look at the way Indian women fit in their respective cultures, their roles in their families and communities, and the geographical and inter-cultural circumstances of their lives. The most famous Indian womenwomen such as Pocahontas and Sacajaweahave earned their places in American mainstream culture based on heroism enacted primarily to benefit non-Indians. How historically accurate are such portrayals and how representative are such women of other Native women? These and many other questions will guide us throughout the term. In addition to works about/by historical figures, we will read works by well-known contemporary writers such as Leslie Silko, Louise Erdrich, Beth Brant, Joy Harjo, and others. The student's grade will be based on two formal papers and a number of informal writing assignments and reports. Background in American Indian history is not required.

## [ENGL 475 Studies In the Twontieth

 Century4 credits. To be offered 1998-99.]

## ENGL 480-481 Seminar in Writing

Fall, 480 ; spring 481.4 credits.
See complete description in section headed Creative Writing.

## ENGL 482 Forms of Poetry

Fall. 4 credits. R. Morgan. Part survey of the evolution of forms in poetry in modern English, and part workshop, the course will focus on the formal aspects of poetry from the time of Sir Thomas Wyatt to the early 20th century. Students will write examples of the forms studied and give short presentations in class. Special attention will be paid to the way forms from other languages and earlier cultures have been introduced and adapted, reinvigorating poetry in English, for example, the Italian sonnet, the French villanelle, the classical ode, and the Chinese T'ang lyric.
ENGL 491 Honors Seminar I
Fall. 4 credits. Open to students in the Honors Program in English or related fields, or by permission of instructor Victorian to Modern: Six Poets: P. Sawyer. This course will read closely works by six major British and Anglo-Irish poets of the past hundred years-from Gerard Manley Hopkins, the Jesuit priest who died virtually unpublished in 1888, to Seamus Heaney, the AngloIrish poet who won the Nobel Prize in 1995. Reading these poets together will allow us to notice shifts from late Victorian times to the present in the languages, scope, audience, and politics of poetry. Some questions we will be keeping in mind: How do these poets attempt to incorporate the experiences of marginalized, oppressed, or ordinary people in their work? To what extent do they see themselves as working changes in the world? What is their relationship to the tradition of poetry as transcendent, visionary, experience? The six poets, in addition to Hopkins and Heaney, will be Hardy, Yeats, Auden and Larkin.

## ENCL 492 Honors Seminar III

Spring. 4 credits. Open to students in the Honors Program in English or related
fields, or by permission of instructor. Section I: Writing the Civill War (also American Studies 492) S. Samuels. This course will consider 19th-century male and female American writers who take on the story of war. We will pay attention to accounts of wounding, healing, violence, slavery, romance, and nation-building enterprises and will read authors such as Melville, Whitman, Stowe, Alcott, Southworth, and Child. Course requirements will include in-class presentations, short research projects, and a longer research paper.
Section II: Narrators and Readers: Austen, Eliot, Forster H. Shaw.
A close look at representative works by three authors central to the classic realist novel. We will be particularly interested in how novelists use their narrators to share complex visions of life in society. Students should emerge from the course with a richer sense of how to read these three novelists and others, an acquaintance with a variety of critical approaches, and a notion of how one goes about doing extended writing on narrative fiction. Short papers and a longer writing project.
ENGL 493 Honors Essay Tutorial I Fall or spring. 4 credits. Prerequisites: senior standing and permission of Director of the Honors Program.

ENGL 494 Honors Essay Tutorial II Fall or spring. 4 credits. Prerequisites: English 493 and permission of Director of the Honors Program.

## ENGL 495 Independent Study

Fall or spring. 2-4 credits. Prerequisites Permission of departmental adviser and director of undergraduate studies.

## Courses Primarily for Graduate Students

Permission of the instructor is a prerequisite for admission to courses numbered in the 600 s . These are intended primarily for graduate students, although qualified undergraduates are sometimes admitted. Undergraduates seeking admission to a 600level 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 term.

## Graduate English Courses for 1997-98 Fall

ENGL 600 Colloquium for Entering Graduate Students

ENGL 602 Literature and Theory (also English 302, Comparative Literature 302, and Comparative Literature 622)

ENGL 604 Paleography, Blbllography, and Reception History for 14th-17th Century Literature

ENGL 61t Oid English (also English 311)
ENGL 613 Middle English (also English 413)

ENGL 615 Piers Plowman
ENGL 624 Freud and Since: Trauma and the Object (also English 424 and Society for the Humanitles 405)
ENGL 627 Studies in Shakespeare: Shakespearean Tragedy

ENGL 636 Richardson and Fielding
ENGL 641 Studies in Romantic Writing: Byron, Shelley, Keats, and the Issue(s) of Romanticism

ENGL 649 Victorian Fictlon and the Social Text
ENGL 650 The Modern British Novel
ENGL 657 The Pathological Public Sphere (also English 457 and Society for the Humanities 409)

ENGL 665 Studies in Early American Literature
ENGL 685 Reconstructing the Era: Nineteenth Century African American Women's Literature and Society (also Women's Studies 685)
ENGL 695 Race, Colonlallsm, and Contemporary Theory
ENGL 703 Theorizing FIIm: Race, Nation, Psychoanalysis (also French Literature 703 and Theatre 703)

ENGL 780.1 MFA Seminar: Poetry
ENGL 780.2 MFA Seminar: Flction

## Spring <br> ENCL 601 The Sexual Child (also Engl 401 and Soclety for the Humanities 418)

ENGL 603 England and Italy in the 14th Century: the Example of Chaucer

ENGL 612 Beowulf (also English 312)
ENGL 620 Objects Lost and Found; Psychoanalysis and the Scene of Reading (also English 420 and Society for the Humanities 420)

ENGL 625 Seventeenth Century Lyrlc
ENGL 630 Aesthetics In the 18th Century
ENGL 634 Electronic Art, Cultural Memory, Baroque Theory (also English 434 and Soclety for the Humanities 421)

ENGL 638 Women and Revolution: Fell to Wollstonecraft

ENGL 656 Postmodernism
ENGL 669 Body-centered discourse and "The Primitlve"

ENGL 687 American Modernlsms: The Twenties Generation

ENGL 697 Contemporary Poetry and Culture (also Comparative Literature 674 and German Studies 674)

ENGL 698 Broken Engllsh: English Literature in a Postcolonlal/ Postmodern Frame

ENGL 720 Malory
ENGL 740 Wordsworth: Romantic Writing and Contemporary Readings

ENGL 781.1 MFA Seminar: Poetry
ENGL 781.2 MFA Seminar: Fiction
ENGL 785 ReadIng for Writers

## FILM

See listings under Department of Theatre, Film and Dance

FRENCH LANGUAGE AND LINGUISTICS
See Languages and Linguistics.

## FRENCH LITERATURE

See Department of Romance Studies.

## FRESHMAN WRITING SEMINARS

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, see "Special Programs and Interdisciplinary Studies" at the end of the Arts and Sciences section of this catalog and consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in November for the spring term.

## GEOLOGICAL SCIENCES

B. L. Isacks, chair; R. W. Kay, director of undergraduate studies; R. W. Allmendinger, W. Allmon, M. Barazangi, W. A. Bassett, J. M. Bird, L. D. Brown, L. M. Cathles, J. L. Cisne, K. Cook, L. A. Derry, C. H. Greene, T. E. Jordan, S. Mahlburg Kay, F. H. T. Rhodes, W. B. Travers, D. L. Turcotte, W. M. White

As an intercollege unit, the Department of Geological Sciences has degree programs in both the College of Arts and Sciences (B.A. degree) and the College of Engineering (B.S. degree)

We live on a planet with finite resources and a finite capacity to recover quickly from human-induced environmental stresses. It is also a powerful planet, with geologic hazards such as earthquakes and volcanic eruptions that alter the course of history with little prior warning. As the human population grows, understanding the earth and its resources becomes progressively more important for both future policy makers and ordinary citizens. Because the human need to understand the earth is so pervasive, we provide our students with a broad and solid minimal set of required courses plus room to explore more specialized topics with wellchosen electives within and outside the department. The Geological Sciences Major prepares students for advanced study in geology, geophysics, geochemistry and geobiology, and careers in mineral and petroleum exploration or in environmental geology. Alternatively, it is a valuable major for a pre-law or pre-med program or in preparation for a career in K - 12 education.
In addition to course work, students learn by outdoor field work and involvement in research projects. Facilities include equipment for processing seismic signals and digital images of the earth's surface, instruments for highly precise isotopic and element analyses, and extensive libraries of earthquake records, satellite images, and exploration seismic records. High-pressure, high-temperature mineral physics research uses the diamond anvil cell and the Comell High Energy Synchrotron Source (CHESS). Undergraduates have served as field assistants for faculty members and graduate students in Argentina, British Columbia, the Aleutian Islands, Scotland, Switzerland, Tibet, and Barbados. Undergraduates are encouraged to participate in research activities, frequently as paid assistants.
The Department of Geological Sciences is taking part in a new intercollege program in the Science of Earth Systems (SES). In the College of Arts and Sciences, this program can be taken as a separate major administered by the Department of Geological Sciences (described in more detail in the section at the front of this catalog, "Interdisciplinary Centers, Programs, and Studies"). The Geological Sciences major emphasizes the structure, composition and evolution of our planet, while the SES major is more concerned with currently active processes on and near the earth's surface where the interactions of water, life, rock and air produce our planetary environment. The SES major is for students interested in careers in atmospheric, hydrological and ocean sciences, environmental chemistry (biogeochemistry), and environmental geophysics.

## The Major

The prerequisites for admission to a major in geological sciences in the College of Arts and Sciences are two two-semester sequences in mathematics and physics, MATH 111-112 or MATH 191-192 and PHYS 207-208 or PHYS 112-213, or their equivalents, and a semester course in chemistry, such as CHEM 207 or 211. GEOL 101 or GEOL 201 followed by GEOL 102 or GEOL 104 are strongly recommended, but a student with a strong foundation in mathematics and science may be accepted as a major without completion of an introductory sequence.
Majors take GEOL 210 and GEOL 214, the five 300 -level core courses listed below, 6 credits of additional course work from geological sciences courses numbered 300,400 , or 600 , plus an additional course in either computer science or biological science, or an intermedi-ate-level course in biological science, mathematics, chemistry, or physics.
In addition, a requirement for an advanced outdoor field experience may be met by completing one of the following 4 credit options: (a) GEOL 491-492 (Undergraduate Research, 2 credits each) with a significant component of field work; (b) GEOL 491 or 492 based on field observations obtained in GEOL 212 (Special January Field Trip, 2 credits) or GEOL 417 (Field Mapping in Argentina, 3 credits) for a combined 4 -credit minimum; (c) GEOL 437 (Geophysical Field Methods, 3 credits) plus at least 1 credit of GEOL 491 or 492 using geophysical techniques from GEOL 434; or (d) An approved outdoor field course taught by another college or university ( 4 credit minimum).

## Core Courses

## GEOL 326 Structural Geology

GEOL 355 Mineralogy
GEOL 356 Petrology and Geochemistry
GEOL 375 Sedmentology and Stratigraphy
GEOL 388 Geophysics and Geotectonics
Prospective majors should consult R. W. Kay, director of undergraduate studies, or another faculty member as early as possible for advice in planning a program. Students majoring in geological sciences may attend the departmental seminars and take advantage of cruises, field trips, and conferences offered through the Department of Geological Sciences.
Courses offered at the 100 and 200 level are open to all students. Certain 300- and 400level courses in geology also may be of particular interest to students of chemistry, biology, ecology, and physics. Students are encouraged to inquire about courses that interest them at the department office in Snee Hall.
Honors. An honors program is offered by the Department of Geological Sciences for superior students. Candidates for honors must maintain an overall 3.0 grade-point average, a cumulative average of 3.5 in the major, and complete an honors thesis (Geological Sciences 491 or 492). Students interested in applying should contact the director of undergraduate studies during the second semester of the junior year.

## COURSES

## Freshman and Sophomore Courses

## GEOL 101 Introductory Geological

 SclencesFall, spring, or summer. 3 credits. Fall: W. B. Travers; spring: J. M. Bird; summer: W. Brice.

Designed to enhance an appreciation of the physical world. Natural environments, surface features, dynamic processes such as mountain belts, volcanoes, earthquakes, glaciers, and river systems are emphasized. Interactions of the atmosphere, hydrosphere, biosphere, and lithosphere (Earth System Science). Water, mineral, and fuel resources; environmental concerns. Field trips in the Ithaca region.

## QEOL 102 Evolution of the Earth and Life (also Blo © 170)

Spring, summer. 3 credits. Spring:
J. L. Cisne.

Earth systems and their evolution. Earth history's astronomical context. Plate tectonics, continental drifts, and their implications for climate and life. Coevolution of life and the atmosphere. Precedents for ongoing global change. Dinosaurs, mass extinctions, and human ancestry. Laboratories on reconstructing geological history and mapping ancient geography. Fossil collecting on field trips.

GEOL 104 The Sea: An Introduction to Oceanography (also BIO ES 154)
Spring, summer. 3-4 (4 credits with lab section) credits. Spring: C. H. Greene, W. M. White; summer: L. Godfrey. A survey of the physics, chemistry, geology, and biology of the oceans for both science and non-science majors. Topics include: seafloor spreading and plate tectonics, marine sedimentation, chemistry of seawater, ocean currents and circulation, the oceans and climate change, ocean ecology, coastal processes, marine pollution, and marine resources

## GEOL 105 Writing on Rocks (Freshman

 Seminar)Fall. 3 credits. J. Chiment.
See Freshman Seminar Handbook for description.
GEOL 106 Vertebrate Fossil Preparation Spring. 1 credit. Prerequisites: one introductory geology course or concurrent enrollment, class size is limited.
J. Chiment.

A laboratory-oriented course that will expose students to techniques of vertebrate fossil preparation. Roughing-out and fine preparation of large specimens in solid matrix will be covered, as well as screen washing and microscope techniques for the recovery of micro-vertebrate remains. Specialized scanning techniques will be discussed.
The class will meet for one hour each week for the first six weeks of the semester. Students will be assigned to an individual or group project requiring two hours of participation each week for the remainder of the semester.

## OEOL 107 How the Earth Works

Fall. 1 credit. J. L. Cisne.
A S/User-friendly introduction to the workings and interactions of solid earth, ocean, atmosphere, and life as they relate to understanding ongoing global change.
[GEOL 108 Geology and Society
Spring. 1 credit. May be taken concurrently with or after GEOL 101, 102, 104, 111, or 201. Not offered 1997-98.
T. E. Jordan.

Intended for students who are curious about the impact of geological materials and processes on society, what geologists actually do, what the big questions are in current research, and what a geology career might hold in store. A different speaker each week takes a look at topics ranging from environmental law to natural resources to agriculture.]

## CEOL 109 Dinosaurs

Fall. 1 credit. J. L. Cisne.
An entry-level survey course for those who are interested in dinosaurs and may lack a science background. Lectures examine the fossil evidence and illustrate how various geological and biological disciplines contribute to understanding dinosaurs and their world.

GEOL 111 To Know the Earth and Build a Habitable Planet
Fall. 3 credits. J. M. Bird.
Acquaints the non-scientists with Earth. Major features and how Earth has evolved. Earth System Science and building a habitable planet. Effects of human activity on geologic environments, mitigating environment damage, living with natural hazards. Mineral resource use in 21st century and an environmentally sound fuel-minerals cycle.

## CEOL 122 Earthquake! (also ENGRI 122)

Fall. 3 credits. L. D. Brown.
The science of natural hazards and strategic resources is explored. Techniques for locating and characterizing earthquakes, and assessing the damage they cause; methods of using sound waves to image the earth's interior to search for strategic materials; the historical importance of such resources. Seismic experiments on campus to probe for groundwater, the new critical environmental resource.

GEOL 123-124 Science of Earth Systems Colloquium (also ABEN 120-121, SCAS 101-102 and SES 101-102)
For description, see the Science of Earth Systems section in "Interdisciplinary Centers, Programs, and Studies," in the front part of the catalog.

## GEOL 125 Global Environment (also ENGRI 125)

Fall. 3 credits. W. M. White, R. W. Kay. Wise environmental management requires an understanding of natural chemical interactions Examines natural chemical cycles among atmosphere, biosphere, hydrosphere, and the solid Earth; the impact of man's activity on them, including the greenhouse effect, ozone hole, acid rain, and water pollution. Laboratory sessions include environmental chemical analysis and computer simulation

## GEOL 201 Introduction to the Physics

 and Chemistry of the Earth (also ENGRD 201)Spring. 3 credits. Prerequisites:
Mathematics 191 and Physics 112.
L. M. Cathles.

Formation of the solar system: accretion and evolution of the earth. The rock cycle: radioactive isotypes and the geological time scale, plate tectonics, rock and minerals, earth dynamics, mantle plumes. The hydrologic cycle: runoff, floods and sedimentation, groundwater flow, contaminant transport.

Weathering cycle: chemical cycles, CO (weathering), rock cycle, controls on global temperature ( $\mathrm{CO}_{2}$ or ocean currents), oil and mineral resources.

## GEOL 203 Natural Hazards and the

 Science of ComplexltyFall. 3 credits. Prerequisites: 1 calculus course. D. L. Turcotte.
Studies of natural hazards; earthquakes, volcanic eruptions, floods, hurricanes, tornadoes, severe storms, wildfires, meteor impacts. Applications of the science of complexity to natural hazards: fractals, chaos, and self-organized criticality.

## GEOL 210 Introduction to Fleld Methods

 in Geologlcal SclencesFall. 3 credits. Prerequisite: GEOL 101, 201, or permission of instructor. Weekly field sessions. A weekend field trip. S. Mahlburg Kay.

The methods by which rocks are used as a geological database. Field methods used in the construction of geologic maps and cross sections; systematic description of stratigraphic sections. Field and laboratory sessions on Saturday mornings until Thanksgiving. One additional lecture during most of these weeks. One weekend field trip to eastern New York.

GEOL 212 Special January Field Trip Fall. 2 credits. Prerequisites: GEOL 101 or 201 or equivalent, and permission of instructor. Travel and subsistence expenses to be announced. Staff. A trip of one week to ten days during January intersession in an area of interesting geology in the lower latitudes. Interested students should contact the instructor during the early part of the fall semester.

GEOL 213 Marine and Coastal Geology Summer. 2 credits. Prerequisites: an introductory course in geology or permission of instructor. Staff.
A special one-week course offered at Comell's Shoals Marine Laboratory (SML), on an island near Portsmouth, New Hampshire. For more details and an application, consult the SML office, G14 Stimson Hall. Estimated cost for 1998 (including tuition, room, board, and ferry transportation) is $\$ 895$.

## GEOL 214 Western Adirondack Fleld Course

Spring, one week at the end of the semester. 1 credit. Prerequisite: GEOL 210 or equivalent, or permission of instructor. Students should be prepared for overnight camping and share in the cost of camp meals. Independent project. W. A. Bassett.

Field mapping methods, mineral and rock identification, examination of Precambrian metamorphic rocks and lower Paleozoic sediments, talc and zinc mines.

## Junior, Senior, and Graduate Courses

Of the following, the core courses GEOL 326, $355,356,375$, and 388 may be taken by B.S. candidates who have successfully completed GEOL 201 or the equivalent and by B.A. candidates who have completed GEOL 101 or the equivalent, or who can demonstrate to the instructor that they have adequate preparation in mathematics, physics, chemistry, biology, or engineering.

GEOL 302 Evolution of the Earth System (also SES 332 and SCAS 302)
For description, see the Science of Earth
Systems section in "Interdisciplinary Centers, Programs, and Studies," in the front part of the catalog.

## GEOL 321 Introduction to Biogeochemistry (also SES 321, NTRES 321]

Fall. 4 credits. Prerequisites: college level chemistry, plus a course in biology and/or geology. L. A. Derry, J. Yavitt.
Control and function of the Earth's global biogeochemical cycles. The course 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, and mathematical models. Interactions between global biogeochemical cycles and other components of the Earth system are discussed.

## GEOL 326 Structural Geology

Spring. 4 credits. Prerequisite: GEOL 101
or 201, or permission of instructor.
Visiting Professor Alexandra Moore.
Nature and origin of deformed rocks at microscopic to macroscopic scales, with emphasis on structural geometry and kinematics. Topics include stress, strain, rheology, deformation mechanisms, minor structures, faulting, folding, and structural families.

## GEOL 355 Mineralogy

Fall. 4 credits. Prerequisite: GEOL 101 or 201 and Chem 207 or permission of instructor. W. A. Bassett.
Examination of minerals by hand-specimen properties and optical microscopy. Geological setting, classification, crystal structures, phase relations, chemical properties, and physical properties of minerals. X-ray diffraction is introduced. Independent research project.

GEOL 356 Petrology and Geochemistry
Spring. 4 credits. Prerequisite:
GEOL 355. R. W. Kay.
Principles of phase equilibrium as applied to igneous and metamorphic systems. Description, classification, chemistry, origin, regional distribution, and dating of igneous and metamorphic rocks. Geochemical distribution of trace elements and isotopes in igneous and metamorphic systems. The petrological
evolution of the planets.

## GEOL 375 Sedimentology and Stratigraphy

Fall. 4 credits. Prerequisite: GEOL 101 or 201. J. L. Cisne.

Formation of sedimentary rocks. Depositional processes and environments. Correlation of strata in relation to time and environment. Petrology of sandstones and limestones. Geological age determination. Reconstruction of paleogeography and interpretation of earth history from stratigraphic evidence. Organization of strata in stratigraphic sequences.
GEOL 388 Geophysics and Geotectonics
Spring. 4 credits. Prerequisites: Math-
ematics 192 and Physics 208, 213, or equivalent. B. L. Isacks.
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.

GEOL 411 Satellite Remote Sensing of Glaciers, Earthquakes, and Erosion
Fall. 3 credits. Prerequisite: Permission of instructor. B. L. Isacks.
Instruction in satellite remote sensing, image processing, geographic information systems (GIS) and analysis of digital elevation models, using advanced computer workstations, via participation in current research on earthquakes, mountain glaciers, and erosional processes.

GEOL 417 Field Mapping in Argentina
Summer. 3 credits. Prerequisites: GEOL 210 and 326; Spanish desirable, but not required. S. M. Kay.
Modern techniques of geological mapping applied in the region of San Juan, Argentina, including folded and faulted sedimentary rock units of the Andean Precordillera (San Juan River section), intensely deformed Precambrian metamorphic rocks of the Pampean Ranges (Pie de Palo), and shallow-level silicic intrusives (Cerro Blanco-Ullun).

GEOL 423 Petroleum Geology
Fall. 3 credits. Recommended: GEOL 326. Offered alternate years W. B. Travers.

Introduction to hydrocarbon exploration and development. Exploration techniques, including well logs, fluid pressures, seismicreflection methods, gravity, and magnetic measurements to map subsurface structures and stratigraphy. Petroleum origin and migration. Dispersal systems and depositional patterns of petroleum reservoirs. Economics of exploration, leasing, drilling and production. Estimates of petroleum reserves, including tar sands and oil shales.
GEOL 434 Reflection Seismology
Spring. 4 credits. Prerequisites: Mathematics 192 and Physics 208, 213, or equivalent. L. D. Brown. Fundamentals of subsurface imaging by multichannel seismic reflection techniques as used in oil exploration and geohydrological investigations. Covers survey design, acquisition, analysis, processing and interpretation in both 2D and 3D. Includes discussion of related techniques such as seismic refraction analysis, tomographic inversion, vertical seismic profiling, shear wave exploration and ground penetrating radar. Lab is keyed to state-of-the-art seismic processing, modeling and interpretation software from LandMark.

GEOL 437 Geophysical Fleld Methods
Fall. 3 credits. Prerequisites PHYS 213 and MATH 192 or equivalents, or
permission of instructor. L. D. Brown. Introduction to field methods of geophysical exploration, especially as applied to environmental issues. Emphasis on seismic, gravity, and magnetic techniques. Field surveys carried out at the beginning of the semester are analyzed in a series of weekly follow-up meetings during the semester wherein the results are analyzed and interpreted. A field companion to GEOL 436, which is recommended but not required prior to this course.

GEOL 445 Geohydrology (also ABEN 471 and C\&EE 431)
Fall. 3 credits. Prerequisites: Marhematics 294 and Engr 202. W. Brutsaert,
L. M. Cathles, J.-Y. Parlange,
T. S. 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.

GEOL 452 X-ray Diffraction Techniques Spring. 3 credits. Prerequisites: GEOL 355
or permission of instructor. Offered
alternate years. W. A. Bassett and staff. Automated X-ray diffractometer, DebyeScherrer, real-time Laue, high-temperature diffraction, high-pressure diffraction, and polefigure analysis. Applications in materials science and geological sciences. Labs will be held in the new Materials Science X-Ray Facility.

## [GEOL 453 Advanced Petrology

Fall. 3 credits. Prerequisite: GEOL 356. Offered alternate years. Not offered 1997-98. R. W. Kay.
Magmas and metamorphism in the context of plate tectonics. Major and trace element chemistry and phase petrology as monitors of the creation and modification of igneous rocks. Temperature and stress in the crust and mantle and their influence on reaction rates and textures of metamorphic rocks.
Application of experimental studies to natural systems.]

## [GEOL 454 Advanced Mineralogy

Spring. 3 credits. Prerequisite: GEOL 355 or permission of instructor. Offered alternate years. Not offered 1997-98. W. A. Bassett.

Crystallography and crystal chemistry of minerals and the methods of their study. X-ray diffraction, optical methods, computer simulation of crystal structures. Emphasis on effects of high pressures and temperatures with implications for understanding of Earth's interior.]

## GEOL 455 Geochemistry

Fall. 4 credits. Prerequisites: Chemistry 207 and Mathematics 192 or equivalent. Recommended: GEOL 356. Offered alternate years. W, M. White.
The Earth from a chemical perspective. Formation of the elements; cosmochemistry; chemical evidence regarding the formation of the Earth and Solar System; trace-element geochemistry; isotope geochemistry; geochemical thermodynamics and kinetics; chemical evolution of the crust, mantle, and core; weathering and the chemistry of natural waters; chemistry of rivers and the oceans; hydrothermal systems and ore deposition.

## [GEOL 458 Volcanology

Spring. 3 credits. Corequisite: GEOL 356 or equivalent. Offered alternate years. Not offered 1997-98. R. W. Kay and W. M. White.

Causes of volcanism, melting in the Earth, and the origin of magmas. Physical volcanology, nature and types of volcanic eruptions and associated deposits, 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.]

## GEOL 475 Special Topics in

 OceanographySpring, summer. $2-5$ var. credits.
Prerequisites: GEOL 104 or BIO ES 154,
and permission of instructor. C.H. Greene Undergraduate instruction and participation in advanced areas of oceanographic research.
Topics will change from term to term.
Contact instructor for further information.

## [GEOL 476 Sedimentary Basins:

 Tectonics and MechanicsSpring. 3 credits. Prerequisite: GEOL 375 or permission of instructor. Offered
alternate years. Not offered 1997-98.
T. E. Jordan.

Subsidence of sedimentary basins from the point of view of plate tectonics and geomechanics. Interactions of subsidence, sediment supply, and environmental characteristics in development of stratigraphic sequences. Stratigraphic characteristics of active-margin, passive-margin, and cratonic basins. Geophysical and stratigraphic modeling; sequence stratigraphy. Modern and ancient examples.]
[GEOL 478 Advanced Stratigraphy
Spring. 3 credits. Prerequisite: GEOL 375 or permission of instructor. Offered alternate years. Not offered 1997-98. T. E. Jordan.

Modern improvements on traditional methods of study of ages and of genetic relations among sedimentary rocks, emphasizing 3-D relationships. Techniques and applications of sequence stratigraphy at scales ranging from beds to entire basins. Physical correlation, dating techniques, and time resolution in sedimentary rocks. Physical controls on the stratigraphic record. Numerical modeling.]

## OEOL 479 Paleoblology (also BIOES 479)

Fall. 3 credits. Prerequisites: one year of introductory biology for majors and either BIOES 274, 373, GEOL 375, or permission of instructor. Offered alternate years. W. Allmon.

A survey of the major groups of organisms and their evolutionary histories. Intended to fill out the biological backgrounds of geology students and the geological backgrounds of biology students concerning the nature and significance of the fossil record for their respective studies.

## GEOL 481 Senior Survey of Earth Systems

Fall. 3 credits. Limited to seniors majoring in geological sciences. J. M. Bird. Survey course that integrates undergraduate course work, intended to enhance overall understanding of geological sciences. Emphasis on current models of earth's dynamic systems (e.g., global climate change; mantle evolution). Guest lecturers; synthesis and review literature; scientific literature readings; discussions; student presentations.

## GEOL 491-492 Undergraduate Research

Fall, spring. 1 or 2 credits. Staff.
(B. L. Isacks and R. W. Kay, coordinators). Introduction to the techniques and philosophy of research in the earth sciences and an opportunity for undergraduates to participate in current staff 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.

## GEOL 500 Design Project in

 GeohydrologyFall, spring 3-12 credits. An alternative to an industrial project for M.Eng. students choosing the geohydrology option. May continue over two or more semesters. L. M. Cathles.

The project may address one of many aspects of groundwater flow and contamination, and must involve a significant geological component and lead to concrete recommendations or conclusions of an engineering nature. Results are presented orally and in a professional report.

## GEOL 502 Case Histories in

 Groundwater AnalysisSpring. 4 credits. L. M. Cathles.
Groundwater flow in a specific area, such as a proposed nuclear-waste disposal site, 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 end of term.

## [GEOL 622 Advanced Structural

 Geology 1Spring. 3 credits. Prerequisites: GEOL 326 and permission of instructor. Offered alternate years. Not offered 1997-98.
R. W. Allmendinger.

Stress-strain theory and application. Advanced techniques of structural analysis. Topics include finite and incremental strain measurement; microstructure, preferred orientation, and TEM analysis; pressure solution and cleavage development; and experimental deformation. Applications to deformation of unconsolidated sediments, brittle and brittle-ductile deformation of supracrustal strata, and ductile deformation of high-grade metamorphic rocks. Kinematic analysis of shear zones and folds in these regimes.]

## [CEOL 624 Advanced Structural

 Geology IISpring. 3 credits. Prerequisites: GEOL 326 and permission of instructor. Offered alternate years. Not offered 1997-98. R. W. Allmendinger.

Geometry, kinematics, and mechanics of structural provinces. Concentration on thrust belts, rift provinces, or strike-slip provinces. Techniques of balanced cross sections.]
GEOL 628 Geology of Orogenic Belts Spring. 3 credits. Prerequisite: permission of instructor. J. M. Bird.
A seminar course in which students study specific geologic topics of an orogenic belt selected for study during the term. The course is intended to complement GEOL 681.
[GEOL 634 Advanced Geophysics I: Fractals and Chaos in Geology and Geophysics
Spring. 3 credits. Prerequisite: GEOL 388 or permission of instructor. Offered alternate years. Not offered 1997-98. D. L. Turcotte.

Definitions of fractal sets and statistical fractals, scale invariance, self-affine fractals, multifractals, applications to fragmentation, seismicity and tectonics, petroleum distribution and reserves, ore grade and tonnage, drainage networks and landforms, and floods and droughts. Definitions of chaos and selforganized criticality, renormalization groups,
diffusion limited aggregation and percolation clusters, wavelet transforms, applications to mantle convection, the earth's dynamo, and distributed seismicity.]

## [GEOL 636 Advanced Geophysics If:

 Quantitative GeodynamicsSpring. 3 credits. Prerequisite: GEOL 388 or permission of instructor. Offered altemate years. Not offered 1997-98. D. L. Turcotte.

Stress and strain in the earth, elasticity and flexure, heat transfer, gravity, fluid mechanics, rock rheology, faulting, chemical
geodynamics, flow in porous media.]

## GEOL 651 Analysis of Blogeochemical

 SystemsSpring. 3 credits, Prerequisite: MATH 293 or permission of instructor. Offered altemate 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. Eigen-analysis of linear systems. Feedback and nonlinear cases, problems of uncertainties in natural systems. Modeling software such as Stella II and Matlab; applications to current research of participants or from recent literature.

## GEOL 656 Isotope Geochemistry

Spring. 3 credits. Open to undergraduates. Prerequisite: GEOL 455 or permission of instructor. Offered alternate years. W. M. White.

Nucleosynthetic processes and the isotopic abundances of the elements. Geochronology and cosmochronology using radioactive decay schemes, including U-Pb, Rb-Sr, Sm-Nd, K-Ar, U -series isotopes, and cosmogenic isotopes such as ${ }^{14} \mathrm{C}$ and ${ }^{36} \mathrm{Cl}$. Use of radiogenic and stable isotopes in petrology and their application to study of the evolution of the crust and mantle. Isotopic evidence regarding the formation of the Earth and the Solar System. Stable isotopes and their use in geothermometry, ore petrogenesis, paleontology, and the global climate system.

## GEOL 681 Geotectonics

Fall. 3 credits. Prerequisite: permission of instructor. J. M. Bird.
Theories of orogeny; ocean and continent evolution. Kinematics of lithosphere plates. Rock-time assemblages of modern oceans and continental margins, and analogs in ancient orogenic belts. Time-space reconstructions of specific regions. Problems of dynamic mechanisms-corollaries and evidence from crustal features.
GEOL 695 Computer Methods in Geological Sciences
Fall, spring. 3 credits. L. Brown,
B. L. Isacks.

Independent research projects using state-of-the-art computational resources in the Department of Geological Sciences. Possibilities include: image and seismic processing, seismic and geomechanical modeling, GIS, use of interpretational workstations for 3 D seismics and satellite imagery; modeling fluid flow through complex media.

## GEOL 700-799 Seminars and Special Work

Fall, spring. $1-3$ credits. Prerequisite: permission of instructor. Staff.
Advanced work on original investigations in geological sciences. Topics change from term to term. Contact appropriate professor for more information.
[GEOL 722 Advanced Toplics in Structural Geology
R. W. Allmendinger. Not offered 1997-98.]

GEOL 731 Plate Tectonics and Geology J. M. Bird.

GEOL 733 Fractals and ChaosIndependent Studies
D. L. Turcotte.

GEOL 751 Petrology and Geochemistry S. Mahlburg Kay, R. W. Kay.

GEOL 753 Advanced Topics in Mineral Physics
W. A. Bassett.

GEOL 755 Advanced Topics in Petrology and Tectonlcs
J. M. Bird, W. A. Bassett.

GEOL 757 Current Research in Petrology S. Mahlburg Kay, R. W. Kay.

GEOL 762 Advanced Topics in Petroleum Exploration
Fall. W. B. Travers.
[GEOL 771 Advanced Topics In Sedimentology and Stratigraphy
T. E. Jordan. Not offered 1997-98.]

GEOL 773 Paleoblology J. L. Cisne.

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GEOL 775 Advanced Topics In
        Oceanography
    Spring. C. H. Green.
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GEOL 780 Earthquake Record Reading Fall. M. Barazangi.
GEOL 781 Geophysics, Exploration Seismology
L. D. Brown.

GEOL 783 Advanced Toples in Geophysics
B. L. Isacks.

GEOL 789 Lithospherlc Seismology (COCORP Seminar)
L. D. Brown.

GEOL 793 Andes-HImalaya Seminar S. Mahlburg Kay, R. W. Allmendinger, B. L. Isacks, T. E. Jordan

GEOL 795 Low Temperature Geochemistry
L. A. Derry.

GEOL 796 Geochemistry of the Solid Earth W. M. White

GEOL 797 Fluld-Rock Interactions L. M. Cathles.

GEOL 799 Soil, Water, and Geology Seminar
L. M. Cathles, T. S. Steenhuis.

## GERMAN STUDIES

L. Adelson, acting chair, fall; A. Groos, chair, spring; I. Ezergailis, director of undergraduate studies; P. U. Hohendahl, director of graduate studies; D. Bathrick, D. Brenner, B. Buettner, H. Deinert, P. Gilgen, B. Martin, A. Schwarz, G. Waite

The Department of German Studies offers students a wide variety of opportunities to discover the literature and culture of Germanspeaking countries, whether as part of their
general education, a major in German Studies or a double major involving another discipline, preparation for graduate school or an international professional career. Courses are offered in English as well as German, and range from medieval to contemporary
literature as well as from film and visual culture to intellectual history, music, history of psychology, and women's studies.
The department's offerings in English begin with a series of Freshman Writing Seminars introducing various aspects of German literature (the fairy-tale and romantic narratives, twentieth-century writers such as Kafka, Hesse, Mann, Brecht), issues in mass culture and modernity, problems of German national identity/ies, and cinema and society. A variety of courses in English translation is also offered on the 300 - and 400 -level, exploring such topics as the Faust legend, aesthetics from Kant to Heidegger, Freud and his legacy, opera from Mozart to Strauss, the German novel, political theory and cinema, the Frankfurt School, and feminist theory.
Students wishing to begin German at Cornell enroll in GERLA 121-122 in the Department of Modern Languages. Those successfully completing this sequence, or those who place into the 200-level, may pursue further language study in that department or begin with the literature and cultural studies tracks in German Studies. The beginning sequence of 200-level courses in German Studies, with readings and discussion in German, is designed to provide further grounding in the language as well as introduce German literature (GERST 201-202) and cultural studies (GERST 220). Beginning in spring 1998, GERST 201 and GERLA 203 will be replaced by GERST/GERLA 200. More advanced courses introduce majors and other qualified students to a broad variety of literary and cultural topics in German-speaking countries.

## Advanced Standing

Students with an AP score of 4 or better are automatically granted three credits in German. Students with an AP score of 4 or better, an LPG score of 65 or higher, or a SAT II score of 680 or higher must take the CASE examination for placement in courses above GERST 201 or GERLA 203. Students coming to Cornell with advanced standing in German and/or another subject are encouraged to consider a double major and to discuss the options with the director of undergraduate studies as early as possible

## The Majors

The department offers two options for the major: German literature/culture and German area studies, the latter 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. For both majors, there is a wide variety of courses co-sponsored with other departments (Comparative Literature; Government; History; Music; Theatre, Film, and Dance; Women's 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, Inta Ezergailis, 178 Goldwin Smith Hall.

## German (Literature/Culture)

Although the emphasis of this track is on literature, majors can also pursue individual interests in courses on film and visual culture, theater and performing arts, music, intellectual and political history, and women's studies that have a substantial German component. Please consult with the director of undergraduate studies.
Admission: By the end of their sophomore year, prospective majors should have successfully completed GERST 202, GERST 220, or GERLA 204.
To complete the major, a student must:

1. demonstrate competence in the German language by successful completion of GERLA 304 or the equivalent.
2. complete six courses in German Studies at the 300 level or above. One these must be the Senior Seminar (GERST 410).

## 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; Women's Studies; etc.
Admission: By the end of their sophomore year, prospective majors should have successfully completed GERST 202, GERST 220, or GERLA 204.
To complete the major, a student must:

1. demonstrate competence in the German language by successful completion of GERLA 304 or the equivalent.
2. complete six courses with a substantial German component at the 300 level or above. Three of these must be in German Studies, including the Senior Seminar (GERST 410).
3. select a committee of two or more faculty advisors to help formulate a coherent program of study. One of the advisors must be from the Department of German Studies.

## Study Abroad

The department encourages undergraduate majors to consider studying abroad for 1-2 semesters, normally during the junior year, as regular students at a German-speaking university. Interested students should consult Bonnie Buettner (German Studies) or Gunhild Lischke (Department of Modern Languages) as early as possible.

## Honors

Eligibility: A student wishing to receive honors in German Studies must have a GPA of 3.5 in all courses relevant to the major.

Committee: Candidates for honors form an advisory committee consisting of an advisor from German Studies and at least one additional member.

Honors essay: During the first term of their senior year, students determine the focus of their honors essay through an appropriate course or in independent study under the
direction of their advisors. During the second term they complete an honors essay, which will be evaluated by the committee.

Determination of honors: An oral examination concludes the process. The level of honors will be determined by the essay, the exam, and grades in the major.

## Freshman Writing Seminar Requirement

The following courses may be used to satisfy the freshman writing seminar requirement: German 109, 111, 130, 150, 151 and 175. For details, students should consult the instructors.

Fees. Depending on the course, a small fee may be charged for film rental or photocopied texts for course work.

## Freshman Writing Seminars

See Freshman Seminar booklet for course times and descriptions.

GERST 109 From Fairy Tales to the Uncanny: Exploring the Romantic Consciousness
Fall or spring. 3 credits. B. Buettner, P. Gilgen, and staff.

## GERST 111 Workshop in German Studies

 Fall. 3 credits. H. Deinert.GERST 130 Metropolis, Modernity, and Mass Culture: The Roaring Twenties, German-style
Fall or spring. 3 credits. B. Buettner, $P$. Gilgen and staff.

## GERST 150 Imagining Germany/s

Fall or spring. 3 credits. B. Buettner,
P. Gilgen and staff.

GERST 151 Kafka, Hesse, Brecht, and Mann
Fall or spring. 3 credits. H. Deinert.
GERST 175 Cinema and Society
Fall or spring. 3 credits. G. Waite and staff.

## Courses Offered in German

## GERST 200 Contemporary Germany (also

 GERLA 200)Spring. 3 credits. Prerequisite: qualification in German (LPG score of 56-64 or SAT II score of 580-670 or GERLA 123). Fulfills the Arts and Sciences language proficiency requirement and can be used in partial fulfillment of the Arts and Sciences humanities distribution requirement. Staff.
An intermediate language course designed to provide an introduction to modern German culture and literature while students develop language proficiency. Students examine issues that shape German society, literature, and thought as reflected in short stories, poems, socio-cultural and political texts, video, and audio materials. Selected themes include "Beyond the Wall; German Unification," "Germany: a Multi-cultural Society?", "Speaking and Identity," and "Musikszene." Oral and written work and individual and group presentations emphasize accurate and idiomatic expression. Successful completion of the course enables students to continue with more advanced courses in language, literature and culture. This course replaces GERST 201 and GERLA 203.

GERST 201 Introduction to German Literature I: Prose
Fall. 3 credits. Prerequisite: qualification in German or permission of instructor. Taught in German. Fulfills the language proficiency requirement and can be used in partial fulfillment of the humanities distribution requirement. B. Buettner. An intermediate course designed to introduce major German-speaking authors of the twentieth century and to improve oral and written German language skills. Selected prose works of Bachmann, Brecht, Kafka, Mann, Dürrenmatt, Aichinger, and others explore problems of subjectivity and identity in modern society. Review of selected points of grammar; emphasis on developing reading competency and accurate and idiomatic expression in class discussion and written assignments; expansion of vocabulary. Beginning in spring 1998, GERST 201 and GERLA 203 will be replaced by GERST/ GERLA 200.

## GERST 202 Introduction to German

 Literature II: DramaFall or spring. 3 credits. Prerequisite: GERST 201, GERLA 203, or permission of instructor. Taught in German. Can be used in partial fulfillment of the humanities distribution requirement. B. Buettner and P. Gilgen.

An intermediate course designed to introduce the work and basic drama theories of major Austrian, Swiss and German dramatists. Selected plays by Dürrenmatt, Brecht, Frisch, Borchert, Hein, and others explore major social and political issues of twentieth-century German culture. Emphasis on further improvement in oral and written German, expansion of vocabulary and basic familiarity with modern literature in German. Review of grammar as needed.

## GERST 220 Was ist Deutsch?

Spring. 3 credits. Taught in German. Prerequisite: one German course at the 200 level, B. Buettner.
Questions of German identity have always raised difficult issues-both for Germans themselves and for others. These issues are again taking center stage as Germans redefine themselves in a reunified Germany. How has the concept of "Germanness" evolved? How do past perceptions of identity impinge on the present? Through selections from film, literature, art, and music we will explore this peculiarly German question.

## GERST 307 Modern Germany

Spring. 4 credits. Prerequisite: GERST 201-202 or equivalent. Taught in German. L. Adelson.

Introduction to the history of postwar Germany, the development and unification of the two Germanys, and their societies. The emphasis is on cultural and social institutions as well as political and intellectual debates. Focal topics include responses to the Nazi past, Germany and Europe, protest movements, migration patterns, women, mass media, and popular culture. We will consider the changes taking place in Germany today in light of the recent past. Some films will also be shown.

## [GERST 311 Workshop in German

Studies I \#
Not offered 1997-98.]

## [GERST 312 Workshop in German

 Studies IINot offered 1997-98.]

## GERST 315 From Dawn Song to

 Requiem: Introduction to German PoetryFall. 4 credits. Prerequisite: GERST 201202 or equivalent. Readings in German. I. Ezergailis.

Reading selected German verse, from the Middle Ages through the Baroque to Goethe, Heine, and the Romantics; from Rilke to Celan, Ingeborg Bachmann, and other twentieth-century authors, we will pay attention to the microcosm of each poem as well as to its contexts-socio-political, cultural, and aesthetic-and consider the formal constraints and the enabling openings of writing in verse.

## GERST 320 Postwar German Novel

 Spring. 4 credits. I. Ezergailis. A reading, in English translation, of such post1945 German novelists as Grass, Böll, Johnson, and Christa Wolf. This course is recommended for the concentration in modern European studies.
## GERST 330 Political Theory and Cinema

 (also COM L 330, GOVT 370 and THETR 329)Fall. 4 credits. G. Waite.
This course provides an introduction to some fundamentals of current film analysis and political theory and their relationship to one another. Our investigation has two main aspects. On the one hand, we will be interested in the work of film-makers who have been particularly concerned to reshape ideas about politics in the cinematographic medium. On the other, we will attempt to develop a way of reading political theory using techniques borrowed from cinema and vice versa-thus forging between these two disciplines productive analogies that are not necessarily based on influence. We will study not only mainstream but also experimental and low-budget films; similarly, we will find political theory in obscure places, as well as more obvious ones. While the course has a historical perspective, the main emphasis will be on contemporary work. Our texts/films will be taken from the works of such thinkers/ filmmakers as: P. P. Pasolini, J.-L. Godard,
S. Eisenstein, D. Vertov, G. Romero,
R. Corman, M. von Trotta, D. Cronenberg,
T. W. Adorno, W. Wenders, R. W. Fassbinder,
A. Kluge, P. K. Dick, W. Benjamin,
G. Deleuze, M. Gorris, K. Tahimik. L. Strauss, K. Marx, J. G. Fichte, L. Althusser, R. Scott, L. Bunuel, A. Gramsci.
[GERST 342 The New Europe (also GOVT 342)
Not offered 1997-98.]
[GERST 353 Kleist \#
Not offered 1997-98.]
[GERST 354 Schiller *
Not offered 1997-98.]

## GERST 357 Major Works of Goethe

 (1749-1832)Spring. 4 credits. Prerequisite: GERST 201-202 or equivalent. Please consult instructor. Seminar discourse in English and German. H. Deinert.
Poet, statesman, artist, scientist, rebel,
conservative, mythmaker and iconoclast, Goethe stands at the center of Germany's belated Renaissance. Taking his early cues
from Homer, Shakespeare and the Bible, he created cultural icons at once modern and steeped in tradition. We will examine works from all phases of the man's incredibly productive life against the background of political turmoil in Europe and the Americas. We will use art, music and theater as additional tools of interpretation.

## GERST 365 Austrlan Literature

Spring. 4 credits. Prerequisite: GERST 201-202 or permission of instructor. I. Ezergailis.

A careful study of texts by Austrian authors writing between the turn of the century and World War II, a productive and controversial time that includes the demise of the AustroHungarian Empire. We will read some drama and poetry, but most of the texts will be medium-length prose pieces and excerpts from longer ones. The diverse list includes figures such as Arthur Schnitzler, Franz Kafka, Marie von Ebner-Eschenbach, Karl Kraus, Rainer Maria Rilke, and Robert Musil.

## Courses In English Translation

GERST 320 Postwar German Novel
GERST 330 Polltical Theory and Cinema (also COM L 330, GOVT 370 and THETR 329)

GERST 374 Opera and Culture (also MUSIC 374 AND ITALL 374) \#
For description, see Music 374.

## GERST 378 Cerman Aesthetic Theory:

 From Kant to Hegel *Fall. 4 credits. Readings and discussion in English. P. Gilgen
Beginning with Kant's Critique of Judgment (1790), German philosophy around 1800 is concerned with the philosophical status of the beautiful and of art. Especially in Romantic theory and practice, art is meant to provide a solution to the philosophical dilemmas in the wake of Kant's critical philosophy. But already in Hegel's Pbenomenology, and more explicitly in the Encyclopedia and the Lectures on Aesthetics, art loses this elevated position vis-ä-vis philosophy. Taking this observation as a guiding thread, this course is structured around in-depth readings of Kant's Critique of Judgment and the "Introduction" to Hegel's Lectures on Aesthetics. Further readings will include Schiller, Schelling, Schlegel, Novalis, and Holderlin. The following questions will be addressed: What are the conditions for the move from the subjective judgment of taste (Kant) to objective beauty (Romantics, Hegel)? How is the relation of art and nature reconceived by the Romantics, particularly Schelling? What is the relation of aesthetic theory and the history of art? In the concluding part of the course, we will discuss contemporary philosophers whose work on aesthetics relies explicitly on Kant's and/or Hegel's theories, such as Adorno, Danto, and Lyotard.

## GERST 383 German Literature of the

 Twentleth CenturyFall. 4 credits. Taught in German. Prerequisites: two 200-level courses or permission of instructor. L. Adelson. This survey course introduces students to twentieth-century German literature in its historical, social, and aesthetic contexts. Discussion of representative literary texts will be emphasized. Readings will include works by Thomas Mann, Georg Kaiser, Marieluise Fleisser, Bertolt Brecht, Anna Seghers,

Heinrich Boll, Christa Wolf, Ingeborg Bachmann, Ulrich Plenzdorf, Botho Strauss, Peter Schneider, and Vera Kamenko.

## GERST 396 German Film (also COM L

 396 and THETR 396)Spring. 4 credits. Requirements:
participation in class discussion, one paper, midterm, and final. D. Bathrick. This course will explore German film from the Weimar and Nazi periods to the present in relation to the cultural and sociopolitical context of which it was a part. Readings and lectures will be devoted to formal and cultural developments historically as well as interpretive analysis of selected individual films.
[CERST 398 The Poetic and the Polltlcal: A Look at Some German Women Writers
Not offered 1997-98.]
GERST 408 Uncanny Communitles (also 5 HUM 408)
Fall. 3 credits. A. Schwarz.
For complete description, please see S HUM.
GERST 411 Theory, Pathology, and Treatment (also S HUM 412)
Fall. 4 credits. B. Martin and C. Miller. For complete description, please see S HUM.
[GERST 413 Women around Freud (also COM L 412 and WOMNS 413)
Not offered 1997-98.]
GERST 414 History into Fiction: Nazis and the Literary Imagination (also ENGL 404, COM L 404, and NES 404)
For description, see ENGL 404
[GERST 415 Marx, Freud, Nietzche (also COM L 425 and GOVT 473)
Not offered 1997-98.]

## [GERST 418 Thomas Mann

Not offered 1997-98.]
GERST 442 German Jewish Culture: From the Enlightenment to the Present (also JWST 442 and S HUM 444)
Spring. 3 credits. This introductory course is designed for undergraduates who do not read German and will proceed in a cognitively cumulative fashion, starting with past developments in order to elucidate the present. D. Brenner. We will examine debates surrounding minority identity by discussing fiction, autobiography, essay, and film by "German Jews" from the Enlightenment through the post-Holocaust period. The course will confront the social, cultural, and religious conflicts that typify the history of Jewish existence in German-speaking lands during the modern epoch. Authors to be addressed include: Moses Mendelssohn, Solomon Maimon, Heinrich Heine, Karl Marx, Sigmund Freud, Arthur Schnitzler, Martin Buber, Hannah Arendt, Gertrud Kolmar, Nelly Sachs, Else Lasker-Schüler, Franz Kafka, Fritz Lang, Henrik Galeen, Paul Celan, Walter Benjamin, Maxim Biller, Rafael Seligmann, Katja Behrens, Barbara Honigmann, Henryk Broder, Esther Dischereit, Peter Stephan Jungk, Rachel Abraham, Irene Dische, George Mosse, and others.

GERST 450 Representing the Holocaust, Then and Now (also JWST 451 and S HUM 450)
Fall. 3 credits. Limit 20 srudents.
D. Brenner.

It has been argued that the most brutal crime humans have committed against humankind was the "Final Solution," the Nazis' attempted and nearly successful destruction of European Jewry. Gypsies, the disabled, homosexuals, communists, Jehovah's Witnesses, Poles, and Russians were also singled out for persecution. Since the end of the Second World War, numerous social scientists and cultural historians have tried to describe how and why such genocides occurred. Writers, poets, memoirists, artists, filmmakers, museum curators and others have also attempted to represent and communicate the experiences of Holocaust survivors, victims and perpetrators. Mediated through cultural forms and practices, a number of Holocaust "discourses" have developed, particularly in the United States-and leading many critics to descry the "Americanization" of the Holocaust.

In this seminar, we will consider the ways in which the events of 1938-1945 have been, might be, and will be remembered. Exactly how these events are represented is contingent upon a number of factors: political, social, psychological, discursive, linguistic, etc. We will frequently make comparisons of a cross-cultural and cross-historical nature (i.e., "here and there," "then and now") as well as discussing the implications of Holocaust representations for the practice of tolerance and cultural diversity.

## [GERST 458 Comparative Democritization (also GOVT 458)

Not offered 1997-98.]

## Course In Latvlan and Baltic Literature

[QERST 377 Perfection of Exlle? Baltic Emlgré Literature (also RUSSL 377) Not offered 1997-98.]

## Graduate and Advanced Undergraduate Courses

[GERST 405 Introduction to Medieval German Literature I \#
Not offered 1997-98.]
[GERST 406 Introduction to Medieval German Literature II *
Not offered 1997-98.]

## GERST 410 The Brothers Mann: Senior

 SeminarFall. 4 credits. Readings and discussion in German. I. Ezergailis.
The relationship of Thomas and Heinrich Mann has been described as "a brotherhood in which German history was mirrored...in all its agony." We will read selected texts by the Mann brothers-novels, short stories, essays, publicistic pieces, and letters - to examine the dynamic of a brothers' strife that illuminates confrontations and tensions of a whole culture at a decisive time in German history. Some background material will provide the social, political, and intellectual context.

## [GERST 412 German Llterature from 1770 to 1848 <br> Not offered 1997-98.]

[GERST 430 Brecht, Artaud, Müller, Wilson (also COM L 430 and THETR 420)
Not offered 1997-98.]
[GERST 435 Introduction to Literary Theory (also COM L 435)
Not offered 1997-98.]
[GERST 447 Reading Freud: Gender, Race, and Psychoanalysis (also COM L 447 and wOMPS 447)
Not offered 1997-98.]
GERST 451-452 Independent Study 451, fall; 452, spring. $1-4$ credits each term. Prerequisite: permission of instructor.
[GERST 472 Poetry of the 1990s (also COM L 472, ENGL 408, and SPANL 472)
Not offered 1997-98.]
[GERST 492 The Advance of Humanism: Aspects of the European Enlightenment \#
Not offered 1997-98.]
[CERST 495 The Aesthetic Theory of the Frankfurt School (also COM L 495)
Not offered 1997-98.]
[CERST 496 Theorlzing the Publlc Sphere (also COM L 496 and HIST 496)
Not offered 1997-98.]

## Seminars

Note: For complete descriptions of courses numbered 600 or above consult the appropriate instructor.
[OERST 600 Special Topics in Feminist Theory (also ANTHR 600 and COM L 600)
Not offered 1997-98.]
[CERST 608 Modem/Postmodern (also COM L 608)
Not offered 1997-98.]
GERST 615 Jows in German Culture Since 1945 (also JWST 615)
Fall. 4 credits. Required readings in German. Class discussion in English. L. Adelson.

This seminar will explore Jewish literature written in German since 1945, including works by authors such as Elisabeth Langgasser, Paul Celan, Hans Keilson, Edgar Hilsenrath, Grete Weil, Jeannette Lander, Esther Dischereit, Irene Dische, Rafael Seligmann, Maxim Biller, and Barbara Honigmann. This material will be considered against the larger background of postwar German attempts to represent both Jewish identity and the Holocaust. To this end the course will consider pivotal crises of representation such as those reflected in the Fassbinder scandal, the "Historians' Debate," and the more recent competition for a
"German national monument to the murdered Jews of Europe." Additionally, we will consider how these literary works and cultural contexts are relevant to international cultural studies in memory, diaspora, "hybridity," and representation.

## [GERST 621 Issues in Gay and Lesbian Studies (also WOMNS 621) <br> Not offered 1997-98.]

[GERST 624 Seminar in Medieval German Literature II
Not offered 1997-98.]
[OERST 626 Nuremberg
Not offered 1997-98.]

GERST 627 Baroque (also COM L 626) Fall. 4 credits. The course is conducted in English. G. Waite.
This graduate seminar focuses on the "baroque" in two basic ways: (1) as a period of cultural production in seventeenth-century continental Europe (France, Holland, Italy, and Spain in addition to Germany); (2) but more especially as a problem in current theory. Thus we will study concepts such as: "allegory" and Trauerspiel (Walter Benjamin); "action from a distance," "absent and immanent cause" (Spinoza, Louis Althusser); "the fold" (Leibniz, Gilles Deleuze); "savage anomaly" (Antonio Negri); and "guided culture" (José Antonio Maravall). Approximately equal attention will be given to literary and philosophical texts, written and visual practices. Thus, in addition to representative literary texts, we will analyze works by Leibniz and Spinoza, Caravaggio, Poussin, and Velâzquez, as well some contemporary critics and theorists (Christine Buci-Glucksmann, Michel Foucault, Louis Marin, among others).

## [GERST 629 The Enlightenment

 Not offered 1997-98.][GERST 630 Classicism and Idealism Not offered 1997-98.]
[GERST 634 German Romanticism Not offered 1997-98.]

GERST 635 The Gates to Modernity: From Karlsbad to the 1848 Revolution
Spring. 4 credits. Anchor course. P. U. Hohendahl.

The seminar will focus on Germany's entry into the modern age represented by authors such as Heine, Büchner, Feuerbach, and Marx The course will deal with the cultural, political, and social consequences of the Enlightenment, among them the democratization of literature and culture, the politicization of philosophy, and the emancipation of underprivileged groups (women and working class). The readings will trace the formation of bourgeois culture and its contradictions as they are articulated by the writers of Young Germany, the Left Hegelians, and radical literati of the 1840 s. In addition to the authors mentioned above, readings will be taken from the works of Bettina von Arnim, Böne,
Grabbe, Hebbel, and Fanny Lewald.

## [GERST 637 Novelle Workshop

Not offered 1997-98.]
GERST 647 German Literature from 1949 to 1989: Questions about Identity Spring. 4 credits. L. Adelson.
This seminar/anchor course will focus on German literature during the period between 1949 and 1989. The point of the course will be to trace major themes and styles in German-speaking literature, East and West, in light of recent events. While individual texts will be examined within their specific historical (temporal, geopolitical, aesthetic) contexts, the course will also be organized comparatively around critical debates concerning such topics as fictional representations of the immediate past; attempts by minority/majority voices to challenge and change the canon; writing and social change; questions concerning a national cultural identity; the politics of postmodernity, etc. Readings will be taken from authors such as Böll, Grass, Bachmann, Koeppen, Andersch, Handke, Dürrenmatt, C. Wolf, Weiss,
H. Muller, V. Braun, Hein, Morgner, J. Becker,

Enzensberger, B. Strauss, Süsskind, and Maron. Secondary materials will include critical writings and visual media from the period.

## [GERST 650 Culture in the Weimar Perlod

Not offered 1997-98.]

## [GERST 652 Culture in Germany

 1933-1945Not offered 1997-98.]

## [GERST 653 Opera (also COM L 655 and MUSIC 679)

Not offered 1997-98.]
[GERST 660 Visual Ideology (also COM L 660 and THETR 660)
Not offered 1997-98.]
[GERST 661 After the City: From Metropolis to Electropolis (also ARCH 338/638 and COM L 661)
Not offered 1997-98.]
GERST 663 Nietzsche and Heidegger (also COM L 663)
Spring. 4 credits. G. Waite.
This graduate seminar investigates the basic thoughts, types of argumentation, and styles of writing of these two philosophers, with particular focus on Heidegger's appropriation of Nietzsche. We will consider both as political thinkers in the tradition of esotericism-as a way of grasping the paradoxical existence of Left-Nietzscheans and Left-Heideggerians, given Nietzsche's and Heidegger's self-understanding of themselves as men of the Right. At issue, too, is a relation of Nietzsche and Heidegger to both Plato and Machiavelli. In this regard, the grasp of Nietzsche not only by Heidegger but also by Straussians will be contrasted with that of the Left. Basic texts include: Nietzsche, "The Greek State," "On Truth and Lie in the Extramoral Sense," Thus Spoke Zarathustra, and Beyond Good and Evil; and Heidegger, "Who Was Nietzsche's Zarathustra?", "Nietzsche's Word 'God Is Dead," and selections from his Nietzsche. Further: Laurence Lampert, Leo Strauss and Nietzsche, Stanley Rosen, "Nietzsche's Revolution" and The Mask of Enlightenment: Nietzsche's "Zaratbustra" and Leo Strauss, "What Is Political Philosophy?" and "Note on the Plan of Nietzsche's Beyond Good and Evil."
[GERST 664 Freud and the Fin de Siècle Not offered 1997-98.]
[GERST 666 Ingeborg Bachmann Not offered 1997-98.]
[GERST 667 "Minor" German Literatures?
Not offered 1997-98.]
[GERST 671 Postcolonial Theory and German Studies
Not offered 1997-98.]
[GERST 672 German Opera (also MUSIC 674)
Not offered 1997-98.]
GERST 674 Contemporary Poetry and Culture: 1968-1993 (also COM L 674, ENGL 697 and SPAN L. 674)
Spring. 4 credits.
For description, please see COM L.

GERST 675 After the Divide: German Critical Theory of the Seventies and Elghties (also COM L 675 and HIST 675)
Fall. 4 credits. P. U. Hohendahl
The death of Theodor W. Adorno in 1969 marked the end of classical Critical Theory. During the following decade his students and disciples moved in different and conflicting directions. In this country only the project of Jürgen Habermas has received serious and consistent attention. However, the German configuration of the 1980s is considerably more complex. The seminar examines the writings of H. M. Enzensberger, Habermas, O. Negt, A. Kluge, P. Bürger, A. Wellmer, and C. Dahlhaus. Their works range from social and political theory to aesthetic theory and literary and music criticism.

## [GERST 679 Bertolt Brecht in Context

 (also COM L 679 and THETR 679)Not offered 1997-98.]

## [GERST 685 Gramscl and Cultural Politics (also COM L 685 and GOVT 675)

Not offered 1997-98.]
[GERST 687 The Politics of Culture in the German Democratic Republic Not offered 1997-98.]
[GERST 690 Feminist Criticism and Theory (also WOMNS 690) Not offered 1997-98.]
[GERST 692 The Polltics of Criticism (also COM L. 692 and THETR 692) Not offered 1997-98.]

GERST 699 German Film Theory (also COM L 699 and THETR 699)
Fall. 4 credits. D. Bathrick.
This course examines critically major German film theories from the Weimar period to the present. Works by Balazs, Arnheim, Kracauer, Benjamin, Adorno, Horkheimer, Kluge, Syberberg, Koch, Elsaesser, and others will be discussed in relation to the context in which they emerge as well as current debates in film theory.

## GERST 753-754 Tutorial in German

 LiteratureFall and spring. $1-4$ credits per term. Prerequisite: permission of instructor.

## Related Courses in Other Departments

## Government

GOVT 465 Visual Culture After Nietzsche Fall. S. Buck-Morss.

GOVT 655 Gender Polltics and Welfare Policies in Europe and the US Fall. U. Liebert

GOVT 669 Modern Social Theory I Fall. S. Buck-Morss.

COVT 670 Modern Social Theory II Spring. S. Buck-Morss.

## Modern Languages

LANG 501 Teaching Second Languages Fall. Y. Shirai.

## Linguistics

## LING 441 Introduction to Germanic

 LinguisticsFall. J. H. Jasanoff.

## Society for the Humanities

S HUM 410 Politics and Traumar From Revolution to Transgression
Fall. S. R. Stewart

## GOVERNMENT

I. Kramnick, chair; B. R. O'G. Anderson, R. Bensel, M. G. Bernal, S. Buck-Morss, R. Bullock, V. Bunce, T. Christensen, J. Cowden, M. Evangelista, R. Herring, N. Hirschmann, M. Katzenstein,
P. Katzenstein, E. W. Kelley, J. Kirshner,
T. J. Lowi, R. McDermott, W. Mebane, J. Pontusson, J. Rabkin, A. Rutten, E. Sanders, H. Schamis, M. Shefter, V. Shue, A. M. Smith, S. G. Tarrow, S. Telhami, N. T. Uphoff, C. Way

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 power-wielders 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).
To accommodate new courses or course changes, a supplementary announcement is prepared by the department. Before enrolling in courses or registering each term, students are requested to consult the current supplement listing courses in government, available in 125 McGraw Hall

## The Major

To be admitted to the major, a student must pass two government courses.
To complete the major, a student must (1) pass two of the introductory government courses (Government 111, 131, 161, 181); (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. 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 300 -level or above; (4) complete at least one seminar-style course in government which may be applied toward the 28 credits. These courses include those numbered 400.XX to which students are admitted by application only; (5) accumulate 12 credits in upper-level courses in related fields (such as anthropology, economics, history, psychology, and sociology). Upperlevel courses are usually courses numbered at the 300 -level or above (200-level courses are not considered upper-level). Students should consult with their major adviser to choose appropriate courses. All choices of related courses must be approved by the major adviser, or the director of undergraduate studies; (6) all courses used to fulfill a government major must be passed with a letter grade.

To summarize, a total of 10 government courses and 3 additional courses ( 12 credits) of upper-level related courses are required to complete the major.

Cornell-in-Washington Program. Government majors may apply to the Cornell-inWashington program to take courses and undertake a closely supervised extemship during a fall or spring semester
Study Abroad in Geneva. French, history, and government majors, or other students with a commitment to international experience, may study abroad in Geneva, Switzerland. Geneva is an especially appropriate location for students with an interest in international affairs, as many international organizations maintain offices there, among them the United Nations, the Red Cross, the Headquarters of the World Health Organization, the International Labor Organization, the International Telecommunications Union, the World Intellectual Property Organization, the European Nuclear Research Center, and the Ecumenical Center at Grand-Saconnex Comell students enroll full-time in the University of Geneva and affiliated schools, including the Graduate School of International Studies (HEI) and the Development Studies Institute, where they take year-long courses, studying with Swiss and international students. They can choose classes in many subjects, including literature, economics and other social sciences, law, theology, psychology, education, architecture, physical education, and French language, civilization and history
The University of Geneva offers four consecutive three-week language and civilization summer courses beginning in midJuly, which prepare students for the mandatory French exam given in early October. Cornell students must attend the last of these sessions, from mid-September to early October, but earlier sessions are recommended for students who need additional language preparation.
Interested students can participate in internships at international organizations, and qualified participants may be able to work under the direction of officials on research studies that are of mutual interest.

Students must be Cornell undergraduates with a strong academic record. The minimum French preparation is the completion of French 204 or 213 , or its equivalent in advanced credit or placement by the Cornell C.A.S.E. examination. Students should plan to study abroad for the entire academic year. Students interested in the study abroad program in Geneva should contact the Cornell Abroad office ( 474 Uris) for further information.
European Studies Concentration. Govern ment 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 Tarrow for advice on course selection and foreign study programs.
Model European Community Simulation. Undergraduates with an interest in the European Community, public affairs, or debating may participate in the annual Modern European Community Simulation (SUNYMEC) held in April at SUNY Brockport. The simulation is an opportunity for participants, representing politicians from the
member nations of the European Community, to discuss issues and resolutions of current concern to the EC.

To prepare for this simulation, a 2 -credit seminar, Government 431, is offered each spring. Participation in the simulation will be open only to those who register for this seminar. Anyone interested in participating or in finding out more information should contact the Western Societies Program at 130 Uris Hall, 255-7592.
International Relations Concentration. See the description under "Special Programs and Interdisciplinary Studies."
Honors. Each fall a small number of qualified seniors enter the honors program To apply, junior majors submit applications in April. Along with a fuller description of the honors program, application forms are available in 125 McGraw Hall. The two courses comprising the honors sequence (honors courses) are described below.

## Introductory Courses

Students registering for introductory courses should register for the lecture only. Sections will be assigned during the first week of class Introductory courses are also offered during summer session.

## GOVT 111 Introduction to American Government and Politics

Fall and summer. 3 credits. T. J. Lowi. An introduction to government through the American experience. Concentration on analysis of the institutions of government and politics as mechanisms of social control.

## GOVT 131 Introduction to Comparative

 Government and PoliticsFall and summer. 3 credits. V. Bunce. This course provides a survey of the institutions, political processes, and policies of contemporary states. It focuses on the conditions for and workings of democracy. Looking at Western Europe, we will analyze institutional variations among liberal democracies, and their political implications. We will then probe the origins of democracy in Western societies and the reasons why communism and other forms of authoritarian rule have prevailed elsewhere. Finally, we will explore the impetus behind and the obstacles to democratization in the Third World and the erstwhile Communist Bloc Throughout this survey, problems of democracy will be related to problems of economic development, efficiency, and equality.

## GOVT 161 Introduction to Political Philosophy \#

Spring and summer. 3 credits.
I. Kramnick.

A survey of the development of Western political theory from Plato to the present. Readings from the works of the major theorists. An examination of the relevance of their ideas to contemporary politics
GOVT 181 Introduction to International Relations
Spring and summer. 3 credits. S. Telhami. An introduction to the basic concepts and practice of international politics.

## Freshman Writing Seminars

GOVT 100 Freshman Seminars
Fall, spring, or summer. 3 credits. Seminars will be offered in fall, spring, and summer terms. Consult the listings for the Freshman Seminar Program in the section "Special Programs and Interdisciplinary Studies," the supplement issued by the department, and the Freshman Seminar booklet for course descriptions and instructors.

## Major Seminars

## GOVT 400 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 majors over nonmajors and seniors over juniors. Topics and instructors change each semester. To apply, students should pick up an application in 125 McGraw Hall during the course selection period the semester before the seminar is given.
The following courses are open to sophomores, juniors, and seniors without prerequisites unless otherwise indicated.

## American Government and Institutions

Government 111 is recommended.

## [GOVT 121 Economic Growth and

 Democratic Legitimacy3 credits. Not offered 1997-98.)
GOVT 302 Social Movements in American Polltics (also American Studios 302)
Fall. 4 credits. E. Sanders. From populism to environmentalism, social movements directed at reform of national policies and political structures have been an earmark of American politics. This course will begin with an examination of late nineteenth-century agrarian and labor movements and move through progressivism, a variety of 1930 s upsurges, civil rights, and more or less contemporary environmental, consumer, feminist, and peace movements. The focus will be on the conditions that gave rise to these movements, their internal resources, and external alliances and their ultimate impact on the national state (as well as vice versa).
[GOVT 303 Introduction to American Political Partles
4 credits. Not offered 1997-98.]
GOVT 305 Atomic Consequences: The Incorporation of Nuclear Weapons in Post-War America
Spring. 4 credits. M. Dennis.
This course will explicate the development of atomic weapons from early twentieth-century ruminations about super bombs in science and fiction through the Manhattan Project, the postwar development of thermonuclear weapons and civil defense, and more recent plans for strategic defense. Our focus will expand to cover the lives of researchers at such institutions as Los Alamos during and after World War II as well as discussions of national politics. Other topics include the Nazi effort to develop an atomic bomb, the role of technical espionage during and after

World War II, and the problems posed by the classification of technical knowledge. From our vantage point at the end of the cold war, we will seek to understand how the bomb became part of American culture through the use of literature and film, as well as reading in primary historical documents and secondary analyses.

## GOVT 308 Science in the American

 Polity 1800-1960Fall. 3 credits. M. Dennis.
For description, see S\&TS 390.

## GOVT 309 Science in the American

 PolltySpring. 4 credits. S. Jasanoff.
For description, see S\&TS 391

## 【GOVT 310 Power and Poverty in

 America4 credits. Not offered 1997-98.]

## GOVT 311 Urban Politics

Fall. 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 313 The Nature, Functions, and

 Limits of LawFall. 4 credits. Undergraduates only. R. Osgood.

A general education course for students at the sophomore and higher levels. Law is presented not as a body of rules but as a set of varied techniques for resolving conflicts and dealing with social problems. The roles of courts, legislatures, and administrative agencies in the legal process is analyzed, considering also the constitutional limits on their power and practical limits of their effectiveness. Assigned readings consist mainly of judicial and administrative decisions, statutes and rules, and commentaries on the legal process. Students are expected to read assigned materials before each class and to be prepared for participation in class discussion.
[GOVT 316 The American Presidency (also American Studies 316)
4 credits. Not offered 1997-98.]
[GOVT 317 Campaigns and Elections
4 credits. Not offered 1997-98.]

## GOVT 318 The American Congress

Spring. 4 credits. M. Shefter.
The role of Congress in the American political system. Topics to be discussed: 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.

## [GOVT 320 Public Opinion and Public

 Choice4 credits. Prerequisite: Government 111
or permission of the instructor. Not
offered 1997-98.]

## COVT 322 Political Economy of

 Capitalist DevelopmentFall. 4 credits. A. Rutten.
Everyday life in Europe has been radically transformed over the past millennium. This course examines how political, economic, and social institutions shaped that transformation, and the institutional reaction to that transfor-
mation. It gives special attention to the development of limited government in Europe, and to the evolution of the American state. We will also consider what lessons, if any, the history of the West offers for modern developing countries

## QOVT 324 Legal Reasoning and Legal Adaptation: A Comparison of American and Talmudic Law <br> Spring. 4 credits. J. Rabkin

Legislatures may change old laws to reflect new preferences, but much American law is still adapted to modern challenges by judges invoking old precedents and principles, particularly in fields like family law, the law of contracts, and the law of torts. Talmudic law, which rests on much older principles and precepts and cannot fall back on new legislation to justify change in the modern world, must also be adapted to new circumstances. The rabbinic authorities who seek to apply this law often invoke similar kinds of reasoning as American courts but under peculiar constraints. This course, an unusual venture in comparative law, will focus on characteristic modes of reasoning in each system, rather than attempting any systematic surveys of legal outcomes. Readings will include selections from ancient texts as well as modern decisions and contemporary commentaries. No previous background is required.

## GOVT 327 Civil Liberties in the United States <br> Spring. 4 credits. A. Rutten.

An analysis of contemporary issues in civil liberties and civil rights, with emphasis on Supreme Court decisions. Cases are analyzed in terms of democratic theory and the social and political context in which they arose.

## GOVT 328 Constitutional Politics: The United States Supreme Court

Fall. 4 credits. J. Rabkin.
The course investigates the role of the Supreme Court in American politics and government. It traces the historical development of constitutional doctrine and the institutional role the court has played in American politics.

## GOVT 353 Feminism Movements

 and the State (also Women's Studies 353)4 credits. Not offered 1997-98.]
[GOVT 401 Introduction to Sclence and Technology Policy (also S8TS 431)
4 credits. Not offered 1997-98.]

## GOVT 402 Public Opinion and Mass

 Polltical BehaviorFall. 4 credits. J. Cowden.
This survey course examines the processes by which people develop their political attitudes and beliefs, the ways in which these attitudes and beliefs find expression in electoral behavior, and the conditions under which public sentiment is translated in public policy and government action.

## [GOVT 405 Government and the

 Economy (also GOVT 705)4 credits. Not offered 1997-98.]

## GOVT 406 Politics of Education (also

 GOVT 706)Fall. 4 credits. E. W. Kelley.
Education is simultaneously America's biggest business and the institutional process through which skills and values are passed on to the next generation. This course deals with
conflicts about, and the politics of, education as they occur at national, state, and local levels. What (including values) will be taught and to whom; who will benefit from formal education as a vehicle for entry into economic opportunity? What are the powers and restrictions on government in this area? How does the American system differ from other systems? How does educational testing affect equal opportunity to obtain meaningful competencies and jobs?
[GOVT 407 Law, Sclence, and Public Values (also S8TS 407)
4 credits. Not offered 1997-98.]
GOVT 409 Racial Prejudice and Political Intolerance
Fall. 4 credits. J. Cowden.
This course explores the nature, scope, and etiology of intolerance and its implications for the opeartion of politics in the United States. Readings will include many of the "classics" in political science, political psychology,
psychoanalysis, and social psychology, dating from the 1930s to the present.

## GOVT 410 Legislatures, Courts, and Public Policy

Fall. 4 credits. A. Rutten.
Courts play a central role in the formulation and enforcement of policy in the United States. However, courts are not all powerful; politicians and bureaucrats have a variety of ways of changing judicial decisions. This course examines judicial control over policy by examining the relations among politicians, bureaucrats, and judges. To do so, we must examine how courts fit into the political process. Among the topics that we will consider are statutory interpretation, administrative procedures, and constitutional review.

## [GOVT 413/613 Finance, Federalism, and Politics <br> 4 credits. Not offered 1997-98.]

## GOVT 427 The Politics of Environmental

 Protection in AmericaFall. 4 credits. S. Jasanoff
For description, see S\&TS 427.
[GOVT 428 Govemment and Public Pollcy: An Introduction to Analysis and Criticism
4 credits. Not offered 1997-98.]

## Comparative Government

Government 131 is recommended.
[GOVT 252 Contemporary Palestinian Society (also NES 298)
3 credits. Not offered 1997-98.
See Near Eastern Studies 298 for description.]
[GOVT 271 Introduction to African Development (also CRP 271 and ASRC 271) ${ }^{(B)}$
3 credits. Not offered 1997-98.]

## [GOVT 325 Eastern Europe

4 credits. Not offered 1997-98.]
[GOVT 332 Modern European Politics
4 credits. Not offered 1997-98.
This course presents an introduction to politics and political change in Western Europe. It starts from the formation of the European nation-state and the growth of democratic regimes after the French Revolution. It continues with the nature of European systems of government and with the political party system; it then turns to the politics of
public policy and to the interaction between policy-makers and societal interest groups. The course ends with an analysis of the interaction between politics and economics in the different countries. The main countries studies are France, Germany, Britain, Italy, Spain, and the Scandinavian countries, with the United States used as an external reference point.]
[GOVT 333 Government and Polltics of the Former Soviet Union
4 frectits.- Not offered 1997-98.]
Cova 33a Polltical Economy of East Asia
Spring. 4 credits. R. Bullock.
This lecture course examines East Asian political economy in historical and comparative perspective. Central questions include: Why have Japan, South Korea, and Taiwan developed so rapidly in the postwar era? Can we identify an East Asian mode of development? What does the region's growth mean for other countries and for the international economy? Are Southeast Asian countries following a similar trajectory today? Particular topics include Japanese colonialism, industrial policy and its critics, domestic political consequences of rapid growth, political corruption, US-Japan economic conflict, and recent attempts at political-economic liberalization.
[GOVT 335 America In the World \# 4 credits. Not offered 1997-98]

GOVT 340 Latin American Politics © Spring. 4 credits.
This is the introductory lecture course to the politics of Latin America. The main purpose is to view the region in a conceptual and comparative perspective. Country cases will be introduced in order to understand the fundamental historical processes as well as to explain the significance of competing theoretical frameworks that have shaped the debate in the field. The course will focus on the political economies of the region in order to analyze the role of groups and classes under different political regimes and contrasting strategies of development.

## [GOVT 342 The New Europe

4 credits. Not offered 1997-98.]
[GOVT 344 Government and Politics of Southeast Asia (e)
4 credits. Not offered 1997-98.]
GOVT 346 Modem Japanese Politics 잉 Fall. 4 credits. R. Bullock.
This course is an introduction to Japanese domestic politics and political economy. Subject matter begins with post-Meiji Japan but focuses on the postwar era. Questions to be explored include: Who rules Japan? How is policy formulated? How do we account for postwar political stability and rapid economic growth? How are opposition interests accommodated or ignored? How is the political system changing today?
GOVT 347 Government and Polltics of China
Fall. 4 credits. V. Shue.
An introduction to the main currents in China's domestic politics over the last sixty years. Topics include the revolutionary rise of communism; Maoism, in theory and in practice; the politics of bitterness during the "Cultural Revolution"; the evolving roles of the party and the military, and of peasants,
workers, and intellectuals in the polity; the prospects for democracy, perceived social inequality, violence, corruption, and other pressing problems that have emerged with the reforms under Deng Xiaoping.
[GOVT 349 Polltical Role of the Military 4 credits. Not offered 1997-98.]
[GOVT 350 Comparative Revolutions
4 credits. Not offered 1997-98.]
[GOVT 354 America In the World Economy
4 credits. Not offered 1997-98.]
[GOVT 355 International Relations of the Ancient Near East
4 credits. Not offered 1997-98.]
[GOVT 357 Understanding Russia Today 4 credits. Not offered 1997-98.
For description see, Russ L 330.]
GOVT 358 Modern Mistory of the Middle
East: Changing Politics, Soclety, and Ideas ©
Fall. 4 credits. M. Litvak.
For description, see NES 294
[GOVT 430 Democracy, Power, and Economic Reform
4 credits. Not offered 1997-98 At a time of major political and economic reforms taking place in much of the Second and Third Worlds, and also in some of the First, fundamental questions about governance have been raised. The task before reformers is not limited to establishing a political system of individual rights and the rule of law, or of designing fair electoral systems and holding regular elections. It is also about establishing new forms of political power, or as Max Weber might put it, establishing new and effective systems of political domination. The reformers' need to carry out massive structural transformations has often implied centralizing authority, at the same time they are supposed to foster democracy. The dual challenge is thus one that much of the political development theory has tended to see as sequential rather than simultaneous: to centralize political power in order to carry out major socio-economic transformations, and to build democratic institutions which, by definition, disperse power. This seminar will examine these questions by focusing on some of the more important theoretical debates about the interrelationship between democracy and structural reform, the state and the economy, the crafting of order and the creation of markets.]

## [GOVT 431 Model European Union

2 credits. Not offered 1997-98.
This two-credit course is designed to prepare students to participate in the annual Model European Union Simulation held, on an alternating basis, at SUNY Brockport and in Brussels. The simulation provides an opportunity for participants, representing politicians from the member states of the European Union, to discuss issues and resolutions of current concern to the EU. The preparatory course introduces students to the EU, the country that the Cornell team will represent, and the issues to be discussed at the simulation. A substantial part of travel costs for the Cornell team will be paid by the Institute for European Studies, and course enrollment will be restricted by budgetary considerations. Students enrolled in this course are required to write a research paper.\}
[GOVT 433 The Politics of Economlc Liberalization in the Developing World 상
4 credits. Not offered 1997-98.]

## [GOVT 434 Politics and Society In Modern Italy <br> 4 credits. Not offered 1997-98.]

[GOVT 436 Environmental Pollifics and Policy
4 credits. Not offered 1997-98.1

## [GOVT 437 Contemporary China:

 Society and Politics ©Spring. 4 credits. V. Shue
Selected reading and in-class discussion of some of the central dilemmas that have been posed by the rapidly escalating processes of social change taking place under conditions of continuing political authoritarianism in China today. Topics include broad changes in demographic and social structure; rising tensions in family and gender relations; the enduring salience of community and workplace; the resurgence of Chinese nationalism, of ethnic nationalisms, of regionalism, and of popular religious movements; the significance of rising rates of crime and of political corruption; the growing crisis of social welfare delivery; and the limits on political dissent and on the development of civil society.

## [GOVT 438 Contemporary China:

 Political Economy (6)4 credits. Not offered 1997-98.]
[COVT 439 Japan in International Politics ()
4 credits. Not offered 1997-98.]

## GOVT 442 Feminist Politics and Pollcy in

 the United States and Europe (also GOVT 655)Spring. 4 credits. U. Liebert.
In both Western Europe and the United States, feminist organizations as well as public policies that support gender equality are simultaneously under siege and yet still vibrant. Instances of this are the increasing gender gap in political voting behavior, the advancements in feminist political representation and participation in all major spheres of society and politics, the public debates on topics once considered private-including women's, gay and lesbian issues-and ongoing demands for state and federal legislation (in Europe: national and EUlegislation) to act on gender related discrimination. Through cross-national comparisons we hope to assess the strengths and weaknesses of public and private gender politics and policies in Europe and the U.S., and to discuss how differences can be traced to variations in institutional structures of "party government" and the "welfare state," to media framing and patterns of public discourse, to feminist organizational strategies, power resources and alliances, as well as to conflicts of interests and struggles over values and symbolic meanings. The course is addressed to female as well as male advanced undergraduate and graduate students interested in studying gender issues in a comparative perspective.
[GOVT 443 Proseminar in the Politics of South Asia
4 credits. Not offered 1997-98.]
[GOVT 444 Afrocentrism
4 credits. Not offered 1997-98.]

GOVT 454 The Herodotean Moment: The Uses and Abuses of "Western Civilization" (also Comparatlve Literature 454, History 454) \#
Fall. 4 credits. M. Bernal.
The basic premise of the seminar is that the concept of "Western civilization" is a problematic one in need of critical and historical analysis. The course will examine the evolution and transformation of this concept from antiquity to the twentieth century by focusing on selected moments (and texts in which they are represented) of actual and/or perceptual encounters with other civilizations. It will also inquire into the political uses and abuses of the idea of the West, and the literary, psychological, and anthropological dimensions of the idea's history.

## [GOVT 458 Comparative

 Democratization4 credits. Not offered 1997-98.]

## [GOVT 468 Global and Domestic

 Dimensions of Science and Technology Policy (also S\&TS 425)4 credits. Not offered 1997-98.]

## Political Theory

## Government 161 is recommended,

[GOVT 361 Modern Ideologies: Liberalism and Its Critics \#
4 credits. Not offered 1997-98.]

## [GOVT 362 Politics of Sexuality (also

 Women's Studles 262)4 credits. Not offered 1997-98.1

## [GOVT 364 The Selfish Individual and the

 Modern WorldFall. 4 credits. N. Hirschmann. Michael Milken and Ivan Boesky broke the law: but did they really do anything wrong? Is acting selfishly simply human nature, or its perversion? Do we have narural obligations to others, or is everyone out for themselves? This course will consider these questions through the lens of modern political theory from Hobbes to contemporary times. We will consider the relation of the individual to society to examine different understandings of "the individual," and how they change over time. In the process, we will examine how these understandings affect the meaning of concepts such as freedom, equality, and justice, as well as the form and role of government. This course will follow a seminar format and rely heavily on class discussion. Enrollment limited.
[COVT 366 American Political Thought from Madison to Malcolm X (also History 316 and American Studies 366)
4 credits. Not offered 1997-98.]
[GOVT 368 Global Climate and Global Justice (also Philosophy 368) 4 credits. Not offered 1997-98.]
[GOVT 369 Introduction to Feminist Political Thought (also Women's Studies 269)
4 credits. Not offered 1997-98.]

## GOVT 370 Political Theory and Cinema

 Fall. 4 credits.For description, see GERST 330.

## GOVT 375 Visual Culture and Social

 Theory (also ART H 370 and Comp. 닌. 368)Fall. 4 credits. S. Buck-Morss
Introduction to critical concepts for the analysis of visual culture, in specific socio-historical contexts.

QOVT 377 Concepts of Race and Racism
Spring. 4 credits. A. M. Smith.
This course examines race and racism from a political theory perspective. We will discuss the different types of racism: traditional racism, "new racism," or cultural racism, scientific racism and contemporary hybrid racism. We will then examine the politically ambiguous "ethnicity theory." In the second half of the course, we will consider the works by Marable on African American political economy; women of color feminist theorists; native American theorists; Takaki on Asian American labor history; and Hero on Latinos/ Latinas and American politics. Although we will discuss American multicultural history in some detail, our primary focus will be on an investigation of these works' theoretical foundations.
GOVT 462 Modern Political Philosophy
Fall. 4 credits. R. Miller
For description, see PHIL 346.

## COVT 466 Feminism and Gender Discrimination

Spring. 4 credits. K. Abrams.
This course will introduce students to the major schools of feminist legal theory, including equality theory, difference theory, and anti-essentialism. It will then use these theories as a framework for examining several areas in which the law has attempted to address gender-specific injuries. These will include the workplace (sexual harassment, regulation of fertility, work/family conflict), the family (abortion, surrogacy), and violence against women (rape, spousal abuse, pomography). The course will emphasize analysis and critique of present political and legal responses and formulation of alternative responses. Some previous exposure to legal materials (case law, statutes) is useful but not required.

## GOVT 467 Radical Democratic <br> \section*{Feminisms}

Fall. 4 credits. A. M. Smith.
Radical Democratic Feminisms is an advanced feminist theory seminar. We will focus on contemporary political discourses that are influenced by socialist feminism, radical democratic pluralism, critical race theory, and radical anti-racist and anti-heterosexist multiculturalism. The reading list will include works by Sheila Rowbotham, Joan Scott, Michele Barrett, Lynne Segal, Zillah Eisenstein, Frances Fox Piven, Barbara Ehrenreich, Jacqui Alexander, Chandra Talpade Mohanty, Judith Butler, Julia Epstein, Anne McClintock, Angela Davis, Alice Echols, Dangerous Bedfellows, Lisa Duggan, Nan Hunter, Amy Gluckman and Betsy Reed, Elizabeth Grosz, Elspeth Probyn, Katha Pollitt, Renata Salecl, Patricia J. Williams, Ellen Willis, Gayatri Spivak, Jeffrey Escoffier, Barbara Epstein, and bell hooks. Students should have completed at least one course in feminist theory and at least one course in social theory or political theory before taking this course.

GOVT 468 Global and Domestic Dimensions of Science and Technology Policy
Spring. 4 credits. S. Jasanoff.
For description, see S\&TS 425.
[GOVT 470 Anthropology-Theory-Politics-Performance (also Anthropology 470)
4 credits. Not offered 1997-98.]
[GOVT 473 Marx, Nietzsche, Freud (also German Studies 415)
4 credits. Not offered 1997-98.]
GOVT 474 Community, Nation, and Moralify
Spring. 4 credits. R. Miller.
For description, see PHIL 446.

## International Relations

Government 181 is recommended.

## GOVT 294 Global Thinking (also Phllosophy 294) ©

Fall. 4 credits. No prerequisites; intended for Freshmen and Sophomores. Fulfills geographical distribution requirement. H. Shue.

The analysis taught in this course is global in two different respects: international subjects and interdisciplinary methods. We look in detail at questions raised by one of the most important and most difficult issues facing international society: when, if ever, should other nations unilaterally or multilaterally intervene militarily into ethnic conflicts like those in Bosnia and Rwanda in this decade? Both of these recent cases, one in Europe and one in Africa, raise fundamental questions about the kind of world we are constructing for the 21 st century. To what extent is the system of nation-states we now have either desirable or unavoidable? Does every ethnic group have a right to a self-determining and sovereign state? When is the use of military force morally justified? Should trials for war crimes or crimes against humanity be routinely held after military conflicts? These and other ethical questions need to be answered in light of the best available knowledge about the political dynamics of foreign interventions and the changing international legal regime, bringing together political science, law, and ethics. The course is team-taught by leading faculty researchers from the three fields listed.
[GOVT 380 The Polltics of German Unification
4 credits. Not offered 1997-98.]
[GOVT 382 International Relations of East Asla
4 credits. T. Christensen. Not offered 1997-98.]
[GOVT 383 Theorles of International Relations
4 credits. Not offered 1997-98.]

## GOVT 386 The Causes of War

 Spring. 4 credits. C. Way.Review of the theoretical literature on the causes of war and sources of peace. Application of theories to case studies of specific wars and consideration of different proposals for preventing war. Topics include contrasting explanations for the origins of World War I and II; the democratic peace; and the prospects for military conflict in the post-Cold Wat era.

## GOVT 388 International Political Economy <br> Fall. 4 credits. J. Kirshner.

This course examines the politics of international political economic relations. It will draw on the history of the modern international economy and explore the theories that have been used to explain its evolution. The goals of the course are to gain insights into contemporary issues, and to understand how scholars of international relations and economics describe and explain problems in the global economy.
[GOVT 389 International Law
4 credits. Not offered 1997-98.]
GOVT 391 Chinese Foreign Policy ©
Spring. 4 credits. T. Christensen.
This undergraduate lecture course will review and analyze the foreign policy of the People's Republic of China from 1949 to the present. Lectures will discuss the Cold War history of Beijing's relations with the Soviet Union, the United States, Southeast Asia and the Third World. Various theories of foreign policy will be discussed as potential tools for understanding Chinese foreign policy behavior. The class will conclude with a discussion of the future of Chinese foreign policy in light of the end of the Cold War, changes in the Chinese economy and the post-Tiananmen legitimacy crisis in Beijing.

## [GOVT 392 International Relations of the Middle East (also NES 395) ©

4 credits. Not offered 1997-98.
This course will examine patterns of international relations in the Middle East in the twentieth century, with special reference to the Arab-Israel and Iran-Iraq conflicts. These conflicts will be treated as part of a Middle East system, whose other main elements are the interaction between domestic and external politics, inter-Arab relations, and the involvement of extraregional powers.]

## GOVT 393 Introduction to Peace Studles

 (also SOC 393)Fall. 4 credits. J. Reppy
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.

## GOVT 394 Comparative Foreign Policy

Spring. 4 credits. M. Evangelista. This course explores the sources of differences in foreign-policy processes and outcomes between and within states. One school of thought holds that differences in the characteristics of the countries in question (large versus small, democratic versus authoritarian, industrialized versus developing, etc.) lead to differences in their foreign policies. Another argues that the important differences are not so much between countries as between "issue-areas," for example, military policy versus trade policy. In this course, students will evaluate the competing explanations by looking at a number of aspects of foreign policyincluding diplomacy, strategy, economic policy, and alliance policy-in several areas and historical cases: the World Wars, the Cold

War, arms races, North-South political and economic relations, foreign economic policies of advanced industrial, state-socialist, and developing countries. We will attempt to understand why some states are more successful than others in achieving the main goals of foreign policy: security and prosperity.

## [GOVT 395 Palestinian Nationallsm (also

 NES 399)4 credits. Not offered 1997-98.]

## [GOVT 398 North-South Relations

4 credits. Not offered 1997-98.]

## GOVT 475 The Politics of International Monetary and Financial Relations

Spring. 4 credits. J. Kirshner.
Government 475 is a topical seminar which focuses on a different aspect of international political economy each time it is offered. The goal of the course is to explore the historical and theoretical background of a particular issue or controversy and consider the implications of that analysis for the contemporary system.

## GOVT 477 Ratlonal Choice Approaches

 to Intemational RelationsSpring. 4 credits. R. McDermott. Rational Choice paradigms are becoming increasingly predominant in International Relations scholarship. This course teaches international relations from a Rational Choice perspective. This course will cover modelling methodology and theoretical issues. Familiarity with mathematics is not required, but logical reasoning is emphasized. This course will cover rational choices approaches to social choice and public good problems, negotiation, alliances and constraints of domestic politics. Critiques of balance of power, deterrence, and power transition theories from a rational choice perspective will be included. An introduction to Game Theory will be provided. Alternative psychological approaches will be mentioned briefly.

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[OOVT 482 International Relations of East Asla @
4 credits. Not offered 1997-98.]
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## [GOVT 483 The Milltary and New Technology (also S\&.TS 483) <br> 4 credits. Not offered 1997-98.]

## [GOVT 489 International Law and

 Regime Development4 credits. Not offered 1997-98.]
GOVT 491 Conflict, Cooperation, and Norm: Ethical Issues in Internatlonal Affairs
Fall. 4 credits. M. Evangelista. This course examines current and historical issues in international relations from the perspective of international law, norms, and ethics. We develop general principles and concepts, such as "just war," "national interest," and "human rights," and apply them to real-world situations. Most of the focus of the course is on particular cases that involve legal and ethical issues: violations of human rights and genocide; war crimes; military intervention; economic sanctions; environmental degradation; economic injustice. The first part of the course examines these issues using examples from 20th century international affairs, including recent events. The second part focuses on current issues that pose ethical problems for the foreign policy of the United States: internal violence and human
rights abuses in the former Yugoslavia and former Soviet Union; indigenous uprisings in Mexico and their relation to U.S. foreign economic policy; the appropriate U.S. response to situations in countries such as Haiti, Nigeria, and China

## Honors Courses

Each April a limited number of junior majors are admitted to the honors program, their work to begin the following fall. Application forms and a full description of the program may be obtained in 125 McGraw Hall.

## GOVT 494 Honors Seminar: Thesis Clariflcation and Research

Fall. 4 credits. E. Sanders. Each student works individually with a faculty member. The student initiates the tutorial by interesting a faculty member in his or her likely thesis project and by submitting to the director of undergraduate studies a form outlining the general area the thesis will treat and bearing the faculty tutor's signature. This form is due the third week of classes. The tutorial culminates in a ten-to-fifteen-page paper setting forth the central questions to be addressed by the thesis, the state of existing knowledge regarding those questions, and why they matter.

## OOVT 495 Honors Thesis: Research and Writing

Spring. 4 credits. Limited to students who have successfully completed Government 494.
Students continue the work of the preceding semester typically with the same faculty tutor Research on the thesis is completed and writing begun. The tutorial culminates in a thesis of some sixty to eighty pages. The grade for the tutorial is determined by the faculty tutor, while the degree of honors (if any) awarded the thesis is decided by a committee of faculty members established for that purpose.

## Independent Study

Independent study, Government 499, is a one-on-one tutorial which is arranged by the student with a faculty member of their choosing. Government 499 is 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 125 McGraw Hall and must be completed at the beginning of the semester in which the course is being taken.

## GOVT 499 Readings Fall or spring.

Fall or spring. $1-4$ credits.

## Graduate Seminars

Qualified undergraduates are encouraged to apply for seminars listed with 600 course numbers but may only register with the permission of the instructor. Students may consult the supplement that lists graduate courses, available in the department office.

## Fleld Seminars

GOVT 603 Fleld Seminar In American Politics
Fall. 4 credits. M. Shefter and J. Rabkin. The basic issues and institutions of American government and the various subfields of American politics are introduced. The focus is on substantive information and theoretical analysis and problems of teaching and research.
GOVT 606 Field Seminar In International Relations
Fall. 4 credits. J. Kirshner and
T. Christensen.

A 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 will be expected to do extensive reading in the literature as well as research.

## GOVT 607 The Western Political

 Traditlon: A SurveyFall. 4 credits. N. Hirschmann. An introduction to political theory through a reading of selected classics in political thought from Plato to Marx.

## Methodology

GOVT 601 Scope \& Methods of Political Analysis
Fall. 4 credits. J. Cowden and

## J. Pontusson.

This course introduces the major analytical approaches used in contemporary political science research. We touch on broad philosophical issues concerning the nature of theory and inference, the practices of cultural and historical interpretation, and the relevance of moral values and political commitments. Several kinds of research designs, including comparative case study and quasi-experimentation, are briefly examined. The basic analytical ideas involved in statistical methods such as sampling and regression analysis are introduced, as are the basic concepts of the theory of collective choice and the elementary methods of applied game theory.

## [GOVT 602 Field Seminar in Political Methodology <br> 4 credits. Not offered 1997-98.]

[GOVT 605 Comparative Methods
4 credits. Not offered 1997-98.]
[GOVT 608 Nommative and Interpretive Methodologies
4 credits. Not offered 1997-98.
This course will present various normative and interpretive methodological approaches to issues in political science. Though the specific focus of the course will vary depending on the interests of the instructor, the general orientation of the seminar will be to expose students to the role of hermeneutic techniques and qualitative criticism in political analysis. This course will fulfill departmental requirements for the second methodology course.]
[GOVT 610 Formal Theory and Modelling 4 credits. Not offered 1997-98.]

## GOVT 707 Game Theory for Political Science

Spring. 4 credits. C. Way Introduction to game theoretic models of politics. Lays out the logical basis of game theory at an accessible level, and demonstrates applications to topics in comparative politics, international relations, and American politics. Students will achieve an understanding of the basic concepts of game theory, the ability to solve and to formulate simple games, and some knowledge of the basic models used in political science.

## American Government and Institutions

[GOVT 609 Political Parties and Elections
4 credits. Not offered 1997-98.]
GOVT 611 The Political Economy of American Development, 1860-1900
Fall. 4 credits. R. Bensel.
This course will trace and describe the political economy of national state formation from the last decades of the antebellum period, through the Civil War and Reconstruction eras, and end with the transition to a more industrial society during the late nineteenth and early twentieth centuries. Utilizing a broad survey of the historical literature on these periods, the course will investigate: (1) the connection between slavery and the emergence of southern separatism; (2) the impact of conflict between the plantation South and industrializing North on American state formation; (3) the failure of post-Civil War attempts to remold the southern political economy; (4) the role of finance capital markets in indistrial and western agrarian expansion and the consequent emergence of monetary issues in national politics; and (5) the political economic basis of possible developmental trajectories other than the high-tariff, gold-standard one actually followed.

## [GOVT 612 American Political

Development II: Social Movements and State Expansion in the
Twentieth Century
4 credits. Not offered 1997-98.]

## [GOVT 613/413 Finance, Federalism,

 and Politics4 credits. Not offered 1997-98.]

## GOVT 615 State and Economy In

 Comparative PerspectiveSpring. 4 credits.
This course reviews the extensive literature on the political economy of comparative state formation and institutional change. Among the topics covered will be war-making and state expansion, regime evolution and economic development, and market processes and class transformations. Although much of the reading and discussion will focus on the United States and Europe, the limits of these cases as theoretical prototypes for the remainder of the world will also be considered.

## GOVT 618 Politics, Markets, and the Middle Classes

Spring. 4 credits. E. Sanders and R. Bullock.

The middle sectors-white collar workers, farmers, professionals, and small business people-have played critical roles in development, democratization, and social
movements, but the literature analyzing their class identities, values and coalitional tendencies is rather sparse. Readings for this course will be diverse, ranging from the U.S. and Europe to East Asia and developing countries. However, the course is primarily intended as a research workshop, with members presenting their work-in-progress during the second half of the semester.
[GOVT 620 The Unlted States Congress
4 credits. Not offered 1997-98.]

## GOVT 623 The Politics of Courts

Spring. 4 credits. J. Rabkin.
All modern or westernized governments have judicial organs, designed to provide impartial decisions on certain kinds of disputes. But the kinds of issues that are left to courts vary widely from country to country and from era to era; the forms and degrees of political insulation for courts also vary widely; even the official rationales for such institutions vary a good deal. All of these differences are sometimes subjects of political controversy. This course will survey various forms and doctrines of judicial authority, seeking to clarify the relation between particular judicial models and the political systems in which they operate. Supra-national courts and administrative organs will be included in the survey, but principal emphasis will be on the role of courts in English-speaking countries.
[GOVT 629 Cleavages and Coallitions In Contemporary Amerlcan Politics
4 credits. Not offered 1997-98.]
[GOVT 703 Political Economy
4 credits. Not offered 1997-98.]

## [COVT 705/405 Government and the Economy

4 credits. Not offered 1997-98.]
GOVT 706 The Politics of Education Fall. 4 credits. E. W. Kelley.
See Govt 406 for description.

## Public Policy

[GOVT 626 Workshop on Law, Science and Technology (also S8TS 626) 4 credits. Not offered 1997-98.]

## Comparative Government

[GOVT 633 European Party Systems and Political Change
4 credits. Not offered 1997-98.J
[GOVT 634 Genetic Engineering: Politlcs and Society in Comparative Perspective
4 credits. Not offered 1997-98.]
GOVT 638 Latin American Political Economy
Spring. 4 credits. H. Schamis.
The central goal of this seminar is to examine the magnitude and scope of the decades-long process of economic transformation in the region and capture its implications for political stability. In order to do so, we will adopt a historical political economy approach. Old concepts-populism, corporatism, national-ism-will be reviewed in light of new developments. Different economic phases and strategies-export-led growth, importsubstituting industrialization, market-oriented reform-will be analyzed in light of the region's changing social structures, unstable political institutions, and shifting preferences and ideologies of social actors. And classic theoretical approaches-Modernization,

Dependency, Bureaucratic-Authoritarianismwill be reevaluated in light of the current convergence toward marketization and democratization.
GOVT 639 Studying Political Culture
Fall. 4 credits. V. Shue.
Selected readings deploying a range of differing approaches to the study of the relations between culture and politics. Discussion of central methodological and interpretive questions including the linkage of cultural with structural explanations and the framing of informative comparisons across cultures. Readings and discussion focused on, but not confined to, Asian examples.

## COVT 642 Comparative Political

Economy: East and Southoast Asia
Fall. 4 credits. R. Bullock.
This seminar focusses on the political economy of rapid growth in postwar Japan, South Korea, and Taiwan. Seminar themes include: Japanese colonial legacies; contending models of East Asian economic success; international implications of rapid growth; the "Japanese model of development" and regional variance; one-party conservative rule; structural corruption and political scandal; ongoing efforts at political-economic liberalization; and Southeast Asian cases as second-generation NICs.
[GOVT 644 Sociotechnical Aspects of Irrigation
Not offered 1997-98.]
GOVT 645 Chinese Politics
Spring. 4 credits. V. Shue.
Review and assessment of several of the major currently competing approaches to the study of Chinese politics. Discussion and evaluation of leading works in the field analyzing Chinese state and society, policymaking and policy implementation, bureaucratic politics, elite political culture, and political economy. Special attention to problems of research and interpretation.
[COVT 647 Political Anthropology: Southeast Asia
4 credits. Not offered 1997-98.]
[GOVT 648 Pollitical Economy of Change: Rural Development in the Third World
4 credits. Not offered 1997-98.]

## [GOVT 649 Agrarian Polltical Economy: Land, Labor, and Nature

4 credits. Not offered 1997-98.]
[GOVT 652 Southeast Asia Seminar: The Philippines (also Aslan Studies 601) 4 credits. Not offered 1997-98.]
[GOVT 653 The Plural Society Revisited (also Asian Studies 602 and 607)
4 credits. Not offered 1997-98.]
GOVT 655 Gender, Polltics and Welfare Policies In Europe and the U.S. (also GOVT 442)
Fall. 4 credits. U. Liebert.
How can we rethink the welfare state from a gender perspective? How do welfare reforms restructure and welfare debates re- and/or deconstruct gender relations? To what extent do institutional constraints and gender representation matter for explaining gender bias in different welfare retrenchment policies? By comparing recent experiences and developments in the U.S. and Europe (European Union), we will discuss and further develop the emerging body of feminist
theories on democratic welfare state politics and policies. Situated at the intersection of gender studies and welfare state analyses, the materials will cover the following areas: (1) feminist as well as "mainstream" theories of the welfare state and its "retreat" in the context of global change; (2) comparative analyses of the impact of distinct welfare regimes on the (re)structuration of gender relations; (3) cultural and discourse analyses of how welfare reform debates are framed and how they de- and reconstruct gender relations differently in different countries; (4) the institutional constraints on and incentives for gender politics, including gender representation and welfare policies, that are embodied in various forms of party government.

## [GOVT 656 Comparative Political Economy

4 credits. Not offered 1997-98.]
GOVT 657 Comparative Democratization
Fall. 4 credits. H. Schamis.
This course will focus on the transition from authoritarian to liberal politics in Eastern Europe and in Latin America. Particular attention will be paid to Poland, Hungary, Russia as well as Argentina, Brazil, and the not-necessarily-transitional Mexico. During the course, we will also bring in a variety of other cases of recent democratization-in particular, Spain, Portugal, Italy, and Greece. Our focus will be equally divided between the empirics of these transitions and theoretical understandings of transitions to democracy.

## GOVT 660 Globalization and Social Movements and Contentious Politics (also SOC 660)

Spring. 4 credits. S. Tarrow
This is a research seminar on the relationships among politics, organized social movements, and periods of mass mobilization like those that swept through Western Europe and the U.S. in the 1960s and in Eastern and Central Europe today. The course begins with a theoretical introduction to major approaches to social movements and collective action, concentrating on the factors that induce masses of people to adopt disruptive forms of collective action. It moves from there to a historical section focusing on cycles of protest in the recent and not-so-recent past. It continues with case materials that illustrate a series of theoretical problems in the study of movements and collective action-particularly that of the relations between protest and reform. Students will write term papers on particular cycles of protest and reform.

## GOVT 692 The Administration of

 Agricultural and Rural DevelopmentSpring. 4 credits. N. Uphoff
For description, see INTAG 603.

## Political Theory

GOVT 663 Political Theories of Power Spring. 4 credits. A. M. Smith
Through reading and discussion of theorists such as Lukes, Gramsci, Laclau and Mouffe, Nietzsche, Foucault, Connolly, Fraser, Butler (Biddy) Martin, (Renata) Salecl, (Joan) Scott, (Jacqueline) Rose and (Mike) Davis, we will explore the contemporary debates on the structure of power relations. Seminar themes will include: the definition of social agents' interests, hegemony, disciplinary regimes, subjectivity and resistance. Seminar participants should already have a basic familiarity with the treatment of power in the political theory tradition.

## GOVT 664 Contemporary Democratic

 TheoryFall. 4 credits. A. M. Smith
Many theorists and activists working on questions of class, racial, gendered and sexual identities have claimed that we must develop a rigorous critique of "essentialism" in order to make way for a truly democratic form of political practice. How are these diverse claims, in post-Marxist texts, critical studies of race and racism, feminist theory and lesbian, bisexual and gay studies, structurally similar? How do the political practices envisioned in these anti-essentialist texts differ from other strategies? Do the demands for antiessentialist theories and practices risk the erasure of politically important identity claims? The reading list will change from year to year; it will probably include selections from the work of Ernest Laclau, Chantal Mouffe, Stuart Hall, Etienne Balibar, Patricia Williams, Vron Ware, Teresa de Luretis, Biddy Martin, Chandra Talpade Mohanty, Joan Scott and Judith Butler.

## [GOVT 665 American Political Thought: From Madison to Malcolm X <br> 4 credits. Not offered 1997-98.]

## GOVT 669 Modern Social Theary I

 Fall. 4 credits. S. Buck-Morss. Readings vary, but topics are drawn from the traditions of Marx, Weber, Durkheim, the Frankfurt School, and Freud. They include political economy, the transformation to "modernity," ideology as the legitimation of power, and social institutions as social constraints. The methods of critical theory, structuralism, poststructuralism, and feminism will be considered.GOVT 670 Modern Social Theory II
Spring. 4 credits. S. Buck-Morss.
Issues raised by neo-Marxism, critical theory, poststructuralism, and feminism.

GOVT 671 Graduate Seminar in Feminist Political Theory
Spring. 4 credits. N. Hirschmann. This graduate seminar will examine contemporary feminist theory from the perspective of political theory. We will study the work of feminist theorists who work specifically within the discipline of political science, as well as the specifically political dimensions of work not generally considered political theory. Though particular readings and topics will change from year to year in response to the most recent literature, in general the course will focus on questions of epistemology and methodology as a way to explore a variety of issues of relevance to feminism as an academic, intellectual, and political enterprise The course is open to undergraduates who have taken Government 463 or other courses in feminist theory, with permission of the instructor.

## [GOVT 674 Theory and Practice of

 Nationalism4 credits. Not offered 1997-98.]
[GOVT 675 Gramsci and Cultural Politics (also German Literature 685)
4 credits. Not offered 1997-98.]

## International Relations

GOVT 681 Politics of Transnationalism Spring. 4 credits. M. Evangelista and S. Tarrow.

With the globalization of the world economy and media and the diffusion of new
international organizations and institutions, economists, political scientists and sociologists have been asking whether the monopoly of the nation-state over international society is eroding. Such erosion could be part of the explanations for the mobility of capital and employment, the diffusion of transnational movements, and for the apparent inability of states to control identity politics within and contagion from without. The central questions of this course are whether something resembling a transnational society is developing and what are the effects of transnational movements on the state.

## [GOVT 682 International Relations of the

 Middle East4 credits. Not offered 1997-98
The focus of this seminar will be patterns of alliances among Middle Eastern states. We will examine the applicability of competing theories of alliance formation in the Middle East, including those that focus on power distribution; perceptions, and domestic politics.]

## [GOVT 683 Foreign Policy Analysis

 4 credits. Not offered 1997-98. This seminar will survey theories of foreign policy and examine their applicability by comparing the foreign policy making in several states. Both theories emphasizing the role of the international system and theories highlighting the relevance of domestic politics will be assessed.]
## GOVT 685 International Political

 EconomySpring. 4 credits. J. Kirshner. An exploration into a range of contemporary theories and research topics in the field of international political economy. The seminar will cover different theoretical perspectives and a number of substantive problems.

## GOVT 686 International Strategy

Spring. 4 credits. T. Christensen.
This seminar will analyze and compare national security strategies, including military doctrine, alliance policies, and foreign economic policy. We will examine how various factors-international structure, domestic politics, and leadership psychol-ogy-contribute to policy outcomes. We will study how different strategies act as stabilizing or destabilizing influences in the international system. We will examine how variation in the international distribution of power (e.g., bipolar, multipolar) affects both individual nations' policies and international stability more generally. Specific topics will include great power strategy, China's Cold War strategies, and factors for stability and instability in the post-Cold War world.
[GOVT 687 International Environmental Policy
Not offered 1997-98.]
[GOVT 688 Political Economy and National Security
4 credits. Not offered 1997-98.]
[GOVT 689 International Security Politics
4 credits. Not offered 1997-98.]

## GOVT 691 Normative Elements of

 International RelationsFall. 4 credits. M. Evangelista and H. Shue.

We examine selected normative elements of international affairs, divided into three interlocking clusters. First are issues about
conflict, including both low-intensity military intervention and nuclear weapons. Second are questions about cooperation, especially between rich nations and poor nations. Third are debates about the authority and status of the major players in the international system: individual persons, nation-states, and international regimes. Questions considered include: is the retention by some nations of nuclear weapons morally justified? Is the world economy unjust? Should national governments be pressured to respect individual human rights?
[GOVT 694 Research Design and Grant Writing
4 credits. Not offered 1997-98.]

## Independent Study

This course is NOT open to undergraduates. Undergraduates wishing to conduct supervised study should register for Government 499.

## GOVT 799 Independent Study

Fall or spring. 4 credits.
Government 799 is a course of individualized readings and research for graduate students.
Topics, readings, and writing requirements will be 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 secretary in 125 McGraw Hall.

## GREEK

See Department of Classics

## HEBREW

See Department of Near Eastern Studies.

## HINDI-URDU

See Languages Courses under Languages and Linguistics.

## HISTORY

I. Hull, chair; M. Steinberg, director of graduate studies; M. Washington, director of undergraduate studies; D. A. Baugh,
S. Blumin, T. Borstelmann, V. Caron,
S. Cochran, P. R. Dear, S. Greene,
P. Holquist, P. R. Hyams, J. J. John,
C. Kammen, M. Kammen, S. L. Kaplan, J. V. Koschmann, D. C. LaCapra,
W. F. LaFeber, R. L. Moore, J. M. Najemy, M. B. Norton, G. Okihiro, C. Peterson, W. M. Pintner, J. R. Piggott, R. Polenberg, W. B. Provine, T. Shiraishi, J. H. Silbey, B. Strauss, D. Usner, R. Weil, J. H. Weiss, D. Wyatt

Emeritus: K. Biggerstaff, P. W. Gates, F. Somkin, B. Tierney, O. W. Wolters

The popularity of history among Comell 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.

## The Major

To complete the history major, a student must fulfill the requirements listed below:
Entry requirement: completion of any two History courses excluding Freshman Writing Seminars.

1) Take history department courses totaling 40 credits and complete all these courses with a grade of C or better. (Courses taken for entry may count towards to 40 credits.)
2) Of the courses totaling 40 credits, take a minimum of:
a. 16 credits outside of American history and
b. 12 credits in 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) Of the courses totaling 40 credits, take at least one 400-level seminar. Appropriate seminars may be used to fulfill Requirements (2a) and (2b).

## 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 the Honors Proseminar (History 400) plus an additional 400 -level seminar, preferably during their junior year, and complete 44 credit hours in history. During the second term of sophomore year or early in junior year, interested students should speak to a faculty member or faculty adviser about the honors program.
Before the beginning of 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 History 401, Honors Research, with their supervisors. Any exceptions to this must be approved by the Honors Committee. History 401 is a 4-credit course that permits honors candidates
to conduct research and to begin writing the honors essay. At the end of the first semester of the senior year, as part of the requirements for History 401, the student submits to the supervisor a ten-to-fifteen page overview, or, alternatively, a preliminary draft of some part of the thesis along with an outline of the whole and meets with a committee consisting of the student's supervisor and one other department member who will eventually serve as a reader of the thesis. That committee then recommends whether the student may proceed to enroll in History 402, Honors Thesis, during the final semester of the senior year. History 402 is a 4 -credit 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 two faculty members who administered the preliminary oral interview in December.

The text of the honors essay may not exceed sixty pages except by permission of the chair of the honors committee and the student's supervisor. Two copies are due during the third or fourth week of April. In May each honors candidate is given an oral examination administered by the supervisor; examination focuses on the essay as well as the specific subfield of history in which the student has conducted research (e.g., Periclean Athens, seventeenth-century science, nineteenthcentury America).
To qualify for a bachelor of arts degree with honors in history, a student must (1) sustain at least a $\mathrm{B}+$ cumulative average in all history courses and (2) earn at least a cum laude grade on the honors essay and on the oral examination.
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.

## Course Offerings

Comparative history
History of science
American history
Latin American history
African history
Asian history
Near Eastern history
Ancient European history
Medieval, Renaissance, and early modern European history

## Modern European history

Honors and research courses

## Course Numbering System

100-level courses are very general introductory courses (like 151-152, 190-191) and freshman writing seminars.

200-249-level courses are similar to freshman writing seminars, except that there is greater emphasis on subject matter and less on writing.

250-299-level courses have no prerequisites and admit freshmen. They cover a relatively broad geographical area, period of time, or subject.
300-399-level courses may have specified prerequisites or deal with more-specialized subjects than do those numbered 250-299. Admission of freshmen varies from course to course and is indicated in the course descriptions.
400-499 are upper level undergraduate courses.
600-699 and 700-799 are graduate level courses.

## Comparative History

## HIST 274 Foodwaym: A Soclal History of Food and Eating

Fall. 4 credits. S. L. Kaplan.
An interdisciplinary examination of the validity of the adage "man is what he eats." Among the topics: food and nutrition, food and social structure, the politics of food control, food and modernization, taste making, and food in religion and literature. Cases will be drawn widely across space and time, from Pharaoh's Egypt to the 1990s.
HIST 360 Early Warfare, East and West
Spring. 4 credits. C. Peterson. A study of the principal modes of warfare found both in the East and the West from ancient times up to the eighteenth century. Tactical evolution and the impact of innovations are stressed, but attention is also paid to the general social and cultural background and the role of nonmilitary factors.

## [HIST 380 Soclal HIstory of Western

 Technology \#4 credits. Not offered 1997-98; next offered 1998-99. J. Weiss.
For description, see History of Science.]

## [HIST 393 Images of Humanlity in Medieval China (also Aslan

 Studies 393) ©Fall. 4 credits. Prerequisite: any course on premodern China or Chinese religions, or permission. Not offered 1997-98. C. Peterson.]

【HIST 405 Population and History 4 credits. Open to sophomores. Not offered 1997-98; next offered 1998-99. S. L. Kaplan.]

## [HIST 409 Seminar on Work In Europe and America *

Fall. 4 credits. Not offered 1997-98; next offered 1998-99. S. L. Kaplan.
A comparative study of the meaning of work in different societies from premodern times to the present. Emphasis on the "representations" of work of the actors themselves who worked, as well as of those who for various critical reasons did not work. The seminar will examine not only ideology but also the organization, practice, and physical place of work. It will explore theory as well as "cases," and draw on anthropological and sociological as well as historical materials.]
[HIST 432 The Clty in History: Europe and America "
Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98; next offered 1998-99. S. Blumin.

Reading and discussion of significant interpretations of the rise, role, and character of cities in medieval and early modern Europe and in modern Europe and America. Individual research projects.]
[HIST 451 Lord and Peasant in Europe: A Seminar in Soclal Mistory * 4 credits. Prerequisite: permission of instructor. Not offered 1997-98; next offered 1998-99. S. L. Kaplan.]

HIST 454 The Herodotean Moment: The Uses and Abuses of "Western Civilization" (also Government 454) \#
Fall. 4 credits. Limited to 20 students. Prerequisite: permission of instructor. J. Najemy, M. Bernal.

The basic premise of the seminar is that the concept of "Western civilization" is a problematic one in need of critical and historical analysis. The course will examine the evolution and transformation of this concept from antiquity to the twentieth century by focusing on selected moments (and texts in which they are represented) of actual and/or perceprual encounters with other civilizations. It will also inquire into the political uses and abuses of the idea of the West, and the literary, psychological, and anthropological dimensions of the idea's history. Readings include selections from Herodotus's Histories, Virgil's Aeneid, Augustine's City of God, The Song of Roland, Petrarch, Pico, Machiavelli, Montesquieu, Flaubert, Shelley's Hellas, Amold, Hegel's Philosophy of History, James Mill's History of British India, and, from secondary critical literature, Tzvetan Todorov's The Conquest of America and Edward Said's Orientalism.

## History of Science

HIST 250 Technology in Socioty (also Engineering General Interest 250, Electrical Engineering 250, and Science and Technology Studies 250)
Fall. 3 credits. R. Kline.
For description, see ENGRG 250.
HIST 281 Science in Western Civilization (also Science and Technology Studies 281) \#
Fall. 4 credits. History 281 is not a prerequisite to 282. P. R. Dear.
This course aims to make comprehensible both to science majors and to students of the humanities the historical structure and development of modern science and to show science as a cultural phenomenon. Changing perceptions of nature and human knowledge from Greek Antiquity to the twentieth century form the framework for current Western views of the world, while the roots of the presentday dominance of "science" as a symbol of progress and modernity lie in an alliance between knowledge of nature and power over nature that took shape in the nineteenth century after a long period of emergence. 281 runs chronologically up to the death of Isaac Newton and focuses on the cultural traditions of Christian Europe and its selective appropriation of a Greek heritage.
HIST 282 Science in Western Clyllization (also Science and Technology Studies 282) \#
Spring. 4 credits. History 281 is not a prerequisite to 282 . P. R. Dear.

How did the natural philosophy of the 18th century become the natural science of the 19 th and 20 th centuries? This course will explore the changing conceptions of knowledge in the West with particular attention to the connections among theories of nature, political cultures, and commercial and industrial practices. In addition to the traditional discussions of such fundamental figures and constellations of events as William Herschel, the Chemical Revolution and the French Revolution, Darwin and the theory of evolution, and natural philosophy in the Scottish Enlightenment, lectures will also focus on the development of research in the sciences in Germany, the role of research schools in dissemination new knowledge and experimental practice, and the different national styles of support for science during the period.
HIST 287 Evolution [also Blology-General Courses 207; Science and Technology Studies 287)
Fall. 3 credits. W. Provine.
For description, see BIO G 207.
[HIST 292 Inventing the Power and Informatlon Societles (also Engineering General Interest 298, Electrical Englneering 298, and Science and Technology Studies 292)
Spring. 3 credits. Not offered 1997-98.
R. Kline.

For description, see ENGRG 298.]

## [HIST 380 Soclal Mistory of Westem

 TechnologySpring. 4 credits. Not offered 1997-98; next offered 1998-99. J. Weiss.
Studies in the interaction between technological changes and social changes in Western Europe and America since the eighteenth century. Readings and lectures will deal both with instances of social transformation that accompanied technological changes and with the role of technology in social thought and cultural expression. Special attention to three periods: Britain during the Industrial Revolution, America in the nineteenth century, and America during the Vietnam War.]

## HIST 415 Seminar In the History of

 Blology (also Biology-Ceneral Courses 467, Blology and Soclety 447; Science and Technology Studles 447)Summer. 4 credits. W. Provine. For description, see BIO G 467.

HIST 416 Enlightened Science (also Science and Technology Studies 416)
Spring. 4 credits. P. R. Dear and
M. A. Dennis.
"Science" is a term that is often associated with "rationality." The idea that "reason," rather than "faith" or "tradition" should be the pre-eminent guide to practical action has deep roots in the thought of 18 th-century Europe, the period known as the Enlightenment. The practice and image of science in the Enlightenment show how this ideal was developed and understood, and what its meanings and implications were. Those meanings, and their associated values, remain strongly with us today. This course will investigate our current scholarly understanding of many themes and issues relating to "enlightened science," as well as studying writings of the period itself in a variety of topical areas, from political economy to astronomy and natural history, in
several national contexts including Scotland, France, and Germany. We will attempt to view these materials from the perspective both of developments from earlier periods and in relation to the later consequences of this ideology

## HIST 525 Seminar in the History of Technology (also Science and Technology Studies 525)

Fall. 4 credits. R. Kline.
For description, see S\&TS 525
[HIST 465 Scientific Rhetoric in Historlcal Perspective (also Communicatlon 465 and Science and Technology Studies 465)
Spring. 4 credits. No prerequisites Not offered 1997-98. P. R. Dear,
B. Lewenstein.

Exploration of the development of scientific discourse since the Scientific Revolution, with special emphasis on understanding the rhetorical purposes served by differing forms and techniques. Readings will include classics from Newton, Darwin, Einstein, and others, along with representative samples of more routine scientific communications. Students will prepare brief reports during the semester and a final term paper.]
[HIST 680 Seminar In Historiographical Approaches to Science (also Science and Technology Studies 680)
Fall. 4 credits. Not offered 1997-98. P. R. Dear.

Examines philosophical, sociological, and methodological dimensions of recent historiography of science.]

## HIST 682 Topics In the Scientiflc

 Revolution (also Science and Technology Studies 682)Fall. 4 credits. Not offered 1997-98.
P. R. Dear.

This is a graduate seminar devoted to investigation of recent scholarship and issues in sixteenth- and seventeenth-century European knowledge of nature. Students will be expected to produce a substantial paper focused on the study of primary source documents. The seminar will focus alternately on the study of recent historiography in selected areas, and an examination of primary source materials intended to critique and test those historiographical approaches. Topics will include: credibility and social status; the academic environment; philosophy and court culture; the situated meaning of experiment.]

## HIST 711 Introduction to Science and Technology Studies (also Science and Technology 711) <br> Fall. 4 credits. P. R. Dear <br> For description, see S\&TS 711.

## American History

HIST 101 Introduction to American History \#
Fall. 3 credits. 101 is not a prerequisite to 102. M. Washington.

A survey of American history from the colonial era to the Civil War. Major topics include cultural encounters of white, black, and Indian, the social construction of Colonial America, the American Revolution, conflict and consensus in the early republic, socioeconomic aspects in the rise of immigration, Indian relations and removal, slavery and reform, and the coming of the Civil War.

MIST 102 Introduction to Amerlcan History
Spring. 3 credits. 101 is not a prerequisite to 102. G. Okihiro.
An introductory survey of the development of the United States since the Civil War.

## HIST 208 The Era of

 Franklin D. RooseveltSpring. 4 credits. Primarily for sophomores. Prerequisite: permission of instructor. R. Polenberg
The impact of the Great Depression and
World War II on American politics, law, and culture.

## HIST 209 Political History of Indians in the United States (also American Indian Studies 209) \#

Spring. 4 credits. D. Usner.
An investigation of political organization and change among Native American societies. Discussions and assignments examine forms of tribal government, diplomacy, and warfare as well as political relations with European colonies and the United States. Specific topics include pan-Indian confederacies, Indian policy, struggles over sovereignty, and Indian strategies of autonomy and resistance.

## [HIST 213 Asian American History (also

 Asian American Studies 213)Fall. 4 credits. Not offered 1997-98. G. Okihiro.

Comparative introductory history of Asian Indians, Chinese, Filipino, Japanese, and Koreans in the U.S. from about 1850 to World War II. Themes include U.S. expansionism in the Pacific, Asian migrant labor in Hawaii and the American West, the anti-Asian movement, and Asian resistance.]
[HIST 214 Seminar on American Foreign Pollcy
4 credits. Not offered 1997-98.
W. LaFeber.]
[HIST 227 Men and Women in Modern America (also Women's Studies 227)
Fall. 4 credits. Limited to 20 students.
Permission of instructor required.
Intended primarily for sophomores. Not offered 1997-98. M. B. Norton.]

HIST 238 History of Women in the Professions, 1800 to the Present (also American Studies 258, Women's Studies 238, and Human Development and Family Studies 258)
Spring. 3 credits. Not offered 1997-98 J. Brumberg.

For description, see HDFS 258.
HIST 251 Black Religious Traditions from Slavery to Freedom |also American Studies 251; Religious Studies 251)
Spring. 4 credits. M. Washington This course focuses on the black religious and spiritual traditions during bondage and the early years of freedom. The course will examine slave religion, the rise of black churches in the North, the formation of black churches after the Civil War, the independent church movement and the churches' role in social protest.

HIST 273 Women in American Society Past and Present (also Women's Studies 273) "
Spring. 4 credits. M. B. Norton
A survey of women's experiences in America from the seventeenth century to the present.

Among the topics to be discussed are women's familial roles, the changing nature of household work, the women's rights movement, employment of women outside the home, racial and ethnic differences in women's experiences, and contemporary feminism.

## [HIST 276 American Indian History, 1500-1850 (also American Indlan Studles 276) \#

Fall. 4 credits. Not offered 1997-98; next offered 1998-99. D. Usner.
A survey of North American Indian history from the sixteenth century to the midnineteenth century. Relations between Indian nations and with European colonies will be explored. Different cultural groups and crosscultural encounters will be compared, with emphasis on resistance and adaptation to European colonialism. The formative years of U.S. Indian policy and the experiences of Indian people through the removal era will receive close attention.]

## HIST 277 American Indian History

 since 1850 (also American Indian Studles 277)Spring. 4 credits. D. Usner.
A historical study of American Indians in the United States and Canada from the midnineteenth century to the present. The active and complex role played by Indian people in their responses to government policies and to socioeconomic changes will be emphasized. Challenges faced and initiatives taken by Indians will be traced from the early reservation years to the current era of self-determination. Cultural change and continuity within Indian communities will be closely examined.
[HIST 303 African-American Women in Slavery and Freedom (also Women's Studies 307)
Spring, 4 credits. Not open to freshmen. Not offerd 1997-98. M. Washington. Historical exploration of African-American women from a sociopolitical perspective. Topics include women in Africa, slavery and freedom, sexuality, labor, the family, gender crossracially that begins with the African background and ends at 1900.]
[HIST 304 American Culture in Historical Perspectlve, 1880-1980 (also American Studies 304) Fall. 4 credits. Not offered 1997-98; nex offered 1998-99. M. Kammen
An introduction to American Studies and the study of modern American culture. Emphasis upon relationships between mass culture, popular culture, and high culture; and on the question of American exceptionalism (distinctiveness). Special attention also to the situation of subcultures and regions, to the changing role of entertainment in relation to leisure, the media, ethnicity (pluralism), the decorative and popular arts.]
[HIST 309 The U.S. and the Third World
Spring. 4 credits. Not offered 1997-98
Next offered 1999-00. T. Borstelmann. This course examines the development of American relations with Asia, Africa, Latin America, and the Middle East, with particular emphasis on the post-World War II period. Connections between domestic factors in the United States and American foreign policy will be emphasized.]

HIST 311 The Structure of American Political History (also American Studies 311]
Fall. 4 credits. J. Silbey.
Examines the course of American politics from the eighteenth century to the Gilded Age, focusing on the development of American political culture, the nature of decision making, and the role of interest groups, political parties, and political elites in shaping our political history.

## HIST 312 The Structure of American Political History <br> Spring. 4 credits. J. Silbey

 A continuation of History 311 but can be taken independently. Examines the course of American politics from the 1890 s to the present, focusing on the massive transformation of American political life in the late nineteenth and twentieth centuries in response to industrialism and urbanization, the depression and the international crises from the 1930s to the 1990s.
## HIST 313 U.S. Foreign Relations,

 1750-1912Fall. 4 credits. Open to freshmen with permission of instructor. W. LaFeber. Examines the development of the U.S. continental and global empires by analyzing policy and policymakers from Benjamin Franklin to Woodrow Wilson. Emphasis is placed on domestic events that shaped foreign policy. In conjunction with Hist. 313, a special course, 301 , for discussion and guided research will be offered.

## [HIST 314 History of American Forelgn Policy, 1912 to the Present

Spring. 4 credits. Not offered 1997-98;
next offered 1998-99. T. Borstelmann.
Students examine the emergence of the United States as a world power in the twentieth century. The course focuses on the domestic sources of foreign policy and the assumptions of the major policymakers (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.]
[HIST 316 American Political Thought: From Madison to Malcolm X (also Government 366) \#
Spring. 4 credits. Not offered 1997-98. I. Kramnick.

For description, see GOVT 366.]

## HIST 318 American Constitutional Development

Fall. 4 credits. R. Polenberg. Major issues in constitutional history. Topics include: the drafting of 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 Roosevelt "revolution"; civil liberties and civil rights in modern America; the right of privacy; the contemporary Supreme Court

## [HIST 319 The Frontier in American

 Thought and Culture4 credits. Not offered 1997-98; next offered 1998-99. D. Usner.]
[HIST 321 Colonial North America to 1763 \#
Fall. 4 credits. Not offered 1997-98. Next offered 1998-99. 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 intemal and external conflicts.]

## HIST 324 Varieties of American

 Dissent, 1880-1900 (also American Studies 324)Fall. 4 credits. N. Salvatore.
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 will explore the varieties of economic, political, and cultural dissent in America between 1880 and 1990, and will examine how understanding dissent in its specific historical context illuminates major aspects of American life and culture.

## [HIST 325 Age of the American Revolution, 1763-1815 *

Spring. 4 credits. Not offered 1997-98.
Next offered 1998-99. M. B. Norton. An examination of the process by which the thirteen English colonies became an inde pendent 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.]

## [HIST 327 American Frontler History

 Before 1850Fall. 4 credits. Not offered 1997-98.

## D. Usner.

An overview of European exploration and colonization in North America, life on different colonial-Indian frontiers, and territorial expansion by the United States. Topics include the ideological and material frameworks of expansionism, the political and social dimensions of interethnic and imperial rivalry, and the formation of U.S. Indian and land policies. Themes of human migration, commercial development, and environmental change are emphasized.)

## [HIST 328 American Frontler History:

 The West since 1850Spring. 4 credits. Not offered 1997-98. D. Usner.

An examination of the American West, both as place and myth, from the mid-ninereenth century to the present. Conquest of Indian territories, class and ethnic struggles, frontier ideology, and western politics are among the topics. The course comparatively studies agricultural, mining, and other frontier societies. The role of government and science in transforming western environments is closely explored, toward an understanding of recent farm, energy, and other land-use policies in the West.]

HIST 329 Indians, Settlers, and Slaves in the Early South (also American Indian Studies 329) "
Fall. 4 credits. D. H. Usner
History of the American South from the sixteenth century to the early nineteenth century with an emphasis on intercultural relations. Topics include colonization of the region by Spain, England, France, and the United States, American Indian adaptation and resistance, the evolution of slavery, African American relations with European and Indians, and the role of racial ideology and ethnic identity in the formation of the South as a distinct section of the United States.
[HIST 330 The Age of Jackson, 18151850 (also American Studies 330) \# 4 credits. Not offered 1997-98; next offered 1998-99. J. Silbey.]
[HIST 331 The American Clvil War and Reconstruction 1850-1877 (also American Studies 331)
Spring. 4 credits. Not offered 1997-98; next offered 1998-99. J. Silbey.
An analysis of the factors leading up to the breakup of the Union, the impact of the war in North and South, and the problems of restoration and reconstruction of the seceded states.]
[HIST 332 The Urbanization of American Society: 1600-1860 (also American Studies 332) \#
Fall. 4 credits. Not offered 1997-98; next offered 1999-2000. S. Blumin.
America was born in the country and moved to the city. This course examines the transformation of America from a rural to a rapidly urbanizing society and culture, from the first European settlements to the era of the Civil War. It is also a history of the city itself, as a human community, and as a crucible of cultural contact and change.]
[HIST 333 The Urbanization of American Society: 1860-2000 (also American Studies 333)
Spring. 4 credits. 332 is not a prerequisite to 333. Not offered 1997-98; next offered 1999-2000. S. Blumin.
America was born in the country and moved to the city. This course examines the transformation of America from the urbanizing society and culture of the mid-nineteenth century to the thoroughly metropolitan nation of the present (and near future). It is also a history of the city itself, as a human community, a crucible of cultural contact and change, and a focus of public policy.]

## [HIST 335 African-American History from Slavery to Freedom \#

Fall. 4 credits. Not open to freshman.
Not offered 1997-98. M. Washington. Introductory course on African-Americans from 1619 to 1865 . Emphasis will be on life in bondage, the free black communities, and racism. Other topics include African cultural heritage, the slave trade, religion, the family, and the black freedom struggle.]
[HIST 336 Capitalism and Society in Developing America, 1607-1877 (also American Studies 336) \#
Fall. 4 credits. Not offered 1997-98; next offered 1998-99. S. Blumin. An examination of American society in the context of capitalist development, and of capitalism as a social phenomenon. The transformation of pre-industrial colonies into an industrializing nation; the development of
social classes; the emerging ethos of free enterprise.]
[HIST 337 Entrepreneurialism and Organization In the Age of the Corporation: Capitalism and Society In Modern America, 1840-2000 (also Amerlcan Studies 337)
Spring. 4 credits. Not offered 1997-98; next offered 1998-99. S. Blumin
An examination of American society in the context of capitalist development and of capitalism as a social phenomenon. The rise of corporate capitalism; class, "mass", and the ethos of enterprise in twentieth-century American society.]
[HIST 340 Recent American History, 1925-1960
Fall. 4 credits. Not open to freshmen. Not offered 1997-98; next offered 1998-99. R. Polenberg.

Topics include the Sacco-Vanzetti case; radicalism and reform in the New Deal; Franklin Roosevelt and World War II; the Holocaust and the atomic age; the Cold War and civil liberties; individualism and conformity in the 1950s.]
HIST 341 Recent American History, 1960 to the Present
Spring. 4 credits. Not open to freshmen. R. Polenberg.

Topics include the Supreme Court and civil rights; Kennedy, Johnson, and social reform; the Vietnam War and Watergate; politics and the presidency from Carter to Clinton; and class, race, and ethnicity in modern America.

HIST 345 The Intellectual and Cultural Life of Nineteenth-Century Americans (also American Studles 345 and Religious Studles 345) \# Fall. 4 credits. R. L. Moore
An examination of the development of cultural and intellectual diversity in the United States. Particular emphasis will be placed on religious pluralism.

## HIST 346 The Modernization of the

 American Mind (also American Studies 346)Spring. 4 credits. R. L. Moore.
American thought and culture from 1890 to the present. Emphasizes the intellectual impact of major political and economic events and the adaptation of social ideas and values to new conditions.
[HIST 359 American Families In Historical Perspective |also American Studies 359, HDFS 359, and Women's Studies 357)
Spring. 3 credits. Prerequisite: HDFS 150 or one 200-level social science or history course. S-U grades optional. Human ecology students must register for HDFS 359. Not offered 1997-98. J. Brumberg.

For description, see HDFS 359]
[HIST 375 The African-Amerlcan Workers, 1865-1910: The Rural and Urban Experience (also ILRCB 385) \#
Fall. 3 credits. Prerequisite: juniors and seniors, or permission of instructor. Not offered 1997-98. N. Salvatore.
For description, see ILRCB 385.]

## [HIST 376 The African-American

 Workers, 1910-the present: Race, Work, and the ClityNot offered 1997-98. N. Salvatore. For description, see ILRCB 386.)
[HIST 411 Undergraduate Seminar in Amerlcan Political History
Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. J. Silbey.]
[HIST 412 Undergraduate Seminar in Asian American History (also Asian Amerlcan Studles 412)
Spring. 4 credits. Not offered 1997-98. G. Okihiro

A reading and research seminar that will cover various topics in Asian American history.]

## HIST 414 Motlvations of American

 Forelgn PollcyFall. 4 credits. Prerequisite: Permission of instructor. W. LaFeber.
Topic for Fall 1997: Willard and Dorothy Straight, the Chinese Revolution, and the origins of the American Century.
[HIST 418 Undergraduate Seminar in the History of the American South
4 credits. Not offered 1997-98; next offered 1998-99. J. Silbey.]

HIST 419 Seminar In American Social History (also American Studles 419) Spring. 4 credits. Prerequisite: permission of instructor. N. Salvatore
This undergraduate seminar will focus this semester on the social and cultural dimension of the urban black experience in the decades following World War II. A research paper is required.
[HIST 421 Undergraduate Seminar In American Cultural History (also American Studies 421)
Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98; next offered 1998-99. M. Kammen.]
[HIST 426 Undergraduate Seminar In Early Amerlcan History (also Women's Studies 426) \#
Spring. 4 credits. Not offered 1997-98; next offered 1998-99. M. B. Norton.]
[HIST 428 Undergraduate Seminar In Amerlcan Frontier History \# 4 credits. Not offered 1997-98. D. Usner.]

HIST 429 Undergraduate Seminar in Indlans of Eastern North America (also American Indian Studles 429) \#
Fall. 4 credits. D. Usner.
A seminar examining the history of Native Americans in the eastern woodlands from colonial times to the present. The cultural and economic participation of Indians in the evolution of frontier societies will be examined. Major topics include fur-trade networks, political relations, removal, and the persistence of Indian communities in eastern states.
[HIST 432 The City in History: Europe and America \#
Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98;
next offered 1998-99. S. Blumin.
Reading and discussion of significant interpretations of the rise, role, and character of cities in medieval and early modern Europe, and in modern Europe and America. Individual research projects.]

HIST 438 Reform in Antebellum America Spring. 4 credits. Prerequisite: permission of instructor. M. Washington. An examination of American sociery from 1830 to 1860 through the eyes of people attempting to bring change. The emphasis
will be on individuals, such as William Lloyd Garrison, Abby Kelly Foster, and Horace Bond. The course will also emphasize issues such as slavery, temperance, Indian removal, and public education.
[HIST 440 Undergraduate Seminar In Recent American History
Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98; next offered 1998-99. R. Polenberg.
Topic: Freedom of Speech, Censorship, and the Supreme Court.]
HIST 442 Religion and Polltics In American History: From J. Winthrop to R. Reed (also American Studies 442 and Religlous Studles 442)
Fall. 4 credits. R. L. Moore.
A reading and research seminar concerned with popular culture in nineteenth-century America (publications, performances, and audiences)
HIST 458 Female Adolescence in Historical Perspective (also Women's Studies 438 and Human Development and Famlly Studies 417) \#
Spring. 3 credits. Prerequisite: permission of instructor. J. Brumberg.

## For description, see HDFS 417

[HIST 484 Seminar in the History of American Labor: Race, Work, and the Clity (also ILR 304)
Fall. 4 credits. Open to juniors and seniors only with the permission of the instructor. Not offered 1997-98.
N. Salvatore.

For description, see ILRCB 304.]
HIST 486 Seminar on the 1960s
Fall. 4 credits. T. Borstelmann
This course will explore the issues and developments of the most turbulent and significant decade in recent U.S. history. Major topics will include the civil rights movement, the Kennedy and Johnson administrations, the Vietnam War, the anti-war movement, the counterculture, the women's liberation movement, the media, and the Nixon administration. A substantial research paper will be required.

HIST 500 Undergraduate Research Seminar (also Amerlcan Studies 500)
Fall and spring. 8 credits each term. J. Silbey and others.

Offered in Cornell-in-Washington Program. An intensive research and writing experience utilizing the extensive resources of Washington, D.C.
[HIST 521 Seminar In Amerlcan Cultural Studies (also American Studies 521) Fall. 4 credits. Not offered 1997-98; next offered 1998-99. M. Kammen.
The focus will be the relationship between government and culture in historical perspective. After three contextual sessions devoted to 19th-century background, we will mainly be concerned with the period from the 1930s to the present. Several comparative sessions will be devoted to government as a patron of culture in other societies. A research paper is required.]

## HIST 607 Writing Seminar on African-

 American WomenFall. 4 credits. Prerequisite: permission of instructor. M. Washington.
This course is designed for students actively engaged in a writing project on African-

American women's history. Students must have already done the research and most of the reading for their papers prior to enrollment. Reading and class discussion will focus on style, methodology, and theory. An extensive research paper is due at the end of the semester.

## [HIST 608 African-American Women

Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98 M. Washington.

A reading and discussion topics seminar focusing on the experiences of AfricanAmerican women in nineteenth-century America, including the Caribbean. Topics include women and labor, abolitionism, women's rights, sexuality and race relations, education and racial uplift, black women's literature, marriage and family.]

## [HIST 610 Afro-American Historiography

Fall. 4 credits. Not offered 1997-98. M. Washington.

Reading and discussion course focusing on the way historians write and interpret the Black experience in America. Students will be concerned with individual historians, various schools of thought, and historical approaches.]
[HIST 613 Seminar on American Diplomatle History
Fall. 4 credits. Not offered 1997-98.
T. Borstelmann.

A reading and research seminar in twentiethcentury American diplomatic history, emphasizing the Cold War period. Discussion will focus on interpretive approaches to U.S. foreign policy and on U.S. relations with the Third World since 1945. A research paper is required.]

## [HIST 617 Seminar in American Cultural

 History4 credits. Not offered 1997-98. Semester/ TBA. R. L. Moore.]

HIST 618 Seminar In American Cultural History
Spring. 4 credits. R. L. Moore
A reading and research seminar concerning selected topics in nineteenth century America.

## [HIST 621 Graduate Seminar in

 American HIstoryFall. 4 credits. Not offered 1997-98; next offered 1998-99. M. Kammen.]
[MIST 624 Graduate Sominar in American Indian History (also American Indian Studies 624)
Spring. 4 credits. Not offered 1997-98. D. Usner.)
[HIST 626 Graduate Seminar in the History of American Women (also Women's Studies 626)
Spring. 4 credits. Not offered 1997-98. M. B. Norton.

A reading and research seminar intended primarily for graduate students. Major works in American women's history will be carefully scrutinized, and each student will prepare a lengthy research paper.]

## [HIST 627 Graduate Seminar in Early

 American History4 credits. Not offered 1997-98.
M. B. Norton.]
[HIST 633 Seminar in Nineteenth. Century American History
4 credits. Prerequisite: permission of instructor Not offered 1997-98; next offered 1998-99. J. Silbey.]

## [HIST 634 Seminar in Nineteenth-

 Century American HistorySpring. 4 credits. Not offered 1997-98; next offered 1998-99. J. Silbey.
A research seminar intended primarily for graduate students exploring society, culture, and politics of the United States between 1815 and 1896.]
HIST 640 Graduate Seminar in Recent American History
Fall. 4 credits. Prerequisite: permission of instructor. R. Polenberg.
A graduate research seminar that will examine American legal and constitutional history in the twentieth century.

## [HIST 683 Seminar In American Labor History (also ILRCB 783)

Fall. 3 credits. Prerequisites: graduate students only. Not offered 1997-98 N. Salvatore.

For description, see ILRCB 783.]

## [HIST 710 Colloquium in American

 HistorySpring. 4 credits. Required of all first-year graduate students in United States history. Not offered 1997-98. M. Kammen. Examination of major approaches, periods, issues, and modes of interpreting American history. Readings include recent "classics" of American scholarship from diverse subfields and genres.]

## Latin American History

## HIST 295 Colonial Latin America

Fall. 4 credits. T. Holloway.
Survey of Latin America from the rise of preColumbian civilizations through the European conquest, the establishment of the Spanish and Portuguese colonial societies, imperial rivalries in the New World, the background of the independence movements, and the achievement of political independence.
[HIST 296 Latin America in the Modern Age ©
Spring. 4 credits. Not offered 1997-98. T. Holloway.

Survey of the Latin American nations from independence to the present. Major themes include the persistence of neocolonial economic and social institutions, the development of nationalist and populist politics, revolutionary movements of the twentieth century, and United States-Latin American relations.]

## [HIST 347 Agrarian Societies in Latin

 American History (1) \#Spring. 4 credits. Not offered 1997-98. T. Holloway.

The development of rural patterns of wealth, status, and power, focusing on the role of country people in the larger society. Topics include disruption of the conquest, evolution from encomienda to hacienda, rise of plantation agriculture and export enclaves, decline of Indian communities, peasant protest, and land reform and development programs of the recent past.]
[HIST 348 Contemporary Brazil ©
Fall. 4 credits. Not offered 1997-98.

## T. Holloway.

With some historical background, the course focuses on the twentieth century. Topics include the import-substituting growth model, contradictions leading to military rule 1964 1985, transition to competitive politics, debt,
ecology, regional and social disparities. Some comparisons are made to other Latin American countries.]

## [HIST 449 Race and Class in Latin

 American HistorySpring. 4 credits. Prerequisite: permis-
sion of instructor. Not offered 1997-98.
T. Holloway

This seminar focuses on ethnic interaction and class formation in the historical development of Latin American societies considering the roles of Native Americans, Europeans, and Africans. Each unit will be approached as an analysis of the historical origins of contemporary patterns, and comparisons will be made among units, in a search for underlying and overarching themes.]

## [HIST 649 Seminar in Latin American

 HistorySpring. 4 credits. Not offered 1997-98.
T. Holloway.]

## African History

HIST 255 Cultures and Ecology in Precolonial Africa ©
Fall. 4 credits. S. E. Greene.
This course will cover the history of Africa from the origins of humankind through the emergence of small-scale societies and state systems, such as Egypt, Meroe, Mali, Bunyoro, the Swahili ciry states and the Zimbabwe complex that had regional and international significance. Emphasis will be placed on understanding the character of preindustrial societies, and the way in which historic ecological conditions affected processes of change and the character of gender, class and ethnic relations within these societies. The course will also examine Africa's interaction with Islamic, Native American, and European cultures up to 1800 .
[HIST 390 Southern African History $\boldsymbol{e}^{2}$. Spring. 4 credits. Not offered 1997-98. G. Okihiro.

Southern African history from foundations to union, or from the earliest human inhabitants to 1910. Major themes will include the peopling of southern Africa, interaction and change among the San, Khoikhoi, and Bantuspeaking peoples, the arrival and expansion of Europeans, African state systems, and the economic transformation of the 1870 s and 80 s leading to the South African war and union.]

## HIST 391 Riot and Revolution In

 Nineteenth Century Africa: The Blrth of the MadernSpring. 4 credits. S. E. Greene.
The beginning of the nineteenth century witnessed the rapid and often times forceful expansion of Islam in West Africa, the end of the Atlantic slave trade, the transformation of the Zulu from a small, inconsequential people to the largest and most powerful ethnic group in South Africa, and the wild fire spread of Swahili as a lingua franca in east and central Africa. This course explores these revolutionary changes and the upheavals that accompanied them as Africa remade itself to face the modern era. Lectures, readings and discussions will focus on the causes and consequences of these events and their significance for understanding contemporary Africa.

## HIST 434 Gender and Sexuality in the Social Hlstory of Airlca (also Women's Studles 477) (e)

Spring. 4 credits. S. Greene
This course will examine theoretical literatures and case studies on the history of gender relations and sexuality in African social history. The course will be organized topically on such themes as gender and political-economy, gender and social relations, gender and (homo-/hetero) sexuality, and gender and the religions of Africa. Readings for each topic will cover both the precolonial and colonial periods.

## Asian History

[HIST 190 Introduction to Asian Civilizations (a)
Spring. 4 credits. Not offered 1997-98; next offered 1998-99. C. Peterson,
D. Wyatt.

An introduction to the distinctive cultures of China, India, Japan, and Southeast Asia that features an intensive examination of selected topics and periods of particular significance in the history of each.]

## HIST 191 Introductlon to Modern Aslan

 History ©Fall. 4 credits. S. Cochran, D. Wyatt. The history of Asia-Pacific from the nineteenth century to the present, focusing on relations of China, Japan, and Southeast Asia with each other and with the West.

## [HIST 243 ChIna and the West before Imperialism © *

Spring. 3 credits. Open to freshmen and sophomores. Limited to 15 students. Not offered 1997-98. C. A. Peterson.]
[HIST 293 Mistory of China up to Modern Times ©
Fall. 4 credits. Not offered 1997-98; next offered 1998-99. C. A. Peterson.
A survey of the principal developments in the history of China from the earliest times to the eighteenth century that also undertakes a topical introduction to Chinese culture and civilization, in part by the use of visual materials.]

## HIST 294 History of China In Modern Times 랑 <br> Spring. 4 credits. S. Cochran.

A survey that concentrates on the rise of the last imperial dynasty in the seventeenth and eighteenth centuries, the upheavals resulting from domestic rebellions and foreign imperialism in the nineteenth century, and the twentieth-century efforts to achieve social mobilization, political unity, and commercial expansion.

## HIST 297 Japan Before 1600 (e)

Spring. 4 credits. J. Piggott.
This course explores Japan before 1600 from a variety of perspectives. Analysis of primary sources, including literary and archaeological experiences compared with those of other societies around the globe. History 297 is a good introduction to issues of premodern historical study and to the general study of East Asia. (Graduate students or more advanced undergraduates who would like to do a research project should register for History 497).

HIST 298 State, Soclety, and Culture In Modern Japan 룽
Spring. 4 credits. J. V. Koschmann. A survey of Japan from early-nineteenth century to the present, which attempts to connect the political, socio-economic, and imaginative realms of modern Japanese life so as to achieve a complex view of modern Japanese society. Pays particular attention to the changing situation of women and women's movements, Japan's relations with the Asia and the U.S., and problems of historical representation and consciousness. Readings will include Japanese works in translation as well as secondary sources.

## HIST 322 Taming the Samuraf Warrior History in Japan \# ©

Fall. 4 credits. J. Piggott.
This course explores the role of the samurai at various epochal moments in Japan, and the effects samurai-centered governance has had on culture writ broadly up to the early modern era. This is very much a hands-on course in which analysis and writing are emphasized--students will do extensive analysis of primary sources, write a critical book review, and write a final essay.
Graduate students are welcome but should register for History 522 after consultation with the instructor

## [HIST 326 From Medieval to Early

 Modern in Japan \#랑4 credits. Not offered 1997-98; next offered 1998-99. J. Piggott.]
[HIST 352 The Past as Prelude? Japan in Asla, Germany in Europe (also Government 396) (a)
Fall. 4 credits. Not offered 1997-98.
Katzenstein, Koschmann]
HIST 360 Early Warfare, East and West \#
Spring. 4 credits. C. A. Peterson. For description see Comparative History.
[HIST 393 Images of Humanity in Medieval China (also Aslan Studies 393) 융
Fall. 4 credits. Permission required. Not offered 1997-98. C. A. Peterson, J. R. McRae.]

## HIST 395 Southeast Asla to the Elghteenth Century *

Fall. 4 credits. D. Wyatt
A survey of the earlier history of Southeast Asia, concentrating particularly on regional movements of economic, social, cultural, and political change and using, to the extent possible, readings in translated primary sources.

## HIST 396 Southeast Aslan History from

 the Elghteenth Century ©Spring. 4 credits. R. Mrazek.
A survey of the modern history of Southeast Asia with special attention to the formation of modern states (colonial as well as national), changing economic and social structure, and consciousness. Primary texts will be read in translation whenever feasible.
[MIST 420 Japan in the Year 1000: The Tale of Genjl In Historical

## Perspectlve ©

Fall. 4 credits. Not offered 1997-98; next offered 1998-99. J. Piggott.
The tale of Genji is a classic of premodern Japanese literature that provides readers a broad view into Japan's courtly society at a time when many of the elements of Japan's
classical tradition were taking form. Additional primary source readings and secondary sources provide insight into the countryside beyond the capital as well. Previous study of premodern Japan is advised.]

## [HIST 448 Gender and Family In

 Classical Japan \# ․ㅜㅇFall. 4 credits. Not offered 1997-98; next offered 1998-99. J. Piggott.
An inquiry into structures of family and gender from the eighth to the fourteenth centuries. Themes will include kinship and family, state formation, and gender construction, and those interested in these themes in comparative perspective are invited to enroll "Breadth" reading, primary source materials, and comparative reading placing Japan in an East Asian context will be assigned. Previous study of some aspect of premodern Japan is recommended.]

## NIST 466 Kings and Shoguns ©

Spring. 4 credits. J. Piggott.
The tum of the fourteenth century witnessed epochal changes in Japan as structures of monarchy, court-Bakufu relations, landholding, judiciary, international relations, and popular culture were deeply affected by the failure of Go-Daigo Tenno's royal restoration Core readings of the seminar will include portions of the martial epic, the Taibeiki, and other materials from which insights into these transformations can be drawn. Previous course work in Japanese history, especially History 322, is recommended.

## HIST 489 Seminar In Modern Japanese

 HistoryFall. 4 credits. Prerequisites: History 298 or equivalent. J. V. Koschmann.
Topic for Fall 1997: Japan Since World War II.

HIST 492 Undergraduate Seminar In Medieval Chinese History ㅇㅠㅠ Spring. 4 credits. Prerequisite: History $190,293,360$, or permission of instructor. C. A. Peterson

Topic for spring 1998: The intellectual and cultural life of the medieval Chinese literati including an examination of their careers, literary output, and private lives.

## HIST 493 Problems in Modem Chinese

 History (also History 693)Fall. 4 credits. Prerequisite: History 294 or permission of instructor. S. Cochran Conflicting interpretations of Chinese history during the late imperial period and the first half of the twentieth century.
[MIST 494 The Japanese in Asla © 4 credits. Not offered 1997-98. J. V. Koschmann.]

## HIST 495 Aslan Kingship and State

 Formation 앙Fall. 4 credits. Prerequisite: previous coursework in Asian history and consultation with the instructor. J. Piggott.
The seminar will explore kingship and state formation in comparative perspective. Readings will include theoretical and ethnohistorical work on societies across the globe, East and West. In addition to participating in discussion focused of core readings, seminar members will undertake research projects targeting societies of their choice. Students with an interest in the history of preindustrial societies, political and cultural anthropology, and religion will find the seminar stimulating.
[HIST 497 Colloquilum in Premodern Japanese History © \#
Fall. 4 credits. Not offered 1997-98. J. Piggott.

Explores the premodern civilization of Japan from a variety of historical perspectives. Students will attend History 297 lectures and participate in a special weekly colloquium.]

## HIST 499 Problems in Modern Chinese

 History (also Mistory 694) ©Spring. 4 credits. Prerequisite: History 294 or permission of instructor. S. Cochran.

This course gives each student an opportunity to select one research topic and work on it throughout the semester. Knowledge of Chinese is not required, but background in Chinese studies is needed.

## HIST 588 Proseminar In Modern Korean

 HistoryFall. 4 credits. Prerequisite: a course on
East Asian history or equivalent.
J. V. Koschmann

Designed primarily for graduate students in East Asian Studies who specialize in Chinese and/or Japanese history but need for comparative or other purposes to develop a familiarity with the main problems and contours of modern Korean history. Readings will be selected primarily from Englishlanguage works on Korea from the 1870 s through the post-World War II era, including Japanese colonial policy and practice in Korea, the Korean War, and the postwar history of the Republic of Korea.

## HIST 598 Colloquium in Modern

 Japanese HistorySpring 4 credits. J. V. Koschmann For graduate students only. Students will attend lectures and do the reading for History 298, participate in a special weekly colloquium, and write a seminar paper

## [HIST 609 Modern Japan Studies: The

 Formation of the Fleld in History and Literature (also Asian Studies 609)Fall. 4 credits. Not offered 1997-98; next offered 1998-99. J. V. Koschmann and N. Sakai.

The course will provide both a historical introduction to and critical analysis of the constitution of modern Japan 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 object of area studies discourse and "Japan" as represented in American journalism, popular culture, and politics. Interdisciplinary and team-taught, the course will aim to introduce students to a range of methodologies and approaches developed in historical and critical works, problematizing assumptions in each case. Possibilities for crossdisciplinary research (along lines recently undertaken in areas such as feminist criticism and cultural studies, for example), will also be explored.]

## [HIST 691 Chinese Historiography and

 Source MaterlalsFall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98; next offered 1998-99. C. Peterson.]

HIST 693 Problems in Modern Chinese History (also History 493)
Fall. 4 credits. Prerequisite: permission of instructor. S. Cochran.
Conflicting interpretations of Chinese history during the late imperial period and the first half of the twentieth century.
HIST 694 Problems in Modern Chinese History (also History 499)
Spring. 4 credits. Prerequisite: permis-
sion of instructor. S. Cochran.
For description, see HIST 499.
HIST 695 Early Southeast Asia: Graduate Proseminar
Fall. 4 credits. D. Wyatt.
Introduction to the history of Southeast Asia for graduate students. Students will be expected to attend the lectures and complete the readings for History 395, and they will meet separately as a group to further explore selected topics.

## HIST 696 Modern Southeast Asia:

 Graduate ProseminarSpring. 4 credits. R. Mrazek.
Introduction to the modern history of Southeast Asia for graduate students. Students will be expected to attend the lectures and complete the readings for History 396, and they will meet separately as a group to further explore selected topics.

## [MIST 791 Seminar in Medieval Chinese

 HistoryFall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98.

## C. A. Peterson.]

MIST 792 Seminar in Medieval Chinese History
Spring. 4 credits. Prerequisite: permission of instructor. C. A. Peterson.
[HIST 795 Seminar in Modern Southeast Asian History
Fall. 4 credits. Permission of the
instructor. Not offered 1997-98.]
[HIST 796 Seminar in Southeast Asian History
Spring. 4 credits. Prerequisite: reading knowledge of relevant languages. Not offered 1997--98. D. Wyatt.]

HIST 797 Seminar In Japanese Thought Fall. 4 credits. Prerequisite: reading knowedge of Japanese desirable. Grads only. J. V. Koschmann.
Topic for fall 1997: Taisho thought and culture.
[HIST 798 Seminar in Japanese Thought 4 credits. Prerequisite: reading knowedge of Japanese and permission of instructor. Not offered 1997-98; next offered 1998-99. J. V. Koschmann.]

## Near Eastern History

【HIST 248 History of the Near East: 1250-1914 (also Near Eastern Studies 258 and Religious Studies 258) e\#

Fall. 3 credits. Not offered 1997-98.
L. Pierce.

For description, see NES 258.1
HIST 254 Islamic History: 600-1258 (also Near Eastern Studies 257 and Religious Studies 257) ©
Fall. 3 credits. D. Powers.
For description, see NES 257.
[HIST 317 Politics and Culture in Late Medieval Central Asia and the Near East (also Near Eastern Studies 353) ©
L. Peirce. Not offered 1997-98.

For description, see NES 353.]
HIST 372 Introduction to Islamic Law (also History 652, Near Eastern Studies 351/651, Religious Studies 350) 붕
Fall. 4 credits. Enrollment is limited to 25 students. D. Powers.
For description, see NES 351.
[HIST 437 Sexuality, Society, and the State in the Near East (also Near Eastern Studies 456/657, History 657 and Women's Studies 455/655) (e)
Spring. 4 credits. Not offered 1997-98.
L. Peirce.

For description, see NES 456.]
HIST 441 Ottoman History: 1600-1923 (also History 641, Near Eastern Studies 359/659) ©
Spring. 4 credits. L. Peirce
For description, see NES 359.
HIST 446 Ottoman History, 1300-1600 (also History 646, Near Eastern Studies 358/658)
Fall. 4 credits. Enrollment is limited to 20 students. L. Peirce.
For description, see NES 358.
HIST 457 Women, Men and the Law In Muslim Court (also History 657, Near Eastern Studies 459/655, Religious Studies 459, and Women's Studies 458)
Fall. 4 credits. Prerequisites: previous course within Islamic Studies desirable but not essential. L. Peirce.
For description, see NES 459.
[HIST 460 Seminar in Islamic HIstory: Muhammad and the Rise of Islam (also Near Eastern Studies 418 and Religlous Studies 418) © \#
4 credits. Not offered 1997-98.
D. Powers.

For description, see NES 418.]
HIST 461 Seminar in Islamic History 600-750 (also History 671, Near Eastern Studies 451 and 650, and Religious Studies 451) ; \#
Spring. 4 credits. Enrollment is limited to 25 students. D. Powers.
For description, see NES 451.
HIST 641 Ottoman History: 1600-1923 (also History 441, Near Eastern Studies 359/659) ©
Spring. 4 credits. L. Peirce.
For description, see NES 359.
HIST 646 Ottoman History: 1300-1600 (also History 446, Near Eastern Studies 358/658)
Spring. 4 credits. Enrollment is limited to
20 students. L. Pierce.
For description, see NES 358.
HIST 652 Introduction to Islamic Law (also History 372, Near Eastern Studies 351/651, Religious Studies 350) *
Fall. 4 credits. Enrollment is limited to 25 students. D. Powers.
For description, see NES 351.

HIST 657 Women, Men and the Law In Muslim Court (also History 457, Near Eastern Studles 459/655, Rellglous Studies 459, and Women's Studies 458)
Fall. 4 credits. Prerequisites: previous course within Islamic Studies desirable but not essential. L. Pierce.
For description, see NES 459
HIST 671 Seminar In Islamic History (also History 461, Near Eastern Studies 451, and 650, and Religious Studies)
Spring. 4 credits. D. Powers.
For description, see NES 451.

## Ancient European History

## HIST 151 Introduction to Western Clvilizatlon \#

Fall. 4 credits. D. Peterson.
A survey of European history and culture from ancient Greece and Rome, through the Middle Ages, to the Renaissance and Reformation (c. 1550). Attention to politics, ideas, religion, social and economic structures, gender, and Europe's relations with neighboring societies.

## HIST 228 War and Peace in Greece

 and RomeSpring. 3 credits. B. Strauss.
A study of war and peace in the ancient Mediterranean world in light of modern theories of international relations. The course will test the validity of modern theories against ancient models and will ask what the ancient experience can contribute to modern theory and practice. Case studies include the Peloponnesian War, the Second Punic War, Alexander's conquests, and the defense of the Roman Empire.

## HIST 232 Eyewitness to War in the

 Anclent WorldFall. 3 credits. B. Strauss.
A study of ancient soldier-historians who participated in the campaigns about which they later wrote. Topics include historicity, autobiography, propaganda, prose style. Readings include selections from Thucydides, Xenophon, Julius Caesar, Josephus, Ammianus Marcellinus as well as, for comparative purposes, modern soldier-historians.
HIST 265 Anclent Greece from Homer to Alexander the Great \#
Spring. 4 credits. Open to freshmen. B. Strauss.

A survey of Greece from the earliest times to the end of the Classical period in the late fourth century B.C. 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.

## [HIST 268 A History of Rome from

 Republlc to Holy City \#Spring. 4 credits. Open to freshmen.
Not offered 1997-98. B. Strauss.
A survey of Rome from the founding of the Republic to the end of the Western Empire. The focus is on the Roman conquest of the Mediterranean world and on the cultural reconquest of Rome by the vanquished. Roman politics, peasant society, imperialism,
and propaganda are the main topics of the first half. The government of the Caesars, society during the Roman peace, and the interaction of Romans, Jews, and Greeks that produced Christianity are the main topics of the second. Readings in translation include Cicero, Polybius, Livy, Tacitus, Plutarch, and Saint Augustine.]

## HIST 367 Representations of Women in Ancient Greece and Rome (also Classics 363 and Women's Studies 363)

Spring. 4 credits. L. Abel and J. Ginsburg. For description, see Class 363.

## HIST 452 The Tragedy of Classical

 Athens, 462-404 B.C. \#Fall. 4 credits. Prerequisite: permission of instructor. B. Strauss.
The nature of Athenian democracy, society, and culture in the "golden age" of Athens. The course will examine the influence of Athenian political life on the great tragedians of the age and the influence of tragedy on the Athenians' conception of their character and history. Readings from Herodotus, Thucydides, Aeschylus, Sophocles, Euripides, Aristophanes, Plato, Aristotle, and Plutarch.

## [HIST 453 Crisis of the Greek City-State,

 415-336 B.C.Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98; next offered 1999-2000. B. Strauss.
The fortunes of the city-state and citizen in an age of uncertainty. The focus is on Athens with some attention paid to the wider Greek world. Topics include the nature of Athenian politics, Athenian society, cultural change, and war between the city-states, crisis as a historical concept, and anthropology and ancient Greece. Readings in translation include Thucydides, Sophocles, Euripides, Aristophanes, Plato, Aristotle, Demosthenes, and Xenophon.]
[HIST 463 Gender and Politics in the Roman World (also Classics 463 and Women's Studies 464) \#
For description, see CLASS 463. Not offered 1997-98; next offered fall 1998. J. Ginsburg.]
HIST 473 Roman Society and Politics under the Julio-Claudians (also Classics 480) "
Spring. 4 credits. Prerequisite: Classics 212, History 268 , or permission of instructor. J. Ginsburg.
For description, see Classics 480.
[HIST 630 Topics in Ancient History Fall. 4 credits. Not offered 1997-98. B. Strauss.]

## Medieval, Renaissance, and Early Modern European History

HIST 151 Introduction to Western Civilization \#
Fall. 4 credits. D. Peterson.
For description see Ancient European History.

## HIST 152 Introduction to Western

 Civilization \#Spring. 4 credits. P. Holquist and R. Weil. For description see Modem European History.

## [HIST 233 The Politics of Religion in

 Early Modern EuropeSpring. 4 credits. Not offered 1997-98. R. Weil.

We will look at the impact of the reformation, counter-reformation and wars of religion on aspects of political, social and cultural life in 16th-and 17th-century Europe, exploring shifts in gender relations, the problem of social control, the effect of religious conflict on the power of the state and its contested boundaries with the church, the relationship of elite and popular religion, and the encounter of European missionaries with other cultures. Students will engage with major historiographical interpretations of the period, as well as with the close reading of primary sources.]

## HIST 257 English History from Anglo-

 Saxon Times to 1485 "Fall. 4 credits. P. Hyams.
A survey of the government, social organization, and cultural and religious experience of the English people. Particular stress is laid on land settlement, the unification of the realm, the emergence of state institutions such as Parliament, and changes in economic organization (manors, towns and commerce). The approach will be comparative within a context of contemporary European developments. The course offers students who wish to work on their writing skills an opportunity to do so, especially in the second paper.
[HIST 259 The Crusades $\#$ (2)
Fall. 4 credits. Not offered 1997-98; next offered 1999-2000. P. Hyams. A lecture course examining the Crusading Movement and the States it produced from the eleventh century to the fall of the mainland Kingdom of Jerusalem in 1292. The historical themes this generates are almost unlimited. The course treats the Christianity and Chivalry of the Medieval West, the confrontation of this culture with those of the Mediterranean and Islam, and what is perhaps the cradle of Western Colonialism. The very concept of "Crusade" itself is problematic today and will continue to cast its shadow on U.S. dealings with the Middle East. The sometimes spectacular readings allow students to choose from a very wide range of paper topics, and enjoy an excellent introduction to every aspect of the long-gone world of the Middle Ages.]

## HIST 262 The Middle Ages: An Introduction and Sample |also Religious Studies 265) \#

Spring. 4 credits. P. Hyams. As a single-semester alternative to History $263-4$, this survey aims to convey what was significant in that area of the "West" that was to become Europe, between the end of the Roman Empire in the West and the Renaissance, from 395 to 1400 . It thus takes a critical look at a formative period of Western Civilization. The course is organized into modules. The first of which surveys in five weeks the main public developments in Political and Church History over the period. Other modules focus in some depth on select aspects, such as technology, music, material resources and religions, to other choice samples from the best of medieval culture. The emphasis is on students finding their own ways to win credit.
HIST 263 The Earlier Middle Ages (also Religious Studies 263) \#
Fall. 4 credits. J. J. John.
A survey of medieval civilization from ca. 300 to ca. 1100 dealing with religious, intellectual, political, and economic developments in Western Europe.
[HIST 264 The Hlgh MIddle Ages
Fall. 4 credits. Not offered 1997-98; next offered 1998-99. P. Hyams. A survey of medieval civilization 1100-1400, dealing with political, economic, religious, and intellectual developments in Western Europe. Special attention will be paid to the interaction of different kinds of history and to the historian's understanding of literature and its use as a primary source. Lectures and class discussions.)

## [HIST 284 The Age of Reform in Western Europe (1400-1600)

Fall. 4 credits. Not offered 1997-98.
An exploration of the efforts to reform church and society in the fifteenth and sixteenth centuries. Major topics include the strengths and weaknesses of the medieval church, the theological controversies among Lutherans, Calvinists, Anabaptists, and Roman Catholics, the social foundations of reforming and dissenting movements, and the success and failure of Protestant and Catholic Reformations.]
[HIST 286 State and Society in the Iron Century (1560-1660)
Spring. 4 credits. Not offered 1997-98. A survey of the conflicts which convulsed the continent of Western Europe between 1560 and 1660 , focusing on the French Wars of Religion, the Dutch Revolt, the Thirty Years War, and peasant uprisings in France and Germany. The course will examine the sources and outcomes of conflict, the role of religion in politics, and the social impact of warfare. Particular emphasis will be placed on the capabilities and limitations of different state structures in mobilizing resources, waging war, and repressing dissent.]

## HIST 349 Early Modern England *

Fall. 4 credits. R. Weil.
This course will explore the crises of political, religious, and epistemological authority that plagued England in the sixteenth and seventeenth 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.

## HIST 350 The Italian Renaissance

 Fall. 4 credits. J. Najemy.An exploration of intellectual, cultural, religious, and political developments in Italy from the political thought of Dante and Marsilius in the age of the communes, through the several stages of Humanism from Petrarch to Alberti to Pico, down to the crisis of Italian liberity in the generation of Machiavelli, Guicciardini and Castiglione. The course will seek 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 will be placed on the close reading of primary sources and on issues of interpretation.
[HIST 351 Machlavelli \#
Spring. 4 credits. Not offered 1997-98; next offered 1999-2000. J. Najemy. This course will present Machiavelli in a variety of historical and interpretive contexts:

European and Italian politics in the early sixteenth century; the decline of the Florentine republic and the rise of the Medicean principate; Machiavelli's own career in government and his, and the republic's, crisis in 1512-13; the intellectual traditions of Renaissance humanism, political thought, and the revival of antiquity; vernacular literary currents and popular culture; and the remarkable generation of political figures, writers, and theorists with whom Machiavelli associated and corresponded. Emphasis will be placed on a close reading of the major works (including the letters, The Prince, the Discourses, Mandragola, and selections from The Art of War and the Florentine Histories, all in translation) and a critical examination, in the light of that reading, of some major modern interpretations of Machiavelli.]

## [HIST 361 The Culture of the Renalssance I (also History of Art 350 and Comparative Llterature 361) \#

Spring. 4 credits. Not offered 1997-98; next offered 1998-99. J. Najemy,
C. Lazzaro.

An interdisciplinary exploration of some major themes of Renaissance society and culture from the fourteenth to the sixteenth centuries. Using the perspectives of history, art history, and literature, the course will investigate the representation in primary texts and works of art (and with the aid of selected modern criticism) of Renaissance discourses of antiquity and authority, education and learning, republics and courts, politics, gender and family, love and eros, and cross-cultural encounters. Most of the attention will be to Italian history and culture, but with some comparisons to other European contexts. Readings include selections from Petrarch, Boccaccio, Alberti, Machiavelli, More, Erasmus, and Vasari. Artists range from Ambrogio Lorenzetti to Mantegna, Durer, Titian, and others. Two lectures and a required discussion section each week. (Undergraduates must preregister for one of the sections.)]
HIST 364 The Culture of the Renaissance II (also Comparative Literature 362; English 325; Religious Studies 362; Music 390)
Fall. 4 credits. C. Kaske, W. Kennedy. For description, see COM L 362.
HIST 365 Medieval Culture, 400-1150 (also Religious Studles 365) \#
Fall. 4 credits. Prerequisite: History 263 or permission of instructor. J. J. John. Intellectual and cultural developments in the age of monasticism, from St. Augustine and St. Benedict to St. Anselm and St. Bernard of Clairvaux.
[HIST 366 Medieval Culture, 1100-1300 (also Religlous Studies 366) \#
Spring. 4 credits. Prerequisite: History 264 or permission of instructor. Not offered 1997-98; next offered 1999-00. J. J. John.

The origin and development of the universities will be studied as background for a consideration of the scholastic mentality and its influence on the art, literature, philosophy, science, script, and theology of the period. Readings from Abelard, Hugh of St. Victor, Bonaventure, Thomas Aquinas, Dante, and others.]

## [HIST 368 Marriage and Sexuality

 in Medieval Europe Ialso Religious Studles 368, Women's Studies 368)Spring. 4 credits. Not offered 1997-98. 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.]
HIST 369 The History of Florence in the Time of the Republic, 1250-1530 \# Spring. 4 credits. J. Najemy.
Florentine politics and society from the communal period through the age of Dante, the rise and decline of the guild republic, the age of civic humanism, and the rise of the Medici to the crisis of the republic in the time of Machiavelli. Social conflicts, economic structures, guilds, family history, and political and historical ideas are considered in the context of the emergence and transformation of republican government.
HIST 374 War, Trade, and Empire, 1500-1815 \#
Spring. 4 credits. D. Baugh.
Maritime enterprise, imperial policy, and naval power in the age of expansion. The rise and decline of the Portuguese and Spanish empires are considered, but the emphasis is on English, French, and Dutch rivalry in the Atlantic and Caribbean.
[HIST 377 Gender in Early Modern Europe (also Women's Studies) Spring. 4 credits. Enrollment limited to 30. Not offered 1997-98; next offered 1998-99. R. Weil.
An inquiry into how masculinity and
femininity were defined in early modern
Europe. Questions to be explored include: What purpose did gender distinctions serve in this particular society? To what extent were men and women able to shape and redefine the meaning of their gender? How was their ability to do so affected by such events as the Reformation and the French Revolution?]
[HIST 405 Population and History
Not offered 1997-98; next offered 1998-99.

## S. Kaplan.

For description, see Comparative History.]
[HIST 408 Feudalism and Chivalry: Secular Culture in Medieval France, 1000-1300 *
Spring. 4 credits. No prerequisites; History 263 or 264 would help. Not offered 1997-98; next offered 1998-99. P. Hyams.

An upper-level seminar on the main currents of noble lay culture in France, which led European fashions in love, warfare, entertainment, and environment through most of the
period. There will be heavy emphasis on contemporary sources (in English), including lively and complete readings from epic
literature (the Song of Roland), lives, and chronicles.]

## [HIST 409 Seminar on Work in Europe and America

Fall. 4 credits. Not offered 1997-98; next offered 1998-99. S. Kaplan.
For description see Comparative History.]
[HIST 427 Power and Society in Early Medieval Europe and Japan
Spring. 4 credits. Prerequisite: a course in medieval European or Japanese historical studies, or permission of instructor. Not offered 1997-98. P. Hyams and J. Piggort.
This seminar will focus on structures, processes, and practices of society in early medieval Europe and Japan. It will provide a forum for discussion of the ways in which, in some very different societies, Europeans and Japanese handled power. We will also be interested in comparing historiographical methodologies employed and issues considered by historians of these societies

The nature of power and authority and characteristic organizational practices, including kingship, land tenure, status systems, and religious and military structures; the formation of ideology through art, ritual, literature, and law; and various means of linking center and periphery in these societies will be topics for discussion.]

## [HIST 436 Conflict Resolution in

 Medieval Europe \#Spring. 4 credits. Not offered 1997-98; next offered 1998-99. P. Hyams
This seminar concentrates on a time (late 9th13th centuries) when much of Europe lacked formal systems of justice, and so handled questions of social control quite largely by extra-legal means. Its subject is in one sense political history upside-down, as viewed by individuals rather than their rulers. We examine ways in which anthropology and some recent approaches to law can assist: the readings will be partly anthropology, partly translated medieval accounts of actua conflicts, with samples of recent interpretation The topics covered should be of interest to law students and majors in anthropology and other modern social sciences.]

## [MIST 443 GIfts, Commodities and Alllances: Historical Perspectlve on Exchange

Spring. 4 credits. Not offered 1997-98. Almost all forms of social interaction are predicated on some type of exchange, whether equal or unequal, voluntary or coerced, real or fictive. This course is an exploration of the varieties of exchange. Readings will combine classic theoretical treatment (Marx, Mauss, Goody and others) with historical monographs from both the Western and non-Western worlds, as well as contemporary literature in economic anthropology. The main themes of the course will be the social corollaries of exchange and the homologies between material and immaterial modes of exchange.]

HIST 447 Crusaders and Chronlclers
Fall. 4 credits. P. Hyams
An intensive reading seminar offering a natural progression from History 259 The Crusades. It will examine contemporary accounts of the crusading movement in

English translation. The twin goals are to follow select themes of crusading history to a deeper level than is possible in History 259 and to study medieval historiography through whole chronicles and other primary sources.

## HIST 450 Power and the Sacred in Late Medieval and Early Modern Europe

 Fall. 4 credits. D. Peterson. Explores the transformations of European religious life in a period of declining ecclesiastical authority, new secular powers, and social changes brought on by the rise of commerce, urbanization, and plague. Primary and secondary readings on topics in rough chronological order, including: humanist, and "popular" religion; heresy, dissent, minorities and religious discipline; ritual and charitable communities; prophesy, mysticism, and women's religious experience. In a European framework, roughly 1200-1500, with special attention to Italy and urban settings.[HIST 451 Lord and Peasant in Europe: A Seminar in Social History Not offered 1997-98. S. L. Kaplan.]

## [HIST 468 The Representation of Eros In

 the Italian RenaissanceSpring. 4 credits. Not offered 1997-98 J. Najemy.]

HIST 472 Politics and Culture in 18thCentury England \#
Spring. 4 credits. R. Weil.
Between 1660 and 1800 England experienced imperial and economic expansion, the Enlightenment, and the threat of Revolution abroad and at home. How in this context did people interpret and imagine the nature of the social order, political authority, and the family? We will consider the changing and fiercely contested notions of property, politeness, crime and punishment, sexuality, Empire slavery and the market
[HIST 481 The English Revolution \# Spring. 4 credits. Not offered 1997-98; next offered 1998-99. R. Weil
Between 1640 and 1660, England experienced two decades of civil war and revolution and embarked on a fascinating series of attempts to reorganize political and religious life. Women and the lower classes emerged as actors on the political stage, radical religious sects flourished, and the nature of authority was questioned in both the family and the state. This course will explore the political, cultural, religious and social dimensions of the English Revolution, using mostly primary sources.]
[HIST 487 Household and Family in Late Medieval and Early Modern

## Europe 葉

Fall. 4 credits. Not offered 1997-98
What was the pre-modern household? Was it an economic unit, a residential entity, a legal construct, an emotional body, or a patriarchal tool? This seminar is an introduction to the methodologies and controversies of current historical research on the European household and family. Topics will include the nature of kinship, property rights and inheritance customs, variation in household structure, the economic context and demographic implications of household formation patterns, and power relations inside and outside of the household.]
[HIST 496 Theorizing the Public Sphere (also Comparative LIterature 496 and German Studles 496
Fall. 4 credits. Not offered 1997-98. P. Hohendahl.

For description, see GERST 496.]

## HIST 651 Old English Literature in Its

 Historical Context (also English 710)Spring. 4 credits. P. Hyams, T. D. Hill.
This graduate course, cross-listed with English
710, might equally be known as "Anglo-Saxon England: History and Literary Context." It studies the written sources for major questions of Anglo-Saxon history in their literary and cultural context. It concentrates on important texts extant in both Latin and Old English Comparison can illuminate the resources and intentions of writers, compilers, and copyists, the literary and linguistic culture of England, and the ways in which historians might most fruitfully study such texts. Bede's Ecclesiastical History, and Battle of Maldon and Aelfric's Collequies, and selections from the Anglo-
Saxon chronicle, Beowulf, laws, homilies and wisdom literature are all likely to come under scrutiny. One goal is to reclaim for European religious history a corpus of material that historians neglect because it is in Old English.

## [HIST 653 England-Britain-Europe in

 the Middle AgesFall. 4 credits. Not offered 1997-98
P. Hyams.

This graduate seminar tentatively explores the coming move from the study of medieval English history to that of the British Isles and its inhabitants within the wider context of Europe and Western Christendom. Readings will mostly be representative original sources The precise texts and topics studied will depend on the interests (and especially future teaching plans) of participants, but will certainly allow for a critical examination of existing literature on the general and cultural history of England, Scotland, Ireland and Wales.]

## HIST 663 Graduate Seminar in

 Renaissance MistorySpring. 4 credits. Open to undergraduates with permission of instructor. J. Najemy
Topic for 1998: Patronage and the Medici.

## [HIST 664-665 Seminar in Latin Paleography

664, fall; 665 , spring. 4 credits each term. Hours to be arranged. Not offered 1997-98. J. J. John.]

## [HIST 666 Seminar in Medieval History

 Fall. 4 credits. Not offered 1997-98 J. J. John.]HIST 669 Polltics, Power, and Culture in Early Modern England
Fall. 4 credits. R. Weil.
An inquiry into how the ruling class ruled, and what that meant to and for everyone else Topics include: the invention of the "state," the relationship of central and local power, clientage and corruption, the construction of categories of "public" and "private," representations of monarchy, hegemony and resistance, court culture, the social interpretations of the English Revolution and their critics. Focus is on historiography and methodology, with some engagement with primary sources
[HIST 686 Llcit and Illicit Violence in the Sixteenth and Seventeenth Centurles
Spring. 4 credits. Not offered 1997-98 An inquiry into the varieties of violence in early modern Europe. We will examine both those forms of violence which the authorities prohibited (murder, rioting, tyrannicide, the feud) and those forms which they themselves employed (warfare, inquisition, execution). We will also examine less overt forms of violence which though 'merely' psychic (black magic) or even spurious (the myth of Jewish ritual murder) powerfully influenced the lives of everyday women and men. The central themes of the seminar are the technologies and legitimation of violence-how, why, against and for whom violence was justified and exercised.]

## Modern European History

## HIST 152 Introduction to Western Civilization (1600 to the end of World War II) \#

Spring. 4 credits. P. Holquist and R. Weil. This course is designed to introduce students to some of the main themes of European history from the Reformation to the present. The lectures are organized around the problems of state-building and social order: how have European societies ordered and reproduced themselves? why did the modern state and modern civil society develop? how have a succession of political ideologies legitimized them? how have state and society responded to crisis and disruption? what balance has been struck between acquiescence and force, between law and violence, in upholding order? Readings emphasize primary works by figures such as Luther,
Hobbes, Tocqueville, Marx, etc.

## HIST 217 Totalitarianism

Spring. 4 credits. P. Holquist. One of the distinguishing features of the twentieth century is the rise of a qualitatively new political project, one that produced massive violence and fundamentally reordered the societies it operated upon. Totalitarianism seeks to explain these developments as related to the emergence of a certain political ethos and the development of particular state tools. This seminar will first examine totalitarianism as a concept through a reading of classic studies on this phenomenon, and then test the concept's applicability in a range of case studies (especially Stalinist Russian and Nazi Germany, but including also Fascist Italy and Maoist China) and see how it operated in a variety of spheres (aesthetics, politics, economic policies, state measures for the population, repressive policies). This course is designed primarily for sophomores, to acquaint them with historical issues and methodologies and to develop their writing abilities.

## HIST 218 The Russian Imperial and Foreign Pollcy \#

Fall. 3 credits. W. Pintner.
An examination of Imperial Russian foreign policy, examining military, economics, and social factors. Examples will be taken from various periods ranging from the early Muscovite period to the First World War. Students will write 6 to 7 short papers, do extensive reading, and participate in class discussion.

## HIST 220 The French Experience: An Introduction (also French Literature 224)

Spring. 3 credits. S. Kaplan.
An examination of French society culture and institutions. What has made French culture so distinctive? Its literature and its revolutions, its gastronomy and fashion, its painting, cathedrals and cinemas. Looking attentively at texts, images and contexts from selected moments in the seventeenth, eighteenth, nineteenth, and twentieth centuries, we will attempt to unravel some of the defining enigmas of the French experience. Two lectures/week in English and one section (one section conducted in English, one in French). Readings available both in French and English translation.

## [HIST 224 The British Empire,

 ca. 1760-1960Spring. 3 or 4 credits. Not offered 1997-98. D. A. Baugh.
A seminar course examining instances of British rule on five continents. Topics will explore dynamics of colonization, interactions with native peoples, and the goals, successes, and failures of British imperial policies and institutions.]

## HIST 235 Antisemitism and the Crisis of Modernity: From the Enlightenment to the Holocaust (also Jewish Studies 254) <br> Spring. 4 credits. V. Caron.

This course will examine the role of antisemitism in nineteenth and twentieth 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 became embedded in the worldviews of significant sectors of the European population, 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.

## HIST 252 Russian History to 1800

Fall. 4 credits. W. Pintner.
The origin and development of the fundamental social, political, economic, and cultural institutions that have determined the nature of contemporary Russian society.

## [HIST 253 Russian History since 1800 \#

 Spring. 4 credits. Not offered 1997-98. W. Pintner.Nineteenth- and twentieth-century Russia up to the revolution of 1917, with emphasis on the major social, political, and economic changes that have transformed Russia since the mid-nineteenth century.]

## [HIST 258 Engllsh History from the

 Revolutlon of 1688 to the Present Spring. 4 credits. Not offered 1997-98. D. Baugh.An introductory course encompassing political, social, economic, imperial, and constitutional developments. Major themes are the significance of 1688 , eighteenthcentury society and politics, the rise and decline of liberalism, the Irish Question, the
impact of the two world wars, and the challenges and achievements of the welfare state.]

## [HIST 283 Europe in the Technological Age

Spring. 4 credits. Not offered 1997-98. J. Weiss.

An introduction to politics, culture, and technology in contemporary Europe. In the sections on politics a survey of party systems and their interactions with social movements is followed by examinations of postCommunist constitution and political structures, the New Germany, and the European Union. The section on European culture pays special attention to the European press and electronic media as shapers and reflectors of cultural values. A section on the struggle over the control of the past deals with tensions and conflicts in European national memories. In the section on Nationalism and ethnicity, political and cultural approaches are combined in consideration of the owars in former Yugoslavia as well as less violent conflicts between nationalists and members of ethnic minorities elsewhere in Europe. The section on technology deals with the design of products and processes as a cultural phenomenon, making cross-national comparisons of some of the social, cultural, and institutional influences on engineering performance.]

## HIST 290 Twentieth-Century Russia and

 the Soviet UnionFall. 4 credits. P. Holquist.
An introductory lecture course spanning the lifetime of the USSR (1917-1991), but covering the last years of the Russian Empire and the first years of the post-communist present as well. Geographically, it focuses on the Russian heartland and the non-Russian areas of the Soviet Union. The course will explore the roots and consequences of the Russian Revolution; the nature and evolution of Leninism, Stalinism and Soviet communism; the entrenchment of reform of the postStalinist system; and the legacy of communism for the region's new regimes. Students are introduced to a wide variety of historical materials, including documents, essays, memoirs, literature and film.

## HIST 291 Modern European Jewish History, 1789-1948 (also Jewish Studies 252)

Spring. 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 eighteenth 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 nonJewish society responded to these new developments from the eighteenth 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.

HIST 353 Nineteenth－Century European Intellectual History \＃
Fall． 4 credits．D．LaCapra．
The focus is on social and cultural thought in France，Germany，and England．Topics include reactions to the French Revolution and industrialization；the definition of conservative，liberal，and radical perspectives； and the relation between literature and social thought．Readings include Tocqueville，Mill，
Hegel，Marx，Flaubert，Dostoevsky，Nietzsche， and Durkheim．

## ［HIST 354 Twentleth－Century European

 Intellectual History lalso Comparative Llterature 340）Fall． 4 credits．Not offered 1997－98． D．LaCapra．
This course examines significant currents in twentieth－century thought in France，Ger－ many，and England．Topics include the varieties of existentialism，the development of the social sciences，psychoanalysis，the modern novel，structuralism，and poststructuralism．Readings include Weber， Freud，Heidegger，Sartre，Camus，Woolf， Foucault，and Derrida．］

## ［HIST 355 The Old Regime：France In

 the Seventeenth and Eighteenth Centuries \＃4 credits．Not offered 1997－98；next offered 1998－99．S．Kaplan．
A systematic examination of the social structure，economic life，political organization， and collective mentalities of a society that eclipsed all others in its time and then， brutally and irreversibly，began to age． France，in European perspective，from the wars of religion through the age of Voltaire．］

## ［HIST 356 The Era of the French

 Revolutlon and Napoleon \＃Spring． 4 credits．Not offered 1997－98； next offered 1998－99．S．Kaplan．
A study of the failure of the traditional system， its dismantling and replacement in France，and the international consequences．Focus will be on the meaning of the revolutionary experi－ ence，the tension between the desires to destroy and to create，and the implications of the Revolution for the modern world．I

## HIST 357 Survey of German History，

 1648－1890 \＃Fall． 4 credits．Open to freshmen with permission of instructor．I．Hull．
An examination of the social，political， intellectual，and diplomatic history of the German states from the devastation of the Thirty Years＇War，through absolutism，the bourgeois revolutions of 1848，the struggle for unification，to the beginning of the modern industrial state

## HIST 358 Survey of German History，

 1890 to the PresentSpring． 4 credits．Open to freshmen with permission of instructor．I．Hull．
An examination of the＂German problem，＂ that is the political，cultural，economic and other causes of modern Germany＇s extreme violence and volatility from 1890 through 1945，and of the consequences thereof on the divided Germany of 1945 to 1989 ，and on the new German state since 1989

HIST 362 European Cultural History， 1750－1870（also Comparative Llterature 352）\＃
Spring． 4 credits．M．Steinberg．
The course will focus on the making of middle－class culture，society，and imagination
from the Enlightenment through the French Second Empire．There will be three units with national and thematic foci：Germany in the period of Enlightenment，emancipation，and the burgeoning of national consciousness； questions of law，property，gender，and sexuality in early 19th－century England； modernism and urbanism in Second Empire France．Primary readings（including novels， paintings，and operas）will be considered along with contemporary historical and theoretical readings．

【HIST 363 European Cultural History， 1870－1945（also Comparative Literature 353）
Spring． 4 credits．Not offered 1997－98； next offered 1998－99．M．Steinberg． This course will focus on problems of modernity，identity，and ideology in compara－ tive European contexts．We will address the politics and culture of German nationalism， French urbanism and religious revival，the cultural origins of psychoanalysis，technologi－ cal culture（including film），and the cultural origins and dynamics of fascism．As in 362， primary materials（including Wagner，
Nietzsche，Flaubert，Manet，and Freud）will be considered along with recent theoretical work．］

【HIST 379 War and Society：The Origins of the Flrst World War，1870－1919 \＃
Spring． 4 credits．Open to freshmen with permission of instructor．Not offered 1997－98；next offered 1998－99．Baugh， Hull，Pintner．
The First World War destroyed the European world：its hegemony in international politics， its international balance，its social and economic structures，its intellectual certainties． This course examines the long－term and immediate causes of this cataclysm，with special focus on the relations between the various countries＇domestic politics and their foreign policies，the changing balance of power，economic rivalries，imperialism，the growth of extreme nationalism，and the arms race．It ends by considering why the war was so long and destructive and why，afterwards， no one could put the pieces back together again．］

## ［HIST 380 Social History of Western Technology

Spring． 4 credits．Not offered 1997－98； next offered 1998－99．J．Weiss．
For description see History of Science．］
HIST 383 Europe，1900－1945
Fall． 4 credits．J．Weiss．
An investigation of the major developments in European politics between 1900 and the end of the Second World War．Emphasis on the rise and fall of democratic political systems and their alternatives．Topics include the reorientation of liberalism and socialism，the transforming effects of war and depression， the dynamics and diplomacy of fascism，the European response to the economic and ideological influence of America and the Soviet Union，the changes in Eastern Europe during the interwar years，and the interaction between politics and social structure．

## HIST 384 Europe，1945－1968

Spring． 4 credits．J．Weiss．
A political and social history of Europe between the fall of fascism and the political crises of 1968．Emphasis on the comparative study of the elaboration of democratic institutions and ideologies．Topics include the
origins and course of the Cold War in Western and Eastern Europe，Gaullism and Christian Democracy，the emergence of welfare states， liberal－democratic and Communist culture，the end of colonial empires in the West，opposi－ tion movements in Eastern Europe，and the general upheaval of 1968.

## 【HIST 385 Europe In 20th Century： 1968－1990

Spring． 4 credits．Not offered 1997－98． J．Weiss．
The major political developments in Europe between the upheavals of 1968 and the collapse of Communist regimes．Topics will include the effects of economic turndown in 1973－1974；the response to terrorism； regionalist movements；new ethnic minorities and their opponents；Socialist governments in southern Europe；the arrival of democracy in Spain，Portugal，and Greece；new dynamics in the European Community；the rise of
Thatcherism；the war scare of the 1980 s；and the final phase of the Cold War．］

## ［HIST 405 Population and HIstory

4 credits．Not offered 1997－98；next
offered 1998－99．S．Kaplan．
For description，see Comparative History．］

## HIST 406 The People in the French

 Revolution ：Fall． 4 credits．S．Kaplan．
The Revolution was nothing if not a mass event．Mass action played a critical part in shaping its course．The＂re－invention＂of France affected the population down to each village and demanded decisions from virtually every adult．This course will focus on the people as actors：their collective memory， their ideologies，their repertoire of interven－ tion，the formation of a popular political culture．It will examine the encounters between the people（in their multiple incarnations）and the revolutionary elites who sought to articulate and appropriate the Revolution．A major theme will be the tension between the ambitions to achieve liberty and equality．

## ［HIST 409 Seminar on Work in Europe

 and AmericaFall． 4 credits．Not offered 1997－98；next offered 1998－99．S．L．Kaplan．
For description see Comparative History．］
［HIST 435 Collective Action and Politics in Modern Europe
Not offered 1997－98．S．Kaplan，S．Tarrow For description，see GOVT 435］

## ［MIST 441 Seminar in the European Enlightenment \＃

4 credits．Prerequisite：permission of instructor．Not offered 1997－98．Semes－ ter／TBA．I．Hull．］
［MIST 451 Lord and Peasant in Europe： A Seminar in Social History＂ 4 credits．Not offered 1997－98．
S．L．Kaplan．］
［HIST 456 Seminar In European Cultural History
Spring． 4 credits．Not offered 1997－98； next offered 1998－99．M．Steinberg．］
［HIST 457 Seminar in European Fascism 4 credits．Prerequisite：permission of instructor．Not offered 1997－98．Semes－ ter／TBA．I．Hull．］

## HIST 462 Popular Culture In European

 HistorySpring. 4 credits. S. L. Kaplan
An examination of the origins, practices and meanings of popular culture throughout Europe from the Middle Ages to the era of the French Revolution. After considering the various ways in which "culture" and "popular" can be construed, the seminar will focus on the specific manifestations of popular culture, its various languages and gestures, and its complex relations with the dominant/elite cultures.

## [MIST 464 Russian Social History

Fall. 4 credits. Prerequisite: one semester of Russian history or permission of instructor. Not offered 1997-98. W. Pintner,

Examines the development of major social groups throughout Russian history in the sixteenth and twentieth centuries and compares them to similar groups in other societies.]

## [HIST 467 Seminar in Modem European Political History

Spring. 4 credits. Not offered 1997-98.
Permission of the instructor required. J. Weiss.]
[HIST 474 Topics In Modem European Intellectual History
Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98.
D. LaCapra.

Topic for 1996-97: Modernism,
Postmodernism, and the Disciplines. The seminar will investigate attempts to define and evaluate modernism and postmodernism. It will also relate these attempts to the problem of defining disciplines, especially historiography, literary criticism, and philosophy. One crucial issue to be explored is the role of critical self-reflection in the practice of a discipline, including the relation of selfreflection to historical understanding itself.]

## HIST 476 Social and Cultural History of Contemporary Europe

Fall. 4 credits. J. Weiss.
The "other Europe": language, culture, and nation among the minority peoples of Europe. A comparative investigation of the development of the cultural and historical identity of non-dominant European ethnic groups and their relation to the formation and policies of European national states: the Basques, the Welsh, the Catalans, the Bretons, the Occitans, the Gaelic Irish, the Faroese, the Gypsies, the Romansh, and others. The course will combine historical, literary, and sociolinguistic approaches.

## [HIST 477 Seminar on the Politics of the Enlightenment "

Spring. 4 credits. Not offered 1997-98; next offered 1998-99. 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 eighteenth-century world and to weigh its implications for modern political discourse. Readings in translation from such authors as Bayle, Montesquieu, Voltaire, Rousseau, Diderot, and
others as well as from modern scholarly and polemical literature.]

## [HIST 478 Stalinist Civilization

Spring. 4 credits. Not offered 1997-98; next offered 1998-99. P. Holquist. The collapse of the Soviet Union provides an opportunity to reconsider the entire Stalinist experience, both on the basis of newly accessible documents and from fresh perspectives. This course approaches Stalinism as an entire system, examining the links between high politics, foreign relations, culture and everyday political strategies. Readings will include historical studies as well as newly available primary materials.
Knowledge of Russian not required.]

## HIST 480 Twentieth-Century Britain

Spring. 4 credits. Open to sophomores, juniors, and seniors. D. Baugh.
A seminar course, focusing on political and social history. The main emphasis is on the two world wars and their role in British economic and imperial decline. The course also looks at some great personages--Lloyd George, Churchill, and Bevin-and the major political and social transitions, taking departure from Edwardian era.

## [HIST 485 The Historlcal Origin of the

 Post-Soviet Successor StatesSpring. 4 credits. Not offered 1997-98. W. Pintner.

The course will deal with the peoples of several of the many new states emerging from the former USSR, probably including the Ukrainians, one of the Baltic Peoples, the Muslim Turks of Central Asia, and either the Georgians or the Armenians. Special attention will be paid to how each group came to the part of the Russian empire, their relations with Russians in both the pre- and postrevolultionary periods, and the growth of national consciousness within each national group.]
[HIST 490 Empire, State, and Nation In Russian and Soviet History
Fall. 4 credits. Not offered 1997-98. P. Holquist.

The Russain Empire represented a distinct type of empire, and the USSR provided a specific paradigm of nation-building. Among the topics treated in this course: how the heterogeneous Russian Empire was conceived and administered; the emergence of competing models of political organization (ethnonationalism; federalism; pan-Islamic and panTurkic movements); the USSR's attempts to reintegrate many former areas of the Empire, and the consequences of such Soviet policies, both in the life of the USSR and their legacy for post-communist states. Readings will include historical treatments as well as theoretical readings on forms of political organization.]

## HIST 605 Graduate Seminar in European Cultural and Intellectual Mistory (also Music 605)

Fall. 4 credits. M. Steinberg. In 1997 the theme will be the cultural and intellectual history of music and musical life in modern Europe. Topics will include the meaning of the baroque in its northern and southern variations, with attention to the music and musical contexts of J. S. Bach, Handel, and Mozart; the relation of classicism and romanticism to the formation of modern subjectivity, with attention to Beethoven, Mendelssohn, and Schumann; nationalism and
gender in post-Wagnerian opera, with attention to Debussy, Janacek, Bartok, and Richard Strauss; the meaning of the "postmodern" in its comparative musical and epistemological contexts.

## [HIST 635 The Gates to Modernity: From

 Karlsbad to the 1848 Revolution (also German Studies 635)4 credits. Anchor course. Not offered
1997-98. P. Hohendahl.
For description, see GER ST 635.]

## [HIST 661 Graduate Seminar In

 Twentieth-Century German History 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. Semester/TBA. I. Hull.]
## HIST 672 Seminar in European Intellectual History <br> Fall. 4 credits. D. LaCapra.

## HIST 673 Seminar in European Intellectual History <br> Spring. 4 credits. D. LaCapra.

[HIST 674 Graduate Seminar in German HIstory, 1770-1918
Fall. 4 credits. Not offered 1997-98.
Semester, TBA. I. Hull.
Topic for 1995: Law in German History. This course explores selected topics in the political, social, and cultural history of Germany from 1770 to 1918. It is designed to introduce graduate students to the history and historiography of modern Germany and to allow those with sufficient preparation to pursue directed research during the semester.]
HIST 675 After the Divide: German Critical Theory of the Seventies and Eighties (also Comparative Literature 675 and German Studies 675)
Fall. 4 credits. P. Hohendahl.
For description, see GER ST 675.
[HIST 677 Seminar in Russian History
Fall. 4 credits. Not offered 1997-98. W. Pintner.]
[HIST 678 Seminar In Modern European Soclal History
Spring. 4 credits. Permission of instructor required. Not offered 1997-98. J. Weiss.
Topic: political culture since World War II.]
HIST 750 European History Colloquium
Fall and spring. 4 credits, each term.
Kaplan, Hyams (fall); Kaplan, Baugh (spring).
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.

## Honors and Research Courses

Note: History 301-302 are not regular courses for which students may sign up at will. They are personal arrangements between an instructor and a particular student. Students must first gain the consent of a particular instructor to work with them.

## HIST 301 Supervised Reading

Fall or spring. 2 credits, Open only to upperclass students. Prerequisite: permission of instructor. Staff.

HIST 302 Supervised Research
Fall or spring. 3 or 4 credits. Open only to upperclass students. Prerequisite: permission of instructor. Staff,

HIST 400 Honors Proseminar
Fall. 4 credits. Limited to 15 students. For prospective honors candidates in history. Prerequisite: permission of a member of the Honors Committee is required to register. T. Holloway,
An exploration of the major approaches to historical inquiry, analysis, and presentation. Ways of thinking about history along with research methods and organization of the results will be considered by reading and discussing a variety of historical works, along with other works that take history as a field of inquiry at their theme. Substantive readings will be drawn from several time periods and diverse culture areas. There will be several brief papers during the semester, and a longer final paper which explores the work of a major historian or school of historical writing.

## HIST 401 Honors Guidance

Fall or spring, 4 credits. Prerequisites: History 400 and permission of instructor. Staff.

## HIST 402 Honors Research

Fall or spring. 4 credits. Prerequisites: History 400 and permission of instructor. Staff.

## HIST 703-704 Supervised Reading

 703, fall; 704, spring. 4 credits each term. Limited to graduate students. Prerequisite: permission of instructor. Staff.
## HIST 709 Introduction to the Graduate

 Study of HistoryFall. 4 credits. Required of all first-year graduate students. T. Borstelmann, P. Holquist.

The course is designed to introduce entering graduate students to crucial issues and problems in historiography that cut across various areas of specialization.

## HISTORY OF ART

L. L. Meixner, chair; J. E. Bernstock, director of undergraduate studies; K. Barzman,
R. G. Calkins, director of graduate studies;
P. I. Kuniholm, C. Lazzaro, K. McGowan,
A. Ramage, S. Reiss, M. W. Young.

The Department of the History of Art provides a broad range of introductory and advanced courses in Western (European and American) and non-Western art (East and Southeast Asian, African), from ancient times to the present. Courses have various emphases: archaeology, artists, styles, themes, iconography (the study of subject matter), patronage, social history, and theoretical perspectives. The department offerings reflect the interdisciplinary nature of the subject and the importance of critical theory in interpreting works of art. The resources of the Herbert F. Johnson Museum of Art frequently serve as the focus for discussion sections and paper assignments.

## The Major

The major in history of art enables students to acquire a familiarity with the art of many different cultures and a deeper knowledge of selected periods and places. The major strengthens visual, analytic, and interpretive
skills, and reading and writing abilities. The major has requirements to ensure both breadth and depth, but it is also flexible enough to be tailored to each student's interests. In their junior and senior years, majors work closely with their advisers to determine their own course of study.

## Admission to the Major

Students wishing to major in the hisrory of art should complete two courses at Cornell in the department by the end of their sophomore year. One of the two courses required for entry into the major beat the 200 -level and one must emphasize material either predominantly before 1800 or outside Europe/ America. These two courses are prerequisites for the major and may not be counted toward fulfillment of the major requirements. Prospective majors should consult with the director of undergraduate studies.

## Requirements for the Major

Department majors acquire a broad understanding of the history of art in several chronological and geographical areas: ancient, medieval, Renaissance, Baroque, modern, Southeast Asia, China, Japan, and Africa. Additionally, majors practice a range of art historical methods and interpretive strategies, including connoisseurship, dendrochronology, feminism, iconography, semiotics, 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 encouraged strongly.
Requirements: The major in the history of art requires 44 credits, 30 at the 300 -level or above. For admission into the program, majors are required to take two courses: one must be at the 200 -level and one must emphasize material either predominantly before 1800 or outside Europe/America. These courses count toward the total 44 credits. The major requires proseminar; one 400 -level area seminar; two courses in art outside Europe/America; three courses in art predating 1800 (ancient, medieval, or Renaissance/Baroque). Majors must choose at least two courses from different categories. In addition to the 44 credits, majors are required to take two courses, approved by their advisers, 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 $\mathrm{B}+$ for all courses taken in the department and in all arts and sciences courses. Application to write an honors thesis should be made to the director of undergraduate studies during the second term of the junior year. 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 in his/her course load, History of Art 600 and 601 . These courses address the research and writing of the senior thesis under the direction of the student's project adviser.

## Course Numbering System

100 -level courses are all freshman writing

200-level courses are introductions to the major subdivisions of Western and nonWestern art and they often have large enrollments.
300-level courses are more specialized, and some have the introductory course in the appropriate area as a prerequisite. Freshmen are advised to take the introductory courses unless they already have substantial background in the history of art.

400-level courses are upper-level seminars, primarily for undergraduates, although graduate students in the history of art and other fields also take them.
500-level courses are primarily graduate seminars, which undergraduates may also take.

## Freshman Writing Seminars

For Freshman Writing Seminar offerings in the History of Art, see the John S. Knight Writing Program's special brochure. These courses may be used as freshman electives but not to satisfy the distribution requirement.

## Courses

History of Art Introductory Courses 200-level courses in Western art have been changed. $220,230,245$, and 260 are now offered as 4 -credit courses with required sections.

ART H 202 Survey of European Art: Renalssance to Modem \#
Summer only. 3 credits. Staff.
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.

ART H 220 Introduction to Art HIstory: The Classical World (also

## Classics 220) "

Fall. 4 credits. Each student must enroll in a section. A. Ramage.
An overview of the art and archaeology of the Greek and Roman world. 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.
[ART H 221 Minoan-Mycenaean Art and Archaeology (also Classics 221 and Archaeology 221) \#
3 credits. Not offered 1997-98; next spring 1999. J. Coleman.

The birth of civilization in Greece and the Aegean islands during the Bronze Age. The main focus is on the rise and fall of Minoan Crete and Mycenaean Greece, with consideration given to the nature and significance of Aegean interactions with Egypt, the Near East, and Anatolia.]
[ART H 224 Archaeology in Action I (also Classics 232 and Archaeology 232) $\#$
3 credits. Prerequisite: permission of instructor. Not offered 1997-98.
P. I. Kuniholm.]
[ART H 225 Archaeology in Action II (also Classlcs 233 and Archaeology 233) "
3 credits. Prerequisite: permission of instructor. Not offered 1997-98. P. I. Kuniholm.]

ART H 230 Introduction to Art History: Monuments of Medieval Art (also Religlous Studles 230) "
Spring. 4 credits. Each student must enroll in a section. R. G. Calkins.
An introduction to the approaches to ant history through a study of selected works of art from the Middle Ages: architecture, sculprure, painting, manuscript illumination, metalwork, and ivory.
ART H 245 Introduction to Art History: Renaissance and Baroque Art \#
Fall. 4 credits. Each student must enroll in a section. C. Lazzaro.
A survey of major works of European painting, sculpture, and architecture from 1400 to 1700 . The focus is on preeminent artists, workshop methods, style, meaning, patronage, and the function of art in a range of social contexts. The course also covers the methods of art history currently practiced in Renaissance and Baroque studies. Weekly section meetings are required.

## ART H 260 Introduction to Art History: The Modern Era

Spring. 4 credits, Not open to students who have taken History of Art 261. Each student must enroll in a section.
J. E. Bernstock.

A discussion of the most important developments in art from 1780 to the present. The emphasis is on major movements and artists such as Romanticism (Delacroix), Realism (Courbet), Impressionism (Monet), PostImpressionism (van Gogh), Cubism (Picasso), Fauvism (Matisse), Surrealism (Miro), Abstract Expressionism (Pollock), and Pop Art (Warhol).

## ART H 261 Introduction to Art History:

 Modern ArtSummer only. 3 credits. Staff.
An introduction to early modern art as it developed between the French Revolution and World War I. Both European and American movements are examined, including Romanticism, Impressionism, and Cubism. Units are organized around central figures such as Mary Cassatt, Edgar Degas, Thomas Eakins, and Vincent van Gogh. Lectures are supplemented with discussions of methods of inquiry, including social history and feminism, fundamental to interpreting works of art.

## ART H 280 Introduction to Art HIstory:

 Approaches to Asian Art © \#Fall. 3 credits. K. McGowan. Arranged according to selective focus and emphasis rather than broad chronological survey, this course introduces students to the varied responses of the Asian artist in diverse social, geographical and historical contexts. Indian miniature paintings, Japanese prints, high-fired ceramics from Thailand and Vietnam, Indonesian textiles and jewelry, Javanese shadow-puppet theater, and Balinese ritual and performance traditions will be explored. A number of class sessions will meet in the Herbert F. Johnson Museum of Art.
ART H 309 Dendrochronology of the Aegean (also Classics 309 and Archaeology 309)
Fall and spring. 4 credits. Prerequisite: permission of instructor. Limited to 10 students. P. I. Kuniholm.
Participation in a research project of dating modern and ancient tree-ring samples from the Aegean and Mediterranean. Supervised reading and laboratory work. A possibility
exists for summer fieldwork in Greece and Turkey.

[ART M 320 The Archaeology of Classical Greece (also Classics 320) "<br>4 credits. Not offered 1997-98.<br>A. Ramage.]

ART H 321 The Clty of Rome (also Classles 351 and Archaeology 351) "
Fall. 3 credits. M. Landon.
For description, see CLASS 351.
[ART H 322 Arts of the Roman Empire (also Classics 350)
4 credits. Not offered 1997-98.
A. Ramage.

The visual arts in the service of the first world state. The course starts with the architecture, painting, and sculpture of the Etruscan and Republican period but concentrates on monuments of the Imperial era in Italy and the provinces until the time of Constantine. Art made for private patrons is considered, along with the official presentations of the emperors.]
[ART H 323 Painting in the Greek and Roman World (also Classics 323) \# 4 credits. Not offered 1997-98.
A. Ramage.]

ART H 325 Greek Vase Painting (also Classics 325) "
Spring 4 credits. A. Ramage. A stylistic and iconographical approach to an art in which the Greeks excelled. The course will be arranged chronologically from the early (eleventh century B.C.), anonymous beginnings to the "personal" hands of identifiable masters of the fifth and fourth centuries B.C. Styles of cities other than Athens will be stressed.
[ART H 328 Greek Cities and Towns (also Classics 326) \#
4 credits. Prerequisite: Classics/History of Art 220 or permission of instructor. Not offered 1997-98; next offered 1998-99. J. Coleman.]

ART H 327 Greek and Roman Coins (also
Classics 327)
Fall. 4 credits. A. Ramage.
The varied issues of Greek cities and the
Roman state are examined. Coins are considered as art objects as well as economic and historical documents. The changes in design, value, and metals from the origins of coinage to the late Roman period are studied. Lectures, student presentations, and work with the actual examples.
[ART H 328 Greeks and Their Neighbors (also Classics 322) *
4 credits. Not offered 1997-98; next
offered 1999-2000. J. Coleman.
For description, see CLASS 322.]
[ART H 329 Greek Sculpture (also Classles 329) "
4 credits. Not offered 1997-98.
J. Coleman.

For description, see CLASS 329.]
[ART H 332 Architecture in the Middle Ages (also Architecture 382, Rellgious Studles 332) \# 4 credits. Not offered 1997-98.
R. G. Calkins.]
[ART H 333 Early Medieval Art and Architecture *
4 credits. Not offered 1997-98.
R. G. Calkins.

Sculpture, painting, and architecture in the period from the late antique through the Carolingian era (A.D. 300-900). The evolution of the early Byzantine tradition will also be considered.J
[ART H 334 Romanesque Art and Architecture \#
4 credits. Not offered 1997-98.
R. G. Calkins.

The painting, manuscript illumination, sculpture, and architecture of the eleventh and twelfth centuries, primarily in France, England, and Spain. Particular attention will be paid to the art of the Pilgrimage Roads, the manifestation of specific regional styles, the problems of Byzantine influence, the significance of the art of the church treasuries, and the factors that brought about the transition to the early Gothic.]

## [ART H 335 Gothic Art and Architecture (also Religlous Studies 335) \#

4 credits. Not offered 1997-98.
R. G. Calkins.]
[ART H 336 Prelude to the Itallan Renaissance (also Rellglous Studies 336) \#
4 credits. Not offered 1997-98.
R. G. Calkins.]
[ART H 337 The Medieval Illuminated Book (also Religlous Studies 337) \# 4 credits. Not offered 1997-98.
R. G. Calkins.

A study of selected major examples of medieval illuminated manuscripts from between A. D. 300 and 1500. Facsimiles of major manuscripts such as the Lindisfame Gospels, the Book of Kells, and the Hours of Mary of Burgundy will be examined. Students will write a research paper on a manuscript of their choice.]
[ART M 341 Flemish Painting (also Religlous Studies 342) "
4 credits. Not offered 1997-98.
R. G. Calkins.

An examination of Flemish painting in the 15th century, with emphasis on the works of Robert Campin, Jan van Eyck, Roger van der Weyden, Hugo van der Goes, Hans Memling, and ending with Jerome Bosch. Issues of the social, economic, and devotional context will be discussed as they pertain to the particular development of Northern Realism and Symbolism during this century.]

## [ART H $\mathbf{3 4 3}$ Italian Renaissance of the

 Fifteenth Century \#4 credits. Not offered 1997-98.
C. Lazzaro.]
[ART H 344 Italian Renaissance of the Slxteenth Century: Leonardo, Michelangelo, and Raphael \#
4 credits. Not offered 1997-98. S. Reiss. A detailed examination of the art and architecture of these three great artists and of the cultural and historical environment in which they worked. The primary focus of the course will be works of art and architecture created by Leonardo, Michelangelo, and Raphael, but their writings will be studied as well. The importance of drawing for these artists will be stressed, as will the profound impact of their art and thought on other sixteenth-century painters, sculptors and architects. The course will emphasize
conditions of patronage in Florence, Milan, and at the papal court in Rome, and the results of recent conservation campaigns involving works by the three artists will be considered.]

## ART H 345 Rome, Florence, and Venice In the Sixteenth Century \# Spring. 4 credits. C. Lazzaro.

 This course examines the distinctive cultural identities and their visual representation of three city-states in sixteenth-century Italy: Rome, Florence, and Venice. A papal state, a republic turned duchy ruled by the Medici dynasty, and an oligarchic republic, they had in common a "civil society," a social and intellectual elite of both rulers and patricians joined by a shared classical culture. Artistic models and mythological figures from classical antiquity provided a universal visual language, which was modified by local artistic traditions and histories. The course examines the images and symbols of each state; center of power, including St. Peter's, the Vatican, and the Capitoline Hill in Rome, the Piazza Signoria and San Lorenzo complex in Florence, and the piazzas of San Marco and the Doge's palace in Venice; governmentsponsored propagandistic works of sculpture, wall painting, architecture, and spectacle in the buildings and squares, issues of church and state relations, and in Florence of civic and dynastic ideas of the state; and also the role of private collections and commissions (of portraits, allegorical paintings, palaces, and gardens) in establishing cultural identity. The course discusses works of some of the major artists of the sixteenth century, including Michelangelo, Raphael, Bronzino, and Titian, but focuses on topics and issues, which are examined through class lectures, discussions, weekly readings, and term paper.
## [ART H 348 Renaissance Art in Northern

 Europe: The Sixteenth Century \# 4 credits. Prerequisites: History of Art $245,341,342,351$ or permission of instructor. Not offered 1997-98. S. Reiss. This course will examine the painting, graphic arts, and sculpture of Northern Europe in the sixteenth century. The principal emphasis will be on art produced in the Netherlands and Germany. Topics to be considered include patronage and audience in different regions of Northern Europe, the importance of fifteenthcentury traditions, the impact of Italian art, and the development of specifically northern forms of artistic expression in religious and secular art, including landscape, portraiture, and genre painting. Among the themes we will explore are constructions of gender and representations of women in NorthernRenaissance art, attitudes to peasants and the urban lower classes, the impact of the Protestant Reformation and iconoclasm, and the development of the art market in the North. Artists to be considered include Bosch, Bruegel, Dürer, and Grünewald.]

## 【ART H 350 The Culture of the

 Renaissance I (also History 361 and Comparative Literature 361) \# 4 credits. Each student must enroll in a section. Not offered 1997-98. C. Lazzaro, J. M. Najemy.]ART H 351 The Culture of the Renaissance II (also Comparatlve Literature 362, History 364, Music 390, Religious Studies 362, English 325) \#
Fall. 4 credits. W. J. Kennedy, C. Kaske For description, see COM L 362.

ART H 355 Art as Spectacle: The Italian Baroque (also Religious Studies 352) \#
Fall. 4 credits. K. Barzman.
This course casts the Italian Baroque as a society of spectacle. Lectures and discussions will focus on frescoes, public sculpture, architecture, and the re-organization of urban space in Italian cities from the end of the Council of Trent (1563) through the papacy of Clement XII (1740). Emphasis will be placed on spectacular display, on the forms of address intended to guide and impress the viewer, and on the various institutions and individuals served by this kind of cultural production. Artists covered include Bernini, Borromini, Caravaggio, Carracci, Gaulli, Cortona, and Tiepolo.

## ART H 358 Rellgion and Images Across

 the Early Modern World (also Relligious Studies 360) \#Spring. 4 credits. K. Barzman. This course will look at the religious use of images from the fourteenth through the eighteenth centuries. It will take a crosscultural perspective, focusing on Italy, France, the Low Countries, Spain, and Spanish colonial South America and Meso-America The emphasis will be on major iconographic themes (e.g., the Passion of Jesus, Eucharistic imagery, the miraculous interventions of Mary and the saints) and on the incorporation of images in rituals of devotional practice revolving around marriage, birth, illness, death, and the salvation of the soul. We will concentrate on works ranging from anonymous production to the masterpieces of early modern artists (including Giotto, van Eyck, Dürer, Grünewald, Caravaggio, Rubens, Ribera, and Murillo.)

## [ART H 360 Painting and Everyday Life in Nineteenth-Century America (also American Studles 360) \#

4 credits. Not offered 1997-98.
L. L. Meixner.

Nineteenth-century American painters often constructed images of "exceptionalism,"
DeTocqueville's term for the social harmony and material abundance he considered unique to the New World. Embedded in these icons of national cohesion, however, were signs of race, class, and political conflict that we will decode through interdisciplinary methods. Our topical units include New England portraiture and commodity, Hudson River landscape and corporate (railroad) patronage, images of African-Americans and Reconstruction, images of Native Americans, the West, and Manifest Destiny. Through these, we will challenge the assumption that American art celebrated democracy, and consider more conflicted attitudes. Our key artists include John S. Copley, George Caleb Bingham, Winslow Homer, Mary Cassatt, and Thomas Eakins. Our readings include art historical texts and others by Poe, Emerson, and Whitman.]
[ART H 361 The Social History of Nineteenth-Century European Painting \#
4 credits. Not offered 1997-98.
L. L. Meixner.]

## ARTH362 Impressionism and Society

 Spring. 4 credits. L. L. Meixner.This course discusses French Impressionism as it relates to nineteenth-century public life. Chief artists include Manet, Cassatt, Morisot, Degas, Pissarro, Monet, Seurat, Toulouse-

Lautrec, and Van Gogh. Images are interpreted as cultural products of the Third Republic, with close attention to cafe and brothel society, middle-class leisure, japonisme and imperialism, workers' movements, and Le Bon's theory of crowds. Woven into historical discussions are more theoretical considerations of utopia, capital, pathology, and the public body. Overarching issues of class, gender, and power in urban Paris will be addressed through the writings of Baudelaire, Benjamin, Pollock, Jameson, and Zola.

## ART H 365 Art from 1940 to 1990

Fall. 4 credits. J. E. Bernstock.
Major artists and movements in the United States since 1940, beginning with Jackson Pollock and Abstract Expressionism, and continuing through recent developments in art. Attention is devoted to the critical reception that artists have received and to artists' statement themselves.
[ART H 368 Problems In Modernlem: "Primitlvism" (also Comparatlve Literature 386]
4 credits. Not offered 1997-98. H. Foster.]
[ART H 367 Problems in Modernism: "High" and "Low" Culture (also Comparatlve Literature 366)
4 credits. Not offered 1997-98. H. Foster.]
ART H 370 Visual Culture and Social Theory (also Government 375 and Comparative Literature 368)
Fall. 4 credits. A. Vidler, S. Buck-Morss. For description, see Government 375.

## ART H 371 Architectural History of

 Washington, D.C.Fall or spring. Variable credit. Only for students in the Cornell-in-Washington program. Only for non-architects. P. Scott.

A historical and critical survey of the architecture of Washington. Attention will be given to the periods, styles, architects, and clients-public and private-of the notable buildings and to the urbanscape of the nation's capital. The vocabulary of architectural analysis and criticism will be taught. Field trips required.

## ART H 378 Art In Afrlcan Culture and Society (also AS\&RC 310) (3)

Fall. 3 credits. S. Hassan.
For description, see AS\&RC 310.
ART H 380 Introduction to the Arts of China (also Archaeology 380 and Asian 383) 숭
Fall. 4 credits. S. Oertling
A one semester introduction to the arts of China, this course will examine the visual arts of the world's oldest continuous civilization in a topical rather than strict chronological framework. The lectures will cover the major contributions the Chinese have made in the areas of ritual bronzes, burial art, Buddhist sculpture, pottery and porcelain, calligraphy and painting. A substantial part of the course will be devoted to the development of landscape painting, particularly in the later centuries of Chinese art. Sections for the course will meet in the Johnson Museum to examine original works from the museum's large Chinese collection.
[ART H 381 Buddhist Art In Asia © ${ }^{*}$
4 credits. Not offered 1997-98.]
[ART H 383 The Arts of Early Chlna ${ }^{\text {\# }}$
4 credits. Not offered 1997-98.
M. W. Young.]
[ART H 384 The Arts of Japan © \# 4 credits. Not offered 1997-98. M. W. Young.]
[ART H 385 Chinese Painting ©
4 credits. Not offered 1997~98.]
[ART H 386 Art of South Asia © 4 credits. Not offered 1997-98.]

## ART H 395 The House and the World:

 Architecture of Asia ©Spring. 4 credits. K. McGowan. In many Asian societies, houses are regarded as having a life force or a vitality of their own. This course will examine the role of the house as a living organism in Asia, a symbol of the cosmos encapsulated. Houses also function in many societies 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. This accumulation of energy can be conferred upon the inhabitants, or it may exist as a quiet reservoir of power, distinct from its occupants. 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. "The House and the World" will serve as the metaphor for these discoveries.

## [ART H 396 The Arts of Southeast Asla © <br> 4 credits. Not offered 1997-98.]

## Seminars

Courses at the 400 and 500 level are open to upperclass students, majors, and graduate students. All seminars involve the writing and presentation of research papers. Enrollment is limited to 15 students, and permission of the instructor is required. Students may repeat courses that cover a different topic each semester.

## ART H 400 Proseminar for Art History Majors: The History and Practice of

 Art HistoryFall. 4 credits. Prerequisite: History of Art majors only. Enrollment is limited.
K. Barzman.

Limited to majors in the department, this seminar focuses on methods and historiography. We will consider the various practices of art history employed over the years in the analysis and interpretation of cultural production. Readings will focus on classic texts and major authors responsible for codifying these approaches. Papers will call upon students to put methods into practice and to think critically about the writing of art history.

## ART H 401 Independent Study

Fall or spring. 2-4 credits. May be repeated for credit. Prerequisite: permission of a 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.

## ART H 402 Independent Study

Fall or spring. 2-4 credits. May be repeated for credit. Prerequisite: permission of a 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.

## ART H 407 Seminar on Museum Issues

Fall. 4 credits. Prerequisite: permission of instructor. Limited enrollment. All classes will meet in the Johnson Art Museum Study Gallery. M. W. Young and museum staff.
This undergraduate seminar will utilize the resources of the Johnson Art Museum and is designed to give students with a strong art history background the opportunity to work closely and directly with original objects from the museum's major collections. The course will focus on the broad issue of art and connoisseurship and will address critically the question of what determines quality in the work of art. Topics to be covered in the weekly sessions will include methods of attribution, fakes and forgeries, technique and media, restoration and conservation. Some sessions will involve the curatorial staff of the museum. Frequent reports and a significant final paper will be expected of all participants. Enrollment is limited, and permission of the instructor is necessary before the first meeting. Students interested in this course should indicate so by notifying the department directly at the time of pre-registration.
[ART H 423 Ceramics (also Classics 423 and Archaeology 423)
4 credits. Not offered 1997-98. Staff.]
[ART H 424 Sardis and the Cities of Asia Minor (also Archaeology 432 and Classics 432) "
4 credits. Not offered 1997-98
A. Ramage.]
[ART H 425 Seminar on the Bronze Age Architecture of Asla Minor (also Classics 430 and Archaeology 425) \#
4 credits. Prerequisite: permission of instructor. Not offered 1997-98.
P. I. Kuniholm.

The course will cover major architectural building programs from Neolithic Catal Hūyük, Beycesultan, to the final phases of Troy and Hittite Bogazkōy. The art and archaeology of these civilizations will be taken into account when relevant. Reading knowledge of German useful.]
ART H 427 Seminar on Roman Art and Archaeology (also Classlcs 435 and Archaeology 435) \#
Spring. 4 credits. Prerequisite: permission of instructor. A. Ramage.
Topic for spring 1998: buildings, administration and power.

## ART H 434 The Rise of Classical Greece

 (also Classics 434)Spring. 4 credits. Recommended:
Classics 220 or History of Art 220, Classics 221 or History of Art 221, or permission of instructor. P. I. Kuniholm.
The art and archaeology of the Greek dark ages. Topics include: site reports, pottery, metalworking, the introduction of the alphabet, the beginnings of coinage, and links with Anatolia and the Near East.
[ART H 441 Medleval Art In Washington Collections
4 credits. Only for students in the Cornell-in-Washington program. Not offered 1997-98. R. G. Calkins.]
[ART H 448 Studies In Sixteenth-Century European Art \#
4 credits. Prerequisite: permission of instructor. Not offered 1997-98. C. Lazzaro.]

ART H 450 Women In Italian Renalssance Art (also Women's Studies 451) \#
Spring. 4 credits. Prerequisite: permission of instructor. C. Lazzaro.
This seminar examines representations of the Madonna and Child from the fourteenth and fifteenth centuries, the narrative scenes painted on chests and other domestic furnirure, biblical and historical heroines such as Judith and Lucretia, portraits of patrician women and courtesans, and violence to women in a political context. It will investigate the contemporary ideas about motherhood, beauty, sexuality, social presentation, and gender roles in society that inform these representations. We will discuss the existing critical frameworks for interpreting them in feminst art history and theory (particularly in Renaissance studies). We will be concerned especially with how visual images are encoded with meaning, what kind of relationship can be established with their histrocial context, and how they convey social constructs as ideology.

## ART H 451 Prints of the Fifteenth

 through the Seventeenth CenturyFall. 4 credits. Prerequisite: permission of instructor. C. Lazzaro.
This seminar has several aims: to introduce students to prints - the techniques, styles, and issues of connoisseurship-and to the major printmakers of the period, including
Marcantonio Raimondi, Dürer, and Rembrandt; to give students first-hand experience with works of art in the Herbert F. Johnson Museum; and to consider the social and cultural issues raised in the medium of prints and through their unique visual language. These issues include the social hierarchies of class and gender (including witches), moral concerns and religious devotion, the construction and transmission of notions of antiquity and classicism, and the representation of the urban and rural environment. Students will give brief presentations on prints in the collection and longer ones of their own research projects on these and related topics.

ART H 456 Seminar In Baroque Art \#
Spring. 4 credits. Prerequisite: permission of instructor. K. Barzman.
This seminar will examine the historical circumstances within which academies of art emerged in Western Europe, with particular attention to official academies of state and their role in the cultural politics of absolutism. We will also focus on academic debates about art and representation; the codification of programs of study; various practices other than formal study promoted within academies (e.g., drawing after the nude model); the effects of these forms of discipline on social relations among artists, and between artists and patrons; and works of art themselves as expressions of academic discourse on truth, nature, the body, and (ultimately) the body politic. Topics may also include the transformation of academies and training programs
for professional and amateur artists from the sixteenth through twentieth centuries.

## [ART H 461 Fin-de-slècle Cultures In

 Europe, England, and America , 4 credits. Prerequisite: permission of instructor. Auditing is not permitted. Not offered 1997-98. L. L. Meixner.]ART H 462 Toplcs in Early Modernism Fall. 4 credits. Prerequisite: permission of instructor. Auditing is not permitted. Not open to freshmen or sophomores. L. L. Meixner.

Seminar Topic for fall 1997: Early Modernism in America. Using the Armory Show (1913) as its center, this interdisciplinary seminar examines American modernism prior to World War II. Against the backdrop of post-World War I society and politics, we will examine the machine aesthetic and kinetic poetry, the rise of photography at "291," Precisionism, American Dada, the Harlem Renaissance, and Social Realism. In addition to major artists such as O'Keeffe, Stieglitz, and Shahn, key literary figures including Gertrude Stein will be discussed.
[ART H 463 Studles In Modern Art 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. J. E. Bernstock

Topic for 1996: Modern Sculpture. Developments in modern sculpture will be explored from their beginnings in the late nineteenth century. A wide range of styles, media, and content will be studied. The focus will be on major sculptors, such as Auguste Rodin, Constantin Brancusi, Henry Moore, David Smith, Alberto Giacometti, Louise Nevelson, George Segal, Donald Judd, Robert Morris, Eva Hesse, and Richard Serra.]

## ART H 464 Studles In Modern Art

 Spring. 4 credits. Prerequisite: permission of instructor. Auditing is not permitted. J. E. Bernstock.Topic for 1998: To be announced

## ART H 466 Women Artists (also Women's

 Studles 404)Fall. 4 credits. Prerequisite: permission of instructor. J. E. Bernstock.
This seminar will be devoted to a study of the work of women artists from antiquity to the present. The works of the most prominent women artists from each period will be studied in relation to the changing roles of women in society. The artists to be studied include Jennifer Bartlett, Artemisia Gentileschi, Elizabeth Vigee-Lebrun, Mary Cassatt, Kathe Kollwitz, Georgia O'Keeffe, Louise Nevelson, Joan Mitchell, Judy Chicago, and Barbara Kruger.

## [ART H 470 Postmodernist Art and

 Criticism (also Comparative Literature 474)4 credits. Prerequisite: permission of instructor. Not offered 1997-98. H. Foster.]
[ART H 476 Seminar in American Art 4 credits. Not offered 1997-98. L. L. Meixner.]
[ART H 481 The Arts in Modern China 4 credits. Not offered 1997-98.]
[ART H 482 Ceramic Art of China and Southeast Asla *
4 credits. Prerequisite: permission of instructor. Not offered 1997-98.]
[ART H 483 Chinese Art of the T'ang Dynasty © \#
4 credits. Not offered 1997-98
M. W. Young.]
[ART H 486 Studies In Chinese Painting \# \#
4 credits. Not offered 1997-98. M. W. Young.]
[ART H 488 Traditional Arts of Southeast Asia 불
4 credits. Not offered 1997-98.]
[ART H 494 Feminist Theory and the History of Art
4 credits. Prerequisite: permission of instructor. Not offered 1997-98. K. Barzman.

Seminar participants will examine the impact of feminist theory on art historical practice. Based on critical anlaysis of texts from the early 1970 s to the present, we will consider the range of methods employed, the discursive traditions to which they belong (e.g., liberal, Marxist, psychoanalytic, poststructuralist), the relative merits of the methods, and the interpretive problems they present. At the graduate level, some additional meetings and work required.]

ART H 520 Seminar in Classical Archaeology (also Classics 630 and Archaeology 520)
Fall. 4 credits. Prerequisite: permission of instructor. P. I. Kuniholm.
Topic for fall 1997: Architecture of Classical Greece.

ART H 531 Problems in Medieval Art and Architecture (also Religious Studies 531)
Spring. 4 credits. Prerequisite: permission of instructor. R. G. Calkins.
Topic for spring 1998: Narrative and miniatures in medieval illuminated manuscripts.
[ART H 540 Seminar in Renaissance Art 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. C. Lazzaro.]
[ART H 549 Problems In Interpretation in Itallan Renalssance Art
4 credits. Prerequisite: permission of instructor. Not offered 1997-98. C. Lazzaro.

This seminar will examine assumptions about meaning and how meaning is produced in Renaissance art. Various interpretative strategies will be examined, among them iconographic, semiotic, feminist, and psychoanalytic, within a specifically Renaissance literary, intellectual, and social context Texts by Panofsky and critical discussions of them, Baxandall, Bryson, and others will be read and discussed with reference to particular works of art. The seminar is intended primarily for graduate students in all areas of the history of art and those in other disciplines with an interest in the Italian Renaissance. Senior History of Art majors with background in the Italian Renaissance are also welcome.]
[ART H 555 Baroque Ephemera and Public Performance
4 credits. Prerequisite: permission of instructor. Not offered 1997-98.

## K. Barzman.

This seminar focuses on early modern rituals of family, church, and state in which palaces, shrines, streets, and squares provided a
theatre for the rehearsal of formalized practices and the constitution of various economies (of pleasure, fear, mastery, control) in an asymmetrical field of social exchange. Emphasis will be placed on mixed media and ephemeral displays as the backdrop for civic parades, the elevation of popes and crowned heads of state, the reception of diplomats, trials, public executions, feastday celebrations, religious processions, funerals of state, family obsequies, banquets, weddings, and other rites of passage. Opera, ballet, and staged drama (liturgical and secular) will be introduced as more codified forms of public performance, with which performances of the self and of corporate community had much in common. Students are encouraged to attend lectures for ART H 355 in addition to required seminar meetings.]

## [ART H 570 Theories of Modemism

 Tople: Shock and Trauma (also Comparative Literature 672)4 credits. Prerequisite: permission of instructor. Not offered 1997-98.
H. Foster.]

## ART H 571 African Aesthetics (also AS\&RC 503) <br> Fall. 4 credits. S. Hassan.

For description, see AS\&RC 503.
ART H 580 Problems in Aslan Art (also Religlous Studles 580)
Fall. 4 credits. Prerequisite: permission of instructor. K. McGowan.
Topic for fall 1997: Religion in South and Southeast Asian art.

ART H 591-592 Supervised Reading 591, fall; 592, spring. 4 credits. May be repeated for credit. Limited to graduate students.
[ART H 594 Feminist Theory and the History of Art
4 credits. Prerequisite: permission of instructor. Not offered 1997-98. K. Barzman.]
[ART H 595 Art History and Visual Culture (also Comparative Literature 625)
Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98.

## H. Foster.]

## ART H 600 Honors Work

Fall or spring. 8 credits. Intended for senior art history majors who have been admitted to the honors program.
Basic methods of art historical research will be discussed and individual readings assigned, leading to the selection of an appropriate thesis topic
ART H 601 Monors Work
Fall or spring. 8 credits. Prerequisite: History of Art 600.
The student under faculty direction will prepare a senior thesis.

## HUNGARIAN

See Language Courses under Languages and Linguistics.

## INDONESIAN

See Department of Modern Languages.
FALCON Program (Indonesian)
J. U. Wolff, 307 Morrill Hall, 255-0733.

## ITALIAN LANGUAGE AND LINGUISTICS

See Language Courses under Languages and Linguistics.

## ITALIAN LITERATURE

See Department of Romance Studies.

## JAPANESE

See Departments of Asian Studies and Modern Languages.

## JAVANESE

See Language Courses under Languages and Linguistics.

## KHMER (CAMBODIAN)

See Language Courses under Languages and Linguistics.

## KNIGHT, JOHN S., WRITING PROGRAM

See John S. Knight Writing Program in
"Special Programs and Interdisciplinary
Studies" at the end of the Arts and Sciences section of this catalog.

## KOREAN

See Languages and Linguistics.

## LATIN

See Department of Classics.

## LANGUAGES AND LINGUISTICS

Professors Emeriti of Modern Languages and Linguistics: N. Bodman, J. Grimes, R. Hall, C. Hockett, R. Jones, E. Jorden, H. Kufner, R. Leed, W. McCoy, G. Messing, D. Solá, F. van Coetsem

## LANGUAGES, MODERN

L. Waugh, chair; C. Rosen, director of undergraduate studies (311 Morrill Hall); G. Appel, I. Arnesen, E. Beukenkamp, D. Campbell, D. Cruz de Jesús, I. Daly, G. Diffloth, H. Diffloth, E. Dozier, C. Fairbanks, R. Feldman, N. Gabriel, J. Gair, K. Golkowska, A. Grandjean-Levy, M. J. Highfield, Z. Iguina, N. Jagacinski, M. Johns, A. Jongman, J. Lantolf, G. Lischke, T. Lovell, J. Mancusi, M. McCarthy,
D. McGraw, L. Morató-Peña, S. Oja, J. Oliveira,
L. Paperno, S. Paperno, M. K. Redmond,
M. Rice, J. Routier-Pucci, S. Schaffzin,
K. Selden, J. Sereno, Y. Shirai, C. Sparfel,
A. Stratakos Tio, R. Sukle, P. Swenson, H. Tao, L. Trancik, S. Tun, G. Valk, C. Waldron, J. Wolff, S. Yates

Language is enormously complex and encompasses virtually all areas of human endeavor.
Learning individual languages is, of course, integral to understanding language itself as well as to understanding other cultures. The Department of Modern Languages is responsible for a large variety of language courses (the departments of linguistics, classics, Near Eastern studies, and Africana studies offer still others). In addition to fulfilling the College of Arts and Sciences language requirement, some language courses satisfy the college's breadth requirements.
Courses at all levels are offered not only in Spanish, French, German, Italian, Chinese, Japanese, and Russian, but also in some less familiar languages such as Korean, Hindi, Indonesian, Quechua, and many others-a total of about thirty. See the listings below under the rubric "Language Courses." The department's resources include the Center for Language Learning at Noyes Lodge, a state-of-the-art facility where instructors can create high-tech language study materials and students can use them in a beautiful setting on Beebe Lake.
The study of language itself is part of many disciplines and thus is offered in various departments in the College of Arts and Sciences. The members of the professorial faculty in the Department of Modern Languages are linguists who have interests in common with the faculty of the Department of Linguistics (see below). The contributions of the Department of Modern Languages lie mainly in the areas of language use, language perception and production, language acquisition, textual and discourse analysis, cognitive, social and cultural aspects of language, and the structure, history, or social circumstances of a particular language or language family.

## LINGUISTICS

S. McConnell-Ginet, chair; J. Whitman, director of graduate studies ( 320 Morrill Hall);
M. Diesing, director of undergraduate studies ( 212 Morrill Hall); J. Bowers, W. Browne, V. Carstens, A. Cohn, C. Collins, W. Harbert, S. Hertz, J. Jasanoff, A. Nussbaum, F. Parkinson, M. Suñer, D. Zec, A. Zucchi. Visiting: F. Parkinson.
Linguistics, the systematic study of human language, lies at the crossroads of the humanities and the social sciences, and 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 linguistic colleagues in the Department of Modern Languages and 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 over time; sociolinguistics, the study of language's role in social and cultural interactions; and applied linguistics, which relates the results of linguistic research to problems of bilingual education, second-language learning, and teaching.
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 (e.g., Spanish or Japanese) 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 Linguistics 101 , which is a prerequisite for most other courses in the field, or one of the freshman writing seminars offered in linguistics (on topics such as metaphor, American Sign Language, and the science of language). Linguistics 101 and other introductory courses fulfill the social science distribution requirement. Most 100 - and 200 -level courses have no prerequisites and cover various topics in linguistics (e.g., Ling 118 Varieties of Human Language, Ling 200 Introduction to Bilingualism, Ling 216 Mathematical Linguistics) or focus on the linguistics of a particular geographic region or historical development of particular languages (e.g., Ling 217 History of the English Language, Ling 230 Introduction to Southeast Asian Languages and Linguistics). Some of these courses also fulfill the breadth requirements.

Talks and discussions about linguistics are offered through the Undergraduate Linguistics Forum and the Cornell Linguistic Circle. These meetings are open to the university public and anyone wishing to learn more about linguistics is most welcome to attend.

## The Major

For questions regarding the linguistics major, contact Professor Molly Diesing ( 212 Morrill Hall, 255-8635, md20@comell.edu).
The prerequisite for a major in linguistics is the completion of Linguistics 101 and either Linguistics 201 or 203. The major has its own language requirement, which should be completed as early as possible: qualification in two languages other than English, one of which must be either non-European or non-Indo-European. With approval of the department's director of undergraduate studies, this requirement may be waived (i.e., reduced to the normal arts college language
requirement) for students taking the cognitive studies concentration or a double major.
The other requirements for the linguistics major are as follows:

1) Linguistics 201 (Introduction to phonetics and phonology) or Linguistics 203 (Introduction to syntax and semantics), whichever one was not taken as a prerequisite to the major
2) Linguistics 410 (Historical)
3) Three of the following five courses, one of which must be either Phonology 1 or Syntax 1:
Linguistics 301 (Phonology I)
Linguistics 303 (Syntax I)
Linguistics 309 or 310 (Morphology I or II)

Linguistics 319 (Phonetics I)
Linguistics 421 (Semantics I)
4) A course at or beyond the 300 level in the structure of English or some other language, or a typological or comparative structure course such as Linguistics 401, 402 , or Field Methods.
5) One additional linguistics course for at least 4 credit hours, which may be a course with significant linguistic content in a related field.

Honors. Applications for honors should be made during the junior year. Candidates for admission must have a 3.0 (B) average overall and should have a 3.2 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. The thesis is usually written during the senior year but may be begun 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 adviser and at least one other faculty member in linguistics. Members of other departments may serve as additional members if the topic makes this advisable. Linguistics 493 and 494 may be taken in conjunction with thesis research and writing but are not required.
The courses in both the Department of Modern Languages and the Department of Linguistics are listed below under the following rubrics: General Linguistics,
Linguistics of Particular Languages,
Language Courses.

## General Linguistics

Fees: Depending on the course, a small fee may be charged for photocopied texts for course work.

## Freshman Writing Seminars

LING 100 Language, Thought, and Reality
For descriptions, see freshman writing seminar brochure

## LING 101 Theory and Practice of Linguistics

Fall, spring, or summer. 4 credits each term. Fall: A. Zucchi; spring: C. Collins. An introductory course designed to provide an overview of the science of language,
especially its theoretical underpinnings, methodology, and major findings. The course focuses on the basic analytic methods of several subfields of linguistics including phonetics, phonology, morphology, syntax, semantics, language variation, language change, and psycholinguistics.
LING 110 Language Learning and Language Use
Fall. 3 credits. J. Sereno. Language permeates every aspect of our lifecognitive, social, economic, and political. In this course, we will explore how language is used in everyday conversation and how language is learned. What communicative functions does language serve? What is the social significance of patterns of language use? How does language relate to the mental capacities that people have? How do we learn language as children? Is this process different from learning languages as an adult? How does literacy influence the processing of language?

## LING 115 Language and Culture

Spring. 3 credits. J. Whitman.
We often assume that there is a close relationship between differences in language and cultural variation. This course focuses on that relationship, beginning with an examination of the linguistic relativity hypothesis, which posits a link between basic properties of languages and crosscultural differences in world view. We also examine potential cultural determinants of variation in language: pronouns and honorific systems, systems of ritual and taboo in language, and the impact of narrative organization on grammar. Special attention is paid to 'extreme' forms of language: invented languages from Esperanto to Klingon; glossolalia and trance languages; language games and secret languages.

LING 118 Varieties of Human Language
Fall. 3 credits. F. Parkinson.
Language diversity has a place in our complex world. Whether spoken by a handful of speakers or by hundreds of millions, each language manages the same tasks of communication and fits in with its social environment. Language identification, literacy, and multilingualism are among the issues touched on.

## LING 170 Introduction to Cognitive Science (also Cognitive Studies 101, Computer Science 101, and Psychology 102)

For description, see COGST 101.
LING 200 Introduction to BIIIngualism
Spring. 3 credits. J. Sereno
A basic introduction to the study of individual and societal bilingualism. Characteristics of bilingual language learning and use, and possible cognitive consequences will be discussed. Aspects of societal bilingualism in terms of social and political issues will also be considered.

LING 201 Introduction to Phonetics and Phonology
Spring. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor. F. Parkinson.
An introduction to the study of human speech sounds and how they pattern in languages. The first part of the course will focus on phonetics: the production, acoustics, and perception of speech, with attention to both the common and the less common sounds of the world's languages. The second part of the
course will focus on phonology: how human speech sounds pattern within and across languages, with an emphasis on the rules that govern these pattems and their possible representation.

## LING 203 Introduction to Syntax

 and SomanticsFall. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor. C. Collins.
This course focuses on language as a system of knowledge that enables native speakers to create and interpret the structures of their language. Part of the course will consider issues of syntactic structure, such as the order of constituents, the hierarchical organization of grammars, and syntactic universals. The other part of the course will focus on meaning and interpretation, addressing such issues as the role of context, how information is structured, and how it is encoded in the syntax.

## [LING 215 Psychology of Language (also Psychology 215) <br> Not offered 1997-98. <br> For description, see PSYCH 215.]

## LING 216 Mathematical Linguistics

Spring. 4 credits. A. Zucchi.
The course is an introduction to the mathematical concepts and techniques most frequently used in theoretical linguistics.

## [LING 220 Acquisition of Spoken

 LanguageSpring. 3 credits. Not offered 1997-98. A. Jongman. A survey of phonetic aspects of language learning, focusing on first- and secondlanguage acquisition. Relevant concepts in phonetics and psycholinguistics will be introduced at every stage. Topics include the role of innate knowledge versus linguistic experience in phonological development, language-universal aspects of speech learning, the phonetics of motherese, the existence of a critical period for language learning, and the phonetics of foreign accents.]
[LING 240 Experiments on Language Fall or spring. 4 credits. Prerequisite: Linguistics 110 or equivalent. Not offered 1997-98. A. Jongman.
This course surveys experimental linguistic research in order to discover how language is organized and processed. Experimental methods and data will be discussed for each level of language, including phonetics, phonology, lexicon, morphology, syntax, semantics, and pragmatics. Includes a lab section with "hands-on" projects.]

## LING 244 Language Use and

 Gender Relations (also Women's Studies 244)Spring. 4 credits. For non-majors or majors. S. McConnell-Ginet. This course explores connections between language (use) and gender/sex systems, addressing such questions as the following. How do sex and gender affect the ways we speak, the ways we interpret and evaluate speech? How do sociocultural differences in women's and men's roles affect their language use, their relation to language change? What is meant by sexist language? How does conversation structure the social worlds of women and men? Readings draw from work in linguistics, anthropology, philosophy, psychology, literature, and general women's studies and feminist theory.

LING 246 Minority Languages and Linguistics
Spring. 4 credits. W. Harbert, W. Browne,
V. Carstens, M. Diesing, and M. Suner

This course examines minority languages from linguistic, social, and political perspectives. Topics discussed include language death, language maintenance, bilingualism, language contact, official status, and related issues.
Languages/language families to be discussed include Spanish in the U.S., Celtic languages, African languages, Yiddish, and others, depending on the special interests of the instructors.

## [LING 264 Language, Mind, and Brain

Fall. 4 credits. For non-majors or majors. Prerequisite: a basic course in linguistics and/or psychology is desirable. Not offered 1997-98. J. Bowers.
An introductory course that emphasizes the formal structure of natural language and its biological basis. The following topics are covered: the formal representation of linguistic knowledge, principles and parameters of universal grammar, the basic biology of language, mechanisms of linguistic performance, the modularity hypothesis, and language and cognition. This course is especially suited for majors in fields such as psychology, philosophy, computer science, and linguistics (and also for those enrolled in the concentration in cognitive studies) who want to take a one-semester introduction to linguistics that concentrates on the formal principles that govern linguistic knowledge, along with some discussion of their biological realization and their use in perception and production.]

## LING 270 Truth and Interpretation (also Cognitive Studies 270 and Philosophy 270)

For description, see PHIL 270.

## LING 301-302 Phonology I, II

301, fall; 302, spring. 4 credits each term. Prerequisites: for Linguistics 301, Linguistics 201 or equivalent; for Linguistics 302, Linguistics 301 or permission of instructor. Fall: F. Parkinson; spring: D. Zec 301 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. 302 provides further refinement of the issues investigated in 301 , focusing in particular on metrical theory, Lexical Phonology, autosegmental phonology, and Prosodic Morphology.
LING 303-304 Syntax I, II
303 , fall; 304 , spring. 4 credits each term. Prerequisites: for Linguistics 303, Linguistics 203; for Linguistics 304, Linguistics 303 or permission of instructor. Fall:
M. Suñer; spring: M. Diesing.

303 is an introduction to syntactic theory, with emphasis on the classical theory of transformational grammar. 304 is an advanced course, surveying current syntactic models and dealing with such issues as the nature of syntactic representation, levels of representation, principles of universal grammar, and the relation of syntax and semantics.
[LING 306 Functional Syntax
Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. Not offered 1997-98.

A general survey of syntactic theories that highlight grammatical function and reveal its role in discourse structure.]

## LING 309 Morphology

Spring. 4 credits. Prerequisite: Linguistics 101 or equivalent or permission of instructor. V. Carstens.
A general survey course, focusing on the relationship of meaning and form in morphology and introducing techniques of morphological analysis. Current research on formmeaning questions is discussed.

## [LING 310 Morphology II

Fall. 4 credits. Prerequisite: Linguistics 203 or permission of instructor. Not offered 1997-98. Staff.
Considers recent discussions in morphological theory, in particular the relationship of morphology and syntax.]

## LINO 319 Phonetics I

Fall. 4 credits. Prerequisite: Linguistics 201 or permission of instructor. A. Jongman.

Provides a basic introduction to the study of phonetics. Topics to be covered 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, stress and intonation.

## LING 320 Phonetics II

Spring. 4 credits. Prerequisite: Linguistics 319. A. Jongman.

This course is a continuation of Phonetics I and provides 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 will be part of the course.

## [LING 325 Pragmatics

Spring. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. Not
offered 1997-98. S. McConnell-Ginet. An introduction to the study of such topics as speech acts, presupposition, deixis, implicatures, and conversational strategies.]

## [LING 334 Non-Linear Syntax

Fall. 4 credits. Prerequisite: Linguistics 303 or equivalent. Not offered 1997-98. C. Rosen.

Analyses of some twenty diverse languages are examined with the aim of building a formal account of the syntactic constructions existing in the world's languages, and discerning universals that delimit this inventory. Non-linear theory, designed for comparative work, depicts constructions in the abstract, not imagining them as arrays of elements in space. Simultaneously it studies the morphosyntactic systems that relate constructions to their linear realizations.]
LING 350 Representing Language: Knowledge Taught and Untaught (also Cognitive Studies 350)
Fall. 4 credits. J. Gair.
This course will deal with some of the discoveries made in modern linguistics that reveal some fundamental properties of human language and the special human capacity for it, as well as some of the still unsettled questions about it. It will also trace some of
the paradigm shifts that have occurred within linguistics, and consider some of the ways in which language has been represented, both within the science of linguistics and outside of it, by contrasting what is known with what is popularly believed to be true. Projected topics will include: innateness vs. language as socio-cultural; language variability vs. Universal Grammar; language change and relatedness of languages; the question of correctness.

## [LING 370 Language and Cognition (also Psychology 370)

Spring. 4 credits. Prerequisite: Linguistics 101 or 264 or Psychology 215, or permission of one of the instructors. Not offered same years as Psychology 416. Not offered 1997-98.
Examination of current research on selected topics on language from both linguistic and psychological perspectives. Topics may include: Universal Grammar and language acquisition, syntactic parsing, word recognition, sentence production, aphasia, and schizophrenic language.]
LING 390 Independent Study in Linguistics
Fall or spring. $1-4$ credits variable.
Prerequisite: Linguistics 101 or permission of instructor. Staff.
Independent study of linguistics topics not covered in regular curriculum for undergrads.
LING 400 Semiotics and Language (also Comparative Literature 410 and French 400)
Spring. 4 credits. Prerequisite: some background in an area relevant to semiotics: e.g., linguistics, philosophy, psychology, anthropology, or literature, or permission of instructor. L. Waugh. An introduction to the study of semiotics in general and to particular semiotic theories (for example, those of Saussure, Peirce, Jakobson) and to language as a semiotic system. The particular topics to be discussed will depend on the interests of the students. Jakobson's work will be featured in spring 1998.

## LING 401 Approaches to Language

 Typology IFall. 4 credits. Prerequisite: Linguistics
101 or equivalent. C. Rosen.
Study of a basic question of contemporary linguistics: in what ways do languages differ, and in what ways are they all alike? Efforts to formalize universals of syntax and to characterize the total repertory of constructions available to natural languages. Common morphological devices and their syntactic correlates. Emphasis on systems of case, agreement, and voice.

## LING 402 Approaches to Language

 Typology IISpring. 4 credits. Prerequisite: a course in syntax. V. Carstens.
A topics-oriented course focusing on the interaction between linguistic theory and crosslinguistic variation. Topics for 1998: syntactic properties interacting with rich inflection.

## [LING 403 Introduction to Applied Lingulstics

Fall. 4 credits. Prerequisite: A course in the structure of a language at the 400 level. Not offered 1997-98. J. Lantolf, Y. Shirai. Examination of the theoretical bases of applied linguistics, including second-language learning and current language-teaching methodologies.]

## LING 405 Soclolingulstics

Fall. 4 credits. Prerequisite: Linguistics
101, 110, or permission of instructor. J. Wolff.

Systematically within the interactions between language and social context, we will examine dialect usage (diglossia, multilingualism, codeswitching); variation and language change (network theory, change in progress); ethnography of communication and speech acts; language and culture; and language and gender, race and power (including pidgins and creoles)

## LING 406 Ethnolingulstics

Spring. 4 credits. Prerequisite: Linguistics 101 or permission of instructor. J. Wolff This course will be an introduction to the study of pidgin and creole languages and the issues surrounding them both in and beyond linguistics. Topics covered will include genesis of pidgins and creoles; classification of pidgins and creoles; creoles and language universals; creoles and sociolinguistic variation; a module on Saramaccan Creole English; educational and language planning issues; sociohistorical issues; Black English.

## [LING 409 Psychollnguistics of Second-

 Language ReadingFall. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. G. Appel. In-depth analysis of the research on the reading process in a second language. Topics include processing of narrative vs. expository texts (descriptive, problem solving, causative etc.); comparison of the reading process in native vs. second languages, and development of methodologies for the teaching of reading in the second-language classroom.]

## LING 410 Introduction to Historical Linguistics *

Spring. 4 credits. Prerequisite: Linguistics 201 or permission of instructor. J. Jasanoff. A survey of the basic mechanisms of linguistic change, with examples from a variety of languages.

## LING 413 Toplcs in Historical

 Lingulstics \#Fall. 4 credits. Prerequisite: Linguistics 410 or permission. Not offered 1997-98
W. Harbert, J. Jasanoff, and C. Rosen.

Examines a selection of recent research illustrating a variety of productive and innovative approaches to problems in historical linguistics. Readings center on phonological and morphological evolution in the Romance and Germanic families. Students carry out guided research projects.]

## LING 421-422 Semantics I, II

421, fall; 422, spring. 4 credits each term. Prerequisites: for Linguistics 421, Linguistics 203; for Linguistics 422, Linguistics 421 or permission of instructor. Fall:
M. Diesing; spring: A. Zucchi.

421: An introduction to semantics of natural language. The course starts from basic foundational questions conceming the nature of meaning and the empirical domain of semantic theory. Truth-conditional and logical theories and their application to the investigation of the structure of natural languages are extensively explored (with some comparisons with other approaches). Through the study of quantification, scope, anaphora, modalities, presuppositions, and the like, one tries to gain insight into general characteristics of the cognitive apparatus that is at the basis of our capacity for understanding sentences.

422: Guides students into current work in semantic theory. The first half of the course is an introduction to Montague-style semantics, whose influence on current research is quite extensive. The second half of the course focuses on selected topics that have grown out of (and sometimes against) classical Montague semantics. Such topics are usually drawn from the following: generalized quantifiers and anaphora, type-shifting, problems of tense and aspect, the linguistic relevance of algebraic approaches to properties, propositions, events and thematic roles, and discourse representation theory

LING 436 Language Development (also Human Development and Family Studies 436 and Psychology 436)
Spring. 4 credits. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive develop ment, or linguistics. Offered alternate years. B. Lust.
A survey of basic issues, methods, and research in study of first-language acquisition. Major theoretical positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental linguistic issues of universal grammar and the biological foundations for acquisition are discussed, as are the issues of relations between language and thought. The acquisition of communication systems in nonhuman species such as chimpanzees are addressed, but major emphasis is on the child.

## LING 493 Honors Thesis Research

Fall. 4 credits. Staff.
May be taken before or after Linguistics 494 , or may be taken independently.
LING 494 Honors Thesis Research
Spring. 4 credits. Staff.
May be taken as a continuation of, or before, Linguistics 493.

## [LING 600 Fleld Mathods

Spring. 4 credits. Prerequisites: Linguistics 201 and 203 or permission of instructor. Not offered 1997-98. Staff.
Elicitation, recording, and analysis of data from a native speaker of a non-Western language not generally known to students.J

LING 601 Topics In Phonological Theory Spring, 4 credits. Prerequisites; Linguistics 301 and one higher-level course in phonology. D. Zec.
Selected topics in current phonological theory.

## LING 602 Topics in Morphology

Fall. 4 credits. Prerequisites: Ling 301 or 303 or permission of instructor. D. Zec. Selected topics in current morphological theory.
LINQ 604 Research Workshop
Fall. 4 credits. S-U grade only. Prerequisite: three or more semesters of graduate study in linguistics. V. Carstens, A. Cohn. Participants will present their own ongoing research and discuss it with their colleagues. Individual topics will be chosen on the basis of interest, experience, and probable focus of dissertation research

LING 607 Twentieth-Century Approaches to Language
Fall. 4 credits. Prerequisite: at least one course in linguistics or permission of instructor. Offered alternate years.
L. Waugh, M. Bernal.

The development of 20th-century approaches to language in America and Europe. Work in 19th-century approaches will also be considered in their relation to 20th-century approaches, and will be given special attention in fall 1997.
[LING 608 Dlscourse Analysls (also Comparative Literature 618)
Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98.
J. Lantolf, L. Waugh, H. Tao.

Linguistic theory applied to relationships
beyond the sentence.]

## LING 616 Syntax III

Fall. 4 credits. Prerequisite: Linguistics
304 or permission of instructor. C. Collins An 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 633 Seminar in First-Language Acquisition: Cross-IIngulstic Studies of the Acquisition of Anaphora (also Human Development and Family Studies 633)
Fall. 1-4 credits. Prerequisite: Linguistics
436 or equivalent or permission of instructor. Not offered 1997-98. B. Lust. This seminar will review and critique current theoretical and experimental studies of the first-language acquisition of anaphora, with a concentration on insights gained by crosslinguistic study of this area. The seminar will focus on relating current developments in linguistic theory regarding anaphora to current experimental research on first-language acquisition of anaphora. Attention will also be given to the development of research proposals.]
LING 637 Experlmental Research for Language Sciences
Fall. 4 credits. M. McCarthy, J. Sereno. A detailed study of experimental procedures for carrying out research in linguistics, especially in the areas of applied linguistics, phonetics, and language acquisition. Quantitative and qualitative research methods are considered.

## [LING 648 Speech Synthesis by Rule

Spring. 4 credits. Prerequisite: Linguistics
301,319 , or permission of instructor.
Offered alternate years. Not offered
1997-98. S. Hertz.
Investigates the nature of the acoustic
structure of speech synthesis, using speech as a tool for exploring this structure. A particular acoustic model will be proposed, developed, and motivated by considering the relationship between phonological and acoustic structure, speech timing, phonetic universals,
coarticulation, and speech perception. The primary tool for investigation will be the Delta System, a powerful software system for investigating phonology and phonetics through speech synthesis. The course is meant for graduate students and advanced undergraduate students in linguistics, but may also be of interest to students in psychology/ psycholinguistics, computer science, and cognitive studies.]

## LING 700 Seminar

Fall or spring, according to demand.
Credit to be arranged.
Seminars are offered according to faculty interest and student demand. Topics in recent years have included subject and topic,

Montague grammar, speech synthesis, lexicography, classical and autonomous phonology, Japanese sociolinguistics, relational grammar, semantics and semiotics, and others.

## LING 701-702 Directed Research <br> 701, fall; 702, spring. $1-4$ credits. Hours to be arranged. Staff.

LING 773-774 Proseminar In Cognitive Studies I, II (also Cognitive Studies 773-774, Psychology 773-774, Philosophy 773-774, and Computer Science 773-774)
Fall: R. Grade; spring: S-U only.
4 credits. J. Sereno.
This year-long seminar is intended to provide graduate students with an interdisciplinary introduction to the study of knowledge, its representation, acquisition, and use.

## Linguistics of Particular Languages

Fees: Depending on the course, a small fee may be charged for photocopied texts for course work.

## African

## [LING 235 Introduction to African Languages and Linguistics (e)

Fall. 3-4 credits variable. Not offered 1997-98. C. Collins.
This is a survey of aspects of language use in Africa. We will discuss the relation between language and culture, the structural characteristics of African languages, and the historical relationships between different African languages.]

## [LINO 431 Structure of an African Language

Spring. 4 credits. Prerequisite: Linguistics 101 or permission of the instructor. Offered alternate years. Not offered 1997-98. V. Carstens.
A survey of the grammar of an African language in light of current linguistic theory.]

## [LINO 514 Syntax of African Languages

Spring. 4 credits. Prerequisites: Linguis-
tics 101 and permission of instructor. Not offered 1997-98. V. Carstens.
Selected topics in the syntax of African
languages.]

## Arabic

## LING 416 Structure of the Arabic Language (also Near Eastern Studies 416) (e) <br> For description, see NES 416.

## Celtic

[LING 236 Introduction to Gaelic
Spring. 3 credits. Not offered 1997-98. W. Harbert.

This course is an introduction to the history, structure, and current status of the Scottish Gaelic language, oriented around elementary Gaelic texts.]

## LING 238 Introduction to Welsh

Spring. 3 credits. W. Harbert.
This course surveys the history, structure, cultural and political situation of the Welsh language. It includes several sessions of elementary language instruction and a brief introduction to Welsh literature.
[LING 239/539 The Celtic Languages Fall. 4 credits. Graduate students register under Ling 539. Not offered 1997-98. W. Harbert

This course surveys the history, structure, and political and social situation of the Celtic
languages (Welsh, Scottish Gaelic, Irish Gaelic, Breton, Cornish, and Manx). The course includes a few days of introductory language instruction in some of these languages.]

## LING 437 Celtic Linguistic Structures

 Fall. 4 credits. Prerequisite: Linguistics 303. W. Harbert.This course will treat selected topics in the syntax and morphosyntax of the modern Celtic language.

## [LING 623-624 Old Irish I, II

623 , fall; 624 , spring. 4 credits each term. Prerequisite for 624: 623 or permission of instructor. Not offered 1997-98. J. Jasanoff.]

## LING 625 Middle Welsh

Fall. 4 credits. Prerequisite: permission of instructor. W. Harbert.
Students develop a reading knowledge of Middle Welsh through reading prose and poetic texts' with emphasis on prose tales, including the Mabinogi.

## [LING 627 Advanced OId Irish]

## Chinese

CHIN 403 Structure of the Chinese Language: Introduction to Chinese Lingulstics ©
Spring. 4 credits. Prerequisite: permission of instructor. H. Tao
This course will be an introduction to the structure of Chinese and to general issues related to Chinese linguistics. Special attention will be paid to Chinese discourse and pragmatics and to general questions of language use.

## English

## LING 217 History of the English Language \#

Fall. 4 credits. W. Harbert.
This course explores the development of the English language from its Indo-European beginnings to the present. Topics covered include changes in sound, vocabulary and grammatical structure, external influences, Old English, Middle English, Standard English, dialects, and World Englishes.

## LING 311 The Structure of English: Demystlifying English Grammar

Spring. 4 credits. M. Suner.
Do you suffer from grammatical insecurity? In foreign language classrooms, do you find yourself at a loss because you don't know how grammatical terminology applies to English? This course will make English grammar accessible and comprehensible to native speakers who want to understand how the language they use so easily works. In addition to standard grammatical notions, the course will consider dialectal variation, matters of style, how sentence structure conveys viewpoint, and other discourse phenomena.

## 【LING 649 Structure of Old English

Spring. 4 credits. Prerequisite: Ling 441. Offered alternate years. Not offered
1997-98. W. Harbert.

Linguistic overview of Old English, with emphasis on phonology and syntax.]

## French

## The Major

The French major has three separate tracks: the literature track, the area studies track, and the linguistics track. The linguistics track is described here; for the literature and area studies tracks, see the description under Romance Studies. The major in French linguistics is designed to give students proficiency in the oral and written language and to develop skills in the linguistic analysis of French.

While prospective majors should try to plan their programs as far ahead as possible, no student will be refused admission merely because of a late start. It is even possible for a student to begin French and/or linguistics at Cornell and become a major. Students are admitted to the major in French linguistics by the director of undergraduate studies of the Department of Romance Studies, Professor Jacques Béreaud, but will be guided by their individual advisers.

## The French Linguistics Major

To be admitted to the major, students should have completed Linguistics 101 and French $200,203,205$, or 213 (or their equivalents) by the end of the sophomore year. It is expected that all students in the major will also take either French 220, 221, or 222, preferably by the end of the sophomore year.
To complete the major, a student must:

1) acquire a sound degree of competence in French. This competence is demonstrated by the successful completion of French 312 (or its equivalent) or by the passing of a special examination. Typically, students in the major will have taken 312 by the end of their junior year.
2) take six courses in French, Romance, and general linguistics (in addition to Linguistics 101). These courses will include at least one course concerning the history of French (e.g., Romance Linguistics 321, French 629 (listed under Romance Studies]), one course concerning the structure of French (e.g., French 405, 408, 410, Linguistics 323), and one other course in French linguistics.
3) take two courses (preferably a sequence) in some allied area, for example,
(a) French literature and civilization,
(b) psycholinguistics, (c) philosophy of language, (d) French history, culture, music, or history of art or architecture (This requirement may be waived for students who are double majors in other fields.)
Honors. The honors program encourages well-qualified students majoring in French linguistics to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, provides a unique learning opportunity, since it allows for wide reading and extensive rewriting to a degree not practically possible in the case of course papers.
No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have
agreed to supervise their work. They may receive course credit by enrolling in French 429-430, 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 adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.

## [FRDML 405 Contemporary Theorles of

 French GrammarFall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1997-98. L. Waugh.
Selected topics in twentieth-century French linguistics.]

## [FRDML 408 Lingulstic Structure of

 French I (also Linguistics 408)Fall. 4 credits. Prerequisites: qualification in French and Linguistics 101 or Linguistics 400 , or permission of instructor. Offered alternate years. Not offered 1997-98. Staff.
A synchronic study and analysis of modem French, with emphasis on its phonology and morphology.]
[FRDML 410 LIngulstic Structure of French II: Semantics, Pragmatles, and Discourse Analysls
Fall. 4 credits. Prerequisite: qualification in French. Offered alternate years. Not offered 1997-98. L. Waugh.
A synchronic study and analysis of modern French, with emphasis on semantics,
pragmatics, and discourse analysis.]

## FRDML 700 Seminar in French

 LinguisticsSpring, according to demand. Credit to be arranged.
Seminars are offered according to faculty interest and student demand. Topics in recent years have included current theories in French phonology, current theories in French syntax, and semantics of French.

## [LING 232 The French Language Today

 (also French 232)Fall. 3 credits. Prerequisite: Linguistics 101. Not offered 1997-98. A. Cohn.

Designed for students with a working knowledge of French, this course explores the structure of French and how it is used. The course investigates the sound system, word structure and sentence structure of French as well as different varieties of French, including regional and social variation and formal vs. informal differences.]

## German and Germanic

## [CERLA 404 Modern German Syntax

Spring. 4 credits. Prerequisites: German
304 or equivalent and Linguistics 101 or
303. Not offered 1997-98. M. Diesing.

An application of selected theoretical syntactic models to problems in the syntax of modern German.]

## [GERLA 606 Topics In Historical

 Germanle Phonology "Spring. 4 credits. Prerequisite: Ling 441. Not offered 1997-98. W. Harbert. The development of the sound system from Proto-Germanic to its daughter languages.]
[GERLA 607 Topics In Historlcal Germanic Morphology \#
Fall. 4 credits. Prerequisite: Ling 441. Not offered 1997-98. J. Jasanoff.
The Germanic verbal system and its IndoEuropean origins.]

## [GERLA 608 Topics In Historical

## Germanic Syntax

Fall. 4 credits. Prerequisite: Ling 441. Not offered 1997-98. W. Harbert.
A diachronic and comparative investigation of syntactic processes in the older Germanic languages.]

## [CERLA 710 Seminar In Germanlc

 LinguiatlesFall or spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered 1997-98.]

## [GERLA 720 Seminar Ín Comparative

 Germanic LingulsticsFall or spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered 1997-98.
Topics include phonology, morphology, syntax, and dialectology of the older
Germanic languages.]
[LING 237 The Germanic Languages
Fall. 4 credits. Not offered 1997-98.
W. Harbert, M. Diesing.

This course surveys the history, structure, and use of the modern Germanic languages
(English, German, Dutch, Afrikaans, Swedish, Danish, Icelandic, Norwegian, Faroese, and Yiddish).]

## [LING 241 Yiddish Lingulstles

Spring. 3-4 credits variable. Prerequisite:
Linguistics 101 or permission of instructor Not offered 1997-98. M. Diesing.
This course will cover a wide variety of topics relating to the Yiddish language and Yiddish culture, including the structure of Yiddish, the history of the Yiddish langauge, Yiddish in America (the Yiddish revival, the role of the Yiddish press, etc.), Yiddish as a minority/ dying language, and the influence of Yiddish on present-day American English. No previous knowledge of Yiddish required.]

## Lina 315-316 Old Norse

315, fall; 316, spring. 4 credits each term. H. Bernhardsson.

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 will be the center of attention, and the purpose is twofold: the student will gain (a) knowledge of an ancient North Germanic language, important from a linguistic point of view, as well as (b) access to the medieval Icelandic (and Scandinavian) literature.
315: 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. 316: 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 441 Introduction to Germanic

 LinguistlesFall. 4 credits. Prerequisite: Linguistics
101 or permission of instructor. J. Jasanoff. Survey of major issues in historical Germanic linguistics.

## [LINO 645 Cothle

Fall. 4 credits. Prerequisite: Linguistics 101. Offered alternate years. Not offered 1997-98. W. Harbert.
Linguistic structure of Gothic, with extensive readings of Gothic texts.]
LING 646 Old High German, Old Saxon Spring. 4 credits. Prerequisite: Linguistics 101. Offered alternate years. W. Harbert.
[LING 649 Stmiture of Old English *
Fall. 4 credits. Prerequisite: Ling 441.
Offered alternate years. Not offered 1997-98. W. Harbert.
Linguistic overview of Old English, with emphasis on phonology and syntax.]

## Greek

LING 609 Greek Comparatlve Grammar (also Classics 421)
Fall. 4 credits. Prerequisite: thorough
familiarity with the morphology of classical
Greek. A. Nussbaum.
The prehistory and evolution of the sounds and forms of ancient Greek as reconstructed by comparison with the other Indo-European languages.

## [LING 611 Greek Dialects (also Classics 425)

4 credits. Not offered 1997-98; next
offered 1998-99. A. Nussbaum.
A survey of the dialects of ancient Greek through the reading and analysis of representative epigraphical and literary texts.]
[LING 613 Momerle Philology (also Classics 427) "
4 credits. Prerequisite: ability to read
Homeric Greek. Not offered 1997-98; next offered 1999-2000. A. Nussbaum. The language of the Homeric epics: dialect background, archaisms, modernizations. The notion of a Kunstsprache: its constitution, use, and internal consistency. The phonological and morphological aspects of epic compositional technique.]

## [LING 615 Mycenaean Oreek (also

 Classics 429) *4 credits. Prerequisite: thorough familiarity
with the morphology of Classical Greek.
Not offered 1997-98. A. Nussbaum. An introduction to the epigraphy, language, and content of the Linear B tablets with special attention to their implications for Greek historical grammar and dialectology.]

## Indic and Dravidian

LING 341 India as a Linguistic Area
Spring. 4 credits. Prerequisite: Linguistics
101 or permission of instructor. J. W. Gair. A basic introduction to the linguistic and sociolinguistic character of the subcontinent, with special attention to cross-linguistic family influences and convergence.

## [LING 440 Dravidian structures

Fall. 4 credits. Prerequisite: Linguistics
101. Not offered 1997-98. J. Gair. A comparative and contrastive analysis of the structures of several Dravidian languages.]

## [LING 442 Indo-Aryan Structures

Fall. 4 credits. Prerequisite: Linguistics
101. Not offered 1997-98. J. Gair. Typological discussion of the languages of the subfamily. Specific topics and emphasis may vary depending on the interest of the students.]

## Indo-European

LING 131-132 Elementary Sanskrit (also Classics 131-132 and Sanskrit 131-132)
For description, see SANSK 131-132.
[LING 251-252 Intermedlate Sanskrit (also Classics 251-252 and Sanskrit 131-132) 핳
For description, see SANSK 131-132.]

## [LING 617-618 Hittite

617, fall; 618, spring. 4 credits each term. Prerequisites: for Linguistics 617, permission of instructor; for Linguistics 618, Linguistics 617 or permission of instructor. Not offered 1997-98. J. Jasanoff.]

## [LING 619 Rigveda

Fall. 4 credits. Not offered 1997-98. J. Jasanoff, C. Minkowski.

Reading and linguistic analysis of selected Vedic hymns.]

## LING 631 Comparatlve Indo-European

 LingulsticsFall. 4 credits. Prerequisite: permission of instructor. J. Jasanoff.
An introduction to the comparative grammar of the Indo-European languages.

## [LING 635-636 Indo-European Workshop

635, fall; 636, spring. 4 credits each term.
Prerequisite: permission of instructor. Not offered 1997-98. Fall: J. Jasanoff; spring: A. Nussbaum.

An assortment of subjects intended for students with previous training in IndoEuropean linguistics: problems in the reconstruction of Proto Indo-European, topics in the historical grammars of the various IE languages, reading and historical linguistic analysis of texts, and grammatical sketches of "minor" IE languages.]

## Italian

## [ITALA 403 Linguistic Structure

 of ItallanFall. 4 credits. Prerequisites: Linguistics 101 or equivalent and qualification in any Romance language. Offered alternate years. Not offered 1997-98. 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, causatives.]

## ITALA 404 History of the Itallan

 Language \#Spring. 4 credits. Prerequisites: Linguistics 321 and either Italian 201, 203, or equivalent. Offered alternate years. C. Rosen.

Overview of Italian and its dialects from the earliest texts to the present day. Emergence of the standard language. External history and sociolinguistic circumstances.

## Japanese

## LING 404 Lingulstic Structure of

 Japanese (also Japanese 404) © Fall. 4 credits. Prerequisites: Japanese 102 or permission of instructor and Linguistics 101 or equivalent introductory course in linguistics. Offered altemate years. J. Whitman.Introduction to the linguistic study of Japanese, with an emphasis on morphology and syntax.

## LING 411 History of the Japanese

 Language (also Japanese 410) ©Fall. 4 credits. Prerequisite: permission of instructor. Offered alternate years. J. Whitman.

An 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.

## Korean

## LING 430 Structure of Korean

Spring. 4 credits. Offered alternate years. 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. No previous knowledge of Korean required.

## Latin and Italic

## [LING 610 Latin Comparative Grammar (also Classics 422)

4 credits. Prerequisite: thorough familiarity with the morphology of classical Latin. Not offered 1997-98. Next offered 1998-99. A. Nussbaum. The prehistory and evolution of the sounds and forms of classical Latin as reconstructed by comparison with the other Indo-European languages.]

## [LING 612 Italic Dialects (also Classics 424) \#

4 credits. Not offered 1997-98.
A. Nussbaum.

The phonology and morphology of Faliscan, Oscan, and Umbrian studied through the reading of epigraphical texts. Attention to the relations of these languages to Latin and the question of proto-Italic.]

## ILING 614 Archaic Latin (also Classics 426) \#

Fall. 4 credits. Prerequisite: reading knowledge of Latin. Not offered 1997-98; next offered 1999-2000. A. Nussbaum. Reading of epigraphic and literary preclassical texts with special attention to archaic and dialectal features. The position of Latin among the Indo-European languages of ancient Italy, the rudiments of Latin historical grammar, and aspects of the development of the literary language.]

## Romance

## [LING 321-322 History of the Romance Languages \#

321: fall; 322: spring. 4 credits each term. Prerequisites: Linguistics 101 or equivalent and qualification in any Romance
language. Offered alternate years. Not offered 1997-98. C. Rosen.
321: Popular Latin. Pan-Romance trends in phonology, morphology, syntax, and the lexicon. Regional divergence. Non-Latin influences. Medieval diglossia and emergence of Romance standards. 322: French, Italian, and Spanish from 850 to 1250 A.D. Analysis of texts. Overview of other languages to the present day. Elements of dialectology.]

LING 323-[324] Comparative Grammar of the Romance Languages
323, fall; [324, spring.] 4 credits. Prerequisites: Linguistics 101, 110, or equivalent and qualification in any Romance language. Offered alternate years. C. Rosen.

Concise survey of Romance syntax, covering the salient constructions in six languages with equal attention to their historical evolution and their current state. Grammatical innovation and divergence in a typological perspective.

## [LING 620 Area Topics in Romance

 LingulsticsSpring. 4 credits. May be repeated for credit. Offered alternate years. Not offered 1997-98.]

## [LING 621 Problems and Methods in

 Romance LInguisticsFall. 4 credits. Prerequisites: Linguistics 101 or equivalent and qualification in two Romance languages. Offered alternate years. Not offered 1997-98.]

## Russian and Slavic

LING 417-[418] History of the Russian Language (also Russian 401-402) \#
417, spring; [418]. 4 credits each cerm.
Prerequisites: for Ling 417, permission of instructor; for Ling 418, Ling 417 or
equivalent. Offered alternate years. Ling
418 not offered 1997-98. W. Browne.
Phonological, morphological, and syntactic developments from Old Russian to modem Russian.

LING 443-[444] Linguistic Structure of Russian (also Russian 403-404)
443, fall; [444, spring.] 4 credits each term. Prerequisites: for Linguistics 443,
Linguistics 101 and permission of instructor; for Linguistics 444, Linguistics 443 or equivalent. Offered alternate years.
Ling 444 not offered 1997-98. W. Browne. A synchronic analysis of the structure of modern Russian. Linguistics 443 deals primarily with morphology and its relation to syntax and 444 with syntax and word order.
Topics covered include case theory, the functions of word order, voice, agreement, impersonal constructions, negation, nonuniversal categories, and the relation between morphology and syntax.

## [LING 671-672 Comparative Slavic

Linguistics (also Russian 651-652)
671 , fall; 672 , spring. 4 credits each term. Prerequisites: for Linguistics 671, Russian 601 taken previously or simultaneously or permission of instructor; for Linguistics 672, Linguistics 671 or permission of instructor. Offered alternate years. Not offered 1997-98. W. Browne.
Sounds and forms of the Slavic languages and of prehistoric common Slavic; main historical developments leading to the modern languages.]

## RUSSA 601 Old Church Slavic

Fall. 4 credits. This course is prerequisite to Russian 602. Offered alternate years. W. Browne.

Grammar and reading of basic texts.
RUSSA 602 Old Russian Texts
Spring. 4 credits. Prerequisite: Russian
601. Offered alternate years. W. Browne. Grammatical analysis and close reading of Old Russian texts.

## [RUSSA 700 Seminar In Slavic

 LinguisticsOffered according to demand. Variable credit. Not offered 1997-98. Staff.
Topics chosen according to the interests of staff and students.]

## Southeast Asian

KHMER 403-404 Structure of Khmer © 403, fall; 404 spring. 4 credits each term. Prerequisite: Linguistics 101 or equivalent. G. Diffloth.

Introduction to the linguistic study of Khmer.
[LING 230 Introduction to Southeast Aslan Languages and Lingulstics a Fall. 3-4 credits variable. For non-majors or majors. Not offered 1997-98. A. Cohn, J. Wolff.

This is a survey of the languages of Southeast Asia. The goal of this course is to expose students to Southeast Asia as a linguistic area and introduce them to the rich language diversity of the region. It includes three main parts: 1) sociolinguistic and ethnolinguistic issues of language and politics, language and culture, and language use; 2) language structures and typological patterns of the area's languages; 3) historical linguistics, genetic relations between languages, as well as the linguistic effects of language contact and linguistic evidence for prehistory.]
[LING 653-654 Seminar In Southeast Aslan LIngulstics
653, fall; 654, spring. 4 credits each term. Prerequisite: Linguistics 303 or permission of instructor. Linguistics 653 is not a prerequisite for 654. Not offered 1997-98. G. Diffloth.

Languages of mainland Southeast Asia.
Topics, chosen according to student interests, may include description, dialectology,
typology, comparative reconstruction, and historical studies.]

## LING 655-656 Seminar in Austroneslan

 Lingulstics655, fall; 656, spring. 4 credits each term. Prerequisites: for Linguistics 655 , Linguistics 101 and permission of instructor; for Linguistics 656, Linguistics 655. J. Wolff.

Descriptive and comparative studies of Malayo-Polynesian languages.

## LING 657-658 Seminar in Austroaslatic

 Lingulstics657, fall; 658, spring. 4 credits each term.
Prerequisite: Linguistics 101, 110, or permission of instructor. G. Diffloth. Descriptive and comparative studies of Austroasiatic languages.

## Spanish

## The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill in the linguistic analysis of Spanish. (For the major in Spanish literature see the description under Romance Studies.) Satisfactory completion of the major should enable students to meet language requirements for teaching, to continue with graduate work in Spanish or other appropriate disciplines, or 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 pre-professional training for graduate study in law, medicine, business, etc. Students interested in a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies for Spanish linguistics, Professor Margarita Suner ( 218 Morrill Hall).

## The Core

All majors will work out a plan of study in consultation with their advisers. Previous training and interests as well as vocational goals are taken into account when the student's program of courses is determined. Spanish 201 and 204 or 212 (or equivalent) are prerequisite to entering the major in Spanish. All majors normally include the following core courses in their programs:

1) Spanish 315-316-318
2) Spanish 311 and 312 (or equivalent)

Spanish majors have great flexibility in devising their programs of study and areas of concentration.

## The Linguistic Option

Spanish linguistics, for which the program normally includes at least 20 credits, and at least 8 additional credits in general or Spanish linguistics (such as $366,405,407,408$, and others). (Linguistics 101 is recommended before entering this program.) The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.
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 engaged in Spanish literature or linguistics to supervise their work and direct the writing of their honors essays (see Spanish 429-430).
LING 366 Spanish in the United States (also Spanish 366 and Latino Studies Program 366)
Fall. 4 credits. Prerequisite: some
knowledge of Spanish. M. Suñer. Examination of major Spanish dialects in the United States from a linguistic perspective. Contrast with the standard language.
Borrowing, interference, and code switching. Syntactic, morphological, and phonological characteristics. Sex-related phenomena.

## LING 407 Applled Lingulstics: Spanish

 (also Spanish 407)Spring. 4 credits. Prerequisite: proficiency in Spanish or permission of instructor. M. Suñer.

This course seeks to equip the advanced student or the future teacher of Spanish with insights into problem areas for foreign language learners with the aid of linguistic descriptions. The intent is to narrow the gap that is known to exist between the knowledge that a native speaker has and the incomplete one that a foreign language learner possesses.

## [SPAND 405 Mispanic Dlalectology

Spring. 4 credits. Not offered 1997-98. Survey of dialects of Latin America and the Caribbean.]
[SPAND 408 The Grammatical Structure of Spanlsh
Spring. 4 credits. Prerequisites: Linguistics 101 and proficiency in Spanish or permission of instructor. Offered alternate years. Not offered 1997-98. M. Suñer.
Survey of the salient morphological and syntactic characteristics of contemporary Spanish.]

## [SPAND 700 Seminar in Spanish

 LinguistlesFall or spring, according to demand.
Variable credit. Not offered 1997-98.
Topics in synchronic and diachronic Spanish linguistics.]

## LANGUAGE COURSES (PRE-MODERN AND MODERN)

Courses in foreign language literatures as well as certain language courses are taught in the following departments; consult entries under the department name for course listings.
Africana Studies and Research Center: Swahili, Yoruba
Asian Studies: Chinese, Japanese, Korean, Sanskrit, Vietnamese
Classics: Greek, Latin
German Studies: German
Near Eastern Studies: Akkadian, Arabic, Hebrew, Sumerian, Turkish, Ugaritic
Romance Studies: French, Italian, Spanish Russian Literature: Russian
The Full-year Asian Language CONcentration (FALCON Program) offers intensive instruction in Chinese, Japanese, or Indonesian to students wishing to gain fluency in the language in a single year.

## Arabic

See listings under Near Eastern Studies.

## Bengali

Fees. A small fee may be charged for photocopied texts for course work.
BENGL 121-122 Elementary Bengall
121, fall; 122 , spring. 4 credits each term. Prerequisite: for Bengali 122, Bengali 121 or examination. D. Sudan.
The emphasis is on basic grammar, speaking, and comprehension skills; Bengali script will also be introduced.

## BENGL 201-202 Intermediate Bengall

 Reading (e)201, fall; 202, spring. 3 credits each term. Prerequisites: for Bengali 201, Bengali 122 or examination; for Bengali 202, Bengali 201 or examination. D. Sudan.
Continuing instruction in grammar with attention to speaking and reading skills.

## BENGL 203-204 Intermediate Bengali

 Composition and Conversation © 203, fall; 204, spring. 3 credits each term. Prerequisites: for Bengali 203, Bengali 122 or examination; for Bengali 204, Bengali 203 or examination. D. Sudan. Continuing instruction in grammar with attention writing skills.
## BENGL 300 Directed Studies

Fall or spring. 1-4 credits variable Prerequisite: permission of instructor. D. Sudan.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

BENGL 303-304 Bengali Literature I, II 303, fall; 304, spring. 4 credits each term. Prerequisites: Bengali 203-204 or equivalent. D. Sudan.
An introduction to noted Bengali writers. Selections of works by Rabindranath Tagore and Abanindranath Tagore and short stories by Bonophul will be covered. The course will be devoted to reading these works and developing literary criticism and creative writing in Bengali.

## Burmese

NOTE: Contact S. Tun in Morrill Hall 413 before classes begin for placement or other testing and organizational information.
Fees. A small fee may be charged for photocopied texts for course work.

## BURM 103-104 Burmese Conversation Practice

103 , fall; 104 , spring. 2 credits each term. Prerequisites: for Burmese 104, Burmese 103 and Burmese 121. May not be taken alone. Must be taken simultaneously with Burmese 121-122. Satisfactory completion of Burmese 104/122 fulfills the qualification portion of the language requirement S. Tun.

Additional drills, practice and extension of materials covered in Burmese 121 and 122. These courses are designed to be attended simultaneously with Burmese 121-122 respectively, allowing students to obtain qualification within a year.

## BURM 121-122 Elementary Burmese

121, fall; 122, spring. 4 credits each term Prerequisite: for Burmese 122, Burmese 121. May be taken alone or simultaneously with Burmese 103-104. Satisfactory completion of Burmese 104/122 fulfills the qualification portion of the language requirement. S. Tun.
A thorough grounding is given in all language skills: listening, speaking, reading, and writing

## BURM 123 Continulng Burmese

Fall. 4 credits. Prerequisite: Burmese 122. Satisfactory completion of Burmese 123 fulfills the qualification portion of the language requirement. S. Tun Continuing instruction in conversational and reading skills, to prepare students for 200 level courses.

## BURM 201-202 Intermediate Burmese

 Reading (i)201, fall or spring; 202, fall or spring. 3 credits each term. Prerequisites: for Burmese 201, Burmese 123; for Burmese 202, Burmese 201. S. Tun.
Continuing instruction in spoken and written Burmese.

## BURM 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor S. Tun.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## BURM 301-302 Advanced Burmese

 Reading 둥301 , fall or spring; 302 , fall or spring. 3 credits each term. Prerequisites: for Burmese 301, Burmese 202 or permission of instructor; for Burmese 302, Burmese 301. S. Tun.

Continuing instruction in spoken and written Burmese; emphasis on enlarging vocabulary, increasing reading speed, and reading various genres and styles of prose.

## BURM 401-402 Burmese Directed

 Independent Study401, fall; 402, spring. $2-4$ credits variable each term. Prerequisite: permission of instructor. S . Tun.
Various topics according to need.

## Cambodian

## See Khmer

## Chinese

For literature courses (conducted in English or Chinese) and Classical Chinese, see Asian Studies.
NOTE: Testing for placement, except for those with near-native abilities (particularly those schooled in a Chinese setting up until the age of about 12) takes place in registration week, before classes begin. Time and place will be posted on the Chinese bulletin board opposite Morrill 416. Students with some Chinese schooling who want to obtain 3 or 6 credits for their proficiency will be tested at the beginning of the second week of classes. Again, the time and place will be announced.
Fees. A small 'materials fee' may be charged in some courses.

## CHIN 101-102 Elementary Standard Chinese ('Mandarln')

101, fall; 102, spring. 6 credits each term. Prerequisite: for Chinese 102, Chinese 101 or equivalent. Since each section is limited to 15-18 students, students missing the first two class meetings without a university excuse are dropped so others may register. No student will be added after the second week of classes. Satisfactory completion of Chinese 102 fulfills the qualification portion of the language requirement. Staff. A course for beginners or those who have been placed in the course by examination. The course gives 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 109-110. Students who read Chinese, but who speak 'dialects,' such as Cantonese or Amoy, should consult with the staff before enrolling.
CHIN 109-110 Beginning Reading and Writing (Standard Chinese) 109 , fall; 110 , spring. 4 credits each term. Prerequisites: for Chinese 109 , basic conversational Chinese ('Mandarin'); if in doubt, take the placement examinaton; for Chinese 110 , Chinese 109 or equivalent. Students who complete Chinese 110 normally continue with Chinese 209 and 210. Because of high demand for this course, students missing the first two meetings without a university excuse are dropped so others may register. Satisfactory completion of Chinese 110 fulfills the
qualification portion of the language requirement. F. Lee Mehta.
This course is 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 111-112 Beginning Cantonese

 (Spoken)111, fall; 112, spring. 3 credits each term. Prerequisite: for Chinese 112, Chinese 111 or equivalent. Chinese 111-112 only satisfies the qualification portion of the language requirement if the student can also demonstrate a comparable reading ability. Staff
A course in conversational standard Cantonese (as spoken in Hong Kong and Canton) for beginners. Students need not have a Mandarin background to take this course, but those with elementary reading skills will also be introduced to Cantonese (character)

## writing

CHIN 113-114 Beginning Reading for Cantonese Speakers
113, fall; 114, spring. 3 credits each term. Prerequisite: everyday conversational ability in Cantonese. Completion of 114 satisfies the qualification portion of the language requirement. Staff.
This course is intended primarily for students who speak some Cantonese (e.g., at home), but who have had little or no formal training in writing. The focus is on characters, reading comprehension, standard grammar, and reading aloud with Cantonese pronunciation.

## CHIN 201-202 Intermediate Standard Chinese ('Mandarin') 랑

201, fall or summer; 202, spring or summer. 4 credits each term. Prerequisites: for Chinese 201, Chinese 102 with a grade of $\mathrm{C}+$ or above or equivalent; for Chinese 202, Chinese 201 or equivalent. Satisfactory completion of Chinese 201 fulfills the proficiency portion of the language requirement. Staff. Continuing instruction in written and spoken Chinese with particular emphasis on consolidating basic conversational skills and improving reading confidence and depth.
CHIN 209-210 Intermediate Reading and Writing (e)
209, fall; 210, spring. 4 credits each term. Prerequisites: for Chinese 209, Chinese 110 or equivalent; Chinese 210, Chinese 209 Satisfactory completion of 209 fulfills the proficiency portion of the language requirement. After completing 210 , students may only take 400 -level courses in Chinese. 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 215 Mandarin for Cantonese

 SpeakersFall or spring. 3 credits each term. Prerequisites: basic conversational Cantonese and Chinese 114 or the equivalent. Native or near-native Cantonese (speakers/readers) will be allowed in this course. Staff.
This is a one-semester course on Mandarin pronunciation and grammar for speakers of Cantonese.

## CHIN 300 Directed Studies

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## CHIN 301-302 High Intermediate Chinese

301, fall; 302, spring. 4 credits each term. Prerequisites: for Chinese 301, Chinese 202 or equivalent; for Chinese 302, Chinese 301. Staff.

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

## [CHIN 303-304 Advanced Mandarln

 Conversatlon 웅303, fall; 304, spring. 1 credit each term. Prerequisite: Chinese 201-202 or equivalent or permission from instructor. S-U grades only. Not offered 1997-98. Staff. Conversation and reading practice for students who wish to maintain language skills. Guided conversation and oral composition and translation. Corrective pronunciation drills.]
CHIN 411-412 Advanced Chinese: Flction, Reportage, Current Events
411, fall; 412 , spring. 4 credits each term. Prerequisites: for Chinese 411, Chinese 302 or equivalent; for Chinese 412, Chinese 411. Q. Teng.

Reading, discussion, and composition at advanced levels.

## [CHIN 413-414 Advanced Chinese:

 Focus on Current Events413, fall; 414, spring. 3 credits each term. Prerequisites: for Chinese 413, Chinese 412 or equivalent or permission of instructor; for Chinese 414, Chinese 413. S-U grades only. Not offered 1997-98. Reading and discussion, with a focus on current events. One of the goals of this course is to build reading confidence and speed. The content will partially be determined by student need and interest.]

## [CHIN 425 Speclal Topics

Fall or spring, according to demand. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. A number of different topics in advanced Chinese language, advertised the previous semester, will be offered under this title to accommodate the needs of advanced or specialized students, and take advantage of faculty interests. Topics include; correspondence and composition, excerpts from classical novels, Ch'ing documents, xiesheng comedy routines, etc. May be repeated for credit.]

## FALCON (Full-year Aslan Language CONcentration)

For full information, brochures, etc., see the FALCON secretary 413 Morrill Hall (e-mail: falcon©cornell.edu).

## CHIN 160 Introductory Intensive

 MandarinSummer only. 8 credits. Completion of 160 fulfills the qualification portion of the language requirement. Staff,
Introduction to spoken and written Mandarin. Lectures on linguistic and cultural matters, intensive practice with native speakers, and laboratory work. Students who complete this
course with a grade of at least B are normally eligible to enroll in Chinese 201.
CHIN 161-162 Intensive Mandarin © 161 , fall; 162 , spring. 16 credits each term. Prerequisites: for Chinese 161, Chinese 160 or equivalent or permission of instructor; for Chinese 162, Chinese 161. Satisfactory completion of Chinese 161 fulfills the proficiency portion of the language requirement. Staff.

## Czech

Fees. A small fee may be charged for photocopied texts for course work.
[CZECH 131-132 Elementary Czech 131 , fall; 132, spring. 3 credits each term. Prerequisite: for Czech 132, Czech 131 or equivalent. This language series (131-132) cannot be used to satisfy the language requirement. Not offered 1997-98. Staff. Covers all language skills: speaking, listening comprehension, reading, and writing.]

## [CZECH 133-134 ContInulng Czech

 133, fall; 134, spring. 3 credits each term. Prerequisites: for Czech 133, Czech 132 or equivalent; for Czech 134, Czech 133. Satisfactory completion of Czech 134 fulfills the qualification portion of the language requirement. Not offered 1997-98. Staff.An intermediate conversation and reading course.]

## [CZECH 300 Directed Studies

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.]

## Danish

Fees. A small fee may be charged for photocopied texts for course work.
[DANSH 131-132 Elementary Danish 131, fall; 132, spring. 3 credits each term. Prerequisite: for Danish 132, Danish 131 or equivalent. This language series cannot be used to satisfy the language requirement. Not offered 1997-98.
Covers all language skills: speaking, listening comprehension, reading, and writing.]

## [DANISH 300 Directed Studles

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. Not offered 1997-98. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.]

## Dutch

Fees. A small fee may be charged for photocopied texts for course work.
DUTCH 121-122 Elementary Dutch 121 , fall or summer; 122 , spring or summer. 4 credits each term. Prerequisite: permission of instructor. M. Briggs. 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 123 Continuing Dutch

Fall. 4 credits each term. Prerequisite: Dutch 122 or equivalent. Satisfactory completion of Dutch 123 fulfills the qualification portion of the language requirement. M. Briggs.
Improves speaking skills, such as fluency and pronunciation, focusing on verbal communication skills; offering a wide range of readings and sharpening listening skills based on Dutch and Dutch-speaking cultures.

## DUTCH 203 Intermediate Composition

 and ConversationSpring. 3 credits. Prerequisite: Qualification in Dutch or permission of instructor. M. Briggs.

Improved control of Dutch grammatical structures and vocabulary through guided conversation, compositions and reading, drawing on all Dutch-speaking cultures.

## DUTCH 204 Intermediate Composition and Conversation

Fall. 3 credits. Prerequisite: Dutch 203 or permission of instructor. M. Briggs.
This course aims to emphasize written and oral application of accurate, idiomatic Dutch. Reading of authentic material of newspapers, literature, and history, with emphasis on Dutch seventeenth-century culture and its influence on the Americas. Taught in Dutch.

## DUTCH 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor. M. Briggs.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## English

See Intensive English Program.

## English for Academic Purposes

Fees. A small fee may be charged for photocopied texts for course work.

## ENGLF 205 English as a Second

 LanguageFall. 4 credits. Prerequisite: placement by examination. S. Schaffzin.
An all-skills course emphasizing listening and speaking, with some writing practice. Students also meet individually with the instructor.

## ENGLF 206 English as a Second

 LanguageSpring. 3 credits. Prerequisite: ENGLF 205
or placement by examination. S. Schaffzin Designed for those who have completed ENGLF 205 and who need further practice, particularly in writing. Individual conferences are also included.

## ENGLF 209 English as a Second

## Language

Fall or spring. 1 credit. Prerequisite:
permission of instructor. S. Schaffzin.
Practice in classroom speaking and in informal conversational English techniques for gaining information. Students also practice giving informal presentations. Individual conferences with the instructor supplement class work.

## ENGLF 210 Engllsh as a Second

 LanguageSpring. 1 credit. Prerequisite: permission of instructor. S. Schaffzin.
Practice in academic speaking. Formal classroom discussion techniques and presentation of information in various forms. Individual conferences supplement class work.

## ENCLF 211 English as a Second

## Language

Fall, spring, or summer. 3 credits.
Prerequisite: placement by examination. D. Campbell.

Academic writing with emphasis on improving organization, grammar, vocabulary, and style through the writing and revision of short papers relevant to students' fields. Frequent individual conferences supplement class work.

## ENGLF 212 English as a Second Language

Spring. 3 credits. Prerequisite: permission of instructor. Enrollment will be restricted to the first five days of classes on a firstcome, first-served basis. Must have signature of instructor before enrolling. Classes begin the second week of the semester. D. Campbell.
Research paper writing. For the major writing assignment of this course, the students must have a real project that is required for the graduate work. This can be a thesis proposal; a pre-thesis; part of a thesis, such as the literature review or discussion section; a paper for another course or a series of shorter papers (with permission of the other instructor); or a paper for publication. Time limitations make it difficult to deal with work over 20 pages in length. Course work involves practice in paraphrase, summary, the production of cohesive, coherent prose, vocabulary use, and grammatical structure. Frequent individual conferences are a necessary part of the course. Separate sections for Social Sciences/Humanities and for Science/Technology.

## ENGLF 213 Written English for Non-

 Native SpeakersSpring. 3 credits. Prerequisite: permission of instructor. S. Schaffzin. Designed for those whose writing fluency is sufficient for them to carry on regular academic work but who want to refine and develop their ability to express themselves clearly and effectively. Individual conferences supplement class work.

## Freshman Writing Seminar

ENGLB 215-216 English for Later Bilinguals
For description, see freshman writing seminar brochure.

## French

For information on language placement and transfer credit, contact C. Waldron ( 403 Morrill Hall, 255-0702). For literature and advanced language courses see Romance Studies. For information on the literature and area studies tracks of the French major, see Romance Studies; for the linguistics track, see French under Linguistics of Particular Languages.

## 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 Departments of Romance Studies and Modern Languages facilitates the transfer of credit. Information about these plans is available from Professor Jacques Béreaud, director of undergraduate studies, Department of Romance Studies. (For a description of the Study Abroad programs in Paris and in Geneva, see the listing under the Department of Romance Studies.)

Fees. Depending on the course, a small fee may be charged for photocopied texts for course work.

## FRDML 101 Baslc Course I

Summer only. 6 credits. M. J. Highfield and staff.
An introductory course offering opportunities for student interaction and intensive practice in listening to, speaking, reading, and writing basic French in meaningful contexts. Students who have previously studied French must take the language placement test (LPF) or receive permission from the instructor before registering for this course. French 101 is the equivalent of 2 semesters of elementary French.

## [FRDML 103-104 Intensive Elementary

 French103, fall; 104, spring. 6 credits each semester. Prerequisite: 103, none; students with previous study of French may enter only with instructor's permission; 104, FRDML 121, 103, placement score between 37 and 44, or equivalent, by permission of instructor. Students completing only 103 and 104 will have achieved qualification in French; placement in subsequent French courses will be by examination. Not offered 1997-98. N. Gabriel.

While complete a core curriculum equivalent to that of 121-122, this course offers additional materials, presentations, activities and individualized intensive practice. It is intended to facilitate students' acquisition of active language skills as well as to offer insight into learning processes and into French language, culture, and society. In particular, there will be opportunities for students to choose to focus more intensively on certain skills than on others and to vary the pace of their language study.]

## FRDML 121 Elementary French

Fall or spring. 4 credits. Spring enrollment limited. No prerequisites. Students who have studied French before must take the language placement test (LPF). Intended for beginning students or those placed by examination.
Small classes provide the opportunity for student interaction and intensive practice in listening to, speaking, reading, and writing basic French in meaningful contexts, which offer insights into French language, culture, and society.

## FRDML 122 Elementary French

Fall or spring. 4 credits. Prerequisite: French 121, LPF score 37-44, or SAT II 370-480. Students who receive an LPF score of 56 after French 122 attain qualification and may enter the 200-level sequence; otherwise, satisfactory completion of French 123 is required for qualification. Staff.
The goal of French 122 is to build on the students' elementary knowledge of French so that they can function in basic situations in a French-speaking culture. Courses offer intensive, context-specific practice in speaking, listening, reading, and writing.

## FRDML 123 Continuing French

Fall, spring, or summer. 4 credits. Limited to students who have previously studied French and have an LPF score 45-55 or SAT II 490-590. Satisfactory completion of French 123 fulfills the qualification portion of the language requirement. Staff. French 123 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.

## FRDML 200 Intermediate Reading and

 WritingFall or spring. 3 credits. Prerequisite: qualification in French (French 123, LPF score $56-64$, or SAT II 600-680). Satisfactory completion of French 200 fulfills the proficiency portion of the language requirement. C. Sparfel.
Study of the language in different text types, prose and poetry, articles on current events, and a contemporary novel. Discussion of texts with emphasis on vocabulary development, grammar review and expansion, and appreciation of stylistic levels and cultural differences. Students have the opportunity to select reading material and work on their areas of interest.

## FRDML 203 Intermediate Composition

 and Conversation IFall, spring, or summer. 3 credits. Prerequisite: qualification in French (French 123, LPF score $56-64$, or SAT II 600-680). Satisfactory completion of French 203 fulfills the proficiency portion of the language requirement. Staff.
Readings, conversation, composition; various other activities based on films, videos, and newspaper articles. The course gives students the opportunity to expand their language skills and to strengthen their knowledge of grammar for better control.
FRDML 205 Intermediate French: le Irancais multicolore (e)
Fall. 3 credits. Prerequisite: qualification in French (French 123, LPF score 56-64, or SAT II 600-680). Satisfactory completion of French 205 fulfills the proficiency portion of the language requirement and can be used to satisfy the breadth requirement. N. Gabriel.
Opportunities to strengthen and expand active language skills within the context of the wider French-speaking world. Contemporary readings, video and audio materials, and people from francophone countries of Europe, Africa, and the Americas will provide bases for individual and group projects. Taught in French.

FRDML 213 Intermediate Composition and Conversation II
Fall, spring, or summer. 3 credits Enrollment limited. Prerequisite: proficiency in French (French 200, 203, or 205), permission of instructor, or placement by Cornell Advanced Standing Examination (CASE) offered by the Department of Modern Languages. This course, or its equivalent, is required for admission to the Cornell Abroad program. Staff.
Emphasis on improving accuracy in oral and written expression of French, on enriching vocabulary and on dealing with specific points of grammar. Readings, including newspaper articles, short stories, plays, videos, movies, and presentations by students, provide the basis for the course. (Varying emphasis on the elements according to section). Taught in French.

Special section at 9:05: "French Through Food." Andree Grandjean-Levy. Texts ranging from classic literature to newspaper articles, videos, films, and class discussion will all revolve around one main theme: Food and the French-are they what they eat?

## FRDML 300 Directed Studies

Fall or spring. $1-4$ credits variable
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor

FRDML 303 Le Français de l'Actualité
Fall only. 4 credits. Prerequisite: $\mathrm{Q}^{++}$on CASE exam, or French 213, or permission of instructor. A. Grandjean-Levy. Analysis of French televised news broadcasts and other media, discussion with native speakers, and numerous related activities place the student at the heart of today's France. Flexible, individualized approach allows each student to perfect language skills and pursue individual interests

FRDML 305 French through Film
Fall and spring. 4 credits. Prerequisite:
$\mathrm{Q}^{++}$on CASE exam, French 213, or
permission of instructor. C. Waldron. Analysis of French contemporary films and related readings. Used as a means of studying the language. Particular emphasis on the culture and historical context as it relates to French contemporary society. Additionally guest speakers will provide enrichment on selected topics.

## FRDML 630 French for Reading-

 Graduate StudentsSpring and summer. 3 credits. Limited to graduate students.
Designed for those with little or no background in French, this course's primary aim is to develop skill in reading French. Grammar basics, extensive vocabulary, and strategies for reading in a foreign language are covered. Some flexibility in selecting texts according to fields of interest is offered

## German

For literature and culture courses see German Studies.

The German Major
See German Studies.

## Study Abroad

All students planning to study abroad apply through Comell Abroad; please see the Cornell Abroad program description in the introductory section of the Courses of Study. Interested students should contact Bonnie Buettner (German Stds) or Gunhild Lischke (Department of Modern Languages) as early as possible.

## German Area Studies Major

See German Studies.

## Honors

See German Studies.
Freshman Writing Seminar Requirement See German Studies.

Fees. Depending on the course, a small fee may be charged for photocopied texts for course work.

GERLA 121 Elementary German I Fall or spring. 4 credits. Intended for students with no prior experience in German or with a language placement test (LPG) score below 37, or an SAT II score below 370. Staff
Elementary German I is designed to familiarize students with basic vocabulary and structures so they can communicate about everyday life. Videos and audio tapes facilitate listening comprehension and insight into German culture. Daily practice in section provides the opportunity to leam vocabulary and structures.

## GERLA 122 Elementary German II

 Fall or spring. 4 credits. Prerequisite: German 121, LPG score $37-44$, or SAT II $370-450$. Students who obtain an LPG score of 56 or above after German 122 attain qualification and may enter a 200 level course, otherwise, successful completion of German 123 is required for qualification. D. McGraw and staff.Elementary German II, the second semester of elementary German, presupposes that students have not yet learned narrative past, subjunctive, passive or dependent word order Topics include travel, free time, work and the media, including TV, newspaper, film and fiction. There is also discussion of a timeline of key events in Germany from 1917-1989.

## GERLA 123 Continuing German

Fall or spring. 4 credits. Limited to students who have previously studied German and have an LPG score 45-55 or SAT II 460-570. Satisfactory completion of German 123 fulfills the language qualification requirement. G. Valk and staff. German 123 is a course on the beginning intermediate level. Students will further develop their language proficiency by communicating about broadly cultural topics and themese. To provide each student with a maximum opportunity for speaking in German and getting as much help and feedback as possible, much of the work in class will be done in pairs and/or small groups.

## GERLA 200 Contemporary German (also

 GERST 200)Spring. 3 credits. Prerequisite: qualification in German (LPG score of 56-64 or SAT II score of 580-670 or Gerla 123). Successful completion of German 200 fulfills the Arts and Science language proficiency requirement and can be used in partial fulfillment of the Arts and

Sciences humanities distribution requirement. G. Lischke and staff. An intermediate language course designed to provide an introduction to modern German culture and literature while students develop language proficiency. Students examine issues that shape German society, literature and thought as reflected in short stories, poems, socio-cultural and political texts, video and audio materials. Selected themese include "Beyond the Wall: German Unification," "Germany: a Multi-cultural Society?" "Speaking and Identity," emphasize accurate and idiomatic expression. Successful completion of the course enables students to continue with more advanced courses in language, literature, and culture. This course replaces GERLA 203 and GERST 201

## GERLA 203 Intermediate Conversation

## and Composition

Fall or spring. 3 credits. Prerequisite: qualification in German (German 123 or an LPG score 56-64, or SAT II score between $580-670$ ). Successful completion of German 203 fulfills the language proficiency requirement. D. Hobbs and staff Conversation; review of selected points of grammar; composition, reading of literary and non-literary texts; discussion of current events and films, participation in group projects and presentations. Emphasis is on development of accurate and idiomatic expression. The topics of the course include: the fall of the Berlin wall and the unification of Germany, multicultural life, and social changes in Germany. This course will be replaced by GERLA/German 200 in spring 1998

## GERLA 204 Intermedlate Conversation

 and CompositionFall or spring. 3 credits. Prerequisite: German 203 or Gerst 201, or German/ GERST 200, or placement by examination (placement score and CASE). G. Lischke. Emphasis 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 www, and projects on German Expressionist painters at the Johnson Museum.

## GERLA 205-206 Business Gorman

205: fall, 206: spring. 3 credits. Prerequisite: qualification in German (German 123 or an LPG score of $56-64$ or an SAT II score between 580-670). Successful completion of German 203 fulfills the language proficiency requirement. G Lischke.
Learn German and understand German business culture at the same time. This course examines the German economic structure and its major components: industry, trade unions, the banking system, and the government. Participants will learn about the business culture in Germany and how to behave in a work environment, Germany's role within the European Union, the dual education system, 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.

## OERLA 300 Directed Studios

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## QERLA 303 Advanced Conversation and Composition

Fall or spring. 4 credits. Prerequisite for German 303: German 204, GERST 202, GERST 220, or placement by examination
(CASE). G. Valk; G. Lischke.
Further enrichment of vocabulary and emphasis on improving students' oral and written style. Study of the language of different text types, including journalistic and literary texts. Discussion of current events provides insight into the historical, political and social-issues of German-speaking countries. Individual and group projects provide an opportunity for each student to pursue his/her field of interest and share it with the class.

## OERLA 304 Advanced Conversatlon and Compositlon

Spring. 4 credits. Prerequisite: German 303 or placement by examination (CASE). G. Valk.

Students in this course, already quite fluent in German, will have the opportunity to refine and improve both written and spoken language. Reading materials consist of two contemporary novels, articles from DER SPIEGEL and DIE ZEIT. German 304 provides students with an up-to-date picture of Germany, with a special focus on both East and West and the ongoing process of unification.
OERLA 306 Zeltungsdeutsch
Fall. 4 credits. Prerequisite: German 304 or equivalent. G. Lischke.
Analysis of various German daily and weekly newspapers, magazines and German TV with special emphasis on stylistic differences in journalism; discussion of current events. Students have the opportunaity to research material for class presentation, lead discussions and share their interests/special fields with the group.

## GERLA 631-632 Academic German

 I and II631 , fall; 632 , spring. 3 credits each term. Limited to graduate students. Prerequisite: for German 632, German 631 or equivalent. D. Hobbs.
Intended primarily for beginners with little or no previous German knowledge. Emphasis in 631 on acquiring basic German reading skills. Emphasis in 632 on development of the specialized vocabulary of student's field of study.

## Modern Greek

See listings under Classics.

## Modern Hebrew

See listings under Near Eastern Studies.

## Hindl

Fees. A small fee may be charged for photocopied texts for course work.

HINDI 101-102 Elementary HIndl-Urdu
101 , fall; 102 , spring. 6 credits each term. Prerequisite: for Hindi 102, Hindi 101 or equivalent. C. Fairbanks.
A semi-intensive course for students without prior experience in Hindi-Urdu or a closely related language. A thorough grounding is given in all language skills: listening,
speaking, reading, and writing. Students who have had exposure to Hindi-Urdu or a closely related language in the home or otherwise should generally take Hindi 109-110. Check with instructor regarding placement.

## HINDI 109-110 Accelerated Elementary

 Mindi-Urdu109, fall; 110, spring. 3 credits each term. Prerequisite for Hindi 110: Hindi109 or equivalent. C. Fairbanks.
An entry-level sequence for students with some prior exposure to Hindi-Urdu or a closely related language. This course sequence will provide a thorough grounding in all the language skills: listening, speaking, reading, and writing. Completion of this sequence, including satisfactory performance on an examination given at the end of Hindi 110, will constitute a level of performance equal to that of the 101-102 sequence, and will thus be considered to fulfill qualification for the language requirement plus eligibility for 200 -level Hindi-Urdu courses. Check with instructor regarding placement.

## [HINDI 201-202 Intermedlate Hindl

 Reading (e)201, fall; 202, spring. 3 credits each term. Prerequisites: for Hindi 201, Hindi 102; for Hindi 202, Hindi 201 or permission of instructor. Not offered 1997-98
C. Fairbanks.]

## HINDI 203-204 Intermediate

 Compositlon and Conversation e 203, fall; 204, spring. 3 credits each term. Prerequisites: for Hindi 203, Hindi 102; for Hindi 204, Hindi 203 or permission of instructor. C. Fairbanks.Throughout this course sequence all aspects of language learning are practiced: listening, speaking, reading, and writing. In 203, video materials are used and the emphasis is on the conversational aspect of the language. In 204, the focus shifts to reading skills and the main text used is a popular novel.
HINDI 300 Directed Studies
Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. C. Fairbanks.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## [HINDI 301-302 Advanced Readings in Hindi Literature ©

301, fall; 302, spring. 4 credits each term. Prerequisites: for Hindi 301, Hindi 202; for Hindi 302, Hindi 301 or equivalent. Not offered 1997-98. C. Fairbanks.
Selected readings in modern Hindi literature.]

## HINDI 303-304 Advanced Composition

 and Conversation 룽303, fall; 304, spring. 4 credits each term. Prerequisites: for Hindi 303, Hindi 204 or equivalent; for Hindi 304, Hindi 303 or equivalent. C. Fairbanks.
[HINDI 305-306 Advanced Hindl Readings -
305, fall; 306, spring. 4 credits each term. Prerequisites: for Hindi 305, Hindi 202 or equivalent; for Hindi 306, Hindi 305 or equivalent. Not offered 1997-98. Intended for those who wish to do readings in history, government, economics, etc., instead of literature.]

## Hungarian

Fees. A small fee may be charged for photocopied texts for course work.
[HUNGR 131-132 Elementary Hungarlan
131, fall; 132, spring. 3 credits each term.
This language series cannot be used to satisfy the language requirement. Not offered 1997-98.
Intended for beginners or students with limited knowledge of the language.]

## HUNGR 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Indonesian

For students who have completed Indonesian $121-122-123$ or its equivalent there is the option of a one-semester program in Malang, East Java, during the junior year. The program combines a variety of cultural and artistic options with area course work and advanced language study. Complete information is available through Cornell Abroad.

Students who have completed a minimum of 18 credits or the equivalent are eligible to apply for a summer program in the Advanced Indonesian Abroad Program. Further information is available from Professor John Wolff ( 307 Morrill Hall, 255-0733).
Fees. A small fee may be charged for photocopied texts for course work.
INDO 121-122 Elementary Indonesian 121, fall; 122, spring. 4 credits each term. Prerequisite: for Indonesian 122,
Indonesian 121. J. Wolff and staff.
A thorough grounding is given in basic speaking and listening skills with an introduction to reading.

## INDO 123 Continuing Indoneslan

Fall. 4 credits. Prerequisite: Indonesian 122 or equivalent. Satisfactory completion of Indonesian 123 fulfills the qualification portion of the language requirement.
J. Wolff and staff.

Improves speaking skills, such as fluency and pronunciation, focusing on verbal communication skills; offers a wide range of readings and sharpens listening skills.

## INDO 203-204 Intermediate Composition

 and Conversation203, fall; 204, spring. 3 credits each term. Prerequisites: for Indonesian 203,
Indonesian 123; for Indonesian 204,
Indonesian 203 or permission of instructor. J. Wolff and staff.

## INDO 205-206 Intermedlate

 Indoneslan (a)205, fall: 206, spring. 3 credits each term.
Prerequisites: for Indonesian 205,
Indonesian 123 or equivalent; for Indonesian 206; Indonesian 205 or equivalent. Satisfactory completion of Indonesian 205 fulfills the proficiency
portion of the language requirement. J. Wolff and staff.

This course develops all four skills: reading, writing, speaking, and comprehension.

## INDO 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. J. Wolff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor

## [INDO 301-302 Advanced Readings in

 Indonesian and Malay301, fall; 302, spring. 4 credits each term. Prerequisites: for Indonesian 301, Indonesian 205-206 or equivalent; for Indonesian 302, Indonesian 301. Not offered 1997-98. J. Wolff and staff.]

【INDO 303-304 Advanced Indonesian Conversation and Composition 303, fall; 304 , spring. 4 credits each term. Prerequisites: for Indonesian 303, Indonesian 206; for Indonesian 304 Indonesian 303 or equivalent. Not offered 1997-98. J. Wolff and staff.]

INDO 305-306 Directed Individual Study 305, fall; 306, spring. 2-4 credits. Prerequisites: Indonesian 301-302 and 303-304 or equivalent knowledge of Indonesian or Malay. J. Wolff.
A practical language course on an advanced level in which the students will read materials in their own field of interest, write reports, and meet with the instructor for two hours a week for two credits and twice a week for four credits.

## [INDO 401-402 Advanced Readings in Indonesian and Malay Literature

401, fall; 402 , spring. 4 credits each term. Prerequisites: for Indonesian 401, Indonesian 302 or equivalent; for Indonesian 402, Indonesian 401 or equivalent. Not offered 1997-98. J. Wolff and staff.]

## FALCON (Full-year Asian Language

 CONcentration)INDO 161-162 Intensive Indonesian
161 , fall; 162 , spring. 16 credits each term. Prerequisite: permission of instructor. J. Wolff and staff.

## Italian

For literature courses see Romance Studies.

## The Italian Major

## See Romance Studies

## Study Abroad in Italy

Italian majors may study in Italy, generally during their junior year, under any of those study-abroad plans organized by American universities that allow the transfer of grades and credit, such as the Comell program in Rome.

The College of Architecture, Art, and Planning maintains a program open to all qualified
students attending Cornell. The program is housed in the sixteenth-century Palazzo Massimo, designed by the architect Baldassare Peruzzi, on the Corso Vittorio Emanuele in the heart of Rome. Students may enroll for a semester in the fall or spring. Courses regularly taught at the Palazzo Massimo include: Architecture $300,401,402,500,502$, Design Studio; Architecture 338 and 399, Special Topics in Architectural History; Architecture 458, Special Projects in Design Communications; Architecture 367, Contemporary Italian Culture; Architecture 510, Thesis Introduction; Art 251, 311, 322, and 371; and History of Art 371, Renaissance and Baroque Art in Rome; Italian 111, 112, Elementary Italian 111 and 112 correspond to Cornell courses 121 and 122 respectively (see below) Students having passed 111 in Rome will be admitted to 122 when they get back to Cornell. Students having passed 112 in Rome will be granted credit but must take the language placement test (LPI) for satisfaction of the language requirement and for placement into more advanced courses upon their return to Cornell. More advanced Italian classes in Rome are also being organized.
To be eligible, students must have completed the first two years of their curriculum requirements and be in good academic standing.
Fees. Depending on the course, a small fee may be charged for photocopied texts for course work

## ITALA 101 Basic Course I

Summer only. 6 credits.
A thorough grounding in all basic language skills. Students who have previously studied Italian must take the placement examination before registering for this course.

## ITALA 121-122 Elementary Italian

 121 , fall; 122 , spring. 4 credits each term. Prerequisite: for Italian 122, Italian 121 or equivalent. Intended for beginners or students placed by examination. At the end of Italian 122, students who score 56 or higher on the LPI attain qualification and may enter the 200-level sequence; otherwise Italian 123 is required for qualification. K. Bättig, C. Rosen.A thorough grounding in all the language skills: listening, speaking, reading, and writing. Language practice is in small groups Lectures cover grammar and cultural information.

## ITALA 123 Continuing Itallan

Fall, spring, or summer. 4 credits. Limited to students who have previously studied Italian and have an LPI score 45-55 or SAT II 460-580. Satisfactory completion of Italian 123 fulfills the qualification portion of the language requirement. Staff. Italian 123 is an all-skills course designed to improve speaking and reading ability, to establish a groundwork for correct writing, and to provide a substantial grammar review.

## ITALA 203-204 Intermediate

## Composition and Conversatlon

203, fall or spring; 204, fall or spring 3 credits each term. Prerequisites: for Italian 203, qualification in Italian; for Italian 204, 203 or equivalent. P. Swenson. Guided conversation, composition, reading, pronunciation, and grammar review emphasizing the development of accurate and idiomatic expression in the language.

Note: Students placed in 200-level courses also bave the option of taking courses in introductory literature; see separate listing under Italian 201 for description of this course, which may be taken concurrently with the Italian 203-204 language courses described above. The introductory literature courses are offered by the respective literature departments, and the 203-204 language courses by the Department of Modern Languages

ITALA 300 Directed Studies
Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor

ITALA 313 Advanced Italian: Language in Italian Culture
Spring. 3 credits. Prerequisite: Italian 204 or equivalent or permission of instructor. Italian 313 is not prerequisite to Italian 314 and may be taken after Italian 314. P. Swenson.

Further development of all skills. Readings and discussions center on two themes: (1) contemporary Italian life and (2) the Italian language, its origins, evolution, and present state, including the role of the dialects.
Emphasis on vocabulary building and awareness of stylistic levels

## [ITALA 314 Advanced Italian: Language

 and Social IssuesFall. 3 credits. Prerequisite: Italian 204 or equivalent. Italian 313 is not prerequisite to Italian 314 and may be taken after Italian 314. Not offered 1997-98.
S. Stewart.

Further development of all skills, with emphasis on self-expression. Content: evolution and crisis in Italian politics, values, and national identity against the background of European unification. Social movements, issues, and attitudes, especially as reflected in the mass media.]

## [ITALA 631 Readings in Italian Opera

 LlbrottiSpring. 2 credits. For graduate students only. Prerequisite: permission of instructor. Offered concurrently with appropriate seminars in the Department of Music. Not offered 1997-98.]

## Japanese

For literature courses see Asian Studies
Fees. A small fee may be charged for photocopied texts for course work

JAPAN 101-102 Elementary Japanese
101, fall; 102 , spring. 6 credits each term Prerequisite for Japanese 102: Japanese 101 or placement by the instructor during registration. Intended for beginners or for those who have been placed in the course by examination. Staff.
A thorough grounding is given in all the language skills at beginning level: listening, speaking, reading, and writing.

## [JAPAN 123 Accelerated Introductory

 JapaneseFall. 6 credits. Prerequisite: placement by the instructor at beginning of semester Not offered 1997-98. Staff.
Accelerated training in listening, speaking, reading, and writing for students who have
already acquired a limited facility in Japanese through residence in Japan or brief formal study, but who require additional training to qualify for admission to Japanese 102. Attend Japanese 101 lectures. Offered if enrollment is sufficient.]

JAPAN 141-142 Beginning Japanese at a Moderate Pace
141, fall; 142, spring. 4 credits each term. Y. Shirai and staff.

Beginning-level training in listening, speaking, and basic reading and writing. This series of 'Moderate Pace' courses provides an alternate choice for students who find it difficult to schedule the more intensive 101-102 sequence into their schedules. Can be followed by the 241-242, 543-544 and 545546 sequences. All students planning to study abroad apply through Cornell Abroad; please see the Cornell Abroad program description in the introductory section of the Courses of Study.

## JAPAN 201-202 Intermediate Japanese

 Reading I ©201, fall; 202, spring. 2 or 3 credits each term. Prerequisites: for Japanese 201, Japanese 102 or placement by the instructor during registration; for Japanese 202, Japanese 201 and 203 or placement by the instructor during registration. Staff. Reading of elementary texts emphasizing practical materials, with development of writing skills.

## JAPAN 203-204 Intermediate Japanese

 Conversation (a)203, fall and summer; 204, spring and summer. 4 credits each term. Prerequisites: for Japanese 203, Japanese 102 or placement by the instructor during registration; for Japanese 204, Japanese 203 or placement by the instructor during registration. Staff.
Training in listening and speaking for students who have acquired basic oral proficiency. Students are strongly encouraged to enroll in Japanese 201-202 concurrently.

## JAPAN 241-242 Intermediate Japanese

 at a Moderate Pace 앙241, fall; 242, spring. 4 credits each term Prerequisites: for Japanese 241, Japanese 160 or placement by instructor during registration period; for Japanese 242, Japanese 241 or placement by instructor during registration period.
Y. Nakanishi-Whitman.

Training in listening, speaking, reading, and writing for those students who have acquired a basic beginning-level command. Provides an alternate choice for students who find it difficult to schedule the more intensive Japanese 201/203 and 202/204 into their schedules: MBA students, engineering students, hotel school students, arts college students, and others identical with 543-544. Can be followed by Japanese 341-342.

## JAPAN 300 Directed Studies

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor

## JAPAN 301-302 Intermediate Japanese

 Reading II ©301, fall; 302, spring. 4 credits each term Prerequisites: for Japanese 301, Japanese 202 or placement by the instructor during
registration; for Japanese 302, Japanese 301 or placement by the instructor during registration. K. Selden.
Reading of selected modern texts with emphasis on expository style.

## JAPAN 303-304 Communicatlve

 Competence 상303, fall; 304, spring. 3 credits each term. Prerequisites: for Japanese 303, Japanese 204 and, preferably, Japanese 202, or placement by the instructor during registration; for Japanese 304, Japanese 303 or placement by the instructor during registration. Y. Katagiri.
Practice in the use of spoken Japanese within the constraints set by Japanese social settings.
[JAPAN 341-342 Advanced Japanese at - Moderate Pace e

341, fall; 342, spring. 4 credits each term. Prerequisites: for Japanese 341, Japanese 242 or placement by instructor during registration period; for Japanese 342, Japanese 341 or placement by instructor during registration period. Not offered 1997-98.
Training in intermediate to advanced listening and speaking, and continued work on reading and writing. Provides an alternate choice for students who find it difficult to schedule the more intensive Japanese 201/203 and 202/204 into their schedules: MBA students, engineering students, hotel school students, arts college students, and others. Also highly recommended for those with prior background in the language who are weak in the more complex and difficult grammar patterns. Students planning to major in Japanese studies should take 101-102, not 141-142.]

## JAPAN 401-402 Advanced Japanese

## Reading ©

401, fall; 402 , spring. 4 credits each term. Prerequisite: Japanese 302 or permission of instructor.
Section I: Area of Humanities. Cannot be used for distribution. K. Selden. Reading of selected modern texts with emphasis on expository style.
Section II: Area of Economics and Social Science. Cannot be used for distribution. Y. Kawasaki. Reading of selected modern texts with emphasis on expository style.

## JAPAN 407-408 Oral Narration and

 Publle Speaking407, fall; 408, spring. 2 credits each term. Prerequisites: for Japanese 407, Japanese 304 or placement by the instructor during registration; for Japanese 408, Japanese 407 or placement by the instructor during registration. N. Nakada.
Instruction in making and delivering socially appropriate and effective speeches, with emphasis on both the construction of discourse and Japanese patterns of oral delivery.

JAPAN 421-422 Dlrected Readings 421, fall; 422, spring. Credit to be arranged. Limited to advanced students. Prerequisite: placement by the instructor during registration. K. Selden.
Topics are selected on the basis of student needs.

## JAPAN 543-544 Intermodlate Japanese

 for Business School Students 543 , fall; 544, spring. 4 credits each term. Prerequisites: for Japanese 543, Japanese 160,102 , and permission of instructor orplacement by instructors during registration period; for Japanese 544, Japanese
543,102 , or placement by instructors during registration. Y. Nakanishi-Whitman Training in listening, speaking, reading, and writing for students who have already acquired a basic oral proficiency. Course times are arranged to accommodate those in the MBA program, but the material is oriented toward any student. Particularly suited to students who find it difficult to schedule the more intensive 201/203 or 202/204 courses into their schedules.
[JAPAN 545-546 Advanced Japanese for Business School Students
545, fall; 546, spring. 4 credits each term. Prerequisites: for Japanese 545, Japanese 544 or placement by instructors during registration period; for Japanese 546, Japanese 545 or placement by instructors during registration period. Not offered 1997-98. Staff.
Training in listening and speaking at intermediate to advanced level; continued work on reading and writing at intermediate level. Course times are arranged to accommodate those in the MBA program, but the material is oriented toward any student. Particularly suited to students who find it difficult to schedule the more intensive 202 204 courses into their schedules.]

## FALCON (Full-year Asian Language CONcentration)

R. Sukle, 412 Morrill Hall; FALCON secretary, 413 Morrill Hall

## JAPAN 160 Introductory Intenslve Japanese

Summer only. 8 credits. R. Sukle and staff.
This is the first term of the Japanese FALCON Program. It is a full-time, nine-week course; the degree of intensity does not allow students to take other courses simultaneously. Formal application must be made to the program, but admission is open to all students, not just those students intending to take the fall and spring terms of FALCON. The course is an introduction to Japanese from absolute beginning level, in speaking as well as rudimentary reading and writing. There are three small interactive classes per day conducted entirely in Japanese and one lecture in English and Japanese. Two hours during the day are required language labs. Additional preparation time in the language lab is necessary in the evenings. Students completing this course can move smoothly in the academic year into Japanese 241-242 or 543-544. These can be followed the following year by Japanese 341-342 or Japanese 545-546, respectively.

## JAPAN 161-162 Intensive Japanese

 (FALCON)161 , fall; 162 , spring. 16 credits each term Prerequisites: for Japanese 161, Japanese 160 or Japanese 102 at Comell, or placement prior to beginning of fall term by FALCON staff; for Japanese 162 , Japanese 161 , or placement prior to beginning of spring term by FALCON program. Students must apply formally to the program (applications available from FALCON secretary, 413 Morrill Hall). Admission is open to graduate and undergraduate students from Cornell or from elsewhere, provided the applicant
has the necessary prerequisites or is able to place into this level.
Work on spoken and written Japanese from intermediate into advanced level. This is a full-time program and a full academic load; the demands of the program do not normally permit students simultaneously to take other courses. With the sequence $160-161-162$ a student can, in one calendar year complete as much Japanese as would be in three or more years of part-time study in many academic programs. This course also serves to fulfill the language requirement for the MA in Asian Studies and the joint MBA/MA in Asian Studies.

## Javanese

Fees. A small fee may be charged for photocopied texts for course work.
JAVA 131-132 Elementary Javanese 131 , fall; 132 , spring. 3 credits each term Prerequisite: for Javanese 132, Javanese 131 or equivalent. This language series (131-132) cannot be used to satisfy the language requirement. J. Wolff and staff. An elementary language course for those who have had no previous experience in the language.

## JAVA 133-134 Continuing Javanese

 133 , fall; 134, spring. 3 credits each term. Prerequisites: for Javanese 133, Javanese 132 or equivalent; for Javanese 134, Javanese 133 or equivalent. Satisfactory completion of Javanese 134 fulfills the qualification portion of the language requirement. J. Wolff and staff.An intermediate conversation and reading course.

JAVA 203-204 Directed Individual Study 203, fall; 204, spring. 3 credits. Prerequisite: Javanese 134 or equivalent. J. Wolff and staff.
This is a practical language course on an intermediate level in which the students will work through readings and conversations under the guidance of a native speaker for three contact hours a week

## JAVA 300 Dlrected Studies

Fall or spring. $1-4$ credits variable
Prerequisite: permission of instructor. J. Wolff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Khmer (Cambodian)

Fees. A small fee may be charged for photocopied texts for course work.

## KHMER 101-102 Elementary Khmer

101, fall; 102, spring. 6 credits each term. Prerequisite: for Khmer 102, Khmer 101 or equivalent. Staff.
A course for beginners or for those who have been placed in the course by examination The course gives a thorough grounding in speaking and reading

## KHMER 201-202 Intermediate Khmer

 Reading e201, fall; 202, spring. 3 credits each term. Prerequisites: for Khmer 201, Khmer 102; for Khmer 202, Khmer 201. Staff. Continuing instruction in spoken and written Khmer.

## KHMER 203-204 Intermediate

 Composition and Conversation (e) 203, fall; 204, spring. 3 credits each term. Prerequisites: for Khmer 203, Khmer 102; for Khmer 204, Khmer 203. Staff.Letter writing and other forms of composition.

## KHMER 300 Directed Studies

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

KHMER 301-302 Advanced Khmer (a) 301 , fall; 302 , spring. 4 credits each term. Prerequisites: for Khmer 301, Khmer 202 or equivalent; for Khmer 302, Khmer 301. Staff.
Continuing instruction in spoken and written Khmer; emphasis on enlarging vocabulary, increasing reading speed, and reading various genres and styles of prose.

## KHMER 401-402 Directed Individual

 Study401, fall; 402, spring. For advanced students. 2-4 credits each term. Prerequisite: permission of instructor. Staff. Various topics according to need.

## Korean

Fees. A small fee may be charged for photocopied texts for course work.

KOREA 101-102 Elementary Korean 101 , fall; 102 , spring. 6 credits each term. Satisfactory completion of Korean 102 fulfills the qualification portion of the language requirement. H. Diffloth and staff.
Covers basics of speaking, reading, and writing. Introduces Hangul writing system and grammar.

KOREA 109-110 Elementary Reading
109 , fall; 110 , spring. 3 credits each term. Prerequisite: permission of instructor. Satisfactory completion of Korean 110 fulfills the qualification portion of the language requirement. H. Diffloth and staff.
This course is for students who have spoken some Korean in the home, but whose reading and writing skills are limited or nonexistent. If in doubt about eligibility, see instructor

KOREA 201-202 Intermediate Korean © 201, fall; 202, spring. 4 credits each term. Prerequisites: for Korean 201, Korean 102 or permission of instructor; for Korean 202, Korean 201. Satisfactory completion of Korean 201 fulfills the proficiency portion of the language requirement. H. Diffloth and staff.
Covers the basics of speaking, reading, and writing at the intermediate level. Introduces some reading and writing with Chinese characters.

KOREA 209-210 Intermediate Reading 209, fall; 210, spring. 4 credits each term. Prerequisites: for Korean 209, Korean 110 or permission of instructor; for Korean 210, Korean 209 or permission of instructor Satisfactory completion of Korean 209 fulfills the proficiency portion of the language requirement. H. Diffloth and staff.

An intermediate level of reading comprehension and writing course for students who have acquired basic oral proficiency. Introduces some reading and writing with Chinese characters. If in doubt about eligibility, see instructor.

## KOREA 300 Directed Studies

Fall or spring. $1-4$ credits variable
Prerequisite: permission of instructor. H. Diffloth

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor

KOREA 301-302 Advanced Korean
301, fall; 302, spring. 4 credits each term. Prerequisites: for Korean 301, Korean 202 or placement by instructor; for Korean 302, Korean 301 or placement by instructor
H. Diffloth and staff.

Reading of advanced texts, including newspapers and Chinese character material, together with advanced drill on the spoken language.

## Languages

Fees. A small fee may be charged for photocopied texts for course work.

## LANG 501 Teaching Second Languages

Fall. 3 credits. Note: this course will count as out-of-college credit for College
of Arts and Sciences undergraduates.
Y. Shirai, M. McCarthy and staff. This course is designed primarily for graduate teaching assistants in the Department of Modern Languages who have no prior experience in the teaching of foreign and second languages. It is also open to others interested in language teaching methodology. The course has a general component relevant to the teaching of all second languages as well as a language-specific component tailored to the pedagogical needs of particular languages. Topics include: observing and reflecting upon the language classroom; principles and research in second-language learning; teaching grammar, pronunciation, and vocabulary; teaching reading, writing, and speaking; teaching for proficiency; discourse and language functions; materials preparations, the task-based syllabus, lesson plans; evaluation and testing, student errors and teacher feedback, portfolios, discrete point and integrative tests; leamer attitude, aptitude, motivation, and individual differences; learning strategies; individual and small group activities and collaborative learning; culture in the language classroom; and the role of technology in the language classroom.

## Latin

See listings under Classics

## Nepali

## Study Abroad in Nepal

Cornell and the central campus of the Nepalese national university-Tribhuvan-at Kirtipur, Kathmandu, co-sponsor an academic year in Nepal. North American students study and live with Nepalese students who come from outside the Kathmandu Valley to Tribhuvan University. Students may participate in one or two semesters. Courses are offered both at Tribhuvan University and at
the Cornell-Nepal Study Program House adjacent to the university. All courses are officially taught in English. A five-week, incountry orientation program includes classes in intensive Nepali conversation, cultural orientation programs, and a ten-day field trip and trek. Semester course offerings include Nepali language (Tibetan and/or Newari languages also possible), contemporary issues in Nepalese studies, field research design and methods in sociology/anthropology and ecology/environment, and guided field research.
Juniors and seniors in good academic standing from any major field may participate. Students must have a desire to study on the other side of the world, to participate in a multicultural program, and to undertake rigorous field research. No experience in Nepal is necessary and instruction is in English, but some prior Nepali language study is strongly recommended. Students interested in the study abroad in Nepal program should consult with the Cornell Abroad office (474 Uris Hall) for further information.

Fees. A small fee may be charged for photocopied texts for course work.

NEPAL 101-102 Elementary Nepall
101, fall; 102, spring. 6 credits each term. Prerequisite: for Nepali 102, 101 or examination. S. Oja.
Intended for beginners. The emphasis is on basic grammar, speaking and comprehension skills, utilizing culturally appropriate materials and texts. Devanagari script for reading and writing is also introduced.

## 【NEPAL 160 Intensive Nepall

 Summer only. 10 credits. Intended for beginners. Offered alternate years. Not offered 1997-98. S. Oja.Emphasis will be on the spoken language, in dialogues, exercises, and conversation practice. In addition, however, special attention is given to assisting students to develop vocabularies and abilities appropriate to their unique professional needs. Reading and writing practice use both colloquial and scholarly materials in the Nepali (Devanagari) script.]

## NEPAL 201-202 Intermediate Nepali

 Conversation 앙201, fall; 202, spring. 3 credits each term. Prerequisites: for Nepali 201, Nepali 102 or examination; for Nepali 202, Nepali 201 or examination. 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 203-204 Intermediate Nepali

 Composition 상203, fall; 204, spring. 3 credits each term. Prerequisites: for Nepali 203, Nepali 102 or examination; for Nepali 204, Nepali 203 or examination. S. Oja.
A 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 300 Directed Studies

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. S. Oja.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## NEPAL 301-302 Advanced Nepali

301, fall; 302, spring. 3 credits each term. Prerequisite: Nepali 204 or permission of instructor. S. Oja.
Reading of advanced texts, together with advanced drill on the spoken language.

## Pali

Fees. A small fee may be charged for photocopied texts for course work.

## PALI 131-132 Elementary Pali

131, fall; 132, spring. 3 credits each term. This language series cannot be used to satisfy the language requirement. J. Gair. 131 is an introduction to the language of the canonical texts of Theravada Buddhism. Reading of authentic texts of Theravada Buddhism. Emphasis on both content and grammatical structure. Familiarity with Sanskrit is not required. 132 is a continuation of 131 with further readings.

## PALI 300 Directed Studies

Fall or spring. 1-4 credits variable.
Prerequisite: permission of instructor. J. Gair.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Polish

Fees. A small fee may be charged for photocopied texts for course work.

## [POLSH 131-132 Elementary Polish

131, fall; 132, spring. 3 credits each term. Prerequisite: for Polish 132, Polish 131 or equivalent. This language series (131-132) is not sufficient to satisfy the language requirement. Offered alternate years. Not offered 1997-98. Staff.
Covers all language skills: speaking, listening comprehension, reading, and writing.]

## POLSH 133-134 Continuing Polish

133, fall; 134, spring. 3 credits each term. Prerequisites: for Polish 133, Polish 132 or equivalent; for Polish 134, Polish 133 or equivalent. Satisfactory completion of Polish 134 fulfills the qualification portion of the language requirement. Offered alternate years. W. Browne, E. Domisch. An intermediate conversation and reading course

## POLSH 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor.
W. Browne.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Portuguese

Fees. A small fee may be charged for photocopied texts for course work.
PORT 121-122 Elementary Portuguese 121, fall; 122, spring. 4 credits each term. Intended for beginners. Students may attain qualification upon completion of 122 by achieving a satisfactory score on a special examination. J. Oliviera.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing

PORT 203-204 Intermediate Composition and Conversation 랑
203, fall; 204, spring. 3 credits each term. Prerequisites: for Portuguese 203,
Portuguese 122 or permission of instructor; for Portuguese 204, Portuguese 203 or permission of instructor. J. Oliviera. Conversational grammar review with special attention to pronunciation and the development of accurate and idiomatic oral expression. Includes readings in contemporary Portuguese and Brazilian prose and writing practice.

## PORT 300 Directed Studies

Fall or spring. $1-4$ credits variable
Prerequisite: permission of instructor.
J. Oliviera.

Taught on a specialized basis to address particular student needs. Times will be asranged with instructor.

PORT 303-304 Advanced Composition and Conversation © ${ }^{(8)}$
303, fall; 304 , spring. 4 credits each term. Prerequisites: for Portuguese 303,
Portuguese 204 or equivalent; for Portuguese 304, Portuguese 303 or equivalent. J. Oliviera.

## Quechua

Fees. A small fee may be charged for photocopied texts for course work.
QUECH 131-132 Elementary Quechua 131, fall; 132, spring. 3 credits each term. Prerequisite: qualification in Spanish. This language series (131-132) cannot be used to satisfy the language requirement. L. Morató-Peña.

A beginning conversation course in the Cuzco dialect of Quechua.

## QUECH 133-134 Continuing Quechua

133, fall; 134 , spring. 3 credits each term. Prerequisites: for Quechua 133, Quechua 131-132 or equivalent; for Quechua 134; Quechua 133 or equivalent. Satisfactory completion of Quechua 134 fulfills the qualification portion of the language requirement. L. Moratō-Peña.
An intermediate conversation and reading course. Study of the Huarochiri manuscript.
[QUECH 135-136 Quechua Writing Lab 135 , fall; 136 , spring. 1 credit each term. Prerequisite: concurrent enrollment in Quechua 131-132 or instructor's approval. Letter grade only. L. Moratō-Peña. Computer-assisted drill and writing instruction in elementary Quechua.]

## QUECH 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor.
L. Moratô-Peña.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Romanian

Fees. A small fee may be charged for photocopied texts for course work.
[ROMAN 131-132 Elementary Romanian
131, fall; 132, spring. Offered according to demand. 3 credits. Prerequisite: for Romanian 132, Romanian 131 or equivalent. This language series (131-132) cannot be used to satisfy the language requirement. Not offered 1997-98. Covers all language skills: speaking, listening comprehension, reading, and writing.]
[ROMAN 133-134 Continuing Romanian 133 , fall; 134, spring. Offered according to demand. 3 credits. Prerequisite for Romanian 134: Romanian 133 or equivalent. Satisfactory completion of Romanian134 fulfills the qualification portion of the language requirement. Not offered 1997-98.
An intermediate conversation and reading course.]

## Russian

For literature courses see Russian Literature.

## The Russian Major

See Russian Literature.

## Study Abroad

Cornell is an affiliated institution in the Council on International Education Exchange program for Russian language study in St. Petersburg and other Russian cities. Cornell students also frequently go on the American Council of Teachers of Russian program in Moscow and 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 Patricia Carden or Diane Williams, 236 Goldwin Smith Hall.

Honors. Students taking honors in Russian undertake individual reading and research and write an honors essay.

## Freshman Writing Seminar Requirement

See Russian Literature.

## Russian Studies Major

See "Special Programs and Interdisciplinary Studies," which follows the department listings.
Fees. A small fee may be charged for photocopied texts for course work.
RUSSA 103-104 Conversation Practice
103 , fall; 104 , spring. 2 credits each term. Must enroll in one section of 103 and one section of 121 , in the fall; and one section of 104 and one section of 122 in the spring. L. Paperno.

RUSSA 121-122 Elementary Russian 121 , fall or summer; 122 , spring or summer. 4 credits each term. May be taken alone and qualification will be achieved with satisfactory completion of 121-122-123; or may be taken concurrently with 103-104 and qualification will be achieved at completion of 122-104. V. Tsimberov and staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing. An experimental section, Beginning Russian through Film, will be taught in 1997-98 in addition to the regular sections. Most of the work in the experimental section will be based on video clips from original Russian films and TV programs.

## RUSSA 123 Continuing Russian

Fall. 4 credits. Limited to students who have previously studied Russian or been placed by department. Satisfactory completion of Russian 123 fulfills the qualification portion of the language requirements. V. Tsimberov, S. Paperno, L. Paperno.

A course designed to prepare students for study at the 200 level. Passing this course is equivalent to qualification. Authentic Russian materials are used: TV, books, etc.

## RUSSA 203-204 Intermediate

 Composition and Conversation 203, fall, or summer; 204, spring or summer. 3 credits each term. Prerequisites: for Russian 203, qualification in Russian (Russian 123 or placement by department); for Russian 204, Russian 203 or equivalent. L. Paperno, S. Paperno, V. Tsimberov.Guided conversation, composition, reading, pronunciation, and grammar review, emphasizing the development of accurate and idiomatic expression in the language. An additional experimental section, Intermediate Russian through Film, may be taught in
1997-98, with a significant portion of the work based on clips from an original Russian feature film.
RUSSA 205-206 Reading Russian Press 205, fall; 206, spring. 2 credits each term. Prerequisite: qualification in Russian (Russian 123 or placement by department). Both semesters must be taken in order to satisfy the proficiency level for the language requirement. This course cannot be used to satisfy the humanities requirement. Staff.
Reading unabridged articles on a variety of topics from current Russian periodicals.
Note: Students placed in the 200-level courses also bave the option of taking courses in introductory literature; see separate listings under Russian 201 and 202 for descriptions of these courses, any of which may be taken concurrently with the 203-204 and 205-206 language courses described above. The introductory literature courses are offered by the Department of Russian Literature, and the 203-204 and 205-206 language courses by the Department of Modern Languages. Two sections will be taught in 1997-98. Section I: Russian Press for Everyday Culture. Section II: Russian Press for Business and Politics.

## RUSSA 300 Directed Studles

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor.
Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## RUSSA 303-304 Advanced Composition

 and Conversation303, fall; 304, spring. 4 credits each term. Prerequisites: for Russian 303, Russian 204 or equivalent; for Russian 304, Russian 303 or equivalent. L. Papemo, S. Paperno, V. Tsimberov.

Writing, reading, and conversation: viewing and reading authentic language materials; current Russian films (feature and documentary), newspapers, TV programs, and other materials are used.

## RUSSA 305-306 Directed Individual

 Study305, fall; 306, spring. 2 credits each term. Prerequisite: placement by the department. Staff.
This course is intended for students with special needs (e.g., children of Russian immigrants who speak Russian at home) that cannot be met by any other Russian course. Two sections will be taught in 1997-98. Level I: for native speakers of Russian who never went to a Russian school. Level II: for native speakers of Russian who did complete high school in Russia.

## RUSSA 309-310 Advanced Reading

309, fall; 310, spring. 4 credits each term. Prerequisites: for Russian 309, Russian
204; for Russian 310, Russian 309 or equivalent. L. Paperno.
The purpose of the course is to teach advanced reading skills. The weekly reading assignment is $20-40$ pages of unabridged Russian prose (non-fiction) of the 20 th century. The discussion of the reading is conducted entirely in Russian and is centered around the content of the assigned selection.

## RUSSA 413-414 Advanced Conversation

 and Styllstics413, fall; 414, spring. 2 credits each term. Prerequisites: for Russian 413, Russian 303-304 or the equivalent, for Russian 414, Russian 413 or equivalent. V. Tsimberov. Discussion of authentic unabridged Russian texts and films (feature or documentary) in a variety of nonliterary styles and genres.

## RUSSA 633-634 Russian for Russian

 Specialists633, fall; 634, spring. 2 credits each term.
Prerequisite: four years of college Russian.
For graduate and advanced undergraduate students. S. Paperno.
The course is designed for students who specialize in an area of Russian studies requiring fine active control of the language Fine points of syntax, usage, and style are discussed.

## Sanskrit

See listings under Asian Studies.

## Serbo-Croatian

Fees. A small fee may be charged for photocopied texts for course work.

## SEBCR 131-132 Elementary

 Serbo-Croatian131, fall; 132, spring. 3 credits each term. Prerequisite for Serbo-Croatian 132: SerboCroatian 131 or equivalent. This language series (131-132) is not sufficient to satisfy the language requirement. Offered alternate years. W. Browne.
Covers all language skills: speaking, listening comprehension, reading, and writing.

## [SEBCR 133-134 Continulng Serbo-

 Croatian133, fall; 134, spring. 3 credits each term. Prerequisites: for Serbo-Croatian 133, Serbo-Croatian 132 or equivalent; for Serbo-Croatian 134, Serbo-Croatian 133 or equivalent. Satisfactory completion of Serbo-Croatian 134 fulfills the qualification portion of the language requirement. Offered alternate years. Not offered 1997-98. Staff.

An intermediate conversation and reading course.]

## SEBCR 300 Directed Studles

Fall or spring. 1-4 credits variable.
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Sinhala (Sinhalese)

Fees. A small fee may be charged for photocopied texts for course work.

## SINHA 101-102 Elementary Sinhala

101 , fall; 102 , spring. 6 credits each term. Prerequisite: for Sinhala 102, Sinhala 101 or equivalent. Staff.
A semi-intensive course for beginners. A thorough grounding is given in all the language skills; listening, speaking, reading, and writing.

## [SINHA 160 Intensive Sinhala

Summer only. 10 credits. Intended for beginners. Offered alternate years. Not offered 1998.
Emphasis is on the spoken (colloquial) language, the writing system is introduced and used to present all Sinhala materials, with additional reading practice with colloquial materials. A foundation is laid for later study of the written language (literary Sinhala).]

## SINHA 201-202 Intermediate Sinhala Reading ©

201, fall; 202, spring. 3 credits each term. Prerequisites: for Sinhala 201, Sinhala 102 for Sinhala 202, Sinhala 201 or equivalent. Staff.

## SINHA 203-204 Intermediate

 Composition and Conversation © 203, fall; 204, spring. 3 credits each term. Prerequisites: for Sinhala 203, Sinhala 102 or permission of instructor; for Sinhala 204, Sinhala 203 or equivalent. Staff.
## SINHA 300 Dlrected Studies

Fall or spring. 1-4 credits variable.
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Spanish

For advanced Spanish language and literature courses see Romance Studies.

## Study Abroad in Spain

Cornell, the University of Michigan and the University of Pennsylvania cosponsor an academic year in Spain program. Students enrolled in this program spend the first four weeks before the fall semester begins in a residential college located on the campus of the University of Madrid, where they take a course in Spanish language and contemporary society and take advantage of special lectures and field trips to Madrid and Castile. This course carries three credits. In early October the program moves to Seville, where students enroll in as many regular classes at the University of Seville as their language competency and general education permit. Their academic work is supplemented by courses designed explicitly for the program by

Seville faculty, as well as a seminar regularly offered by the resident director, who is chosen from the faculty of either Cornell, Michigan or Pennsylvania. The special courses normally include history of art and architecture, Spanish composition and syntax, and modern Spanish history. In Seville students live with selected families. Cornell Michigan-Pennsylvania also maintains a center in Seville, which is used by students for special seminars, tutorials, lectures, and informal gatherings.
Applicants are expected to have at least completed Spanish 204 prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. Students interested in the study abroad program should consult with the Cornell Abroad office for further information (474 Uris Hall, 255-6224).

Fees. Depending on the course, a small fee may be charged for photocopied texts for course work.

## Important information about registration for Spanish classes

The Spanish Program offers a number of elementary and intermediate courses to satisfy the needs of students with a variety of backgrounds; students are urged to register for the appropriate level so as to start the semester in the right class. Students with 2 or more years in the language are required to take the placement test before taking any Spanish course.

## Background

0 Spanish
less than 2 years
2 years or more

Language Placement
Score ${ }^{*}$
less than 37
or SAT II below 370
37-44

## Course

Spanish 121
Spanish 121
Placement test score
required for any Spanish course
or SAT Il 370-450
45-55
SAT II 460-580
56 or more
Spanish 121

Spanish 112, 122

Spanish 123
or SAT II 590
and above
*the placement score can be from an achievement test, the CPT, or the LPS.

## SPAND 101 Basic Course I

Summer only. 6 credits. Prerequisite: no Spanish.
This course is intended for students with absolutely no experience in Spanish. (Spanish 123 and 203 are usually offered in the summer concurrently with 101 for students with prior experience.) Spanish 101 provides a thorough grounding in all language skills. Language practice in small groups. Lectures cover grammar, reading, and cultural information.

## SPAND 112 Elementary Spanish: Review

 and ContinuationFall. 4 credits. Prerequisite: LPS score 37-44. M. Rice.
This course is designed for students who have taken some Spanish and who have a placement score of $37-44$ or SAT II 370-450. It provides a basic review and then moves on
to cover new material for the remainder of the term. Students who have taken Spanish 121 may enroll for this course. As part of the final exam, students take the LPS and, according to their score, may place into Spanish 123 (score below 56) or receive qualification ( 56 or above), and placement into the 200-level courses. Evening prelim.

## SPAND 121-122 Elementary Spanish

121, fall: 122 , spring. 4 credits each term.
Prerequisite: for Spanish 122, Spanish 121
Z. Iguina and staff.

This course is intended for students with no experience in Spanish. (Students who have previously studied 2 or more years of Spanish are not eligible for 121 unless they have an LPS score lower than 37 or SAT II lower than 370.) The course provides a thorough grounding in all language skills. Language practice in small groups. Lectures cover grammar, reading, and cultural information. Evening prelims.

## SPAND 123 Contlnuing Spanish

Fall, spring, or summer. 4 credits
Prerequisite: Spanish 112, Spanish 122, or an LPS score $45-55$ or SAT II $460-580$.
L. Morató-Pena, M. K. Redmond,
J. Routier-Pucci, A Tiō and staff.

An all-skills course designed to prepare students for study at the 200 level. Satisfactory completion of Spanish 123 fulfills the qualification portion of the language requirement. Evening prelim

## SPAND 200 Spanish for English/Spanish

 BilingualsFall or spring. 3 credits. Prerequisite: LPS score 56-64, SAT II 590-680, CASE placement, or permission of instructor.
D. Cruz de Jesús

A course designed to expand bilingual students' knowledge of Spanish by providing them with ample opportunities to develop and improve each of the basic language skills.
Not available to students who have taken Spanish 203 ог 213.

## SPAND 203 Intermediate Composition and

 ConversationFall, spring, or summer. 3 credits, Prerequisite: qualification in Spanish (Spanish 123, LPS score 56-64, or SAT II 590-680). Not available to students who have taken Spanish 213. D. Cruz de Jesús, M. Rice, J. Routier-Pucci and staff Conversational grammar review with special attention to the development of accurate and idiomatic oral expression. Includes readings in contemporary Spanish prose and practice in writing.

## SPAND 204 Intermediate Composition

 and ConversationFall or spring. 3 credits. Prerequisite: Spanish 203 or permission of instructor. E. Dozier and staff.

Practice in conversation with emphasis on improving oral and written command of Spanish. Includes treatment of specific problems in grammar, expository writing, and readings in contemporary prose.

## SPAND 213 Intermediate Spanish for the

 Medical and Health Professions Fall or spring. 3 credits. Prerequisite: qualification in Spanish (Spanish 123, EPS score 56-64, or SAT II 590-680) or permission of instructor. Students who have taken Spanish 203 or 200 should speak to the instructor. A. Tio .Conversational grammar review, with dialogues, debates, compositions, and readings on health-related themes. Special attention is given to relevant cultural differences. Fulfills proficiency requirement.

## SPAND 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor. Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

SPAND 310 Advanced Conversation and Pronunciation
Spring. 3 credits. Prerequisite: Spanish 204 or equivalent. Z. Iguina.
A conversation course with intensive oral practice obtained through the production of video programs. Study of the fundamental aspects of communication in the standard spoken and written Spanish, with some focus on dialectal variations. Weekly pronunciation labs.

## Swahili

See listings under Africana Studies and Research Center.

## Swedish

Fees. A small fee may be charged for photocopied texts for course work.

## SWED 121-122 Elementary Swedish

 121, fall; 122, spring. 4 credits each term. Prerequisite: for Swedish 122, Swedish 121 or equivalent. L. Trancik. The aim of this course is to develop skills in listening, speaking, reading and writing within Sweden's cultural context. Interactive computer programs are used in these courses.
## SWED 123 Continuing Swedish

Fall. 4 credits. Prerequisite: Swedish 122 or equivalent. L. Trancik.
Development of skills in spoken and written Swedish within Sweden's cultural context.

## SWED 203 Intermedlate Swedlsh

Spring. 3 credits. Prerequisite: Swedish 123 or permission of instructor. L. Trancik. Intermediate to advanced level instruction utilizing audio-visual material and text to enhance language comprehension.

## SWED 204 Advanced Swedish

Fall. 3 credits. Prerequisite: Swedish 203 or permission of instructor. Taught in Swedish. L. Trancik.
Emphasis on improving oral and written expression of Swedish, including vocabulary, readings in contemporary prose, treatment of specific problems in grammar, and presentation of videos and films.

## SWED 300 Directed Studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor.
L. Trancik.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Tagalog

Fees. A small fee may be charged for photocopied texts for course work.

## TAG 121-122 Elementary Tagalog

 121, fall; 122, spring. 4 credits each term. Prerequisite: for Tagalog 122, Tagalog 121. J. Wolff and staff.A thorough grounding is given in basic speaking and listening skills with an introduction to reading.

## TAG 123 Continuing Tagalog

Fall. 4 credits. Prerequisite: Tagalog 122 or equivalent. Satisfactory completion of Tagalog 123 fulfills the qualification portion of the language requirement. J. Wolff and staff.

Improves speaking skills, such as fluency and pronunciation, focusing on verbal communication skills; offers a wide range of readings; and sharpens listening skills.
TAG 205-206 Intermediate Tagalog © 205 , fall; 206, spring. 3 credits each term. Prerequisites: for Tagalog 205, Tagalog 123 or equivalent; for Tagalog 206, Tagalog 205 or equivalent. Satisfactory completion of Tagalog 205 fulfills the proficiency portion of the language requirement. J. Wolff and staff.
This course develops all four skills: reading, writing, speaking, and comprehension.

## TAG 300 Directed Studies

Fall or spring. 1-4 credits variable. Prerequisite: permission of instructor. G. Wolff.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Tamil

Fees. A small fee may be charged for photocopied texts for course work.
[TAMIL 101-102 Elementary Tamll
101, fall; 102, spring. 6 credits each term. Prerequisite: for Tamil 102, Tamil 101 or equivalent. Not offered 1997-98. Staff. A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.]

## [TAMIL 201-202 Intermediate Tamil

 Conversation201, fall; 202, spring. 3 credits each term. Prerequisites: for Tamil 201, Tamil 102 or permission of instructor; for 202, Tamil 201 or permission of instructor. Not offered 1997-98. Staff.
Intermediate instruction in spoken grammar and verbal comprehension skills with special attention to developing technical vocabularies and other verbal skills appropriate to the students' professional fields.]

## [TAMIL 203-204 Intermediate Tamil

 Composition203, fall; 204, spring. 3 credits each term. Prerequisites: for Tamil 203, Tamil 102 or permission of instructor; for 204, Tamil 203 or permission of instructor. Not offered 1997-98. Staff.
A 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.]

## Thai

Fees. A small fee may be charged for photocopied texts for course work.

## THAI 101-102 Elementary Thai

101, fall; 102 , spring. 6 credits each term. Prerequisite: for Thai 102, Thai 101 or equivalent. Intended for beginners or students placed by examination. N. Jagacinski.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.
THAI 201-202 Intermediate Thai Reading
201, fall; 202, spring. 3 credits each term. Prerequisites: for Thai 201, Thai 102; for Thai 202, Thai 201 or equivalent. N. Jagacinski.

## THAL 203-204 Intermediate Composition and Conversation ©

203, fall; 204, spring. 3 credits each term. Prerequisites: for Thai 203, Thai 102; for Thai 204, Thai 203. N. Jagacinski.

THAI 301-302 Advanced Thal © 301, fall; 302, spring. 4 credits each term. Prerequisite: Thai 202 or equivalent. N. Jagacinski.

Selected readings in Thai writings in various fields.

## THAI 300 Directed Studles

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. N. Jagacinski.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## THAI 303-304 Thai Literature

303, fall; 304, spring. 4 credits each term.
Prerequisite: Thai 302 or equivalent.
N. Jagacinski.

Reading of significant novels, short stories, and poetry written since 1850.

THAI 401-402 Directed Individual Study
401, fall; 402, spring. 4 credits each term. For advanced students or students with special problems or interests. Prerequisite: permission of instructor. N. Jagacinski.

## Ukrainian

Fees. A small fee may be charged for photocopied texts for course work.
[UKRAN 131-132 Elementary Ukrainian 131 , fall; 132 , spring. 3 credits each term. Prerequisite: for Ukrainian 132, Ukrainian 131 or equivalent. This language series cannot be used to satisfy the language requirement. Not offered 1997-98.
Covers all language skills: speaking, listening comprehension, reading, and writing.]

## UKRAN 300 Directed Studies

Fall or spring. 1-4 credits variable.
Prerequisite: permission of instructor Staff.
Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Urdu

See listings under Hindi.

## Vietnamese

Fees. A small fee may be charged for photocopied texts for course work.
VIET 101-102 Elementary Vietnamese
101, fall; 102, spring. 6 credits each term. Prerequisite: for Vietnamese 102,
Vietnamese 101 or equivalent. Intended for beginners or students placed by examination. Satisfactory completion of Vietnamese 102 fulfills the qualification portion of the language requirement.
T. Tranviet.

A thorough grounding is given in all language skills: listening, speaking, reading, and writing

## VIET 201-202 Intermediate Vletnamese

201, fall; 202, spring. 3 credits each term.
Prerequisites: for Vietnamese 201,
Vietnamese 102 or equivalent; for
Vietnamese 202, Vietnamese 201.
T. Tranviet.

Continuing instruction in spoken and written Vietnamese.

## VIET 203-204 Intermediate Vletnamese

 Composition and Reading e203, fall; 204, spring. 3 credits each term. Prerequisite: permission of instructor only. T. Tranviet.

Designed for students and "native" speakers of Vietnamese whose speaking and listening are at the advanced level, but who still need to improve writing and reading skills.

## VIET 300 Directed studies

Fall or spring. $1-4$ credits variable.
Prerequisite: permission of instructor. T. Tranviet.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## VIET 301-302 Advanced Vietnamese e

301, fall or spring; 302, fall or spring.
4 credits each term. Prerequisites: for Vietnamese 301, Vietnamese 202 or permission of instructor; for Vietnamese 302, Vietnamese 301. 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 401-402 Directed Individual Study

401 , fall; 402 , spring. $2-4$ credits variable
each term. Prerequisite: permission of
instructor. Intended for advanced
students. T. Tranviet.
Various topics according to need.

## Welsh

Fees. A small fee may be charged for photocopied texts for course work.

## WELSH 411 Readings in Modern Welsh

 Fall. 3 credits. Prerequisite: permission of instructor. W. Harbert.Topics are selected on the basis of student needs.

## WELSH 300 Directed Studies

Fall or spring. $1-4$ credits variable. Prerequisite: permission of instructor. W. Harbert.

Taught on a specialized basis to address particular student needs. Times will be arranged with instructor.

## Yoruba

Fees. A small fee may be charged for photocopied texts for course work.

## [YORUB 121-122 Elementary Yoruba

 (also Africana Studies and Research Center 121-122)Not offered 1997-98.
For description, see ASRC 121-122, sec. 01. I
[YORUB 123-203 Continuing Yoruba (also Africana Studies and Research Center 123-203)
Not offered 1997-98.
For description, see ASRC 123-203, sec. 01.]

## MATHEMATICS

R. Connelly, chair; G. Bailey, D. Barbasch, A. Berenstein, L. Billera, N. Brady, K. Brown, X. Buff, S. Chase, Z. Q. Chen, M. Cohen, R. K. Dennis, P. Diaconis, R. Durrett, E. Dynkin, C. Earle, R. Ehrenborg, M. Erdëlyi-Szabó, J. Escobar, R. Farrell, L. Gross, M. Gross, J. Guckenheimer, A. Hatcher, D. Henderson, J. Hubbard, J. Hwang, P. Kahn, H. Kesten,
B. Khoussainov, N. Lakic, M. Morley, A. Nerode, K. Pilgrim, R. Platek, T. Rishel, O. Rothaus, L. Saloff-Coste, A. Schatz, S. Sen, R. Shore, R. Sjamaar, J. Smillie, A. Solomon, B. Speh, M. E. Stillman, R. Strichartz, M. Sweedler, M. Terrell, R. Terrell, K. Vogtmann, L. Wahlbin, J. Wang, B. H. West, J. West, D. Wise, (Emeritus: J. Bramble, G. R. Livesay, P. Olum, L. E. Payne, A. Rosenberg)

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, real and complex analysis, Lie groups, topology and geometry, logic, probability and statistics, mathematical physics, and applied mathematics. Related departments at Comell have specialists in computer science,
operations research, linear programming, and game theory, and 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 300 or above are invited to confer, before registering, with the instructor concerned. The level of a course is indicated by the first digit of the course number:
roughly, 1,2 , indicate underclass courses; 3, 4, upperclass courses; 5, professional level and mathematics education courses; 6,7 , graduate courses. The subject matter of courses is often indicated by the second digit: 0 , general; 1,2 , analysis; 3,4 , algebra; 5,6, topology and geometry; 7 , probability and statistics; 8, logic; 9, other.
Midterm grades, when required, will be S or U only, except in special circumstances. In all 700 -level courses, all grades will be S-U only, with the exception of 790 . In courses with numbers below 700, students will receive letter grades, with the exception of nonmathematics majors who have requested an SU grade.

## Advanced Placement

Secondary school students are strongly urged to take one of the two advanced placement examinations of the College Entrance Examination Board in their senior year. Freshmen who have had some calculus but who have not taken an advanced placement examination should take the placement examination in mathematics offered at Cornell just before the beginning of classes in the fall. It is most important that anyone with any knowledge of calculus carefully read "Advanced Placement," p. 5.

## The Major

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. It can be broad or narrow. Questions concerning the major should be brought to a departmental representative.

Prerequisites: The traditional prerequisites are Mathematics 221-222 or 293-294. A unit on infinite series is required. Such a unit is offered in Mathematics 112, 122, and 192. Normally students will be admitted to the major only when they have grades of B - or better in all sophomore-level mathematics courses they have taken. Alternative prerequisites are Mathematics 213, 231, normally with grades of $\mathrm{B}+$ or better.

## Requirements

There are five requirements for the major:

1) Computer Science 100. Students are urged to take this course before the end of the sophomore year.
2) Two courses in algebra. Eligible courses are Mathematics 431 or 433,432 or 434 or 332, 336.
3) Two courses in analysis. Eligible courses are Mathematics 321, 411 or $413,414,418$, $420,422,423,427,428$.
4) Further high-level mathematical courses. Any one of the following is sufficient:
a) four additional Mathematics courses numbered 300 or above.
b) (Concentration in Computer Science) five additional courses from i) and ii) below, of which at least one is from i) and three are from ii)
i) Mathematics courses numbered 300 or above
ii) Computer Science courses numbered 310 or above
c) (Concentration in Operations Research)
five additional courses from iii) and iv) below, of which at least one is from iii) and three are from iv)
iii) Mathematics courses numbered 300 or above
iv) courses in Operations Research and Industrial Engineering, typically out of 320-361 (excluding 350 ) and/or out of 431-472.

These three alternatives do not exhaust the possibilities. For example, one very frequent double major is Economics/Math, in which case a suitable individual program can be put together in consultation with the student's adviser.
5) One course dealing with mathematical models. Any course from outside mathematics with serious mathematical content and dealing with scientific matters, provided the course has not been used toward satisfying the previous requirement, e.g., Physics 208, 213, or 217 (but not 112 or 207), or Computer Science 211 (if Computer Science option not used above). Students may consider courses from biology, chemistry, economics, and other fields; they should consult their adviser.
A course may be counted toward the mathematics major only if a grade of C - or better is received for that course.
Major advisers can alter these requirements upon request of an advisee, provided the intent of the requirements is met. (The requirements for Mathematics majors declared before July 1, 1994 are slightly different from what is stated here, particularly in respect to Requirement 4)

## Honors Program

The Department of Mathematics awards honors (cum laude) and high honors (magna cum laude and summa cum laude) to graduating mathematics majors who have demonstrated outstanding ability in the major program.
The awards are determined by the Mathematics Major Committee in the latter part of the semester prior to graduation. Normally, one requirement for honors is participation in the Honors Seminar (Math 401) for one semester, or independent study at a high performance level. The committee will also be looking for excellent performance in mathematics courses, particularly in challenging courses at the $400-$ level or beyond. Students interested in honors should consult their major advisers concerning suitable courses.
To be considered for high honors, a student usually will be expected to write a Senior Thesis, and present it orally to the department. This project is carried out during the senior year under the supervision of a member of the Mathematics department faculty. Students interested in high honors should consult their major advisers and the Mathematics major director during the second semester of their junior year.

## Teacher Education in Science and Mathematics (TESM)

Students at Cornell may pursue teaching credentials in biology, chemistry, earth science, general science, mathematics, and physics. TESM is a university program jointly conducted by the Departments of Education and Mathematics. Although TESM offers options for undergraduate and graduate study, most students enroll in a five-year program, which combines an undergraduate major in mathematics or one of the sciences with a one-year Master of Arts in Teaching (MAT). Students from any college at Cornell are eligible to apply to the program as undergraduates. Students who complete their undergraduate studies and their student teaching are eligible for provisional teaching certification from the State Education Department, effective for five years. Students completing the graduate program can earn the master's degree required for permanent certification.

For more information, contact the TESM Student Support Specialist at 255-9255 or the program coordinator, D. Trumbull (Education) 255-3108 or, in Mathematics, A. Solomon 255-3894.

## Distribution Requirement

Virtually all mathematics courses can be used to satisfy the Quantitative and Formal Reasoning part of the Distribution Requirements. Explicit exceptions are noted in the beginning of the Arts and Sciences section of the Courses of Study.

## Basic Sequences

## Precalculus

Course

## Description

1) Algebra and trigonometry to prepare students for calculus

Numbers
MATH 109* or EDUC $005^{*}$
2) Algebra, analytic geometry, elements of calculus

EDUC 115**
*MATH 109 and EDUC 005 do not carry credit for graduation.
"-Students who want a second semester of mathematics after EDUC 115 may take MATH 105 or if they need more calculus, MATH 111.

## Calculus

## Description

1) Standard three-semester sequence for students who do not expect to take advanced courses in mathematics
2) Calculus for engineers (also taken by some physical science majors)

191(193)-192-293-294
3) Prospective mathematics majors and others who expect to take advanced courses in mathematics: many sequences are possible. For example, 111-112-221-222; or 121-122-221-222; or the engineering sequence 191(193)-192-293-294; or a mix of the above. There is no specifically "approved" basic sequence for mathematics majors. Students should consult with their advisers for each individual case.

Mathematics 191 or 193 may be substituted for 111 in sequences 1 and 3 . Sequences 2 and 3 are two-year sequences that include some linear algebra.

Students who take sequence 1 may learn some linear algebra by taking Mathematics 231. A student whose performance in 112 is exceptional may switch to sequence 3 and take 221.

Special-Purpose Sequences
\(\left.$$
\begin{array}{ll} & \begin{array}{l}\text { Mathematics } \\
\text { Course }\end{array}
$$ <br>

Numbers\end{array}\right\}\)| Description | Finite mathematics and |
| :--- | :--- |
| calculus for biology majors |  | 105-106

Students who want to take two semesters of calculus are advised to take the first two semesters of one of the three calculus sequences. It is also possible to follow Mathematics 106 with 112 or 122.

Switching between calculus sequences is often difficult, especially at the 200 level. Students should not attempt such a switch without consulting the associate chair.

## 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 with similar content. Students will receive credit for only one of the courses in each group.
106, 111, 191, 193
112, 122, 192
213, 222, 224, 293
221, 223, 231, 294
332 and 432
336 and 436
321 and 420

## Fees

In some courses there may be a small fee for computer lab use or for photocopying materials to be handed out to students.

## Undergraduate Course Offerings

Foundation courses: $105,106,109,111,112$, 121, 122, 123, 191, 192, 193, 213, 221, 222, 223, 224, 293, 294
Mathematics Education: 405, 408, 451
History of Mathematics: 101, 403
General and Liberal Arts Courses: 103, 150, 171, 181, 401, 405, 408, 490
Analysis: 411, 413, 414, 418
Algebra and Number Theory: 231, 332, 336, 431, 432, 433, 434, 436
Combinatorics: 441,442
Geometry and Topology: 150, 356, 451, 452, 453, 454, 455
Probability and Statistics: $171,471,472,474$ Mathematical Logic: 181, 481, 482, 483, 486
Applied Analysis and Differential Equations: 321, 420, 422, 423, 425, 427, 428

MATH 101 History of Mathematles Summer. 4 credits. Prerequisite: three years of high school mathematics. The history of the main ideas of mathematics from Babylonian, Egyptian, and Greek times to the present day.

MATH 103 Mathematical Explorations
Fall, spring, or summer. 3 credits. This course may be used to satisfy the
distribution requirement in mathematics.
This course is for students who wish to experience how mathematical ideas naturally evolve. The homework will consist of the students actively investigating mathematical ideas. The course will emphasize ideas and imagination as opposed to techniques and calculations. Topics will vary depending on the instructor. Some assessment will be done through writing assignments.

## MATH 105 Finite Mathematics for Biologists

Fall or summer. 3 credits. Prerequisite: three years of high school mathematics, including trigonometry and logarithms. Mathematical modeling, sets, functions, and graphing (including use of log and semi-log paper). Probability (with some applications to genetics). Matrices, systems of linear equations, and Markov chains. Examples from biology are used.

## MATH 106 Calculus for Biologlsts

Spring or summer. 3 credits. Prerequisite: Mathematics 105 or 109 or EDUC 115 or permission of instructor. (A strong background in functions is required.) Mathematics 111 , rather than 106 , is recommended for those planning to take 112."
Introduction to differential and integral calculus, partial derivatives, elementary differential equations. Examples from biology are used.

## MATH 109 Precalculus Mathematics

Summer. 3 transcript credits only; cannot be used toward graduation.
This course is designed to prepare students for Mathematics 111. Algebra, trigonometry, logarithms, and exponentials are reviewed.

## MATM 111-112 Calculus

Calculus is the study of functions and processes from the point of view of how they are changing. What can we know of a function from the rate at which it changes? What is the cumulative effect of infinitely many infinitesimal changes?
Mathematics 111 and 112 aim to provide, to students with little or no prior exposure to calculus, the knowledge that calculus is useful, in that its applications to the physical, biological and social sciences have shaped our world, and beautiful, in that it represents a breathtaking attempt of the human mind to capture the infinitely large and the infinitely small.
These courses seek to provide basic understanding, technical skills and sample applications in various fields for the very broad range of students who take them. Topics are studied (as appropriate) by analytic, numerical and graphical methods. These courses usually have several sections with small-group projects. (See the Supplement to the Course and Room Roster.)

[^0]
## MATH 111 Calculus

Fall, spring, or summer. 4 credits. Prerequisites: Mathematics 109 or three years of high school mathematics, including trigonometry.*
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, applications to the sciences. The mean value theorem. Antiderivatives, definite and indefinite integrals, the fundamental theorem of calculus, substitution in integration, the area under a curve. Graphing calculators will be used, and their pitfalls will be discussed, as applicable to the above topics.
Mathematics 111 can serve as a one-semester introduction to calculus or as part of a
2-semester sequence in which it is followed by Mathematics 112 or 122 .

## MATH 112 Calculus

Fall, spring, or summer. 4 credits. Prerequisites: Mathematics 106 or 111 with a grade of $C$ or better. Those who do well in Mathematics 111 should take 122 instead of 112 , unless they plan to continue with 213 .*
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). Infinite sequences and series: definition and tests for convergence, power series, Taylor series with remainder. Parametric equations.

## MATH 121 Honors Calculus

Fall. 4 credits. Prerequisite: Three years of high school mathematics, including calculus or permission of the department. This is a first-semester honors course in calculus intended for students who have had calculus in high school. The course material will be the same as that in Mathematics 111, but it will be covered in greater depth.

## MATH 122 Honora Calculus

Fall or spring. 4 credits. Prerequisite: one semester of calculus with a high performance or permission of the department. Students planning to continue with
Mathematics 213 are advised to take 112 instead of this course.*
Differentiation and integration of elementary transcendental functions, the techniques of integration, applications, polar coordinates, infinite series, and complex numbers, as well as an introduction to proving theorems. The approach is more theoretical than in Mathematics 112.

## MATH 123 Analytic Geometry and Calculus

Summer. 4 credits. Prerequisite: High school mathematics through trigonometry and plane analytic geometry.
The honors section of Mathematics 111.
Covers the same topics more deeply (at the level of Apostol's Calculus).
*See the list of courses with overlapping content at the end of the introduction.

## MATH 150 From Space to Geometry

 Spring. 3 credits.Over the centuries mathematicians have interpreted the concept of "space" in numerous ways. This course will survey some of these approaches from the time of Euclid to the later perspective of non-Euclidean systems. We will evaluate the impact of these viewpoints on such concepts as distance, angle measurement, straightness and curvature, dimension, and surface. We will make and analyze models to get a feel for the concepts and to assess the relevance of various approaches to geometry.

## MATH 171 Statistical Theory and

 Application in the Real WorldFall, spring, or summer. 4 credits.
Prerequisites: high school mathematics. This introductory statistics course will discuss 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, and statistical theories of point estimation, confidence intervals, and 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 will be 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 will learn and use computer-based methods for implementing the statistical methodology presented in the lectures. (No previous familiarity with the computer is presumed.)

## MATH 181 Elementary Logic and

 Formal ProofFall. 3 credits. Prerequisite: high school mathematics.
The course will explore, from an elementary viewpoint, several topics selected by the instructor from the following list: sets and relations, mathematical induction, cardinal numbers and the notion of infinity, formal and informal proofs and their roles in mathematics and computer science, introduction to mathematical logic, applications of formal logic to world problems and puzzles. The course is designed for liberal arts students, including those who may be "math-averse." Rather than providing a systematic treatment of formal logic, it attempts to instill an appreciation for mathematics and its uses, as well as some understanding of the process by which intuitive notions are developed into precise mathematical statements.

## MATH 191 Calculus for Engineers

 Fall. 4 credits. Prerequisite: three years of high school mathematics, including trigonometry.*Plane analytic geometry, differential and integral calculus, and applications. This course is restricted to engineering students who have had no previous successful experience with calculus. Students who have had such experience but wish a first-semester calculus course should take MATH 193.

## MATH 192 Calculus for Engineers

Fall, spring, or summer. 4 credits.
Prerequisite: Mathematics 191 or 193.*
Methods of integration, polar coordinates,

[^1]complex numbers, infinite series. Introduction to physical vectors and calculus of functions of several variables.

MATH 193 Calculus for Engineers Fall, spring, or summer. 4 credits. Prerequisite: three years of high school mathematics including trigonometry, plus some knowledge of calculus.*
Plane analytic geometry, differential and integral calculus, and applications. Mathematics 193 covers essentially the same topics as 191, but is designed for students with some previous successful experience with calculus.

## MATH 213 Calculus

Fall or spring. 4 credits. Prerequisite:
Mathematics 112,122 , or 192 .*
Vectors, vector-valued functions, line integrals. Multivariable calculus, multiple integrals. Firstand second-order differential equations with applications. Introduction to numerical methods, series solutions, systems of differential equations, elementary partial differential equations. The course is designed for students who wish to master the basic techniques of calculus, but whose major will not require a substantial amount of mathematics.

MATH 221 LInear Algebra and Calculus
Fall, spring, or summer. 4 credits.
Prerequisite: two semesters of calculus with a grade of B or better, or permission of instructor.*
Linear algebra and differential equations.
Topics include vector algebra, linear transformations, matrices, linear differential equations, as well as an introduction to proving theorems. This course is especially recommended for students who plan to major in mathematics or in a strongly mathematicsrelated field.

## MATH 222 Calculus

Fall or spring. 4 credits. Prerequisite: Mathematics 221 ."
Vector differential calculus, calculus of functions of several variables, multiple integrals. This course is especially recommended for students who plan to major in mathematics or in a strongly mathematicsrelated field.

## MATH 223 Honors Linear Algebra

 and CalculusFall. 4 credits. Prerequisites: Two semesters of calculus with a grade of A- or better, or permission of instructor.* 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. Mathematics 223-224 provides an integrated treatment of linear algebra and multivariable calculus designed for students who have been highly successful in their previous calculus courses.

## MATH 224 Honors Linear Algebra and Calculus

Spring. 4 credits. Prerequisites: Mathematics $223^{*}$
Vector fields; line integrals; differential forms and exterior derivative; work, flux, and density forms; integration of forms over parametrized domains; Green's, Stoke's, and divergence theorems.
*See the list of courses with overlapping content at the end of the introduction.

MATH 231 Linear Algebra
Spring. 3 credits. Prerequisite: Mathematics 111 or equivalent.*
Vectors, matrices, and linear transformations, affine and Euclidean spaces, transformation of matrices, and eigenvalues.

## MATM 281 Formal Logic (also

 Philosophy 331)Fall. 4 credits.
For description, see PHIL 331.

## MATH 293 Engineering Mathematics

Fall, spring, or summer. 4 credits. Prerequisites: Mathematics 192 plus a knowledge of computer programming equivalent to that taught in Computer Science 100.*
Introduction to ordinary differential equations, systems of ordinary linear differential equations. Vector fields and vector calculus. May include computer use in problem solving.

## MATH 294 EngIneering Mathematics

Fall, spring, or summer. 4 credits. Prerequisite: Mathematics 293.* Introduction to partial differential equations, Fourier series, and boundary value problems, with applications. Matrix theory and linear algebra, inner product spaces. May include computer use in solving problems.

## MATH 321 Applicable Analysis

Fall. 4 credits. Prerequisites: Mathematics 294 , or 221 and 222 , or 213 and 231. Graduate students who need mathematics extensively in their work and who have had solid courses in calculus and complex variables should take Mathematics 615616. With less preparation they should take Mathematics 420 (or 321)-422-423.*
(This course was formerly MATH 421 and
has a substantial overlap with MATH 420.) A survey of some of the mathematical techniques that are of primary use in applications to the physical sciences and engineering. The primary mathematical tool explored in harmonic analysis, including Fourier Series, Fourier Integral, Laplace Transform. The applications will be principally to boundary value problems for ordinary and partial differential equations. Moderately advanced mathematics will be used but explained as the course progresses at an elementary level. Much of the formal mathematical material missing in applied courses (e.g., uniform convergence, dominated convergence, complete orthonormal sets) will be thoroughly explained in the course and at the working level.

## MATH 332 Algebra and Number Theory

Fall. 4 credits. Prerequisites: Mathematics 221, 231, or 294.*
Various topics from number theory and modern algebra, usually including most of the following: Primes and factorization, Diophantine equations, congruences, quadratic reciprocity, continued fractions, rings and fields, finite groups, introduction to arithmetic of the Gaussian integers and quadratic fields. Motivation and examples for the concepts of abstract algebra are derived primarily from number theory and geometry.

[^2]
## MATH 336 Applicable Algebra

Spring. 4 credits. Prerequisites: Math-
ematics 221,294 , or 231 .
An introduction to concepts and methods of abstract algebra and number theory that are of importance in science and engineering.
Applications of the theory to concrete problems will be stressed. The course treats mathematical topics usually selected from the following list: Elementary number theory and congruences, groups, fields, partially ordered sets, lattices, graph theory, Boolean algebras, finite machines and languages. Applications discussed usually include at least some of the following: Cryptography, primality testing, elementary coding theory, enumeration problems, fast Fourier transform, difference equations. Additional topics and applications may be chosen by the instructor.

## MATH 356 Groups and Geometry

Spring. 4 credits. Prerequisites: Mathematics 221-222, or Mathematics 293-294. Groups were introduced in the nineteenth century as the set of symmetries of an algebraic or geometric object, and this viewpoint is a central one in modern mathematics. This course studies Euclidean and non-Euclidean (especially hyperbolic) geometry in terms of the groups of symmetries of the relevant spaces. Prior knowledge of groups is not a prerequisite. One aim is to give students experience in modern algebra and geometry (including the geometry of complex numbers) and a sense of the unity of mathematics before they take the 400 -level courses. Special care is taken in learning to write proofs. Groups of transformations. Subgroups and cosets. Homomorphisms and isomorphisms. Orbits and fixed points. Frieze groups and wallpaper groups and associated tesselations of the Euclidean plane. Geometry and trigonometry of the hyperbolic plane. Tesselations of the hyperbolic plane.

## MATH 401 Honors Seminar: Topics in Modern Mathematics

Spring. 4 credits.
This course is a participatory seminar primarily aimed at introducing senior and junior mathematics majors to some of the challenging problems and areas of modern mathematics. The seminar will help students develop research and expository skills in mathematics, which is important for careers in any field that makes significant use of the mathematical sciences (i.e., pure or applied mathematics, physical or biological sciences, business and industry, medicine). The content will vary from year to year.

## MATH 403 History of Mathematics \#

Spring. 4 credits. Prerequisites: two courses in mathematics above 300 , or permission of instructor.
Survey of the development of mathematics from antiquity to the present, with an emphasis on the achievements, problems, and mathematical viewpoints of each historical period and the evolution of such basic concepts as number, geometry, construction, and proof. Readings from original sources in translation. Students will be required to give oral and written reports.
*See the list of courses with overlapping content at the end of the introduction.

## MATH 405 Mathematical Exposition

 Fall. 3 credits.A seminar in mathematics and its applications to other fields. Students are asked to have had at least two years of college-level mathematics. Course work will consist of discussions, written projects, and student talks. The content of these discussions, projects, and talks will vary, to be determined by the instructor in consultation with the students.

MATH 408 Mathematics in Perspective
Spring. 4 credits. Prerequisite: consent of instructor (intended for senior mathematics majors and other students with strong mathematics backgrounds).
The purpose of this course is for students to step back and to form an overview of the mathematics they have learned.
MATH 411 Introduction to Analysis
Fall. 4 credits. Prerequisite: Mathematics 222 or 293-294. Students who need measure theory and Lebesgue integration for advanced probability courses should take Mathematics 413-414 or audit the first few weeks of Mathematics 621. Undergraduates who plan to attend graduate school in mathematics should take 413-414.
An introduction to the theory of functions of real variables, stressing concepts and a logical development of the subject rather than applications. Topics include Euclidean spaces, the real number system, continuous and differentiable functions, uniform convergence and approximation theorems, and the Riemann integral. Students who wish to continue study of theoretical analysis upon completion of Mathematics 411 may take, for example, Mathematics 418.

## MATH 413-414 Introduction to Analysis

 413 , fall; 414 , spring. 4 credits each. Prerequisite for 413: Mathematics 222 or 293-294. Prerequisite for Mathematics 414: Mathematics 413.This sequence, designed for honors students, provides an introduction to the theory of functions of real variables, stressing a rigorous logical development of the subject rather than applications. Topics include metric spaces, the real number system, continuous and differentiable functions, uniform convergence and approximation theorems, Fourier series, Riemann and Lebesgue integrals, calculus in several variables, and differentiable forms.
MATH 418 Introduction to the Theory of Functions of One Complex Variable Spring. 4 credits. Prerequisite: Mathematics 222 or 294 or 213 . May be offered only in alternate years.
A rigorous introduction to complex variable theory. 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.

## MATH 420 Applicable Analysis

Fall or spring. 4 credits. Prerequisites: high level of performance in Mathematics 294 ; or 221 and 222 ; or permission of instructor. Graduate students who need mathematics extensively in their work and who have had solid courses in calculus and complex variables should take Mathematics 615-616. With less prepara-
tion they should take Mathematics 420 (or 321)-422-423*

Ordinary differential equations in one and higher dimensions: qualitative, analytic, and numerical methods, with physical applications. Some important partial differential equations (heat equation, wave equation, and vibrating membrane) and their connections with Fourier series and the Laplacian. Vector calculus and Stokes Theorem, with applications to electromagnetism. Mathematics 420 has substantial overlapping content with Mathematics 321 , but more strongly emphasizes the mathematical properties of solutions of ordinary differential equations and the approximation to such solutions by numerical and computer methods.

## MATH 422 Appllcable Analysis

Fall or spring. 4 credits. Prerequisite:
Mathematics 420 or 321.
Complex variables, Fourier transforms, Laplace transforms. Additional topics may include: An introduction to generalized functions. Applications to partial differential equations.

## [MATH 423 Applicable Analysis

Spring. 4 credits. Prerequisite: Mathematics 420 or 321 ; however, students who have not taken 422 should talk to the instructor before taking this course. Not offered 1997-98. Expected to be offered 1998-99.
Normed vector spaces. Elementary Hilbert space theory. Projections. Fredholm's alternative. Eigenfunction expansions. Applications to elliptic partial differential equations and to integral equations.]

## [MATH 425 Numerical Solutlons of

 Differential EquationsSpring. 4 credits. Prerequisites: Mathematics 222 or 294, one course numbered 300 or higher in mathematics, or permission of instructor. Not offered 1997-98. Expected to be offered 1998-99. Methods and basic theory for the numerical solution of ordinary and partial differential equations. Linear multistep methods, RungeKutta methods, and the problem of stiffness for ordinary differential equations. Finite difference methods and Galerkin finite element methods for partial differential equations. Homework will involve use of a computer.]

## MATH 427 Introduction to Ordinary

 Differential EquationsFall. 4 credits. Prerequisite: Mathematics 222 or 294 or permission of instructor. Covers the basic existence, uniqueness, and stability theory together with methods of solution and methods of approximation. Topics include singular points, series solutions, Sturm-Liouville theory, transform methods, approximation methods, and application to physical problems.

## MATH 428 Introduction to Partial

 Differential EquationsSpring. 4 credits. Prerequisite: Mathematics 222 or 294 or permission of instructor Topics selected from first-order quasilinear equations, classification of second-order equations, with emphasis on maximum principles, existence, uniqueness, stability Fourier series methods, approximation methods.

See the list of courses with overlapping content at the end of the introduction.

MATH 431-432 Introductlon to Algebra
431, fall; 432 , spring. 4 credits each. Prerequisite: Mathematics 221 or 231. Prerequisite for Mathematics 432 : Mathematics 431 or 433 . Undergraduates who plan to attend graduate school in mathematics should take 433-434.* 431: An introduction to linear algebra, including the study of vector spaces, linear transformations, matrices, and systems of linear equations; quadratic forms and inner product spaces; canonical forms for various classes of matrices and linear transformations; determinants. 432: an introduction to various topics in abstract algebra, including groups, rings, fields, factorization of polynomials and integers, congruences, and the structure of finitely generated modules over Euclidean domains with application to canonical forms of matrices.

## MATH 433-434 Introduction to Algebra

433, fall; 434 , spring. 4 credits each.
Prerequisite: Mathematics 221 or 231.
Prerequisite for Mathematics 434: Mathematics 433.
Honors version of Mathematics 431-432. Mathematics $433-434$ will be more theoretical and rigorous than 431-432 and will include additional material such as multilinear and exterior algebra.

## MATH 436 Appllcations of Abstract

 AlgebraFall. 4 credits. Prerequisites: Linear algebra (MATH 231 or higher). Familiarity with elementary algebra or number theory such as MATH 332 would also be helpful." The course is intended for students who would like to learn modern algebra and its applications outside of mathematics. There will be at least as much emphasis on applications as the relevant modern algebra. Frequently, the applications involve or were made possible by the advent of computers. Students who already know the modern algebra covered in the course may still find the applications to be of interest. Specific topics will be chosen by the instructor. The algebra typically includes items drawn from: elementary number theory, polynomials and ring theory, monoids and group theory, real closed fields, algebraic combinatorics, Groebner bases, algebraic geometry, field theory. The applications and related topics typically include items drawn from: complexity theory, coding theory, encryption, discrete and fast Fourier transform, primality testing, factoring integers and polynomials, root counting and isolation, solving systems of polynomial equations, formal language theory and automata.
MATH 336 and 436 may overlap in choice of material. Where they overlap, the coverage in MATH 436 will be of greater depth appropriate to a 400 -level course. Students cannot get credit for both MATH 336 and MATH 436.

## MATH 441 Introduction to Combinatorics

Fall. 4 credits. Prerequisites: Mathematics 221, 231, or 294.
Enumerative Combinatorics: Permutation enumeration, Stirling and Bell numbers, generating functions, exponential formula, Lagrange inversion, recurrences, basic asymptotic methods, rational generating functions. Basic Graph Theory: Trees and Cayley's theorem, chromatic polynomial,

[^3]eigenvalues and their application. Matching Theory: equivalences, marriage theorem, flow problems, totally unimodular matrices. Polya Theory: Action of a group on a set, Burnside lemma, DeBruijn's method, applications to graphical enumeration and algorithms.
MATH 442 Introduction to Combinatorles Spring. 4 credits. Prerequisites: Mathematics 221, 231 , or 294.
Sieves and Mobius Inversion: Inclusion/ exclusion and its application to enumeration and number theory. Partially ordered sets, abstract Mobius inversion, rudiments of lattice theory. Matroids and Combinatorial Geometry: Rank function, circuits, bases, application to graph theory and geometry. Combinatorial Design: Fisher's inequality, Latin squares, Hadamard matrices, Wilson's theorem on t-designs, application to statistical design. Nonconstructive Methods: Ramsey's theorem, Lovasz local lemma, random graphs, application to coding theory. Extremal Set Theory: Sperner's lemma, Kruskal-Katona and Erdös-Ko-Rado theorems.

## MATH 451 Euclidean and Spherical

 GeometryFall. 4 credits. Prerequisite: Mathematics 221 or 231 or permission of instructor. Topics from Euclidean and spherical (nonEuclidean) geometry. A non-lecture, seminarstyle course organized around student participation.

## MATH 452 Classical Geometrles

Spring. 4 credits. Prerequisites: Mathematics 221 or its equivalent.
This is an introduction to hyperbolic, spherical, and projective geometry-the classical geometries that developed as Euclidean geometry was better understood. For example, the historical problem of the independence of Euclid's fifth postulate is understood when the existence of the hyperbolic plane is realized. Straightedge (and compass) constructions and stereographic projection in Euclidean geometry can be understood within the structure of projective geometry. Topics in hyperbolic geometry include models of the hyperbolic plane and relations to spherical geometry. Topics in projective geometry include homogeneous coordinates and the classical theorems about conics and configurations of points and lines. Optional topics include principles of perspective drawing, finite projective planes, orthogonal Latin squares, and the cross ratio.

## MATH 453 Introduction to Topology

Fall. 4 credits. Prerequisites: Mathematics
411 and 221 , or permission of instructor. Basic point set topology, connectedness, compactness, metric spaces, fundamental group. Application of these concepts to surfaces such as the torus, the Klein bottle, the Moebius band.

## MATH 454 Introduction to Differential

 GeometrySpring. 4 credits. Prerequisites: Mathematics 222 or 294, plus at least one mathematics course numbered 300 or above. Mathematics 453 is not a prerequisite
Differential geometry of curves and surfaces. Curvature, geodesics, differential forms. Introduction to n-dimensional Riemannian manifolds. This material provides some background for the study of general relativity; connections with the latter will be indicated.

MATH 455 Applicable Geometry
Fall. 4 credits. Prerequisite: Mathematics 221-222 or equivalent, or permission of instructor.
In general, this course will cover various applicable topics to be chosen from among the geometry of convex bodies, polyhedra, algebraic curves and surfaces, rigid polyhedra, crystallographic patterns, projections and similar topics. Computational aspects of geometry will be included where appropriate.

## MATH 471 Basic Probablility

Fall. 4 credits. Prerequisite: Mathematics 221. May be used as a terminal course in basic probability. Intended primarily for those who will continue with Mathematics 472 .
Topics include combinations, important probability laws, expectations, moments, moment-generating functions, limit theorems. Emphasis is on diverse applications and on development of use in statistical applications. See also the description of Mathematics 671.

## MATH 472 Statistlcs

Spring. 4 credits. Prerequisite: Mathematics 471 and knowledge of linear algebra such as taught in Mathematics 221. Some knowledge of multivariate calculus helpful but not necessary.*
Classical and recently developed statistical procedures are discussed in a framework that emphasizes the basic principles of statistical inference and the rationale underlying the choice of these procedures in various settings. These settings include problems of estimation, hypothesis testing, large sample theory.

## MATH 474 Basic Stochastic Processes

Spring. 4 credits. Prerequisites: Math-
ematics 471 or equivalent and knowledge of linear algebra such as taught in Mathematics 221.
This is a second-semester undergraduate course on probability. It covers topics from renewal theory, martingales, discrete and continuous time Markov chains, Brownian motion and related diffusion processes, and applications to queuing theory and finance. Theoretical as well as applied aspects of the subject will be emphasized.

## [MATH 481 Deductive Logic (also Philosophy 431)

Spring. 4 credits. Not offered 1997-98
Expected to be offered 1998-99.
Propositional and predicate logic. Classical proof procedures. Completeness and compactness. Decidability and undecidability. The Godel incompleteness theorem. Elements of set theory.]

## MATH 482 Topics in Logic (also Phllosophy 432)

Spring. 4 credits. Prerequisites: One logic course from the Mathematics Department at the 200 level or higher, one logic course from the Philosophy Department at the 300 level or higher, or permission of the instructor.
For description, see PHIL 432.

## MATH 483 Intensional Logic (also

 Phllosophy 436)Fall. 4 credits. Prerequisites: One logic course at the 200 level or higher from the Philosophy Department or the Mathematics Department, or permission of instructor. For description, see PHIL 436.
*See the list of courses with overlapping content at the end of the introduction.

MATH 486 Applied Logic (also Computer Science 486)
Spring. 4 credits. Prerequisites: Mathematics 222 or 294; Computer Science 280 or equivalent (such as Mathematics 332, 432, 434, or 481); and some additional course in mathematics or theoretical computer science.
Propositional and predicate logic; compactness and completeness by tableaux, natural deduction, and resolution. 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.
Applications to expert systems and program verification.

MATH 490 Supervised Reading and Research
Fall, spring, or summer. 1-6 credits. Supervised reading and research by arrangement with individual professors. Not applicable for material currently available in regularly scheduled courses.

## Professional Level and Mathematics Education Courses

MATH 500 College Teaching Fall. 1 credit.
Among the topics covered: Basic topics about teaching, such as how to plan recitations, how to prepare lesson plans for lectures, exam design and grading, syllabus planning. Also discussed: the structure of colleges and universities, jobs and tenure, professionalism, alternative teaching strategies.
MATH 508 Mathematics for Secondary School Teachers
Spring. $1-6$ credits. Prerequisite: secondary school mathematics teacher, graduate standing, or permission of instructor.
An examination of the principles underlying the content of the secondary school mathematics curriculum, including connections with the history of mathematics and current mathematics research.

## Graduate Courses

Graduate-level mathematics courses (formerly 500 and 600 level) have been renumbered to conform to university guidelines regarding course level numbers, p. 5. The level numbers (first digit of the course number) have been raised by one, effective in the fall of 1997. Course content and level of difficulty remain unchanged.
Students interested in taking graduate courses in mathematics should consult the department for further details, times, and possible changes in courses as described below.

## MATH 611-612 Real and Complex

 Analysis611, fall; 612 , spring. 4 credits each. 611: measure and integration, functional analysis. 612: complex analysis, Fourier analysis, and distribution theory

## MATH 613-614 Topics in Analysis

613, fall; 614, spring. 4 credits each.

## MATH 615-[616] Mathematical Methods

 In Physics615 , fall; 616 , spring. 4 credits each. 616 not offered 1997-98. Expected to be offered 1998-99. Intended for graduate students in physics or related fields who
have had a strong advanced calculus course and at least two years of general physics. A knowledge of the elements of finite dimensional vector space theory, complex variables, separation of variables in partial differential equations, and Fourier series will be assumed. The course overlaps with parts of Mathematics 420 (or 321)-422-423. Undergraduates will be admitted only with permission of instructor. Mathematics 615 is a prerequisite for 616 .
Topics designed to give a working knowledge of the principal mathematical methods used in advanced physics. A brief discussion of some basic notions: metric space, vector space, linearity, continuity, integration. Generalized functions (Schwartz distributions). Fourier series and Fourier integrals. Saddle point method. Linear operators. Differential operators and integral operators, the equations and eigenvalue problems connected with them and the special functions arising from them. Elements of group theory. The rotation group and its representations.

## MATH 617 Dynamical Systems

Fall. 4 credits.
Topics: Existence and Uniqueness Theorems for ODEs. Poincare-Bendixon theorem and global properties of two dimensional flows. Limit sets, non-wandering sets, chain recurrence, pseudo-orbits and structural stability. Linearization at equilibrium points: stable manifold theorem and the HartmanGrobman theorem. Generic properties: transversality theorem and the Kupka-Smale theorem. Examples: expanding maps and Anosov diffeomorphisms. Hyperbolicity: the horseshoe and the Birkhoff-Smale theorem on transversal homoclinic orbits. Rotation numbers: Herman's theorem. Characterization of structurally stable systems.

## MATH 618 Smooth Ergodic Theory

 Spring. 4 credits.Topics: 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 non-hyperbolic systems. Liapunov exponents: relations between entropy, exponents and dimensions.

## [MATH 619-620 Partial Differential

 Equations619, fall; 620, spring. 4 credits each. Not offered 1997-98. Expected to be offered 1998-99.
Basic theory of partial differential equations.]

## MATH 621 Measure Theory and

 Lebesgue IntegrationFall. 4 credits.
Measure theory, integration, and Lp spaces.

## MATH 622 Applied Functional Analysis

 Spring. 4 credits.Basic theory of Hilbert and Banach spaces and operations on them. Applications.

## MATM 631-[632]-634 Algebra

 631, fall; 632, spring; 634, spring 4 credits each. 632 not offered 1997-98. Expected to be offered 1998-99.631: finite groups, field extensions, Galois theory, rings and algebras, tensor and exterior algebra. 632: Wedderburn structure theorem, Brauer group, group cohomology. 634: Dedekind domains, primary decomposition, Hilbert basis theorem, local rings.
[MATH 637 Analytic Number Theory
Fall. 4 credits. Prerequisites: Mathematics 431, 611, 621. Not offered 1997-98.
Expected to be offered 1998-99.
Topics: The Prime Number Theorem. Primes in Arithmetic Progressions. The Large Sieve and Some of its Applications.]

## [MATH 649 Lle Algebras

Fall. 4 credits. Not offered 1997-98. Expected to be offered 1998-99. Nilpotent, solvable and reductive Lie algebras. Enveloping algebras. Root systems, Coxeter groups. Classification of simple algebras.]

## MATH 650 Lie Groups

Spring. 4 credits.
Topological groups, Lie groups. Relation between Lie groups and Lie algebras. Exponential map, homogeneous manifolds. Invariant differential operators.

## MATH 651 Introductory Algebralc Topology

Spring. 4 credits.
Fundamental group and covering spaces.
Homology theories for complexes and spaces.
MATH 652-[653] Differentiable Manifolds 652 , fall; 653 , spring. 4 credits each. Prerequisites: advanced calculus, linear algebra (Mathematics 431), point set topology (Mathematics 453). 653 not offered 1997-98. Expected to be offered 1998-99. This is an introduction to differential geometry and differential topology at the level of the beginning graduate student.
Topological manifolds. Smooth manifolds, immersions and embeddings, tangent bundles, fiber bundles, vector fields and dynamical systems, Froebenius' theorem. Lie groups. Integration on manifolds, differential forms. Stokes theorem. Connections, Riemannian manifolds, geodesics, curvature, Gauss-Bonnet theorem. Tubular neighborhoods,
transversality and cobordism.

## MATH 661 Geometric Topology

 Fall. 4 credits.An introduction to some of the more geometric aspects of topology and its connections with group theory. Possible topics: surface theory, 3-manifolds, knot theory, geometric and combinatorial group theory, hyperbolic groups, hyperbolic manifolds

## MATH 662 Riemannian Geometry

Spring. 4 credits.
Linear connections, Riemannian metrics and parallel translation. Covariant differentiation and curvature tensors. The exponential map, the Gauss Lemma and completeness of the metric. Isometries and space forms, Jacobi fields and the theorem of Cartan-Hadamard. The first and second variation formulas. The index form of Morse and the theorem of Bonnet-Myers. The Rauch, Hessian, and Laplacian comparison theorems. The Morse index theorem. The conjugate and cut loci. Submanifolds and the Second Fundamental form.

## MATH 671-672 Probablility Theory

 671, fall; 672, spring. 4 credits each. Prerequisite: a knowledge of Lebesgue integration theory, at least on the real line. Students can learn this material by taking parts of Mathematics 413-414 or 621. Prerequisite for Mathematics 672 : Mathematics 671.Properties and examples of probability spaces. Sample space, random variables, and distribution functions. Expectation and moments. Independence, Borel-Cantelli lemma, zero-one law. Convergence of random variables, probability measures, and characteristic functions. Law of large numbers. Selected limit theorems for sums of independent random variables. Markov chains, recurrent events. Ergodic and renewal theorems. Martingale theory. Brownian motion and processes with independent increments.

## MATH 674-[675] Introduction to

 Mathematical Statistics674, spring; 675, fall. 4 credits each
Prerequisites: Mathematics 671 or permission of instructor. 675 not offered
1997-98. Expected to be offered 1998-99 674: Topics include an introduction to the theory of point estimation, consistency, efficiency, sufficiency, and the method of maximum likelihood. Convexity and basic concepts of decision theory are introduced. Concepts of sequential methods may be discussed. 675: The classical theory of optimal tests of hypotheses and their power; the theory of confidence sets. The preferred sequence is $674-675$.

## MATH 681 Logic

Spring. 4 credits.
Basic topics in mathematical logic, including propositional and predicate calculus; formal number theory and recursive functions; completeness and incompleteness theorems. Other topics as time permits.

## MATH 711-712 Seminar in Analysis

711, fall; 712, spring. 4 credits each.

## MATH 713 Functional Analysis

 Spring. 4 credits.Topological vector spaces. Banach and Hilbert spaces, Banach algebras. Additional topics to be selected by instructor.

## MATH 715 Fourler Analysis

 Spring. 4 credits.
## [MATH 717 Applied Dynamical Systems

 (also T\&AM 776)Fall. 4 credits. Suggested prerequisite:
T\&AM 675, Mathematics 617, or equiva-
lent. Not offered 1997-98. Expected to be offered 1998-99.
Review of planar (single-degree-of-freedom) systems. Local and global analysis. Structural stability and bifurcations in planar systems. Center manifolds and normal forms. The averaging theorem and perturbation methods. Melnikov's method. Discrete dynamical systems, maps and difference equations, homoclinic and heteroclinic motions, the Smale Horseshoe and other complex invariant sets. Global bifurcations, strange attractors, and chaos in free and forced oscillator equations. Applications to problems in solid and fluid mechanics.]
[MATH 722 Topics In Complex Analysis Spring. 4 credits. Not offered 1997-98. Expected to be offered 1998-99. Selections of advanced topics from complex analysis, such as Riemann surfaces, complex dynamics, conformal and quasiconformal mapping. Course content varies.]

## MATH 727-728 Seminar in Partlal Differential Equations <br> 727 , fall; 728 , spring. 4 credits each.

MATH 731-732 Seminar in Algebra
731, fall; 732, spring. 4 credits each.

## MATH 735 Topics In Algebra

Fall. 4 credits.
Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.

MATH 737 Algebraic Number Theory Fall. 4 credits.

## MATH 739 Toplcs in Algebra II

 Spring. 4 credits. Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.[MATH 740 Homological Algebra Spring. 4 credits. Not offered 1997-98. Expected to be offered 1998-99.]

MATH 751-752 Seminar in Topology 751, fall; 752, spring. 4 credits each.

## MATH 753-[754] Algebraic Topology

 753 , fall; 754 , spring. 4 credits. 754 not offered 1997-98. Expected to be offered 1998-99.The continuation of 651. Cohomology, cup products, Poincare duality, higher homotopy groups, fiber bundles, fibrations, vector bundles, characteristic classes, K-theory, spectral sequences, cohomology operations.

## MATH 757-758 Topics in Topology

 757, fall; 758, spring. 4 credits each Selection of advanced topics from modern algebraic, differential, and geometric topology Course content variesMATH 761-[762] Seminar in Geometry
761 , fall; 762 , spring. 4 credits each. 762 not offered 1997-98. Expected to be offered 1998-99

## [MATH 767 Algebraic Geometry

Fall. 4 credits. Not offered 1997-98. Expected to be offered 1998-99.]

## MATH 771-772 Seminar in Probability and Statistics

771 , fall; 772, spring. 4 credits each.
MATH 777-778 Stochastic Processes 777 , fall; 778 , spring. 4 credits each.

## MATH 781-782 Seminar in Logic

781, fall; 782, spring. 4 credits each

## [MATH 783 Model Theory

Spring. 4 credits. Not offered 1997-98. Expected to be offered 1998-99.]

## MATH 784 Recursion Theory

 Spring. 4 credits.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 785 Automata Theory

Fall. 4 credits. Prerequisite: Mathematics 481 or similar mathematical logic course at 400 -level or higher.
Basic results in finite and tree automata, including the algebraic approach to these topics. Buchi automata, with applications to computability theory and decidability problems. Rabin automata and their applications to decidability problems, boolean algebras, linear orderings, topology. Applications of automata theory to theoretical computer science in modal and temporal logic and concurrency.
[MATH 786 Proof Theory
Fall. 4 credits. Not offered 1997-98 Expected to be offered 1998-99.
This course will cover basic ideas and methods of proof theory along with major recent developments motivated by computer science and knowledge presentation theory.
The topics will include Gentzen style and "natural" derivations, normalization theorems for classical and constructive logics, connections with the typed lambda calculus, CurryHoward isomorphism, arithmetization of proof theory, imcompleteness theorems, Loeb's theorem, modal logic of formal provability, models of arithmetic, consistency proofs and normalization theorems in typed lambda calculus.]

## [MATH 787 Set Theory

Spring. 4 credits. Not offered 1997-98.
Expected to be offered 1998-99.
Models of set theory. Theorems of Gödel and Cohen, recent independence results.]

## MATH 788 Topics In Applied Logic

 Fall. 4 credits.This course covers applications of the results and methods of mathematical logic to other areas of mathematics and science. Topics vary each year; some recent examples are: automatic theorem proving, formal semantics of programming and specification languages, linear logic, constructivism (intuitionism), nonstandard analysis. The student is expected to be familiar with the standard results in graduate level mathematical logic.

## MATH 790 Supervised Reading and Research

Variable credit (maximum 6 each term).

## MATH 901-902 Oliver Club Seminar

MATH 903-904 Olivetti Club Seminar
MATH 905-906 Occasional Seminar on Undergraduate Education

## MATH 911-912 Seminar in Analysis

MATH 913-914 Seminar in Dynamics and Geometry

MATH 949-950 Seminar In Lle Groups
MATH 951-952 Topics In Topology and Geometry

MATH 967-968 Seminar In Combinatorial and Algebraic Geometry

## MUSIC

M. Scatterday, chair; S. Tucker, director of undergraduate studies ( 218 Lincoln Hall, 255-3423); R. Harris-Warrick, director of graduate studies ( 312 Lincoln Hall, 255-7141); M. Bilson, X. Bjerken, H. Boatwright (fall), D. Borden, D. Conn, L. Coral, W. Cowdery (fall), T. Folan, M. Hatch, K. Hester, J. Hsu, J. Kellock, J. Mräzek (spring), E. Murray, J. Peraino, D. Randel, A. Richards, R. Riley, D. Rosen, R. Sierra, S. Stucky, J. Webster, D. Yearsley (spring), N. Zaslaw

Emeritus: W. Austin, K. Husa, S. Monosoff, R. Palmer, T. Sokol, M. Stith.

Department office: 255-4097

## Musical Performance and Concerts

Musical performance is an integral part of Comell's cultural life and an essential part of its undergraduate academic programs in music. The department encourages music making 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
Cornell Chamber Singers
Cornell Chorale
Cornell University Chorus
Comell University Glee Club
Sage Chapel Choir
Instrumental ensembles
Chamber Music Ensembles
Cornell Chamber Orchestra
Cornell Experimental Lab Ensemble
Comell Gamelan
Cornell Jazz Ensembles
Cornell Symphony Orchestra
Cornell University Chamber Winds Cornell University Symphonic Band Cornell University Wind Ensemble Cornell University Wind Symphony
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 term and, where appropriate, each spring term as well.

The university is also home to many studentrun musical organizations, including the Big Red Marching Band and Big Red Pep Band, the Cornell Savoyards, and several a cappella groups. Information about these groups, too is available through the Department of Music office, 104 Lincoln Hall (255-4097)
The Department of Music and the Faculty Committee on Music sponsor more than one hundred formal and informal concerts each year by Cornell's ensembles, faculty, and students and by distinguished visiting artists. The great majority of concerts are free and open to the public. Lectures and concerts are listed on the World Wide Web
(http://www.arts.cornell.edu./music/). More 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 apply to the department office, 104 Lincoln Hall (255-4097), or to the director of undergraduate studies.

## The Major

Two options are available to the student planning to major in music. Each carries the study of music to an advanced level through the integration of performance, music theory, and music history. Option I is a general course, not necessarily oriented toward eventual graduate or professional work in music. Option II is a more specialized and concentrated program, suitable for students who want to prepare for graduate or professional work in music.

All students contemplating a major in music under either option should arrange for placement examinations and advising in the department as early as possible, usually during the freshman orientation period. Information is available from the director of undergraduate studies. All students are expected to have chosen an adviser from among the department faculty at the time of application for major status.
Option I presupposes some musical background before entering Comell. Prerequisites for admission to the major are completion of Music 152 and 154, at the latest by the end of the sophomore year (the freshman year is preferable), with an overall grade of B - or better in each course. For further information, apply to the director of undergraduate studies.
The requirements for the Bachelor of Arts degree with a major in music under Option I comprise the following:

1) in music theory: Music 251, 252, 253, $254,351,353$, and one of the following: Music 451, 452, 453, 454, 455, 456.
2) in music history: sixteen credits in courses numbered 381 or above listed under Music History Courses for Majors. At least three of these courses must be drawn from the four-course sequence Music 381-384.
3) in performance: four semesters of participation in a musical organization or ensemble sponsored by the Department of Music (Music 331 through 346 and 421 through 448).
Option II presupposes considerable musical study before entering Comell. Prerequisites for admission into the Option II program are previous acceptance as an Option I major and satisfactory completion of Music 252 and 254, normally by the end of the sophomore year. Students must apply to the deparment for formal acceptance as an Option II major. An Option Il major concentrates in one of the three areas listed below. For Option II in performance, exceptional promise must be demonstrated, in part by a successful solo recital before the end of the sophomore year.

The requirements for the Bachelor of Arts degree with a major in music under Option II are:

1) completion of all the requirements for Option I, except as noted below, and
2) in addition:
a) in performance:
(1) the requirement for four semesters of participation in a musical organization or ensemble is waived (but such majors are expected to participate actively in chamber and other ensembles sponsored by the department);
(2) sixteen credits in individual instruction in the student's major instrument, or voice, earned by taking Music 391-392 throughout the junior and senior years.
b) in theory and composition or in history: twelve additional credits in this area of concentration at the 300 level or above, of which either four may be earned in Music 301 or 302 when taken once for four credits, or eight may be earned in Music 401-402.

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 early 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 the senior year the candidate enrolls in Music 401-402 with the chair of the honors committee as instructor. Candidates will be 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. A comprehensive examination administered by the candidate's committee is held not later than May 1. 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.

## DistrIbution Requirement

College of Arts and Sciences students may apply either one or two Music Department courses toward the distribution requirement in Group 4 (humanities and the arts). Neither freshman 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 321-322, 391-392) or in organizations and ensembles (Music 331 through 346 and 421 through 448).
If two music courses are counted for distribution, they must total at least 6 credits, and at least one of the courses must be academic, not performance-oriented. The second "course," however, may comprise either up to 4 credits eamed in performance (Music 321-322, 391-392) or up to 4 credits earned in organizations and ensembles (Music 331 through 346 and 421 through 448 ), but not both.

## Facillities

Music Library. The Music Library, in Lincoln Hall, has an excellent collection of standard research tools. Its holdings consist of approximately one hundred-twenty thousand books, periodicals, and scores and forty-five thousand sound and video recordings. Particularly noteworthy are the collections of opera from all periods; twentieth-century scores and recordings; a large microfilm collection of Renaissance sources, both theoretical and musical; and a collection of eighteenth-century chamber music. In addition, the Department of Rare Books, in the Kroch Library, houses a collection of early printed books on music and musical manuscripts.
Concert Halls. The Department of Music sponsors more than one hundred concerts annually. Comell's principal concert halls are Bailey Hall Auditorium (about 2,000), Alice Statler Auditorium (about 900), Sage Chapel (about 800) and Barnes Hall Auditorium (about 280).
Rehearsal Spaces. The orchestras and bands rehearse in Bailey Hall, Barnes Hall, and Barton Hall; the Jazz Ensembles, Gamelan, and Chamber Ensembles rehearse in Lincoln

Hall; and the choral ensembles are quartered in Sage Chapel. Eleven practice studios in Lincoln Hall are available for individual practice by pianists, vocalists, and instumentalists.
Twenty-two grand pianos and eight upright or studio pianos are housed in Cornell's offices, classrooms, and rehearsal spaces. In addition, our Center for Keyboard Studies includes two concert grand pianos (Steinway and Mason \& Hamlin), two eighteenth-century fortepiano replicas (copies of Johann Andreas Stein and Anton Walter), an original Broadwood grand piano from 1827, a Bösendorfer grand piano from 1842, one Dowd and one Hubbard harpsichord, and a Challis clavichord. Barnes Hall houses a chamber organ by Derwood Crocker, a large Aeolian Skinner Organ is located in Sage Chapel, and there is a Helmuth Wolff tracker organ in Anabel Taylor Chapel.
Digital/Electronic Equipment. A Macintosh Master studio is available for graduate student use (hours to be arranged) and occasional independent study use. The software used is Performer, Mosaic, Finale, and several Opcode patch editor/librarians. The instruments include a Yamaha KX88 MIDI Controller keyboard, a Yamaha TX802 FM synthesizer, an E-Mu Proteus XR, a Casio FZ 10 M sampler and various other synthesizers. In addition, there are two MIDI work stations with additional instruments, including a Korg M1 synthesizer and an Akai S900 sampler.

## Freshman Seminars

MUSIC 111 Sound, Sense, and Ideas Section I-"High" and "Low": The Valuing of Music in Western Society. Fall and spring. 3 credits. J. Sheinbaum. Implicit and explicit value judgments about genres, styles, and individual pieces of music are often made without an examination of the reasoning and ideologies behind them. This seminar will explore various contexts of conventional divisions into "high" and "low" music. We will investigate and write about diverse repertories that blur the boundaries between these categories, thereby questioning the weight of the usual kinds of value judgments. Composers and repertories to be studied include the 15 th-century secular cantus firmus mass, 16th-century English madrigals, Handel, Beethoven, Gershwin, jazz, the Beatles, and progressive rock.

Section II-Love Songs from the Middle Ages to the Millennium. Fall. 3 credits. J. Peraino.

In Western culture, the emotion of love and the act of singing have a long history of association. Consequently, love songs encode much about the cultural beliefs and values of their time. This course examines various conceptions of love (romantic, platonic, homoerotic), the construction of gender, and the expression of these concepts in music over many centuries, beginning with the courtly love songs of the troubadours and ending with present-day rock genres.
[MUSIC 115 Popular Musice Today
Fall. 3 credits. Not offered 1997-98.]

## Introductory Courses

Note: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.

MUSIC 100 Elements of Musical Notation Fall or spring. 1 credit. Prerequisite: concurrent enrollment in any three-credit course in music and permission of instructor. D. Conn
This four-week course, given at the beginning of each term, will fulfill the requirement of basic pitch and rhythm and reading skills needed for introductory courses (except 101 and 103) and 200 -level courses with prerequisites. The material covered in this course is no longer part of Music 105

MUSIC 101 The Art of Music Fall. 3 credits. M W 11:15-12:05. 1-hour disc to be arranged. M. Hatch.
Topic for fall 1997: Popular Music in America 1850 to 1985. A survey of the history and diverse streams of popular music in America. Elementary vocabulary and techniques for describing, analysing, and evaluating music. Relationships between mainstream musics, tributaries, and side-streams; between folk, art, and popular musics; and between American musics and other musics in the world.

## MUSIC 103 Introduction to the Musics of

 the World ©Spring. 3 credits. No previous training in music required. J. Peraino.
Exploration of musical genres from selected regions of the world. The course examines both the elements of musical styles and the features of society that influence music. Listening assignments and projects that investigate the cultural context of music are major components of the course.

MUSIC 105 Introduction to Music Theory Fall or summer, spring. 3 credits. Fall, T R 10:10-11:00 plus two hours to be arranged. Experience in reading music is highly recommended. Fall, W. Cowdery; spring, D. Yearsley.

An elementary, self-contained introduction to music theory emphasizing fundamental musical techniques, theoretical concepts, and their application. Intervals, scales, triads; basic concepts of tonality; extensive listening to music in various styles; analysis of representative works of Bach, Mozart, Haydn and Beethoven.

## [MUSIC 106 Introduction to Music

 Theory3 credits. Prerequisite: Music 105 with grade of B - or better. Limited to 50 students. Not offered 1997-98.]
[MUSIC 107 Medieval to Mozart Fall. 3 credits. Prerequisite: ability to read music or concurrent enrollment in Music 100. Not offered 1997-98.]

MUSIC 108 Beethoven to Bernstein Spring. 3 credits. Prerequisite: ability to read music or concurrent enrollment in Music 100. N. Zaslaw.
A survey of Western art music in all genres
from the beginning of the 19 th century to the present.

MUSIC 120 Learning Music through Digital Technology
Fall or spring. 3 credits. Enrollment limited. Prerequisite: permission of instructor. D. Borden.
This course uses selected commercially available technological resources to produce live music. The student is expected to master the Macintosh computer, several music software programs, and several synthesizers using MIDI. The ability to read music is helpful but not necessary. There are no papers to write; homework is presented in three classroom concerts. The final is a live presentation of the student's final project in a concert open to the public.

MUSIC 201 Diction for Oral Presentation
[Fall] or spring. 1 credit. Prerequisite: permission of instructor. Not offered fall 1997. J. Kellock.

Introduction to the uses of the International Phonetic Alphabet for pronunciation of English, French, German, and Italian. Open to singers and non-singers. Assignments will vary according to musical experience. Singing students will be expected to perform their assignments. Students taking voice lessons for credit (321a-322a) must take Music 201 by the end of the third semester of lessons.

## Music Theory

Students contemplating the music major are strongly advised to take Music 151, 152, 153, and 154 in the freshman year; in any case Music 152 and 154 must be completed no later than the end of the sophomore year. Students contemplating Option II must complete Music 252 and 254 by the end of the sophomore year.

## MUSIC 151 Tonal Theory I

Fall. 3 credits. Prerequisites: admission by departmental placement exam; and concurrent enrollment in or previous credit for Music 153, or equivalent. Intended for students expecting to major in music and other qualified students. M W F 9:05-9:55. E. Murray.

Detailed study of the fundamental elements of tonal music: rhythm, scales, intervals, triads; melodic principles and 2-part counterpoint; diatonic harmony and 4-part voice leading in root position and first inversion; analysis of phrase and period structure

## MUSIC 152 Tonal Theory II

Spring. 3 credits. Prerequisites: Music 151 and 153 or equivalent, and concurrent enrollment in or previous credit for Music 154. Intended for students expecting to major in music and other qualified students. A grade of B-or better in Music 152 is required for admission to the music major. M W F 9:05-9:55. E. Murray.
Continued study of voice leading and harmonic progression, including diatonic modulation; analysis of binary and ternary forms.

## MUSIC 153 Musicianship I

Fall. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 151. Intended for students expecting to major in music and other qualified students. 3 hrs. TBA. E. Murray. 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: 2 parts using treble, alto, and bass clefs. Musical terms: tempo markings and rhythmic terminology.

## MUSIC 154 Musiclanship II

Spring. 2 credits. Prerequisite: concurrent enrollment in or prevous credit for Music 152. Intended for students expecting to major in music and other qualified students. A grade of B- or better in Music 154 , and failure in none of the individual musicianship components of the course, are required for admission to the music major. 3 hrs. TBA. E. Murray.
Sight singing: longer melodies in 3 clefs, including diatonic modulation. Keyboard: diatonic chord progressions and sequences. Dictation: intervals, thythms; longer melodies; chorale phrases with diatonic modulation. Score reading: 3 parts using treble, alto, and bass clefs. Musical terms: nuance and expression marks.

## MUSIC 220 Learning Counterpoint

 through Digital TechnologySpring. 3 credits. Enrollment limited Prerequisite: 152 or permission of instructor. TR 2:55-4:10. D. Borden.
This course is a study of traditional contrapuntal techniques from the fourteenth century to the present, with emphasis on invention and fugue. Synthesizers, samplers, MIDI, and music software will be covered. There are three classroom concerts, some analysis and a final public concert.

## [MUSIC 239 Introduction to

 Improvisational TheorySpring. 2 credits. Prerequisite: permission of instructor. Intended for performers in "jazz" and related styles. Not offered 1997-98. K. Hester.
Tonal, modal, and blues harmonic resources, and the formal structures in which they are embodied. Development of improvisational skills and creation of spontaneous compositions.]

## MUSIC 251 Tonal Theory III

Fall. 3 credits. Prerequisites: Music 152 and 154 or equivalent, and concurrent enrollment in Music 253. M W F 10:1011:00. J. Webster.
Continuation of diatonic and introduction to chromatic harmony; species counterpoint; introduction to counterpoint in the style of Bach; composition in small forms.

## MUSIC 252 Tonal Theory IV

Spring. 3 credits. Prerequisites: Music 251 and 253 or equivalent, and concurrent enrollment in Music 254. J. Webster Study of and composition in larger forms, including sonata form; systematic study of chromatic harmony, voice-leading, and modulation; composition in chromatic style.

## MUSIC 253 Musicianship III

Fall. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 251. 2 hours TBA. J. Webster.

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; 4 parts using treble, alto, tenor, and bass clefs. Musical terms: orchestral ranges, terms, clefs, and transpositions.

## MUSIC 254 Musicianship IV

Spring. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 252. 2 hours TBA. J. Webster Sight singing: melodies in 4 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: 4 parts, including transposing instruments. Musical terms: other terms in French German, and Italian.

## MUSIC 351 Materials of Twentieth-

 Century MusicFall. 3 credits. Prerequisite: Music 252 and 254 or equivalent, and concurrent enrollment in Music 353. M W F 10:1011:00. R. Sierra. Introduction to some techniques of twentiethcentury music, including extended tonality, modes, twelve-tone technique, set theory and new approaches to form and rhythm. Analysis of representative works by Debussy, Bartók, Webern, Hindemith, Schoenberg, Stravinsky, and others.

## MUSIC 353 Musicianship

Fall. 2 credits. Prerequisite: concurrent enrollment in or previous credit for Music 351. 2 hours TBA. R. Sierra.

Sight singing: advanced chromatic, twelvetone, and atonal melodies in 4 clefs. Keyboard: continued chromatic harmony; improvised chromatic modulations. Dictation: continued chromatic harmony; atonal sets and melodies; 2 -part counterpoint. Score reading: 4 clefs, transpositions. Music terms: twenti-eth-century terms.

## [MUSIC 451 Counterpoint

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1997-98. S. Stucky.
Composition in the polyphonic vocal style of the late Renaissance.]

## [MUSIC 452 Topics in Music Analysis

 Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1997-98. J. WebsterA survey of important analytical approaches to tonal music, including thematic-motivic relations, phrase-rhythm, large-scale paragraph construction, structural-tonal voice-leading, and relations among the movements in a multimovement work.]
[MUSIC 453 Introduction to Improvlsational Theory
Fall. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1997-98. K. Hester.
Study and performance of tonal, modal, and blues harmonic resources; introduction to the formal structures in which these resources are embodied. Includes ear training, work at the keyboard, composing short pieces, and analyzing selected representative works of popular music and African-American art music from 1940 to 1970.]

MUSIC 454 Composition
Fall. 4 credits. Prerequisite: Music 251 or permission of instructor. W 1:25-4:25. D. Borden.

Using MIDI and Digital Audio, non-linear methods of musical composition are explored. In addition, interdisciplinary projects are carried out in conjunction with students from the Film Program, Dance Program, and

Computer Animation Projects in other departments. The collaboration receive public performances. Live performances can use acoustic instruments as well as electronic ones.

## MUSIC 455 Conducting

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. S. Tucker. Fundamentals of score reading, score analysis, rehearsal procedures and conducting technique; instrumental and choral contexts.

## [MUSIC 456 Orchestration

Spring. 4 credits. Prerequisite: Music 251 or permission of instructor. Not offered 1997-98. R. Sierra.
Orchestration based on nineteenth- and twentieth-century models.]

## Music in History and Culture

MUSIC 221 History of Rock Music
Fall. 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 present-day genres of alternative rock and hip hop.

## MUSIC 222 A Survey of Jazz

Spring. 3 credits. Enrollment limited. K. Hester.

This course will trace the evolution of jazz historically from its African roots to the current diverse spectrum of improvisational styles that form popular, Neoclassic, and Innovative contemporary jazz music.

## MUSIC 245 Gamelan In Indonesian

 History and CulturesFall or spring. 3 credits. Permission of instructor. No previous knowledge of musical notation or performance experience necessary. M W F 1:25-2:15
M. Hatch, fall; J. Mrảzek, spring

An introduction to Indonesia through its art. Elementary techniques of performance on the Javanese gamelan; a general introduction to Indonesian history and cultures, and the socio-cultural contexts for the arts there. Several short papers and one longer research report are required.

## [MUSIC 261 Bach and Mandel \#

 Fall. 3 credits. Prerequisite: any 3-credit course in music or permission of instructor. Not offered 1997-98.Bach's music, product of a provincial life, and Handel's music, product of a cosmopolitan life, will be compared. Genres studied will include works for keyboard instruments, chamber music, concertos, cantatas, operas, oratorios, anthems, and esoterica.]

MUSIC 262 Haydn and Mozart \#
Fall. 3 credits. Prerequisite: any 3 -credit course in music or permission of instructor. N. Zaslaw.
Music for courts, theaters, churches, concerts, dancing, marching, public and private ceremonies, and domestic use by two extraordinarily different musical personalities who were friends, explored in its historical and socio-cultural contexts.

## [MUSIC 263 Beethoven

Spring. 3 credits. Prerequisite: any 3 -credit course in music or permission of instructor. Not offered 1997-98.
J. Webster.

A survey of Beethoven's life, works, and influence. While the primary focus will be his musical style and its development, the course will also cover social-cultural factors and the psychology and reception of genius.]

## MUSIC 264 Musical Romantles *

Spring. 3 credits. Prerequisite: any
3 -credit course in music or permission of instructor. D. Rosen.
This survey of music from 1815 to 1900 will be divided into five segments focusing on five composers (Schubert, Berlioz, Verdi, Wagner, and Mahler) and two or three segments on broader topics, such as musical nationalism in Russia, fin de siecle Vienna, the art song, and the history of the piano and its music.

## MUSIC 274 Opera \#

Fall. 3 credits. M W F 10:10-11:00. R. Harris-Warrick.

An introduction to major works of the operatic repertory, with discussion of texts and theatrical performances as well as music. Video recordings will be an integral part of the course; trips to live performances will be scheduled where possible.
[MUSIC 275 The Choral Tradition Spring. 3 credits. Prerequisite: any threecredit music course or permission of instructor. Not offered 1997-98.
A survey of representative works, both sacred and secular, in the Western choral tradition from the Middle Ages to the twentieth century Class will include discussion of performances as well as historical and stylistic issues, and will be integrated with local concert offerings whenever possible.)

## MUSIC 276 The Orchestra and Its

 Music \#Spring. 3 credits. Prerequisite: any three credit music course or permission of instructor. N. Zaslaw.
The music of, and the social structures supporting, large instrumental ensembles in the Western world, including Italian court festivals of the 16 th century, string bands of the 17th century, Lully's ascendency at Paris and Versailles, and music of Purcell, Corelli, Vivaldi, Bach, Handel, Haydn, Mozart,
Beethoven, Schubert, Schumann,
Mendelssohn, Berlioz, Liszt, Wagner, Brahms, Tchaikovsky, Bruckner, Mahler, Strauss, Stravinsky, Schoenberg, Webern, Bartők, Shostakovich, Messiaen, Copland, Carter, Tower, Stucky, Sierra, and others.

MUSIC 390 Culture of Renalssance II
(also Comp. Lit. 362, Eng. 325, Hist. 364, Art H. 351)
Fall. 4 credits. Plus discussion section. W. Kennedy and C. Kaske.

See Comparative Lit. 362 for description.

## Music History Courses for Majors and Qualified Non-Majors

Prerequisite: Music 152 or permission of instructor. Intended primarily for music majors, these courses investigate selected topics and repertories from each period in some detail. Each course includes listenings, readings, oral and written papers, and analyses.

MUSIC 374 Opera and Culture (also Gerst 374 and Itala 374)
Spring. 4 credits. Prerequisite: any threecredit music course or proficiency in German or Italian. A. Groos.
This course is designed to explore interrelationships between opera and cultural practice, using examples principally from the German and Italian repertories (e.g., Mozart, Wagner, Verdi, Puccini, Strauss). Lectures and discussion will examine operatic representations of central issues in the emergence of modern culture in the late eighteenth and nineteenth centuries: politics and national identity, issues of gender and sexuality, orientalism, representations of madness and disease. Depending on student interest, a final segment of the semester may extend our focus into twentieth-century opera or other media such as film and theatre.

## MUSIC 381 Music in Western Europe

 to 1700 \#Fall. 4 credits, T R 10:10-11:25.
R. Harris-Warrick.

Western European music from the Middle Ages to the early Baroque, including Gregorian chant, secular monophony, the development of polyphony, the birth of opera, and the rise of independent instrumental music.

## MUSIC 382 Music of the Eighteenth

 Century *Spring. 4 credits. J. Webster.
Music in Western and Central Europe and North America from Bach, Handel and Vivaldi to Haydn and Mozart, including comic and serious opera, church music, concert music, and social music.

## [MUSIC 383 Music of the Nineteenth

 Century \#Fall. 4 credits. T R 10:10-11:25. Not offered 1997-98.
A chronological survey of nineteenth-century music from Beethoven through Puccini including reference to its cultural and historical context.]

## [MUSIC 384 Music of the Twentieth

 CenturySpring. 4 credits. T R 10:10-11:25. Not offered 1997-98. R. Sierra.
A systematic study of music from the turn of the century to the present. Historical context will be an integral part of the course.]

## [MUSIC 388 Historlcal Performance

 Practicum \#Spring. 4 credits. Not offered 1997-98. M. Bilson.

The study of 18th-and 19th-century instrumental performance practices, with special emphasis on the string quartets of Haydn and the piano trios of Schubert. Open to qualified performers.]

## MUSIC 398-399 Independent Study in

 Music History398, fall; 399, spring. 4 credits. Prerequisite: Music 152 and permission of instructor. Staff.
Advanced study of various topics in music history. Students enrolling in Music 398-399 participate in, but do not register for, an approved 200-level music history course and, in addition, pursue independent research and writing projects.
MUSIC 489 African American Music Innovators (also AS\&RC 489)
Fall. 4 credits. Permission of instructor. K. Hester.

This course examines and experiments with methods of analyzing, appreciating, and understanding innovative art forms. Students will write three reports (with transcribed music examples or some form of accurate analytical charting, where appropriate), utilizing three different perspectives on African American Music.

## MUSIC 490 American Musical Theatre

 (also English 454)Spring. 4 credits. S. McMillin.
See English 454 for description.

## MUSIC 492 Music and Queer Identity

Spring. 4 credits. Prerequisite: Music 152
or permission of instructor. J. Peraino. Throughout history music has been associated with "otherness" in Western cultures.
Appropriately, lesbian and gay individuals and communities have turned to music as a means of expressing and negotiating their "queer" identity within status-quo culture. This course examines how and why music encodes "queerness" by focusing on various musical genres (such as opera, disco, women's music, country) and composer/musicians (such as Franz Schubert, Judy Garland, David Bowie) that have become significant for various lesbian and gay communities. The course will also examine the reasons behind the general popularity of queer-coded but "straightidentified" performers such as Elvis Presley, Prince, and Michael Jackson.

## Independent Study

## MUSIC 301-302 Independent Study in Music

301, fall; 302, spring. Credit to be arranged. Prerequisite: departmental approval. Presupposes experience in the proposed area of study. Staff.

## Honors Program

MUSIC 401-402 Honors In Music
401, fall; 402, spring. 4 credits each term. Limited to honors candidates in their senior year. Staff.

## Musical Performance

Cornell faculty members offer individual instruction in voice, organ, harpsichord, piano and fortepiano, 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 or, through Music 321-322, with credit. Other instruments may sometimes be studied for credit outside Cornell, but also by audition only (see Music $321 \mathrm{~h}-322 \mathrm{~h}$ ). Cornell does not offer instruction at the beginner's level.
Lessons for beginners. The Music Department can recommend outside teachers for those who wish to begin studying voice or an instrument. No credit is available for beginning instruction.
Auditions. Auditions are held at the beginning of each term for lessons for advanced students. Contact the Department of Music office (104 Lincoln Hall) for information.
Fees. The fee for a one-half hour lesson weekly, without credit, is $\$ 150$ per term. For a one-hour lesson (or two half-hour lessons)
weekly, without credit, the fee is $\$ 300$. The fee in Music 321-322 for a one-hour lesson (or two half-hour lessons) for credit is $\$ 225$ per term. All fees are non-refundable once lessons begin, even if the course is subsequently dropped.
Scholarships. Music majors receive a scholarship equal to the lesson fee listed above. Members of the department-sponsored organizations and ensembles may, with the permission of the director of the organization, receive a scholarship of up to one-half the Cornell fee for the type of lessons chosen during the term. (These scholarships are intended only for lessons in the student's primary performing medium.) Scholarship forms, available in the Music Department office, are to be returned to the office within the first three weeks of classes.
Practice rooms. Practice-room fees for twelve hours weekly are $\$ 50$ per term and for six hours weekly are $\$ 40$ per term for a room with a piano. Practice-room fees for twelve hours weekly are $\$ 25$ per term and for six hours weekly are $\$ 15$ per term for a room without a piano. The fee for the use of the pipe organ is $\$ 50$ for twelve hours weekly and $\$ 40$ for six hours weekly. All fees are nonrefundable.
Earning credit. For every 4 credits earned in Music 321-322, the student must have earned, or currently be earning, at least 3 credits in another music course (excluding freshman seminars, Music 321-322, 331 through 340, $391-392$, or 421 through 448). These 3 credits must be earned prior to, or simultaneously with the first 2 credits in 321-322; they cannot be applied retroactively. Transfer credit for appropriate music courses already taken elsewhere may be used to satisfy this requirement with the approval of the department.
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 $321 \mathrm{~h}-322 \mathrm{~h}$ and contact the Music Department office.
MUSIC 321-322 Individual Instruction in Volce, Organ, Harpsichord, Piano, Strings, Woodwinds, and Brass
Prerequisite: advanced students may register only after a successful audition with the instructor, usually scheduled during the first week of classes, and will receive credit only as described under "Earning credit," above. Students may register for this course in successive years. Students, at the sole discretion of the instructor, earn 2 credits each term for a onehour lesson (or two half-hour lessons) weekly accompanied by an appropriate practice schedule.

## MUSIC 321a-322a Individual Instruction In Voice

321a, fall; 322a, spring. 2 credits each term. Prerequisite: successful audition during registration. Music 201 must be taken by the end of the third semester of lessons. Limited enrollment. Fall,
H. Boatwright; spring, J. Kellock.

The Vocal Coaching Program offers noncredit lessons to members of the choral ensembles.

## MUSIC 321b-322b Individual Instruction

 in Organ321b, fall; 322b, spring. 2 credits each term. Prerequisite: successful audition. Fall, staff; spring, A. Richards.

## MUSIC 321c-322c Individual Instruction in Piano

321c fall; 322c, spring. 2 credits each term. Prerequisite: successful audition.
M. Bilson, X. Bjerken and staff.

MUSIC 321d-322d Individual Instruction in Harpsichord
321 d , fall; 322d, spring. 2 credits each term. Prerequisite: successful audition.
Fall, staff; spring, D. Yearsley.
[MUSIC 321e-322e Individual Instruction In Violin or Vlola
321 e , fall; 322 e , spring. 2 credits each term. Prerequisite: successful audition. Not offered 1997-98.]

## [MUSIC 3211-322f Individual Instruction

 In Cello321f, fall; 322f, spring. 2 credits each term. Prerequisite: successful audition. Not offered 1997-98.]

MUSIC $321 \mathrm{~g}-\mathbf{3 2 2 g}$ Individual Instruction in Brass
321 g , fall; 322 g , spring. 2 credits each term. Prerequisite: successful audition. M. Scatterday.

MUSIC 321h-322h Individual Instruction outside Cornell
321h, fall; 322h, spring. 2 credits each term. Prerequisite: successful audition. Coordinator: D. Conn.
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 for the use of those who for reasons of space cannot be admitted to Music 321-322. Prior approval and audition by a member of the faculty in the department is required, and credit may be earned only as described under "Earning credit," above. For information and a list of approved teachers, consult the department office, 104 Lincoln Hall.

## MUSIC 3211-322i Individual Instruction

 In Woodwinds321i, fall; 322i, spring. 2 credits each term. Prerequisite: successful audition. D. Conn.

## MUSIC 391-392 Advanced Individual

 Instruction391, fall; 392, spring. 4 credits each term. Open only to juniors and seniors majoring in music under Option II with concentration in performance and to graduate students. Option II majors whose lessons must be taken outside Comell may apply to the department for financial assistance toward the cost of lessons; $\$ 225$ per semester will normally be awarded to such students and a larger amount may be awarded under certain circumstances. Music 391 is not a prerequisite to 392.

## 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, except that the Sage Chapel 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 eaming credit.

## MUSIC 331-332 Sage Chapel Cholr

331, fall or summer; 332, spring. 1 credit. No audition for admission. M $7-9$. T. Folan.

MUSIC 333-334 Cornell Chorus or Glee Club
333, fall; 334 , spring. 1 credit. Prerequisite: permission of instructor. Chorus (treble voices): W 5:15-7:15 p.m. plus 2 hours to be arranged. Glee Club (mens voices): W 7:30-9:30 p.m., plus 2 hours to be arranged. S. Tucker.

## MUSIC 335-336 Cornell Symphony

 Orchestra335, fall; 336, spring. 1 credit. Prerequisite: permission of instructor. W 7:3010:00 p.m. E. Murray.

## MUSIC 337 WInd Symphony

 Fall. 1 credit. Prerequisite: permission of instructor. M W 4:45-6:30. M. Scatterday and D. Conn.
## MUSIC 338 Symphonic Band

Spring. 1 credit. Prerequisite: permission of instructor. M W 4:45-6:30. D. Conn.

MUSIC 339-340 Cornell Jazz Ensembles 339 , fall; 340 spring. 1 credit. Prerequisite: permission of instructor. W $6-8$ p.m. K. Hester.

## MUsIC 342 Wind Ensemble

Spring. 1 credit. Prerequisite: permission of instructor. M 7:30-9:30 and R 4:45-6:30. M. Scatterday.

## [MUSIC 345-346 Introduction to the

 Gamelan 앙345 fall; 346 spring. 1 credit. Enrollment limited. Prerequisite: permission of instructor. M W 2:30-3:20. Not offered 1997-98.
Concentrated instruction for beginning students in elementary techniques of performance on the Indonesian gamelan. Music 245 is a 3 -credit course that complements the instruction in gamelan by an introduction to Indonesian history and cultures.]

## MUSIC 421-422 Comell Chamber

 Orchestra 421, fall; 422 spring. 1 credit. Prerequisite: permission of instructor. R 5-6:30 p.m. J. Hsu.Study and performance of the chamber symphonies of Haydn, Mozart, and their contemporaries. For strings, woodwinds, and horns. More recent music may also be included in the spring.

## MUSIC 437-438 Chamber Winds

437, fall; 438 , spring. 1 credit each term. Prerequisites: enrollment in Symphonic Band, Wind Symphony or Wind Ensemble in the same semester as this course AND permission of instructor only. Fall, T R 4:45-6:30 p.m. Spring, T F 4:45-6:30 p.m. M. Scatterday, D. Conn.

A flexible instrumentation ensemble performing original woodwind, brass, and percussion
music from Gabrieli brass choirs and Mozart serenades through more contemporary works such as Stravinsky's Octet or premiers of works. The ensemble will perform on wind symphony, symphonic band and wind ensemble concerts in addition to several chamber concerts throughout the year.
MUSIC 439-440 Experimental Lab Ensemble
439 fall. 440 spring. 1 credit each term. Permission of instructor. W 8:30-10:30 p.m. K. Hester.

## MUSIC 441-442 Chamber Music

 Ensemble441, fall; 442 , spring. 1 credit. Prerequisite: permission of instructor. J. Hsu. Study and perform chamber music works from duos to octets for pianists, string and wind players.

## MUSIC 443-444 Chorale

443 fall; 444 spring. 1 credit each term. Prerequisite: permission of instructor. F 4:30-6:15 p.m. R. Riley.
Study and performance of selected choral music for mixed voices

## MUSIC 445-446 Comell Gamelan

 Ensemble445 fall; 446 spring. 1 credit each term. Enrollment limited. Prerequisite: Music 245 or 345-346, or permission of instructor. R 7:30-10:00 p.m. Fall, M. Hatch; spring, J. Mrázek.
Advanced performance on the Javanese gamelan. Tape recordings of gamelan and elementary number notation are provided. Some instruction by Indonesian musicians is offered in most years.

## MUSIC 447-448 Chamber Signers

447, fall; 448 , spring. 1 credit each term. Prerequisite: permission of instructor. F 4:15-6:15. Plus 2 hours to be arranged. S. Tucker.

## Graduate Courses

Open to qualified undergraduates with permission of instructor.

## MUSIC 601 Introduction to Blbllography and Research

Fall. 4 credits. M 1:25-4. L. Coral. 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 602 Analytical Technlque Spring. 4 credits. Not offered 1997-98. J. Webster.

A critical survey of various analyical methods in current use. Frequent analytical assignments and class presentations.]
[MUSIC 603 Editorial Practice
Spring. 4 credits. Not offered 1997-98.]
[MUSIC 604 Ethnomusicology: Areas of Study and Methods of Analysis Spring. 4 credits. Open to graduate students in anthropology, linguistics, psychology, sociology, and other cognate fields with permission of instructor. Not offered 1997-98. M. Hatch.
Major aspects of research into musical cultures of the world. Problems, theories, and methods, especially those affecting analytical terminology, transcription and analysis of sound events, and fieldwork.]

## MUSIC 605 Graduate Seminar In European Cultural and Intellectual History (also History 605) <br> Fall. 4 credits. M. Steinberg. <br> See History 605 for description.

## MUSIC 620 Introduction to MIDI

 TechniquesSpring. 4 credits. Permission of instructor. D. Borden.

This course is an introduction to MIDI for students who are already at an advanced level in music composition.

## [MUSIC 622 Historical Performance

 PracticumSpring. 4 credits. Not offered 1997-98. M. Bilson.

The study of 18th- and 19th-century instrumental performance practices, with special emphasis on the string quartets of Haydn and the piano trios of Schubert. Open to qualified performers.]

## [MUSIC 653 Topics in Tonal Theory and

 AnalysisSpring. 4 credits. Not offered 1997-98.]
[MUSIC 654 Topics in Post-tonal Theory and Analysis
Spring. 4 credits. Not offered 1997-98.]

## MUSIC 657-658 Composition

657 , fall; 658 , spring. 4 credits each term. F 1:25-4:00 p.m. plus 1 hour to be arranged. R. Sierra.
[MUSIC 674 German Opera (also German Studies 672)
Fall. 4 credits. Not offered 1997-98.
A. Groos.

See German Studies for description.]
[MUSIC 677 Mozart: His Life, Works, and Times (also German 757)
Fall. 4 credits. Not offered 1997-98.]
[MUSIC 680 Toples In Ethnomusicology Spring, 4 credits. M. Hatch. Not offered 1997-98.]
[MUSIC 681 Seminar In Medieval Muslc Fall. 4 credits. M 1:25-4:00. Not offered 1997-98.]
[MUSIC 684 Seminar In Renaissance Music
Fall. 4 credits. W 1:25-4:25. Not offered 1997-98.]

## MUSIC 686 Seminar in Baroque Music

 Fall. 4 credits. N. Zaslaw.Topic: the music of J. S. Bach. Recent controversies over Bach's career and music, including conflicting approaches to his biography, dating his works, the meaning of The Musical Offering, the size and make-up of his performing forces, harpsichord vs. piano, anti-Semitism in the Passion According to St. John, and the status of The Brandenburg Concertos as absolute or program music.

## MUSIC 688 Seminar In Classical Music

 Fall. 4 credits. J. Webster.Topic: the music of Haydn.
MUSIC 689 Seminar In Music of the Romantic Era
Spring. 4 credits. D. Rosen.
Topic: Issues in 19th Century Italian opera.

## Music 690 Seminar in Music of the Twentleth Century

Spring. 4 credits. R. Sierra.
Topic: the music of Gyorgy Ligeti.

MUSIC 691-692 Historical Performance 691, fall; 692, spring. 4 credits each term. Prerequisite: permission of instructor. Hours to be arranged. M. Bilson.
Lessons on the major instrument with
supplementary study and research on related subjects.
【MUSIC 693 Seminar In Performance Practice
Fall or spring. 4 credits. Not offered 1997-98.]

MUSIC 697-698 Independent Study and Research
697, fall; 698 , spring. Credit to be arranged. Staff.
[MUSIC 785-786 History of Music Theory 785, fall; 786, spring. 4 credits each term. Not offered 1997-98.]

## MUSIC 787 History and Criticism

 Spring. 4 credits. A. Richards. Topic for 1998: Crossing the Classic/Romantic Divide. An introduction to late 18th- and early 19th-century German aesthetics and music criticism, considering the impact of English thought and literature in Germany, and questioning notions of periodization and the canon, specifically the problematic division between 'classical' and 'romantic' as it has been applied to the repertory from this period. Topics include the sublime and the beautiful, the picturesque and the grotesque, landscape aesthetics and the English garden, Witz and the fragment, fantasy, constructions of gender, and Gothic horror.[MUSIC 789 Liturgical Chant in the West Spring. 4 credits. Not offered 1997-98.]

## MUSIC 901-902 Thesls Research

901, fall; 902, spring. Up to 6 credits each term, to be arranged. Offered for S-U only.
Limited to doctoral students in music who have passed the Admission-to-Candidacy Exam.

## NEAR EASTERN STUDIES

R. Brann, chair; C. Baker, A. Gade, M. Litvak, D. I. Owen, (director of the Program of Jewish Studies); L. Peirce, (director of graduate studies); D. Powers, (director of undergraduate studies); G. Rendsburg, N. Scharf, S. Shoer, L. White, M. Younes, J. Zorn

Joint faculty: M. Bernal, S. H. Nasr
(A. D. White Professor-at-Large)

## The Department

The Department of Near Eastern Studies (360 Rockefeller Hall, 255-6275) offers courses in the archaeology, history, religions, languages, and literatures of the Near East. Students are encouraged to take an interdisciplinary approach to the religions and cultures of this region, which has had an important impact on the development of antique, medieval, and modern civilization. The department's course offerings treat the Near East from the dawn of history to the present and emphasize methods of historical and literary analysis.

## Distribution Requirements

Any two Near Eastern Studies history or archaeology courses at the 200, 300 or 400 level that form a reasonable sequence or combination satisfy the distribution require-
ment in the social sciences/history. Any two Near Eastern Studies civilization or literature courses at the 200, 300, or 400 level that form a reasonable sequence or combination satisfy the distribution requirement in the humanities NES 197, 198 or a 200 -level survey course plus any other Near Eastern studies course will constitute a sequence to fulfill the distribution requirement in either social sciences/history or humanities, depending on the second course used in combination with 197, 198 (or a 200level survey course). All 200 or 300 -level language courses may fulfill the humanities requirement.

## The Major

The precise sequence and combination of courses chosen to fulfill the major is selected in consultation with the student's adviser. All majors must satisfy the following requirements (no course may be used to satisfy two requirements; $\mathrm{S}-\mathrm{U}$ options not permitted):
A. Qualification in two Near Eastern languages or Proficiency in one.
B. Nine three- or four-credit NES courses, which must include the following:

1. NES 197 or 198 (when NES 197-198 are not offered, students may substitute a 200-level survey course with the approval of the director of undergraduate studies).
2. Two 200 -level NES survey courses, one whose chronological parameters fall within the period 3000 B.C.E to 600 C.E., and one whose chronological parameters fall within the period 600 C.E. to the present. The following are examples (a complete list can be obtained in the department office):
3000 B.C.E to 600 C.E.
NES 223, Introduction to the Bible
NES 263, Introduction to Biblical History and Archaeology
NES 248, Introduction to Classical Jewish History
600 C.E. to the present
NES 233, The Lyrics of Love and Death: Medieval Hebrew and Arabic Poetry in Translation NES 257, Islamic History 600-1258 NES 258, Islamic History 1258-1914 NES 294, Modern History of the Near East
3. At least two NES courses at the 300 level or above (one of which may be NES 301, 302, 311, or 312).
Prospective majors should discuss their plans with the director of undergraduate studies before formally enrolling in the department. To qualify as a major, a cumulative grade average of C or better is required.
Honors. Candidates for the degree of Bachelor of Arts with honors in Near Eastern Studies must fulfill the requirements of the appropriate major study and enroll in the honors course, NES 499, in the fall and spring semesters of their senior year. For admission to the honors program, candidates must have a cumulative average of $\mathrm{B}+$ or better and have demonstrated superior performance overall in Near Eastern Studies courses. After consulting their major adviser, candidates should submit
an outline of their proposed honors work to the department during the second semester of their junior year.
Study abroad. Near Eastern Studies majors may choose to study in the Near East during their junior year. There are various academic programs in the countries of the Near East that are recognized by the Department of Near Eastern Studies and that allow for the transfer of credit. Archaeological field work on Cornell-sponsored projects in the Near East may also qualify for course credit.

## Freshman Seminar

NES 108 At the Crossroads of History: Readings in Modern Hebrew Literature
Fall. 3 credits. Enrollment limited to 17 students. A. Brener.
The events that gave rise to modern Israel and continue to shape it today have been amply documented over the past several decades. Literature, however, is unique in the ability to create its own special meanings and to convey truths of its own. In this course we will explore writings by six major Hebrew novelists in an attempt to see how significant moments in modern Jewish history have been reflected in Hebrew literature of the twentieth century. Through a specially keyed sequence of writing assignments, we will focus on the literary aspects of these works. Students will also be introduced to the ways in which library resources can be utilized for research. All readings in English.

## [NES 143 Jewish Travelers Through the Ages

Fall. 3 credits. Enrollment limited to 17 students. Not offered 1997-98. A. Brener.]

## NES 154 Harems, Houris, and Hashish: Western Perceptions of the Middle East

Spring. 3 credits. Enrollment limited to 17 students. D. Powers.
Societies acquire their identities, in part, by defining themselves in relation to foreigners, strangers, aliens, or enemies; we divide the world into the familiar (Europe, the West, "us") and the strange (the Orient, the East, "them"). In this course we will explore how contemporary Western perceptions of the Middle East have been shaped by the imperial and colonial experience of the past 150 years.

## Language Courses

NES 101-102 Elementary Modern Hebrew I and II (also Jewlsh Studles 105-106)
101, fall; 102, spring. 6 credits each term. Prerequisite for NES 102: 101 or permission of instructor. Satisfactory completion of NES 102 fulfills the qualification portion of the language requirement. Enrollment limited to 15 students in each section. S. Shoer.

Intended for beginners. This course provides a thorough grounding in reading, writing, grammar, oral comprehension and speaking. Students who complete the course will be able to function in basic situations in a Hebrew-speaking environment.

NES 111-112 Elementary Arabic I and II 111, fall; 112, spring. Enrollment limited to 15 in each session. 6 credits each term. Prerequisite for Arabic 112: Arabic 111 or permission of instructor. M. Younes and L. White.

The course 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 will be on learning the language through using it in meaningful contexts. The student who successfully completes the two-semester sequence will be able to: 1) understand and actively participate in simple conversations involving basic practical and social situations (introductions, greetings, school, home and family, work, simple instructions, etc.) 2) read Arabic material of limited complexity and variety (simple narrative and descriptive texts, directions, etc.) 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 201-202 Intermediate Modem

 Hebrew I and II (also Jewish Studies 201-202) 항201, fall; 202, spring. Enrollment limited to 15 students in each section. 4 credits each term. Prerequisites for NES 201, 102 or permission of instructor; for NES 202, 201 or permission of instructor. N. Scharf. A sequel to NES 101-102. Continued development of reading, writing, grammar, oral comprehension, and speaking skills. The course introduces Hebrew literature and Israeli culture through the use of texts and audio-visual materials.

## NES 211-212 Intermediate Arabic I and II

211, fall; 212, spring. Enrollment limited to 15 students in each section. 4 credits each term. Prerequisites: for NES 211, one year of Arabic or permission of instructor; for NES 212, 211 or permission of instructor. M. Younes, L. White.

A sequel to NES 111-112. Continued development of the four language skills through extensive use of graded materials on a wide variety of topics. Increasing attention will be given to developing native-like pronunciation and to grammatical accuracy, but the main focus will be on developing communication skills. The student who successfully completes 212 will be 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 will be sought through the use of authentic materials.

## NES 301-302 Advanced Modern

 Hebrew I and II (also Jewish Studies 301-302) ©301, fall; 302, spring. Limited to 15 students. 4 credits each term. Prerequisite for NES 301: 202 or equivalent, with permission of instructor. Prerequisite for NES 302: 301 or equivalent, with permission of instructor. This sequence may be used to fulfill the humanities distribution requirement in literature. Limited to 15 students. N. Scharf.

Advanced study of Hebrew through the analysis of literary texts and expository prose. This course employs a double perspective: language is viewed through literature and literature through language. Students will develop composition skills by studying language structures, idioms, and various registers of style.

## NES 311 Advanced Arabic I ©

Fall. 4 credits. Prerequisite: NES 212 or permission of instructor. Limited to 15 students. M. Younes, L. White. Students will be introduced to authentic, unedited Arabic language materials ranging from poems, short stories, and plays to newspaper articles dealing with social, political, and cultural issues. Emphasis will be on developing fluency in oral expression through discussions of issues presented in the reading selections. A primary objective of the course is the development of writing skills through free composition exercises in topics of interest to individual students.

NES 312 Advanced Arabic II 요 Spring. 4 credits. Limited to 15 students. Prerequisite: NES 311, or permission of instructor. M. Younes and L. White.
This course is a continuation of NES 311 using similar but more challenging materials. There will be more focus on the writing skills, the development of native-like pronunciation, and accurate use of grammatical structures than in NES 311. Each students will be required to make an oral presentation in Arabic on a topic of his/her choice and submit a written version of the presentation.
[NES 330-331 Mieroglyphic Egyptian I and II (c.
330 , fall; 331 , spring. 4 credits. Not offered 1997-98. G. Rendsburg.]

## NES 333-334 Elementary Akkadian I and II (also NES 633-634) *

 333, fall; 334, spring. 4 credits. Prerequisite for NES 334: 333 or permission of instructor. D. I. Owen.An introduction to the Semitic language of the Akkadians and Babylonians of ancient Mesopotamia. Utilizing the inductive method, students are rapidly introduced to the grammar and the cuneiform writing system of Akkadian through selected readings in the Code of Hammurapi, the Descent of Ishtar, and the Annals of Sennacherib. Secondary readings on the history and culture of Mesopotamia provide the background for the study of the language. Knowledge of another Semitic language helpful but not essential.

## [NES 335-336 Readings in Akkadian

 Texts (also NES 635-836) 룽 635, fall; [636, spring]. 4 credits. Prerequisite for NES 336: 333-334. Prerequisite for 636: 633-634. Not offered 1997-98. D. Owen.][NES 337-338 Ugaritic I and II © \# 337 , fall; 338, spring. 4 credits. Prerequisite: Knowledge of another Semitic language (preferably Hebrew). Not offered 1997-98. G. Rendsburg.]

## NES 416 Structure of the Arablc

 Language (also LING 416) Spring. 4 credits. Prerequisite: NES 112 or one year of Arabic. M. Younes.The course deals with the 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 420 Readings in Biblical Hebrew

 Prose (also JWST 420 and RELST 420) -Fall. 4 credits. Prerequisite: one year of Hebrew, Biblical or modem. Course may be repeated for credit. Not offered 199798. G. Rendsburg.]
[NES 433 Introductory Sumerian I (also NES 631) (18)
Spring. 4 credits each semester. Prerequisite: permission of instructor. Not offered 1997-98. D. Owen.]
[NES 434 Introductory Sumerian II (also NES 632) ©
Spring. 4 credits. Prerequisite: NES 433/
631. Not offered 1997-98. D. I. Owen.]
[NES 435-436 Aramalc I-II (also JWST 435-436) 룰
435, fall; 436, spring. 4 credits each term. Prerequisite: knowledge of Hebrew. Enrollment limited to 15 students. Not offered 1997-98. G. Rendsburg.]
[NES 631 Introductory Sumerian I (also NES 433)
Spring. 4 credits. Prerequisite: permission of instructor. Not offered 1997-98. D. Owen.]
[NES 632 Introductory Sumerian II (also NES 434)
Spring. 4 credits. Not offered 1997-98. D. I. Owen.]

NES 833-634 Elementary Akkadian I and II (also NES 333-334)
633, fall; 634, spring. 4 credits. Prerequisite for NES 634: 633 or permission of instructor. D. I. Owen.
For description, see NES 333 under Near Eastern Languages.

## [NES 635-636 Readings in Akkadian

 Toxts (also NES 635)635, fall; [636, spring]. 4 credits. Not offered 1997-98. D. Owen.]
[NES 637-638 Ugaritic I and II (also NES 337-338)
337, fall; 338, spring. 4 credits. Prerequisite: Knowledge of another semitic language (preferably Hebrew). Not offered 1997-98. G. Rendsburg.]

## Archaeology

## [NES 261 Anclent Seafaring (also

 Archaeology 275) (2)Spring. 3 credits. Not offered 1997-98. D. Owen.]

NES 263 Introduction to Blblical Hlatory and Archaeology (also ARKEO 263, JWST 263, and RELST 264) © Fall. 3 credits. Enrollment limited to 50 students. J. Zorn.
A survey of the principal archaeological developments in Canaan/Palestine from the Neolithic period (ca 9000 B.C.E.) to the Babylonian Exile ( 586 B.C.E.). Includes an introduction to archaeological methodology utilized in the reconstruction of ancient cultures in the area, as well as the basic bibliography of the field. Emphasis will be placed on the use of archaeological data for the understanding of some major problems in

Israelite history and archaeology, such as the dating of the cultural milieu of the patriarchs, the dating and geographical setting of the Exodus and the Israelite conquest, and the origin and history of the Philistines. Recommended for student planning to participate in excavations in Israel.
[NES 264 Agriculture and Soclety In the Ancient Near East * "
Spring. 3 credits. Not offered 1997-98.
D. Owen.]
[NES 361 Interconnectlons in the Eastern Mediterranean World in Antlquity (e)
Fall. 4 credits. Not offered 1997-98. D. Owen.]
[NES 366 The History and Archaeology of the Ancient Near East (also Archaeology 310) 랑
Fall. 4 credits. Not offered 1997-98. D. Owen.]
[NES 367 The History and Archaeology of Ancient Egypt ©
Fall. 4 credits. Not offered 1997-98. D. Owen.]

## Civilization

NES 197 Introduction to Near Eastern Civllization (also Jewish Studies 197 and Religious Studies 197) (3) \# Fall. 3 credits each term. Required for all NES department majors. NES 197 and any other NES course will constitute a sequence to fulfill the distribution requirement in either the social sciences or humanities, depending on the second course used in combination with NES 197. D. I. Owen.

This course is designed to provide a basic introductory overview of the various civilizations of the ancient Near Eastern/ Biblical world from the advent of writing, ca. 3000 B.C.E. to the conquest of Alexander the Great. Lectures and discussions will focus on four major geographical areas: Mesopotamia Iraq, Anatolia/Turkey, Syro-Canaan/Syria, Lebanon, Israel, and Egypt. For each area we will consider the development of major religious ideas, social and political institutions, economic stractures and literary forms common or unique to each of the peoples who inhabited those areas-Sumerians, Babylonians, Canaanites, Hittites, Phoenicians, Israelites and Egyptians. Readings will be chosen from primary sources in translation and archaeological evidence, and secondary studies. In addition, presentation of slides, videos, and recordings will be integrated into the course.
[NES 234 Arabs and Jows: Cultures in Confluence and Confllet falso JWST 234, RELST 234, and COM L 234) ©
Fall. 3 credits. Not offered 1997-98. R. Brann.]

## NES 251 Introduction to Islam:

 Religion, Politics, and Society (also RELST 252) 웅Spring. 3 credits. A. Gade. In this course we shall examine the Islamic religious tradition from its inception to the present. The first part of the course will focus on the message and style of the Qur'an, the life and experience of the Prophet Muhammad, and the major beliefs and practices of Islam. We shall then turn to
political, religious, and legal developments in the early centuries of Islam. The third part of the course will deal with theological,
philosophical, and mystical movements in the Islamic empire. Finally, we will examine a few specific modern social issues and political movements, such as feminism and Islam, the rise of fundamentalism, and African-American Muslim movements.
[NES 281 Gender and Society in the Muslim Middle East (also Religlous Studies 281, Women's Studies 281) *
Spring. 3 credits. Limited to 20 students.
Not offered 1997-98. L. Peirce.]
NES 339 Muslims, Christians, and Jews in Islamic Spain: LIterature and Soclety (also JWST 339, COM L 334, RELST 334, NES 639, SPANL 339/699) ©
Spring. 4 credits. Enrollment limited to 25 students. R. Brann.
Islamic Spain was a frontier society comprising six distinct ethnic-religious communities: Arabs, muwalladun (native descendants of Iberian converts to Islam), Berbers, musta'ribun (Arabicized Christians), Jews and "Slavs" (European slave soldiers and their descendants). This course will examine the literature, culture, and society of al-Andalus (Islamic Spain) from the Umayyad emirate until the close of the Reconquista (711-1248). The development of Arabic (and Hebrew) poetry will be surveyed with focus on style, genres, and motifs. Conflicting theories of the origin and identity of Hispano-Arabic poetry and culture will also be considered.

## [NES 344 Seminar on Jewish Mysticism

 (also RELST 344 and JWST 342) " Fall. 4 credits. Enrollment limited to 20 students. Not offered 1997-98. Staff.][NES 345 Gender and Judaism (MOMNS 347, RELST 343 and JWST 347)
Spring. 4 credits. Enrollment limited to 25 students. Not offered 1997-98. Staff.]
NES 351 Introduction to Islamic Law (also NES 651, RELST 350, HIST 372/652) © \#
Fall. 4 credits. Enrollment limited to 25 students. D. Powers.
After surveying the historical development of Islamic law, the seminar will focus on the structure and function of the Islamic legal system in the fourteenth and fifteenth centuries, using legal documents, judicial opinions, and court casers (all in English translation!) to elicit major themes and issues.
[NES 357 Islamic Law and Soclety Fall. 4 credits. Not offered 1997-98. D. Powers.]

NES 639 Muslims, Christlans and Jows In Islamic Spaln: Llterature and Soclety (also COM L 334, SPANL 339/699, RELST 334, NES 339, and JWST 339)
Spring. 4 credits. R. Brann.
For description, see NES 339 under Near Eastern Civilization

## NES 651 Introduction to Islamic

 Law (also NES 351, RELST 350, HIST 372/652)Fall. 4 credits. Limited to 25 students. D. Powers.

For description, see NES 351 under Near Eastern Civilization.

## History

NES 239 Cultural Hlatory of the Jewa of Spain (also JWST 239, COMP LIT 239, RELST 239, SPAN LIT 239) © "
Fall. 3 credits. R. Brann.
A survey of the cultural history of the Jews in Spain from the late Visigothic period until the converso crisis of the fourteenth and fifteenth centuries and the Expulsion, focusing on the interaction of Jewish with Muslim and Christian cultures and the stable yet evolving sense of a "Sefardi" identity. The course will establish historical and literary-critical frames fro reading primary sources in translation, including secular and synagogal poetry, philosophy and kabbalah, biblical hermeneutics, historiography, polemics, and other genres.
[NES 244 Introduction to Anclent Judalsm (also JWST 244 and RELST 244) *
Spring. 3 credits. Enrollment limited to
140 students. Not offered 1997-98.
G. Rendsburg.]

## NES 248 Introduction to Classical Jowish History (also RELST 248 and JWST 248) (8) " <br> Fall. 3 credits. C. Baker.

A survey of the major developments in Jewish history between the destruction of the first temple in 586 B.C.E. to the rise of Islam. Topics will include the return under Ezra and Nehemiah; the encounter with Hellenism; the Antiochene persecutions; the growth of Roman influence; the rebellion of 70 C.E.; the rise of such Jewish groups as the Sadducees, Pharisees, and Essenes; the conflict with early Christianity; and the nature of rabbinic Judaism.

## [NES 249 Introductlon to Modern Jewish

 Mistory (also JWST 245) \#Spring. 3 credits. Not offered 1997-98. Staff.]
NES 257 Islamic Mistory: 600-1258 (also HIST 254 and RELST 257) ©
Fall. 3 credits. D. Powers.
A survey of Islamic history from the lifetime of the Prophet to the Mongol conquest of Baghdad. Topics to be covered will include the emergence of Islam as a major world religion; the impact of the Arab conquests on the Mediterranean world; political, military and cultural contacts between the Islamic Near East and western Europe.
[NES 258 History of the Near East 1250-1914 (also HIST 248 and RELST 258) 룽
Fall. 3 credits. Not offered 1997-98. L. Peirce.]
[NES 261 Anclent Seafaring (also Archaeology 275) \# \#
Spring. 3 credits. Not offered 1997-98. D. Owen.]

NES 263 Introductlon to Biblical History and Archaeology (also ARKEO 263, JWST 263, RELST 264) © *
Fall. 3 credits. Enrollment limited to 50 students. J. Zorn.
For description, see NES 263 under Near
Eastern Archaeology

NES 294 Modern History of the Near East: ChangIng Polltics, Soclety, and Ideas (also Government 358 and JWST 294) 형
Fall. 4 credits. Fulfills the college distribution requirement in history or the social sciences. M. Litvak.
This introductory course is designed to acquaint students with the main political, social, and cultural trends that have shaped the modern and contemporary history of the Near East. While discussing developments in the region during the nineteenth and twentieth centuries, the lectures will focus on such themes as modernization, nationalism, Islamic response, and Arab politics in global and regional contexts. The course does not presuppose any knowledge of Near Eastern languages.

NES 324 The History of Early Christianity (also JWST 344, RELST 325) "
Fall. 4 credits. C. Baker.
History of Christianity in the Roman Empire from its beginning in the New Testament period to the Council of Chalcedon. Emphasizing primary sources (both textual and archaeological/icongraphic), the course treats the socio-cultural changes in Christian communities, as well as developments in Christian "orthodoxy" and "heretical" movements (e.g., Gnostics); the role of Greek philosophy in shaping Christian thought; martyrdom and persecution; asceticism, monasticism, and holy persons; Christian views of political and social responsibility.
NES 358 Ottoman History: 1300-1600 (also HIST 446/646 and NES 658) (9)
Fall. 4 credits. L. Peirce.
The Ottoman empire at its height included much of southwestern Europe, the Middle East, and North Africa; its poopulation was made up of peoples of a variety of ethnic and religious identities. This course studies the history and culture of the Ottoman empire from 1300 to 1600 (the period from 1600 through 1923 is studied in NES 359). Among the topics to be covered are: conflicting interpretations of the rise of the Ottomans; the empire's multi-ethinic nature; religious currents and institutions; social and economic classes; modes of dissent and resistance; and Ottoman relations with Europe and Asia. Throughout we will be concerned with questions of identity and of the nature of political and social changes. We will also examine one or two communities in detail to get a sense of the rhythm of daily life.

## NES 359 Ottoman HIstory: 1600-1923

 (also HIST 441/641 and
## NES 659) © *

Spring. 4 credits. L. Peirce.
This course studies the history and culture of the diverse regions an dpeoples making up the Ottoman empire in the period 1600 to 1923. Developments in the seventeenth and eighteenth centuries (cultural, social, military) are examined as essential preliminaries to undersanding the dominant features of the nineteenth and early twentieth centuries: rapid political and social transformations, proliferation of ideological positions, and territorial dissolution. We will examine current debates around the questions of nineteenth-century modernization vs. decline, the economic and cultural impact of Europe, and the emergence of nationalism. Each student will select an area of the emprie to trace in depth.
[NES 347 Seminar on 19th-Century Jewlsh Intellectual History (also RELST 346 and JWST 346)
Spring. 4 credits. Enrollment limited to 20 students. Not offered 1997-98. Staff.]
NES 351 Introduction to Islamic Law (also NES 651, RELST 350, HIST 372/652) ©
Fall. 4 credits. Enrollment limited to 25 students. D. Powers.
For description, see NES 351 under Near Eastern Civilization.

## NES 351 Introduction to Islamic

 Law (also NES 651, RELST 350, HIST 372/652) © \#Fall. 4 credits. Enrollment limited to 25 students. D. Powers.
For description, see NES 351 under Near Eastern Civilization.
[NES 353 Polltics and Culture in Late Medieval Central Asia and the Near East (also HIST 317) \#
Fall. 4 credits. Not offered 1997-98 L. Peirce.]
[NES 361 Interconnections in the Eastern Mediterranean World in Antiquity ©
Fall. 4 credits. Not offered 1997-98 D. Owen.]
[NES 366 The History and Archaeology of the Ancient Near East (also Archaeology 310) \#
Fall. 4 credits. Not offered 1997-98. D. Owen.]
[NES 367 The History and Archaeology of Anclent Egypt 중
Fall. 4 credits. Not offered 1997-98 D. Owen.]
[NES 391 International Relations of the Ancient Near East, 3500-500 BCE (also GOVT 355)
Spring. 4 credits. Not offered 1997-98. M. Bernal.)

## NES 393 Religion and Politlcs in the

 Middle East (also RELST 393)Fall. 4 credits. Enrollment limited to 25 students. M. Litvak.
The seminar will discuss key issues in the relationships between Islam and politics from the early Islamic period to the present with a special emphasis on modern fundamentalist movements. It will examine the differences between Sunni Shiì movements as well as the relationships between nationalism and Islam and the social bases of modern Islamic movements.

## [NES 395 International Relatlons of the

 Middle East (also GOVT 392) 항Fall. 4 credits. S. Telhami.
This course will examine patterns of international relations in the Middle East in the 20th century, with special reference to the ArabIsrael and Iran-Iraq conflicts. These conflicts will be treated as part of a Middle East system, whose other main elements are the interaction between domestic and external politics, interArab relations, and the involvement of extraregional powers.]
[NES 418 Seminar in Islamic Hlstory: Muhammad and the Rise of Islam (also HIST 460/660, NES 618, and RELST 418) (3) \#
Fall. 4 credits. Enrollment limited to 20 students. Prerequisite: NES 257 or 258 , or permission of instructor. Not offered 1997-98. D. Powers.]

NEs 451 Seminar in Islamic History: 600-750 (also HIST 461/671, NES 650, and RELST 451) (i)
Spring. 4 credit. Enrollment limited to 25 students. Prerequisite: NES 257 or 258 , or permission of instructor. D. Powers.
An examination of Islamic history from $600-$
750 , with special attention to interpretive issues relating to the career of the Prophet Muhammad; the Arab conquests, the emergence of the Caliphate, conversion to Islam, and the Abbasid revolution. Students will read primary sources in English translation, especially The History of Tabari.
[NES 456 Sexuality, Society and the State in the Near East (also Mistory 457 and Women's Studies 455) ©
Spring. 4 credits. Prerequisite: Permission of the instructor. Limited to 15 students. Not offered 1997-98. L. Peirce.\}

NES 459 Women, Men and the Law in Muslim Court (also WOMNS 458, RELST 459, HIST 457/657 and NES 855) 웅
Fall. 4 credits. Prerequisites: Previous course in Islamic Studies helpful but not essential. Enrollment limited to 20 students. L. Peirce.
This course examines relations between women and men by focusing on the manner in which one 16 th-century community in the Muslim Middle East functioned through its court. By analyzing actual court cases, we will explore issues such as marriage and divorce, property rights, sexuality and its regulation, access to communal and domestic space and the control of knowledge. We will be particularly interested in the question of whether normative codes of law (religious, state) were compatible with the individual's sense of moral worth and self interest; hence we will also be concerned with relations between the individual and the community, and between the community and the state.

## [NES 618 Seminar in Islamlc History:

 Muhammad and the Rise of IsIam (also HIST 460/660, NES 418, and RELST 418)Fall. 4 credits. Prerequisite: NES 257 or 258 , or permission of instructor. Enrollment limited to 20 students. Not offered 1997-98. D. Powers.]

NES 650 Seminar in Islamic History: 600-750 (also HIST 461/671, NES 451, and RELST 451) \#
Spring. 4 credit. D. Powers.
For description, see NES 451 under Near Eastem History.
NES 651 Introduction to Islamic Law (also NES 351, RELST 350, HIST 372/652)
Fall. 4 credits. Enrollment limited to 25 students. D. Powers.
For description, see NES 351 under Near Eastern Civilization.
NES 655 Women, Men and the Law in Muslim Court (also WOMNS 458, RELST 459, HIST 457/657 and NES 459)
Fall. 3 credits. Prerequisites: previous course in Islamic Studies helpful but not essential. Enrollment limited to 20 students. L. Peirce.
For description, see NES 459 under Near Eastern History.

NES 658 Ottoman History: 1300-1600 (also HIST 446/646 and NES 358) Fall. 4 credits. L. Peirce.
For description, see NES 358 under Near Eastern History.
NES 659 Ottoman Hlstory: 1600-1923 (also HIST 441/641 and NES 359)
Spring. 4 credits. L. Peirce.
For description, see NES 359 under Near Eastern History.

## [NES 682 International Relations of the

 MIddle East (also GOVT 682)Fall. 4 credits. Graduate seminar.
Undergrad seniors only with permission of instructor. S. Telhami.
The focus of this seminar will be the contemporary international relations of the Middle East, with special attention paid to patterns of relations among states of the Middle East, and to the international and domestic variables that could account for these patterns. In Part I of the seminar, we will study a) the ways in which superpower competition and changing objectives affect the relations of states in the Middle East; b) the extent to which a change in the distribution of political, military, and economic power in the Middle East alter politics in the region; and, c) the impact of domestic variables on the foreign policies of states in the Middle East. In Part II, we will examine three major international crises in the Middle East: the Arab-Israeli conflict, the Iran-Iraq conflict, and the crisis in Lebanon.]

## LIterature

## NES 213 Introduction to the Qur'an (also RELST 213) \# ©

Spring. 3 credits. A. Gade.
This course examines the sacred book of the Muslims, the Qur'an, and for the purpose of contextualization the life of their Prophet Muhammad. The Qur'an's transmission and form, as well as its major themes, such as God, humanity, prophethood, and the hereafter will be explored. The course will then deal with the theological and mystical interpretations of the Qur'an and the life of Muhammad. The Qur'an's role in art, politics and personal piety of Muslims will also be examined. Finally, the course will discuss some of the recent theories about the origin of the Qur'an and the life of Muhammad, such as those by R. Bell, J. Burton, and

## J. Wansbrough

[NES 220 The Greek New Testament (also CLASS 202 and RELST 202) Spring. 3 credits. Prerequisite: at least one year of ancient Greek (Classics 101103) or permission of instructor. Not offered 1997-98. Staff.]
NES 223 Introduction to the Blble [also JWST 223 and RELST 223) ㄹ "
Spring. 3 credits. C. Baker.
This course is intended to introduce students to the literature of the Hebrew Bible, with particular attention paid to the material in Genesis through 1 Kings. Emphasis is placed on literary, historical, and theological matters. Special use is made of the numerous archaeological discoveries that have advanced our knowledge of ancient Israel. As such, the Bible is studied against the backdrop of ancient Near Eastern literature, history, religion, mythology, law and culture.

## [NES 227 Introduction to the Prophots (also JWST 227 and RELST 227) 훙

Fall. 3 credits. Enrollment limited to 140 students. Not offered 1997-98.
G. Rendsburg.]
[NES 228 Genesis (also Near Eastern Studles 628, Jewish Studies 228/628 and Rellgious Studies 228) (10 " Spring. 3 credits. Prerequisite: knowledge of Hebrew. Not offered 1997-98. G. Rendsburg.]

## NES 230 The Quest for the Historlcal

 Jesus (also RELST 231)Spring. 3 credits. C. Baker.
Who was Jesus? What did he really say and do? In this course we are concerned with the ways in which scholars approach these questions and the often startling answers they obtain. We examine the social, political, economic and religious environments in which Jesus operated to provide a context for critical readings of the Gospels of Mark, Matthew, Luke, John, and Thomas and other early Christian texts. We then reconstruct the essential features of the original Jesus movement, which we compare and contrast with Cynic philosophy, the Greco-Roman gender system, the belief and practices of the early Church, and the social patterns and religious philosophies of small-scale societies.
[NES 233 The Lyrics of Love and Death: Medleval Arablc and Hebrew Poetry and Narrative [in Transiation] (also Comparative Literature 333 and Jewlsh Studies 233) ©
Spring. 3 credits. Not offered 1997-98. R. Brann.]

NES 239 Cultural History of the Jews of Spain (also JWST 239, COMP LIT 239, RELST 239, SPAN LIT 239) © \#
Fall. 3 credits. R. Brann.
For description, see NES 239 under Near Eastem History.
NEs 339 Muslims, Chrlatlans, and Jews In Islamic Spain: Literature and Socloty (also JWST 339, COMP LIT 334, RELST 334, NES 639, SPAN LIT 339/699) 주 룹
Spring. 4 credits. Enrollment limited to 25 students. R. Brann.
For description, see NES 339 under Near
Eastern Studies Civilization.

## NES 356 Readings in Ottoman

 Turklsh 웅Spring. 4 credits. Prerequisite: knowledge of modern Turkish. Enrollment limited to 15 students. L. Peirce.
After a brief introduction to the script and some grammatical fearures of Ottoman Turkish, we will ready a variety of printed prose texts drawn from essays, histories, and biographies. In the second half of the course, we will examine some manuscript texts and documents.

NES 400 Seminar in Advanced Hebrew (also JWST 400) ©
Fall and spring. 4 credits. Prerequisite: NES 302/JWST 302 or permission of instructor. Enrollment limited to 15 students. N. Scharf.
Continuation of work done in NES/JWST 302, with less emphasis on the study of grammar. We will read and discuss texts of cultural relevance, using articles published in Israeli newspapers and works by authors in each of the three principal genres: poetry, theater and
novels. The course may be repeated for credit with permission of instructor.
[NES 402 Seminar in Hebrew Llterature and Poetics (also Jewish Studies 402) \%
Spring. 4 credits. Prerequisites: NES 301 or equivalent and permission of instructor. Not offered 1997-98. R. Brann.]
[NES 420 Readings in Biblical Hebrew Prose (also JWST 420 and RELST 420) ©
Fall. 4 credits. Not offered 1997-98. G. Rendsburg.]
[NES 421 Readings in Blblical Hebrew Pootry (also JWST 421 and RELST 423) 훙
Spring. 4 credits. Prerequisite for NES 421: one year of Biblical or Modern Hebrew. Course may be repeated for credit. Not offered 1997-98.
G. Rendsburg.]
[NES 428 Medieval Hebrew Blblical Exegesis (also JWST 428, NES 624, and RELST 428) *
Fall. 4 credits. Prerequisite: permission of instructor. Enrollment limited to 20 students. Not offered 1997-98. R. Brann]

NES 429 Readings in the Now Testament (also COM L 429, ENG 429, and RELST 429) "
Fall. 4 credits. Enrollment limited to 40 students. J. Bishop.
Close readings of representative texts from the New Testament in modern scholarly editions, with the help of appropriate commentary, introductory and specialized. The focus for 1994 will be on Acts and letters from Paul. All readings will be in English, but repeated references to the Greek original will be made Graduate students and undergraduates from other colleges who are interested in the material should not feel inhibited from enrolling. The approach will be primarily exegetical; that is, we will try to find out what the texts say and what they mean by what they say. Thus we can hope to stay open to scholarly and religious issues alike.

## NES 620 Readings in Medieval Hebrew

 Poetry and Prose (also JWST 620)Fall and spring. 4 credits each semester. Prerequisite: permission of instructor. Not offered 1997-98. R. Brann.]
[NES 624 Medieval Hebrew Biblical Exegesis (also JWST 428, and RELST 428)
Fall. 4 credits. Prerequisite: permission of instructor. Enrollment limited to 10 students. Not offered 1997-98. R. Brann.]
[NES 627 The Song of Songe (also Jewish Studies 627) 숭
Fall. 4 credits. Prerequisite: knowledge of Hebrew. Not offered 1997-98.
G. Rendsburg.]
[NES 628 Genesis (also NES 228 and Jewish Studies 228/628)
Fall. 4 credits. Not offered 1997-98. G. Rendsburg.]

NES 630 Readings In Judeo-Arabic: Medieval Judeo-Arabic and Hebrew Poetics
Fall and spring. 4 credits. Prerequisites: Arabic 212, Hebrew 202 or equivalents. Designed for graduate students but open to undergraduates with permission of instructor. May be repeated for credit; readings will vary from year to year. R. Brann

This course will study the most important texts of Hebrew and Judeo-Arabic poetics composed during the Middle Ages, from 900 until 1200 for the neo-classical poetics of the Iraqi and Andalusian traditions, and later medieval poetic schools centering on the norms of Renaissance rhetoric down to 1600 How each tradition understood the distinction between secular and devotional poetry, and separated "truthful" from "feigning" verse will be examined. The course will also consider the relationship between poetry and music as defined by different compositional schools and how the poetics of the Hebrew Bible was re-read by each literary center. Finally, the interplay between intrinsic poetics and extrinsic poetic influences in Iraq, Spain, Provence and Italy will be studied.

NES 639 Muslims, Christians and Jews In Islamic Spain: Literature and Society (also COM L. 334, SPANL 339/699, JWST 339, NES 339 and RELST 334)
Spring. 4 credits. Enrollment limited to 25 students. R. Brann.
For description, see NES 339 under Near Eastern Civilization

## [NES 656 Readings in Classical

 Arabic Texts ©Fall. 4 credits. Prerequisite: NES 311 or permission of instructor. D. Powers. Not offered 1997-98.]

NES 491-492 Independent Study, Undergraduate Level
Fall and/or spring. Variable credit. Prerequisite: permission of instructor.

NES 499 Independent Study, Honors Fall and spring. Variable credit. Prerequisite: permission of instructor. Staff.

NES 691-692 Independent Study; Graduate Level
Fall or spring. Variable credit. Prerequisite: permission of instructor.

## The Program of Jewish Studies

The Program of Jewish Studies encompasses a broad spectrum of disciplines that includes civilization, history, language, literature, philology, and religion. The program offers students the opportunity to take a wide variety of courses in Jewish Studies whose subjects are not represented in the Department of Near Eastern Studies. Students interested in planning a program in Jewish Studies should consult with the director, Professor David A. Owen, 360 Rockefeller Hall. For complete listings and descriptions, see Program of Jewish Studies under "Special Programs and Interdisciplinary Studies.

## [JWST 251 The Holocaust: The

Destruction of European Jewry
Fall. 3 credits. Enrollment limited to 100
students. Not offered 1997-98. Staff.]
JWST 252 Modern European Jewish History, 1798-1948 (also HIST 291)
Spring. 4 credits. V. Caron.

JWST 254 Anti-Semitism and the Crisis of Modernity: From the Enlightenment to the Holocaust (also HIST 235)
Spring. 4 credits. V. Caron
JWST 442 German Jewish Culture: From the Enlightenment to the Present (also GER STDS 442 and S HUM 444)
Spring. 3 credits. Enrollment limited to 20 students. D. Brenner

UWST 450 Undergraduate Seminar in Recent American Mistory (also History 440)
Fall. 4 credits. Permission of instructor required. Not offered 1997-98.
R. Polenberg.

JWST 451 Representing The Holocaust, Then and Now (also GER STDS 450 and S HUM 450)
Fall. 3 credits. Enrollment limited to 20 students. D. Brenner.

## JWST 452 France and Its Jews (also

 FR LIT 484/681)Spring. 4 credits. Prerequisite: one 300 level course in French literature, or permission of the instructor. N. Furman.
[JWST 478 Jewlsh-American Writing (also ENG 479 and AMER STS 479)
Fall. 4 credits. Permission of the instructor required. Enrollment limited to 15 students. Not offered 1997-98.
J. Porte.]

## JWST 491-492 Independent Study:

 UndergraduateFall or spring. Variable credit. Prerequisite: permission of instructor.

JWST 499 Independent Study: Honors Fall and spring. Variable credit. Prerequisite: permission of instructor

## Related Courses in Other Departments

Africana Studies
Archaeology
Classics
Comparative Literature
Economics
English
German Studies
Government
English
History
History of Art
Medieval Studies
Modern Lanaguages and Linguistics
Philosophy
Religious Studies
Romance Studies
Russian Literature
Society for the Humanities
Sociology
Women's Studies

## NEPALI

See Language Courses under Languages and Linguistics.

## PALI

See Language Courses under Languages and Linguistics.

## PHILOSOPHY

N. Sturgeon (acting chair), R.N. Boyd, G. Fine (on leave 1997-98), C.A. Ginet, H. Hodes, T. Irwin (on leave 1997-98), K. Jones (on leave Spring 1998), S. MacDonald, R.W. Miller,
S. Shoemaker (on leave spring 1998),
J. Stanley, Z. Szabō, J. Whiting. Emeritus:
N. Kretzmann

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 100 s or 200 s is suitable for beginning study in the field. Sections of Philosophy 100 are part of the freshman writing seminar program; they are taught by various members of the staff on a variety of philosophical topics, and because of their small size (seventeen students at most) they provide ample opportunity for discussion. Students who want a broad introduction to philosophy may take Philosophy 101, but many students with special interests may find that the best introduction to philosophy is a 200-level course in some particular area of philosophy; such courses have no prerequisites and are usually open to freshmen.

## 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 are required for the major. They must include at least one course in ancient philosophy (Philosophy 210 or 211, or a course with a large component on Plato or Aristotle), at least one course in classical modern metaphysics and epistemology (Philosophy 212 or a course on the empiricists, the rationalists, or Kant), and a minimum of three courses numbered above 300. Students admitted to the major after fall 1996 will be required to take a minimum of six philosophy courses numbered above 200 and may not count more than one section of Philosophy 100 toward the major. A course in formal logic (e.g., Philosophy 231), while not required, is especially recommended for majors or prospective majors. Courses numbered 191-199 do not count toward the major.

Philosophy majors must also complete at least 8 credits of course work in related subjects approved by their major advisers. 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 $\mathrm{B}+$ or better for all work in philosophy. In either or both terms of the senior year a candidate for honors enrolls in Philosophy 490
and undertakes research leading to the writing of an honors essay by the end of the final term. Honors students normally need to take Philosophy 490 both terms of their senior year in order to write a satisfactory bonors essay Philosophy 490 does not count toward the eight philosophy courses required for the major. Prospective candidates should apply at the philosophy department office, 218 Goldwin Smith Hall

## Fees

In some courses there may be a small fee for photocopying materials to be handed out to students.

## Introductory Courses

These courses have no prerequisites; all are open to freshmen
Note: Class meeting times are accurate at the time of publication. If changes are necessary, the department will provide new information as soon as possible.

PHIL 100 Freshman Writlng Seminars in Philosophy
Fall and spring. 3 credits. Consult the brochure listing freshman writing seminars prepared by the John S. Knight Writing Program.

PHIL 101 Introduction to Philosophy
Fall. 3 credits. M W 2:30-3:20.
J. Stanley. Spring. 3 credits. T R 10:1011:25. Z. Szabo
As the title suggests, this is an introductory course. It has an opening unit, a closing unit, and four units in-between. The opening and closing are units devoted to questions concerning the nature and purpose of philosophy, while in each of the four main units a philosophical problem is discussed. The problems belong to four principal areas of philosophy: epistemology, philosophy of mind, ethics, and metaphysics. (If you don't know what some of these terms mean, you can be sure that you will learn something here.) The topics are loosely connected, but each is understandable on its own.

Our first topic is illusions and dreams. We will discuss what, if anything, distinguishes them from experiences we regard as reliable guides to how things are around us. The second topic is minds and machines. We will look at the suggestion that the human brain is a computer and that the mind is its program. Next, we will discuss the relationship between self-interest and morality. We will focus on the strengths and weaknesses of rational egoism. Our final topic is determinism and free will. We will see whether there is a genuine conflict between the theses that all events are causally determined and that some of our actions are free

PHIL 131 Logic, Evidence, and Argument Fall. 3 credits. M W F 10:10-11:00. S. MacDonald.

Logic, Evidence, and Argument is designed as an introduction to the concepts and skills central to critical reading and thinking. The course aims at providing a general understanding of the principles of reasoning and developing skills for identifying, analyzing, and evaluating the sorts of reasoning we encounter everyday in ordinary discourse. Students will be expected to attain facility with two different formal systems for representing and evaluating arguments-propositional logic
and traditional syllogistic logic-and to acquire the ability to apply these systems in the analysis and evaluation of various kinds of ordinary reasoning.

## PHIL 145 Contemporary Moral Issues

Fall. 3 credits. M W F 2:30-3:20.
R. Miller.

An examination of central moral issues in American politics today. At what point, if any, is abortion wrong, and in what circumstances should it be legal? What should be done to reduce economic, racial and sexual inequalities? For example, is there a moral justification for affirmative action programs? For welfare programs? What are the limits of the right to free speech? Do they protect pornography? Racist speech? When is it right to go to war? What obligations do U.S. citizens have to help people in poor countries? What restrictions on immigration are justifiable? We will analyze the answers and arguments of moral philosophers, political leaders and judges, through both lectures and discussion sections.

PHIL 191 Introduction to Cognitive Science (see Cognitive Studies 101)
Fall. 3 credits. T R 11:40-12:55.
M. Spivey-Knowlton.

For description, see Cognitive Studies 101
Does not count toward the Philosophy major or toward the Humanities Distribution Requirement in Philosophy
[PHIL 201 Phllosophical Problems 4 credits. Not offered 1997-98.]
[PNIL 210 Ancient Thought *
4 credits. Not offered 1997-98.
PHIL 211 Anclent Philosophy (also Classics 231) \#
Fall. 4 credits. T R 11:40-12:55. C. Brittain.

This course explores the origin and development of Western philosophy in Ancient Greece and Rome. We will explore some of the central ideas of the Pre-Socratics, Socrates, Plato, Aristotle, and the Hellenistic philosophers (Epicureans, Stoics, and Sceptics) Questions to be considered include: What are the nature and limits of knowledge? How reliable is perception? What are the basic entities in the universe: atoms, Platonic Forms or Aristotelian substances? Is moral knowledge possible? What is the nature of happiness and what sort of life will make people happy? Do human beings have free will? This course has no prerequisites

## PHIL 212 Modern Philosophy

Spring. 4 credits. TR 1:25-2:40. Z. Szabo.

This course is an introduction to early modern philosophy (roughly, the period between 1640 and 1790). We will read and interpret five complete works which played a central role in the development of philosophical thought during this time. These works are: Descartes's Meditations, Berkeley's Principles, Leibniz's Monadology, Hume's Enquiry, and Kant's Prolegomena. We will focus on questions concerning the nature, justification, and limits of human knowledge.

The aim of the course is twofold. First, we will analyze and evaluate the arguments these philosophers offer in support of their respective positions. This will make it possible to understand what philosophical problems are, and how philosophical debates might illuminate them. Second, in exploring
the arguments we will also learn about interpretation, about ways of approaching texts that were written centuries ago. This will help to see what changes and what remains the same in our understanding of philosophical problems.
[PHIL 213 Existentialism and Literature (also Comparative Literature 213) 4 credits. Not offered 1997-98.]
[PHIL 214 Philosophical Issues In Christian Thought "
4 credits. Not offered 1997-98.]
PHIL 231 Introduction to Formal Logic Spring. 4 credits. M W F 10:10-11:00. C. Ginet.

The logic of truth-functional connectives and the universal and existential quantifiers: analysis of English statements in terms of a formal language; evaluation of deductive reasoning in terms of such an analysis. And more. The Macintosh programs, Tarski's World and Hyperproof, will be used.

PHIL 241 Ethics (by petition for breadith requirement)
Spring. 4 credits. T R 2:55-4:10. R. Miller. Introduction to the philosophical study of major moral questions-for example: Are all values relative, or are there some objective moral values? Have we ever any good reason to care about the interests of other people? Do people have rights with which governments should not interfere, even to advance the general welfare? What inequalities are unjust? The course discusses general issues in moral philosophy, together with some of their implications for particular current moral controversies, such as the debates over abortion, reverse discrimination, and policies reducing economic inequality. Readings from major philosophers of the past, as well as contemporary sources.

## [PHIL 242 Soclal and Political Theory (by petition for breadth requirement) (also Government 260)

4 credits. Not offered 1997-98.]

## [PHIL 243 Aesthetlcs

4 credits. Not offered 1997-98.)
[PHIL 244 Philosophy and Literature 4 credits. Not offered 1997-98.]

PHIL 245 Ethics and Health Care
Fall. 4 credits. Normally offered also in the six-week summer session. M W F 11:15-12:05. K. Jones.
This course is an introduction to the ethical issues surrounding health care. Topic include:
(1) the professional-patient relationship,
(2) justice and access to health care, (3) autonomy, quality of life, personhood and their relation to issues such as abortion and euthanasia.

## PHIL 246 Ethics and the World

 EnvironmentSpring. 4 credits. Open to all undergraduates. Permission of instructor required for graduate students. M W F 11:15-12:05. N. Sturgeon.

Critical philosophical analysis of the conceptual frameworks in which policies affecting the environment are formulated and judged Topics include the nature of ethics and the possibility of knowledge in ethics; the nature and extent of individual and social obligations to distant people, future generations, nonhuman animals and non-sentient things (e.g., the ecosystem); the origin of environmental
problems and the range of options for their solution.

## [PHIL 247 Ethics and Public Life

Spring. 4 credits. Not offered 1997-98.]
PHIL 249 Feminism and Philosophy
Fall. 4 credits. M W F 10:10-11:00. J. Whiting.

An historical introduction, using literary as well as philosophical texts, to views about the nature of women and their position in society-from the ancient debate (between Plato and Aristotle) about whether men and women are by nature suited to different activities, to contemporary debates between "sameness" and "difference" feminists. Texts will include Aeschylus, Plato, Aristotle, Rousseau, Wollstonecraft, Engels, and various twentieth-century authors (such as Virginia Woolf, Carol Gilligan, Catherine MacKinnon, and Sarah Hoagland).
PHIL 261 Knowledge and Reality Spring. 4 credits. M W F 2:30-3:20. H. Hodes.

An introduction to philosophical issues concerning knowledge, belief, perception, truth, probability, meaning, causation and necessity

## PHIL 262 Philosophy of Mind

Fall. 4 credits. M W F 10:10-11:00.
S. Shoemaker

A study of philosophical issues concerning the place of mind in the physical world, including the mind-body problem (are thoughts and experiences physical entities?), the problem of knowledge of other minds (how can we know that others have minds and are not mere automata?), the possibility of artificial intelligence (can computers think?), and the problem of personal identity (what makes you the same person you were ten years ago?). Readings from classic and contemporary sources.

## PHIL 263 Religlon and Reason

Spring. 4 credits. T R 10:10-11:25
S. MacDonald

What must (or could) God be like, and what reasons do we have for thinking that a being of that sort actually exists? What difference would (or could) the existence of God make to our lives? Religion and Reason examines the idea, common to several major world religions, that God must be an absolutely perfect being. What attributes must a perfect being have? Must it have a mind, be a person, care for human beings? Is the concept of a perfect being coherent? Is the existence of a perfect being compatible with the presence of evil in the world and the existence of human freedom? Does human morality depend in any important way on the nature or will of a perfect being? Is a perfect being among the things that actually inhabit our universe? The course approaches these questions with the tools and methods of philosophical reason and through readings drawn from both classic texts and contemporary philosophical discussion.

## PHIL 270 Truth and Interpretation (also Linguistlcs 270/Cognitive Studies 270)

Spring. 4 credits. T R 11:40-12:55.
J. Stanley and M. Diesing.

In this course, with the use of classic papers in the philosophy of language and linguistics, we will motivate and introduce the basic concepts behind the project of giving a rigorous theory of meaning for natural
language. Our goal will be to understand how philosophers and linguists have used concepts such as reference and truth to explain linguistic content. We will also discuss how issues of learnability and language processing raise constraints for this project.

## PHIL 286 Science and Human Nature

 (also Science and Technology Studies 286)Spring. 4 credits. M W F 10:10-11:00. R. Boyd.

An examination of attempts in the biological and social sciences to offer scientific theories of human nature and human potential and to apply such theories to explain important social and psychological phenomena.

## PHIL 294 Global Thinking (also

 Government 294)Fall. 4 credits. No prerequisites; intended for freshmen and sophomores. T R 1:25$2: 40$, plus disc. Satisfies geographical distribution requirement. H. Shue. The analysis taught in this course is global in two different respects: international subjects and interdisciplinary methods. We look in detail at questions raised by one of the most important and most difficult issues facing international society: when, if ever, should other nations unilaterally or multilaterally intervene militarily into ethnic conflicts like those in Bosnia and Rwanda in this decade? Both of these recent cases, one in Europe and one in Africa, raise fundamental questions about the kind of world we are constructing for the 21st century

To what extent is the system of nation-states we now have either desirable or unavoidable? Does every ethnic group have a right to a selfdetermining and sovereign state? When is the use of military force morally justified? Should trials for war crimes or crimes against humanity be routinely held after military conflicts? These and other ethical questions need to be answered in light of the best available knowledge about the political dynamics of foreign intervention and the changing international legal regime, bringing together political science, law, and ethics. The course is team-taught by leading faculty researchers from the three fields involved.

## Intermediate or Advanced Courses

Some of these courses have prerequisites
PHIL 309 The Philosophy of Plato
Fall. 4 credits. T R 10:10-11:25.
C. Shields.

This course offers an in-depth introduction to Plato's philosophy. We will read full dialogues from each of Plato's major periods, with a special emphasis on his most philosophically mature writings in metaphysics and epistemology. Part One of the course will be given over to Plato's earliest works, which mostly try to recount the ethical investigations of Socrates, Plato's teacher. Part Two takes up Plato's own early metaphysical and epistemological developments, including most importantly his introduction of the theory of Forms. Part Three charts Plato's final thoughts on the theory of Forms. In his most challenging works, he raises some formidable objections to that theory. We will consider whether these objections are compelling. Throughout the semester our aim will be to analyze and assess Plato's arguments in an effort to determine whether we should accept them ourselves.

PHIL 310 Aristotle
Spring. 4 credits. T R 10:10-11:25. J. Whiting.

A general introduction to Aristotle's worksfrom the logical and biological through the ethical and political-organized around the differences, and relations, between his theoretical or scientific works and his practical or ethical works. Topics will include: the extent to which his ethical and political views are based on his metaphysical and psychological views; and the contrast between the universality and exactness of mathematics and other sciences and the alleged particularity and inexactness of ethics.
[PHIL 311 Modern Rationalism
4 credits. Not offered 1997-98.]
PHIL 312 Modern Emplricism
Fall. 4 credits. M W F 1:25-2:15. S. Shoemaker.

An examination of the epistemological and metaphysical views of Bishop Berkeley and David Hume. Readings will include Berkeley's Principles of Human Knowledge and Three Dialogues Between Hylas and Pbilonous, and Hume's Treatise of Human Nature, Bk. I, and Enquiry Concerning Human Understanding. Topics will include the nature of perceptual knowledge, the origin of ideas and the nature of "abstract ideas," the nature of sensible things, the nature of empirical reasoning, the nature of causation, and the nature of the self.

## [PHIL 314 Ancient Phllosophy: The World of Theory and the World of Ordinary Life " <br> 4 credits. Not offered 1997-98.\}

[PHIL 315 Medieval Philosophy * 4 credits. Not offered 1997-98.]
[PHIL 316 Kant 4 credits. Not offered 1997-98.]
[PHIL 317 Hegel 4 credits. Not offered 1997-98.]

PHIL 318 Twentleth-Century Philosophy Spring. Recommended background: Philosophy 231. T R 2:55-4:10. J. Stanley, A survey of philosophical writings from the late 19 th to early 20 th century including G. Frege, B. Russell, L. Wittgenstein, on language, foundations of mathematics, topics in metaphysics (and perhaps epistemology).
[PHIL 319 Philosophy of Marx " 4 credits. Not offered 1997-98.]

PHIL 331 Formal Logic (also Mathematics 281) Fall. 4 credits. M W F 2:30-3:20. H. Hodes.

Review of derivations and truth-in-a-model; function- constants and identity; truth in non-fully-distinguished models; very basic settheory; sets as the only mathematical objects; mathematical induction; soundness; completeness.
PHIL 332 Philosophy of Language Fall. 4 credits. T R 11:40-12:55. Z. Szabo. This course is an introduction to contemporary philosophy of language. Its main focus is the notion of singular reference. The course has four parts. In the first, we will read texts by Frege, Russell, Strawson and Quine which frame the basic problems. In the remaining three parts we will examine questions concerning the three main types of singular terms: descriptions, names and
demonstratives. Reading will include papers by Saul Kripke, Keith Donnellan, John Searle, Gareth Evans, David Kaplan, and Irene Heim.
The aim of this course is threefold. First, we will read classic papers which will help you to orient yourself in the literature. Second, we will try to connect some of the linguistic data with theories that are largely motivated by philosophical considerations. Finally, we will discuss the larger philosophical significance (within metaphysics, epistemology and the philosophy of mind) of problems of singular reference
PHIL 341 Ethical Theory 4 credits. Not offered 1997-98.]
[PHIL 342 Law, Society, and Morallity (also Law 666)
4 credits. Not offered 1997-98.]
[PHIL 343 Resistance and Responsibility (also Law 676)
4 credits. Not offered 1997-98.]
[PHIL 344 Mistory of Ethics: Ancient and Medleval \#
4 credits. Not offered 1997-98.]
[PHIL 345 History of Ethics: Modern \# 4 credits. Not offered 1997-98.]

PHIL 346 Modern Political Phllosophy (also Government 462)
Fall. 4 credits. TR 2:55-4:10. R. Miller. A study of the leading contemporary theories of justice, including the work of Rawls,
Nozick, Gauthier and Scanlon. We will discuss rival views of the moral significance of economic inequality, the kinds of freedom that governments ought to protect, the kinds of values and convictions that are a proper basis for laws (as opposed to being private matters), the tension between unequal political influence and democratic rights, and the roles of community, virtue and grouployalty in political justification. We will largely be concerned with the conceptions of freedom, equality, obligation and community underlying competing theories. We will also consider implications for specific political controversies, e.g., over abortion, welfare programs and pornography
PHIL 361 Metaphysics and Epistemology Spring. 4 credits. T R 11:40-12:55. C. Ginet.

Topics in epistemology. Attention to both a priori and a posteriori knowledge.
[PHIL 362 Philosophy of Mind
4 credits. Not offered 1997-98.]
[PHIL 363 Topics in the Philosophy of Relligion
4 credits. Not offered 1997-98.]
[PHIL 368 Global Cilmate and Global Justlce (also Government 368)
4 credits. Not offered 1997-98.]
[PHIL 369 Limiting War: The Morality of Modern State Violence (also Government 469)
4 credits. Not offered 1997-98.]
PHIL 381 Philosophy of Science: Knowledge and Objectivity (also Science and Technology Studies 381)
Fall. 4 credits. W 7:30-10:00 p.m. R. Boyd.

An examination of central epistemological and metaphysical issues raised by scientific theorizing: the nature of evidence; scientific
objectivity; the nature of theorjes, models, and paradigms; and the character of scientific revolutions.
[PHIL 382 Phllosophy and Psychology
4 credits. Not offered 1997-98.]
Phllosophy 383 Cholce, Chance and Reason
Fall. 4 credits. M W F 1:25-2:15 H. Hodes.

Orderings and choice functions; plausible constraints on rational choice; decision under strict uncertainty; value functions; multiattribute value theory; probability; utility and Bayesian analysis; decision trees; social choice. We'll attend to the mathematical ideas and the philsophical issues they raise. Students should have some familiarity with mathematical proofs; recommended background: one year of calculus.
[PHIL 384 Phllosophy of Physics 4 credits. Not offered 1997-98.]
[PHIL 387 Philosophy of Mathematics 4 credits. Not offered 1997-98.]
[PHIL 389 Philosophy of Science: Evidence and Explanatlon
4 credits. Not offered 1997-98.]

## PHIL 390 Informal Study

Fall or spring. Credit to be arranged. To be taken only in exceptional circumstances. Must be arranged by the student with his or her adviser 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 395 Majors Seminar

4 credits. Not offered 1997-98.]
[PHIL 409 German Philosophical Toxts Not offered 1997-98.]

PHIL 410 Latin Philosophical Texts \# Fall and spring, Variable credit. Prerequisites: knowledge of Latin and permission of instructor. Hours to be arranged. S. MacDonald.

Reading of philosophical texts in the original Latin.

## PHIL 411 Greek Philosophical Texts

 (also Classics 311) "Fall and spring. Variable credit. Prerequisites: knowledge of Greek and permission of instructor. Hours to be arranged. Fall, C. Shields; spring, C. Brittain.

Reading of philosophical texts in the original Greek.
[PHIL 412 Medieval Philosophy \# Not offered 1997-98.]

## Philosophy 413 Aristotle's Theory of Substance: Beings and Llving Beings

Fall. 4 credits. T R 1:25-2:40. C. Shields.

Aristotle offers an account of substance in which living beings figure prominently. Our aim in this class is to determine and assess Aristotle's mature theory of substance, first by focusing on the criteria he develops for substantiality and second by determining why living beings satisfy them so well. This will require understanding how Aristotle conceives of the nature of life and living beings; it will
accordingly require an investigation into Aristotle's conception of soul as form. Our main texts will be the Metaphysics and De Anima. Fairly clearly, the De Anima draws upon the technical machinery of the Metaphysics. It is less clear, however, whether the theory of soul adumbrated in the De Anima shapes the account of substance advanced in the Metaphysics.

## [PHIL 414 German Philosophy

after Kant \#
Not offered 1997-98.]
[PHIL 415 Speclal Topics in the Mistory of Philosophy \#
Fall. Not offered 1997-98.]
[PHIL 416 Modern Philosophy Not offered 1997-98.]
[PHIL 431 Deductiva Logic (also Mathematics 481)
4 credits. Not offered 1997-98.]
PHIL 432 Topics in Logic (also Math 482) Spring. 4 credits. Prerequisites: One logic course either from the Mathematics Department or from the Philosophy Department at least at the 300 -level, or permission of the instructor. T R 1:252:40. H. Hodes.
Topic for Spring 1998: Logic from an abstract viewpoint.

## [PHIL 433 Philosophy of Logle

 4 credits. Not offered 1997-98.]PHIL 436 Intensional Logic (also Math 486)
Fall. 4 credits. Prerequisite: Philosophy 231 or the equivalent and permission of the instructor. T R 4:30-5:45. J. Stanley. The central focus of this class will be the model theory of propositional modal logics (and, in particular, completeness proofs for various different modal systems). We will also cover basic issues in the model theory of quantified modal logic. Time permitting, we may also discuss the basic concepts of free logic and tense logic.
【PHIL 437 Topics in the Philosophy of Language
4 credits. Not offered 1997-98.]
[PHIL 441 Contemporary Ethical Theory 4 credits. Not offered 1997-98.]
[PHIL 442 Ethics and Value Theory (also Society for Humanities 404)
Fall. 4 credits. Not offered 1997-98.]
[PHIL 444 Contemporary Legal Theory (also Law 710)
4 credits. Not offered 1997-98.]
PHIL 446 Toples in Social and Political Philosophy (also Government 474)
Spring. 4 credits. M W 2:55-4:10. R. Miller.

Topic for 1998: Community, Nation and Morality. Although the moral point of view is often taken to transcend ties to particular groups, actual political choices often express the choosers' ties to a nationality, state, community, religion or racial or ethnic group. To what extent are such choices morally legitimate? Do such choices, expressing particular loyalties, conflict with universalist moral principles, e.g., principles requiring equal respect for all? Our discussions will include such topics as: the role of community in liberalism and in critiques of liberal individualism; nationality and political
community and their roles in individual identity, moral obligation and justice; multiculturalism, separatism, and group rights, including issues of race, gender and sexuality; the moral status of patriotism; justice and international inequality; the impact on individuals and minority groups of collective goals and shared convictions of the majority. Readings will include work by Taylor, Kymlicka, Waldron, David Miller, MacIntyre, Nagel, Guinier, Walzer and Nussbaum. The course will have a seminar format. It is intended for both advanced undergraduates and graduate students.

## Philosophy 461 Feminist Epistemology

 (also Women's Studles 461)Fall. 4 credits. T R 10:10-11:25.
K. Jones.

Topic for 1997: Recent feminist work in epistemology and metaphysics. Many feminists recognize that the concepts of reason and objectivity have served the ideological function of maintaining oppressive social structures by, among other things, delegitimizing knowledge claims on the part of the oppressed. At the same time, radical critiques of reason and objectivity threaten to be self-undermining, casting into doubt the status of the critique itself. The course begins with this problem. We also examine feminist work on the social construction of gender and the role that "experience" has played in discussions of whether women are a social group.
PHIL 481 Problems in the Philosophy of Science
Spring. 4 credits. W 7:30-10:00. R. Boyd. Topic to be announced.
PHIL 490 Special Studies In Philosophy Fall and spring. 4 credits. Open only to honors students in their senior year. See Honors description at front of Philosophy section.
PHIL 611 Ancient Philosophy
4 credits. Not offered 1997-98.]
PHIL 612 Medieval Philosophy
Spring. 4 credits. T 4:30-6:30.
S. MacDonald.

Topic to be announced.
[PHIL 613 Modern Phillosophers 4 credits. Not offered 1997-98.]
[PHIL 619 History of Philosophy \# 4 credits. Not offered 1997-98.]
[PHIL 633 Philosophy of Language 4 credits. Not offered 1997-98.1

PHIL 641 Ethics and Value Theory
Fall. 4 credits. M 4:30-6:30.
N. Sturgeon. Spring. 4 credits.

M 4:30-6:30. J. Whiting.
Topic for fall: Moral Relativism, Moral Realism and Moral Nihilism. Topic for spring: Moral
Principles and Moral Perception.
[PHIL 661 Theory of Knowledge
4 credits. Not offered 1997-98.]
[PHIL 662 Philosophy of Mind 4 credits. Not offered 1997-98.]
[PHIL 663 Philosophy of Religion 4 credits. Not offered 1997-98.]
[PHIL 664 Metaphysics
4 credits. Not offered 1997-98.]
[PHIL 665 Metaphysics
4 credits. Not offered 1997-98.]
[PHIL 681 Philosophy of Science 4 credits. Not offered 1997-98.]
[PHIL 682 Philosophy of Social Science 4 credits. Not offered 1997-98.]

## PHIL 700 Informal Study

Fall or spring. Credit to be arranged. To be taken by graduate students only in exceptional circumstances and by arrangement made by the student with his or her Special Committee and the faculty member who has agreed to direct the study

PHIL 773 Proseminar in Cognitlve Studies (also Cognitive Studies 773, Linguistics 773, and Computer Science 773)
Fall. 2 credits. Fall: R grade.
For description, see COGST 773.
PHIL 774 Proseminar in Cognitive Studies (also Língulstics 774)
For description, see COGST 774.
Related Courses in other departments
German Studies 378. German Aesthetic
Theory from Kant to Hegel. P. Gilgen.

## PHYSICS

D. B. Fitchen, chair (109 Clark Hall, 255-6016); R. S. Galik, director of undergraduate studies ( 101 Clark Hall, 255-8158); J. P. Alexander, V. Ambegaokar, P. C. Argyres, N. W. Ashcroft, K. Berkelman, E. Bodenschatz, D. G. Cassel, B. Cooper, P. Drell, G. F. Dugan, V. Elser, E. E. Flanagan, C. P. Franck,
L. K. Gibbons, B. Gittelman, K. Gottfried,
S. M. Gruner, L. N. Hand, D. L. Hartill,
C. L. Henley, W. Ho, M. P. Kalos, A. LeClair, D. M. Lee, G. P. Lepage, R. M. Littauer, N. D. Mermin, N. Mistry, H. Padamsee, J. M. Parpia, J. R. Patterson, R. O. Pohl, D. C. Ralph, J. D. Reppy, R. C. Richardson, J. T. Rogers, D. L. Rubin, J. P. Sethna, A. J. Sievers, E. Siggia, P. C. Stein, R. M. Talman, M. P. Teter, S. A. Teukolsky, R. Thorne, H. Tye, T-M. Yan

The Department of Physics offers a full range of university-level work in physics, from general education courses for nonscientists to doctoral-level independent research. Major research facilities are operated by two component organizations, the Laboratory of Atomic and Solid State Physics (LASSP) and the Laboratory of Nuclear Studies (LNS). LASSP carries out extensive research efforts in condensed-matter physics and in lowtemperature physics. LNS operates a major high-energy particle physics research facility at Wilson Laboratory, the Cornell electronpositron storage ring (CESR). Theoretical work is carried out in many fields of physics, including astrophysics. There is a full schedule of weekly research-oriented seminars and colloquia. Junior and senior students will find many opportunities for research participation and summer employment.
Introductory physics sequences are: 101-102, 207-208, and 112-213-214, or its honors version 116-217-218. In addition, there is a group of general-education courses, Physics 200 through 206, 209, 210. Physics 101-102, a self-paced autotutorial course, is designed for students who do not intend to take further physics courses and who do not have preparation in calculus. Physics 112 and 207 both require calculus (Mathematics 191 or
111), and additional mathematics is required for subsequent courses in the sequence. Physics 101-102 or 207-208 may be taken as terminal physics courses. The three-term sequence 112-213-214 or its honors version, $116-217-218$, is recommended for engineers and physics majors. Physics 214 and 218 are placing an increasing emphasis on use of the computer for homework, laboratory exercises, and projects; some knowledge about computing, perhaps at the level of Computer Science 99 or 101, is desirable.

Courses beyond the introductory level that might be of interest to nonmajors include.
Physics 316, (Modern Physics I); Physics 330, (Modern Experimental Optics); and Physics 360, (Electronic Circuits).
Advanced placement and credit are offered as outlined in "Advanced Placement of Freshmen," or students may consult Professor Galik, the director of undergraduate studies as should students requesting transfer credit for physics courses taken at another college.

## The Major

The major program is constructed to accommodate students who wish to prepare for professional or graduate work in physics as well as those who wish to complete their major program in the field of physics but have other post-graduation goals.
Students who wish to major in physics are advised to start the physics sequence in the first term of their freshman year. (Note that students who have had contact with introductory calculus may take Physics 112 with coregistration in Mathematics 191.) The major program can still be completed with a secondterm start, but flexibility in future course scheduling is reduced.
Prospective majors are urged to make an early appointment at the physics office for advice in program planning. 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 Blevel or higher. The department office will give advice in the matter of selecting a major faculty adviser. Details of the major course program are worked out in consultation between the student and major adviser.

## Physics Core

Common to all major programs is a requirement to complete a core of physics courses. In addition to the three-term introductory sequence (Physics 112-213-214 or Physics 116-217-218), the core includes five upperlevel courses-(a) the two-course sequence in modern physics (Physics 316-317), (b) at least three semester hours of laboratory work selected from Physics $310,330,360,410$, Astronomy 410, (c) an intermediate course in classical mechanics, and (d) an intermediate course in electromagnetism.
Accompanying these physics courses should be work in mathematics through at least Mathematics 294 or 222. Students following the professional/graduate school channel are expected to complete at least one additional year of applicable mathematics (Applied and Engineering Physics 321-322 or Mathematics $321 / 420-422$ ).
In addition to the core, each physics major must complete 15 semester hours of credit in an area of concentration which has been agreed upon by the student and major faculty adviser.

## Concentration within Physics

A student who wishes to pursue professional or graduate work in physics or a closely related field should follow a concentration within the field of physics. For those students with a strong secondary school preparation, the sequence Physics $116-217-218$ is encouraged. Core courses in mechanics and electromagnetism will normally be Physics 318 and Physics 327 , respectively. The minimum 15 hours beyond the core must be composed

Typical Physics Course Sequences (other sequences are also possible)

| Semester | No AP math <br> or physics | 1 year AP <br> calculus and good <br> HS physics | Outside <br> concentrators | Outside <br> concentrators <br> (alternate) |
| :--- | :---: | :---: | :---: | :---: |
| 1st - Fall | 112 | 116 | 112 |  |
| 2nd - Spring | 213 | 217 | 213 | 112 |
| 3rd - Fall | 214 | 218 | 214 | 213 |
| 4th - Spring | $316,3 \times 0$ | $316,3 \times 0$ | $3 \times 0$ | 214 |
| 5th - Fall | $317,327,3 \times 0$ | $317,327,3 \times 0$ | 316 | $3 \times 0,316$ |
| 6th - Spring | $314 / 318,443$ | 318,443 | 314 | $314,3 \times 0$ |
| 7th - Fall | 341,410 | 341,410 | 317,323 | 317,323 |
| 8th - Spring | Elective(s) | Elective(s) |  |  |

- For majors with concentrations outside physics, there will be wide variation in individual programs, arranged to best match the field of concentration.
-Crossovers between the two sequences 112-113-214 and 116-217-218 are possible, although the combination 112-213-218, is difficult. Physics 207 may be substituted for Physics 112 . Students taking 217 after 112 must coregister for 216.
- Exceptionally well-prepared students may be able to begin work at Cornell with Physics 217. Such students should come to the department office for advice in planning a course program.
- Physics electives include $360,444,454,455,480,525,553,561,572$, the senior seminars 481-483, Astronomy 332 or 431-432, and A\&EP 434, 436.
- One semester of intermediate laboratory, listed here as $3 \times 0$, is required
- Well-prepared sophomores wishing to take Physics 318 should consult the instructor before registering.
of physics courses with numbers greater than 300 and must include the senior laboratory course Physics 410. This means a physics concentration needs a minimum of 7 credit hours of laboratory work to complete the requirements. The accompanying table shows several typical course sequences by means of which the major requirements may be completed. The primary distinction among students who may follow the different sequences is the amount and level of precollege work in calculus and in physics. Changes in these typical patterns will be common, as agreed upon between student and major faculty adviser.


## Concentration outside Physics

The concentration will reflect the student's interest in some area related to physics. The array of courses that comprise the concentration must have internal coherence. The array will normally be worked out in conference with the major faculty adviser and must be approved by the adviser. Of the required 15 hours credit beyond the core, at least 8 credits must be in courses numbered above 300 . Students have chosen to concentrate in such topics as chemical physics, astrophysics, natural sciences, history and philosophy of science, computer science, meteorology, or econometrics. A combined biology-chemistry concentration is appropriate for pre-medical students or those who wish to prepare for work in biophysics. Students interested in a career in the teaching of science should consider the Teacher Education in Science and Mathematics (TESM) program, which is administered by the Department of Education and is described in detail in the College of Agriculture and Life Sciences section of this catalog. A concentration in "science education" would then typically include Education 402 and 403 , both part of TESM, and two or more courses designed to broaden the student's background in general science and mathematics.

For students with concentrations outside physics, the core requirements in mechanics and electromagnetism can be appropriately met with Physics 314 and Physics 323, respectively.

Students with an astronomy concentration who might continue in that field in graduate school should use Astronomy 410, 431, 432 as part of the concentration; they are encouraged to use Physics 318 and 327 to satisfy the core requirements in mechanics and electromagnetism.

## Foreign Language Requirement

Students interested in eventual graduate work in physics are advised to meet this College of Arts and Sciences requirement with work in French, German, or Russian.

## Honors

A student may be granted honors in physics upon the recommendation of the Physics Advisers Committee of the physics faculty There is no particular course structure or thesis requirement for honors.

## Double Majors

Double majors including physics are possible and not at all uncommon. It should be noted, however, that if a student wishes to complete a major in physics as well as a major in one or more other subjects, any course used to satisfy
a requirement of the second major may not be used also in satisfaction of any physics major requirement.

## 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 of the courses in each group.
Physics 101, 112, 116, 207
Physics 102, 208, 213, 217
Physics 214, 218

## Course Prerequisites

Prerequisites are specified in physics course descriptions to illustrate the materials that students should have mastered. Students who wish to plan programs different from those suggested by the prerequisite ordering are urged to discuss their preparation and background with a physics adviser or with the instructor in the course. In many cases an appropriate individual program can be worked out without exact adherence to the stated prerequisites

## Courses

Listed days and times are not definite but are unlikely to change. Days and times will not be listed for 600 -level courses.

## PHYS 101-102 General Physics

101, fall; 102, spring; 101, 102, summer 4 -week or 8 -week session. 4 credits each term. General introductory physics for non-physics for non-physics majors. Prerequisites: Three years of high school mathematics, including some trigonometry. A student without high school physics should allow extra time for Physics 101. Prerequisite for Physics 102: Physics 101 or 112 or 207. Includes less mathematical analysis than Physics 207-208 but more than Physics 200-206, 209, 210. Enrollment may be limited. Fall introductory lec. R Aug. 28 or M Sept. 1, 7:30 p.m. Spring introductory lec. M Jan. 19, 7:30 p.m. 101, D. Fitchen; 102, D. Cassel.

Physics 101-102 emphasizes quantitative and conceptual understanding of the topics of introductory physics developed without use of calculus. The course is mostly self-paced in a mastery-oriented format including eight subject units and a final retention (review) unit each term. Most instruction occurs in the learning center utilizing video-taped lectures, personal tutoring by staff, assigned laboratory exercises, and computerized solutions of sample test questions. Unit testing is designed to measure mastery with a limit of three test tries taken at times of the student's choice.
Major topics for 101: kinematics, forces and dynamics, momentum, energy, fluid mechanics, waves and sound, thermal physics, kinetic theory, and thermodynamics. For 102: electricity and magnetism, optics, relativity, atomic, quantum, and nuclear physics. At the level of Pbysics by Cutnell and Johnson.

## PHYs 103 General Physics

Summer. 4 credits. Prerequisite: Three years of high school mathematics, including some trigonometry. Primarily for students majoring in the life sciences.

Lectures and discussions: M-F 10:00-11:15; laboratories M W 2:00-5:00.
Basic principles treated quantitatively but without calculus. Kinematics; forces and fields, momentum, angular momentum and energy; thermal physics and fluid mechanics; and sound waves. Text at the level of Pbysics, 3rd edition, by Cutnell and Johnson.

## PHYS 112 Physics I: Mechanics

Fall, spring, summer 6-week session. 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisite: coregistration in Mathematics 192 (or 194 or 112), or substantial previous contact with introductory calculus combined with coregistration in Mathematics 191 or 111. Lec. M W F $10: 10-11: 00$ or $12: 20-1: 10$. Two rec. and one lab/cooperative learning session each week. Evening exams. Fall, P. Krasicky; spring, R. Galik.
Mechanics of particles: kinematics, dynamics, conservation laws, central force fields, periodic motion. Mechanics of many-particle systems: center of mass, rotational mechanics of a rigid body, static equilibrium. At the level of Pbysics for Scientists and Engineers, Vol. 1, by Serway.

## PHYS 116 Physics I: Mechanics and Special Relativity

Fall, spring. 4 credits. More analytic than Physics 112 , intended for students who will be comfortable with a deeper, somewhat more abstract approach. Intended mainly but not exclusively for prospective physics majors. Prerequisites: a good secondary school physics course and familiarity with basic calculus. Corrective transfers between Physics 116 and Physics 112 (in either direction) are encouraged during the first few weeks of instruction. Lec. M W F 10:10-11:00. Fall, H. Tye; spring, R. Patterson.

A more rigorous version of Physics 112, covering similar topics at the level of $A n$ Introduction to Mechanics, by Kleppner and Kolenkow.

## PHYS 190 Supplemental Introductory

 LaboratoryFall, spring. 1 credit. Times by arrangement with instructor. S-U only. (first offered spring 1996) Enrollment limited to students who have all of the following; (i) three transfer credits for introductory physics lecture material; (ii) a degree requirement of the laboratory component of that introductory course; (iii) approval of the director of undergraduate studies; (iv) permission of the lecturer of that course at Cornell. Enrollment limited. A Physics 190 Permission Form must be filed in 121 Clark Hall with the physics department course coordinator. Students perform the laboratory component of one of the introductory courses (Physics 112, 213, 214) to complement the lecture-related course credit acquired elsewhere. Those wishing to take the equivalent of one of these introductory courses at another institution should receive prior approval from the director of undergraduate studies.

## PHYS 200 Art, Archaeology, and

 Analysis (also Engineering 185, MS\&E 285, Archaeology 285, and Art 372)For description, see ENGRI 185.

## PHYS 201 Why the Sky Is Blue: Aspects

 of the Physical WorldFall. 3 credits. Lec. T R 2:55-4:10, rec. W 2:30-3:20 or W 3:35-4:25. A. Sadoff. This is a descriptive physics course aimed specifically at the non-science 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 is emphasized. An overriding theme is the character of physical laws as shown through the great principles of symmetry and conservation. While there are a few computational problems assigned, the purpose is to help students to understand the concepts rather than to master problemsolving techniques. At the level of Pbysics for Poets by March.

## PHYS 202 The World According to Physics-The Way Things Work

Summer- 3 week session. 3 credits.
Prerequisite: three years of high school mathematics, including some trigonometry. M-F 10:00-12:00; laboratories 2 afternoons per week to be arranged. R. Lieberman. Intended to provide students majoring in fields outside the sciences with an appreciation for the familiar physical world surrounding them. Which falls faster, a pound of gold or a pound of feathers? What trajectory does a launched rocket follow? Why are the curves on highways banked? What actually keeps a satellite circling the earth-why doesn't it just fall down or fly away? Can you build a ship that runs off the heat found in the ocean? With an emphasis on problem solving, the course helps the student to develop skills transferable to other areas. Topics include Newton's basic laws of motion, trajectories, satellites, space travel, and the concepts of energy.

## PHYS 203 Physics of the Heavens and

 the Earth-A SynthesisSpring. 3 credits. Prerequisite: none; uses high school algebra and geometry. For nonscience majors. Lec T R 2:55-4:10; sec W 2:30-3:20 or $3: 35-4: 25$. H. Padamsee. This course 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 and motion in the heavens, showing how the two evolved separately, from the ideas of the ancient Greeks to the dynamics and telescopic discoveries of Galileo; the final melding of these two topics with Newton's Universal Gravitation; an exploration of this "new" physics and its impact. 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 at the same time a humanistic perspective.

## PHYS 204 Physics of Musical Sound

Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec M W F 9:05-9:55; sec R or $F 3: 35-4: 25$. E. Cassel.
Many features of the production, propagation, and perception of musical sound may be understood in terms of important concepts in physics. Topics covered will include the mechanism of tone production in musical instruments, distinctions in tone quality, musical scales and tuning, some basic principles of room acoustics and reproduction
of sound, and aspects of the mechanism of hearing. At the level of The Science of Sound, by T. D. Rossing.

## PHYS 205 Reasoning about Luck

Fall. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec. M W 2:30-4:00; rec. T 2:303:20. L. N. Hand.
An attempt to explain how and when natural scientists can cope rationally with chance The first part of the course deals in a constructive way with the basic ideas of probability theory and explains why it is that in large systems likely events can become overwhelmingly likely. An introduction to mechanics and to heat as probabilistic mechanics follows. In this way, interested students are given a nontrivial understanding of the second law of thermodynamics, that putative bridge between C. P. Snow's two cultures. Another physical theory, quantum mechanics, in which chance occurs-though in a somewhat mysterious way-is touched on.

## [PHYS 206 War and Peace in the Nuclear Age (also Government 384)

Spring. 4 credits. Intended for nonscientists; does not serve as a prerequisite to further science courses. Assumes no scientific background but will use high school mathematics. Lec. T R 10:10-11:25 Not offered 1997-98. P. Stein
This course is intended for any student who wishes to understand the following: the history and evolution of militrary strategy; the developments in 20th-century physics that culminated in the development of the "atomic" bomb; the principles, types, and effects of nuclear weapons; existing and proposed arsenals and delivery systems; the evolution of the nuclear military strategy of the nuclear powers; and the history of nuclear arms-control negotiations. The course will also examine important concepts involved in military strategy and arms control. Much attention will be given to the problem and mechanisms of control of proliferation and weapons of mass destruction. Assignments emphasize quantitative reasoning skills as well as the technical subject matter.

## PHYS 207-208 Fundamentals of Physics

207, fall; 208, spring. 4 credits each term. Prerequisites for Physics 207: high school physics plus Mathematics 111 or 191, or substantial previous contact with introductory calculus, combined with coregistration in a math course approved by instructor Prerequisites for Physics 208: Physics 207 or 112 or 101 and at least coregistration in Mathematics 112 or 192. Physics 207-208 is a two-semester introduction to physics with emphasis on tools generally applicable in the sciences, intended for students majoring in a physical science, mathematics, or an analytically oriented biological science. Lec. M W F 9:05-9:55 or 11:15-12:05; two rec. and one lab each week. Evening exams. Fall, R. Littauer; spring, D. Fitchen
207: Mechanics, conservation laws, waves, and topics from thermal physics, fluids, acoustics and properties of matter
208: Electricity and magnetism, and topics from physical and geometrical optics, quantum and nuclear physics. At the level of Fundamentals of Pbysics, extended, by Halliday, Resnick, and Walker

## PHYS 209 Relativity and Chaos

Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec. T R 1:25-2:40; rec M 2:30-3:20 or M 3:35-4:25. N. D. Mermin.

We will examine two revolutionary fields of classical physics, one venerable and one relatively recent: the special theory of relativity will be developed, with a view to understanding how certain simple but apparently contradictory facts about light lead to extraordinary insights into the nature of time; and the newer subject of "chaos" will be explored, with a view to seeing how extremely simple rules can lead to behavior of breathtaking complexity.

## [PHYS 210 Randomness in Classical and Quantum Physics

Fall. 3 credits. Intended for nonscientists; does not serve as a prerequisite for further science courses. Assumes no scientific background but will use high school algebra. Lec. T R 1:25-2:40; rec. M 2:303:20 or M 3:35-4:25. Not offered fall 1997. next offered fall 1998. N. D. Mermin. We will examine two areas of physics where randomness plays a central role: the classical probability theory of gamblers, and its relation to subjects from the nature of coincidence to the direction of the flow of time; and the quantum theory, which promotes randomness from a consequence of human ignorance to a fundamental aspect of the physical world, leading to Einstein's celebrated rejection of a dice-throwing God and his more disturbing complaint about "spooky actions at a distance.")

## PHYS 213 Physics Il: Heat/

 ElectromagnetismFall, spring, (summer 6-week session) 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 112 and coregistration in the continuation of the mathematics sequence required for Physics 112. Lec. T R 9:05-9:55 or 11:15-12:05, two rec. each week and one 3 -hour lab alternate weeks. Evening exams. Fall, P. Drell; spring, P. Lepage.

Temperature, heat, thermal energy, electrostatics, behavior of matter in electric fields, DC circuits, magnetic fields, Faraday's law Maxwell's equations, electromagnetic oscillations. At the level of Pbysics for Scientists and Engineers, by Serway. Laboratory covers electrical measurements, circuits, and some aspects of heat transfer

## PHYS 214 Physics III: Optics, Waves,

 and ParticlesFall, spring, (summer, 6 week session). 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 213 and coregistration in the continuation of the mathematics sequence. Lec. T R 9:05-9:55 or 11:15-12:05. Two rec. each week and one 3 -hour lab alternate weeks. Evening exams. Fall, N. Ashcroft; spring, G. Dugan.

Physics of wave phenomena, electromagnetic waves, interference and diffraction effects wave properties of particles and introduction to quantum physics. Course includes computer use in solving problems and labs. At the level of Pbysics for Scientists and Engineers, by Serway.

## PHYS 216 Introduction to Special Relativity

Fall, spring, based upon preregistration. 1 credit. S-U only. Enrollment may be limited. Course will be completed within first four to six weeks of term. Coregistration in this course is a requirement for registration in Physics 217, unless the student has taken a relativity course at the level of Physics 116 or Astronomy 106 Prerequisites: Physics 112 or Physics 207 or permission of instructor. Lec. T R 8:008:50. Fall, spring, staff
Introduction to Einstein's Theory of Special
Relativity: 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 An Introduction to Mechanics by Kleppner and Kolenkow or Space and Time in Special Relativily by Mermin.

## PHYS 217 Physics II: Electricity and

 MagnetismFall, spring. 4 credits. Enrollment may be limited. Intended for students who have done very well in Physics 112 or 116 and in mathematics and who desire a more analytic treatment than that of Physics 213 Prospective physics majors are encouraged to select Physics 217. Prerequisites approval of student's adviser and permission from the instructor. A placement quiz may be given early in the semester, permitting those students who find Physics 217 too abstract or analytical to transfer into Physics 213, which they can do without difficulty at that time Vector calculus will be taught in this course, but previous contact, especially with the operations grad, div, and curl, is helpful. It is assumed the student has seen Special Relativity at the level of Physics 116 or is currently enrolled in Physics 216. It is also assumed that the student has covered the material of Mathematics 192 and is coregistered in Mathematics 293 or the equivalent. Lec. M W F 10:10-11:00. Fall, staff; spring, K. Berkelman
At the level of Electricity and Magnetism, by
Purcell (Vol. 2, Berkeley Physics Series)

## PHYS 218 Physics III: Waves and

 ThermodynamicsFall, spring. 4 credits. Enrollment may be limited. A more rigorous version of Physics 214. Conditions governing enrollment are similar to those of Physics 217. Lec. M W F 11:15-12:05. Fall, J. Brock; spring, E. Bodenschatz.

Topics covered in recent years have included oscillators, mechanical waves, waves at interfaces, standing waves, electromagnetic waves, guided waves, scattering, interference and diffraction, geometric optics, the doppler effect, and an introduction to matter waves Evening exams may be scheduled. At the level of Pbysics of Waves by Elmore.

## PHYS 310 Intermediate Experimental

 PhysicsSpring. 3 credits. Enrollment may be limited. Prerequisite: Physics 208 or 213. Labs T R 1:25-4:25.
Students select from a variety of experiments. An individual, independent approach is encouraged. Facilities of the Physics 410 lab are available for some experiments

PHYS 314 Intermediate Mechanics
Spring. 4 credits. Prerequisites: Physics 208 or 214 (or equivalent) and Math 294 (or equivalent); Applied and Engineering Physics 322 or coregistration in Mathematics 420/421 recommended. Intended for physics majors with concentration outside of physics or astronomy; Physics 318 covers similar material at a more analytical level. Lec. M W F 10:10-11:00, rec. F 1:25-2:15. C. Franck.
Includes Newtonian mechanics, Lagrange and Hamilton formulations, central forces, rigid body motion, and small oscillations. At the level of Classical Dynamics by Marion and Thornton.

PHYS 316-317 Modern Physics I and II 3 credits each term. Physics 316, fall, spring; Physics 317, fall. The two courses comprise a two-term sequence and it is assumed that majors registering in Physics 316 will continue with Physics 317. Prerequisites: Physics 316: Physics 214 or 218, and coregistration in at least Mathematics 294 or equivalent; Physics 317: Physics 316. Lec. M W F 9:05-9:55, rec. T 2:30-3:20. Fall, 316, S. Teukolsky; spring, D. Rubin; fall, 317, P. Lepage. Introduction to the physics of microscopic phenomena, emphasizing the use of elementary quantum and statistical mechanics. Physics 316: Breakdown of classical concepts in microphysics; light quanta and matter waves; Schrödinger equation and solutions in 1 and 3 dimensions; hydrogen atom, exclusion principle, the periodic table at the level of Modern Pbysics from A to $Z$ by Rohlf. Physics 317: Classical and quantum statistical mechanics; molecules; solid state physics; nuclear physics and radioactivity; elementary particle physics at the level of An Introduction to Quantum Pbysics by French.

## PHYS 318 Analytical Mechanics

 Spring. 4 credits. Prerequisites: Physics 116 or permission of instructor; Applied and Engineering Physics 321 or Mathematics 420 . Intended for junior physics majors concentrating in physics or astronomy. Physics 314 covers similar material at a less demanding level. Lec. M W F 10:10-11:00; rec. F 2:30-3:20. A. LeClair.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; introduction to chaos. At the level of Mechanics by Landau and Physics 318 Lecture Notes by Hand and Finch. Supplementary reading will be assigned.

## PNYS 323 Intermediate Electricity and Magnetism

Fall. 4 credits. Prerequisites: Physics 208 or 214 (or equivalent) and Math 293/294 (or equivalent); coregistration in Applied and Engineering Physics 321 or Math 321 or 420 recommended. Intended for physics majors with concentration outside of physics or astronomy; Physics 327 covers similar material at a more analytical level. Lec. M W F 11:15-12:05, rec. F 2:303:20. G. F. Dugan.
Includes electro/magnetostatics, boundary value problems, dielectric and magnetic media, Maxwell's Equations, and electromagnetic waves, and sources of electromagnetic radiation.

## PHYS 327 Advanced Electricity and

 MagnetismFall. 4 credits. Prerequisites: Physics $217 / 218$ or permission of instructor; coregistration in Applied and Engincering Physics 321 or Mathematics 420 . Intended for physics majors concentrating in physics or astronomy. Physics 323 covers similar material at a less demanding level. N.B.: Physics 327 assumes knowledge of the material at the level of Physics 217. Lec. M W F 11:15-12:05, rec. F 2:30-3:20. V. Ambegaokar.

Electro/magneto-statics-vector and scalar potentials, Laplace's Equation and boundary value problems, multipoles; radiation-solutions to Maxwell's Equations, energy-momentum of radiation; electrodynamics in media; special relativity-transformations, four vectors, particle kinematics and dynamics, relativistic electrodynamics. At the level of Classical Electromagnetic Radiation, by Heald and Marion.

## PHYS 330 Modern Experimental Optics (also A8EP 330)

Fall. 4 credits. Enrollment limited. Prerequisite: Physics 214 or equivalent. Lec. M 2:30-3:20; Lab. T W 1:25-4:25; sec. F 3:35-4:25. E. Bodenschatz. A practical laboratory course in basic and modern optics. The seven projects cover a wide range of topics from geometrical optics to classical wave properties such as 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. The students will also be introduced to digital imaging and image processing techniques. At the level of Modern Optics by Guenther.

## PHYS 341 Thermodynamics and

 Statistical PhysicsFall. 4 credits. Prerequisites: Physics 214 and Mathematics 294. Lec. M W F 10:1011:00, rec. R 2:30-3:20. A. Sievers. Statistical physics, developing both thermodynamics and statistical mechanics simultaneously. Concepts of temperature, laws of thermodynamics, entropy, thermodynamic relations, free energy. Applications to phase equilibrium, multicomponent systems, chemical reactions, and thermodynamic cycles. Application of statistical mechanics to physical systems; introduction to treatment of Maxwell-Boltzmann, Bose-Einstein, and FermiDirac statistics with applications. Elementary transport theory. At the level of Fundamentals of Statistical and Thermal Pbysics, by Reif, or Introduction to Statistical Mechanics by Betts.

## PHYs 360 Electronic Circuits

 (also A\&EP 363)Fall, spring. 4 credits. Prerequisites: Physics 208 or 213 or permission of the instructor. No previous experience with electronics assumed, however, the course moves quickly through some introductory topics such as basic DC circuits. Fall term is usually less crowded. Lec. M 2:30-4:25; labs, T R or W F 1:235-4:25 (also evening labs M W 7:30-10:30 spring). Fall,
E. Kirkland; spring, R. Thorne.

Analyze, design, build and experimentally test circuits used in scientific and engineering instrumentation (with discrete components and integrated circuits). Analog circuits: resistors, capacitors, operational amplifiers
(linear amplifiers with feedback, oscillators, comparators), filters, diodes and transistors. Digital circuits: combinatorial (gates) and sequential (flip-flops, counters, shift registers) logic. Computer interfacing introduced and used to investigate digital to analog (DAC) and analog to digital conversion (ADC) and signal averaging. At the level of
Microelectroinic Circuits by Sedra.
PHYS 400 Informal Advanced Laboratory
Fall, spring; (summer, 6 week session). Variable to 3 credits. Prerequisites: two years of physics or permission of instructor. Lab T W 1:25-4:25. Fall, W. Ho; spring, D. Hartill.

Experiments of widely varying difficulty in one or more areas, as listed under Physics 410 , may be done to fill the student's special requirements.

## PHYS 410 Adyanced Experimental

 PhysicsFall, spring. 4 credits. Limited to seniors except by special permission. Prerequisites: Physics 214 (or 310 or 360 ) plus 318 and 327, or permission of instructor. Lec. M 2:30-3:20, lab T W 1:25-4:25. Fall, W. Ho; spring, D. Hartill

Selected topics in experimental concepts and techniques. About sixty different experiments are available in acoustics, optics, spectroscopy, electrical circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, nuclear physics. The student performs three to six diverse 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 443 Introductory Quantum Mechanics

Spring. 4 credits. Prerequisites: Physics 327 or 323; and Physics 316 and Applied and Engineering Physics 321 or Mathematics 420; coregistration in Physics 314 or 318 ; or permission of instructor. Lec. M W F 9:05-9:55, rec. R 3:35-4:25. Staff.
Introduction to concepts and techniques of quantum mechanics, at the level of Quantum Mechanics, by Cohen-Tennoudji.
PHYS 444 Nuclear and High-Energy Particle Physics
Spring. 4 credits. Prerequisite: Physics 443 or permission of instructor. Lec. M W F 9:05-9:55, rec. F 2:30-3:20. J. Rogers. Behavior of high-energy particles and radiation; elementary particles; basic properties of accelerators and detectors; general symmetries and conservation laws. At the level of Concepts of Particle Pbysics, by Gottfried and Weisskopf.
PHYS 454 Introductory Solld-State Physics (also A\&EP 450)
Fall. 4 credits. Prerequisite: Physics 443, A\&EP 361, Chemistry 793, or permission of instructor. Lec. M W F 11:15-12:05.
Computer lab: W or R $2: 30-4: 25$. F. Wise. An 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, superconductivity, and defects. At the level of Introduction to Solid State Pbysics, by Kittel, and Solid State Pbysics, by Ashcroft and Mermin.

## PHYS 455 Geometrical Concepts in Physics

Spring. 3 credits. Prerequisite: Physics 327 and at least coregistration in Physics 318 or permission of instructor. Usually offered every other spring. Lec. T R 10:10-11:25.
Geometrical methods are an essential tool in modern theoretical physics and also provide deep insights into classical physicselectrodynamics, thermodynamics, mechanics, special and general relativity. This course will introduce basic concepts from topology and differential geometry, emphasize calculational methods and illustrate their utility by drawing examples from these areas of physics. In particular, we shall cover manifolds, differential forms, vector bundles, homotopy, homology and lie groups. At the level of Geometrical Methods of Mathematical Physics by Schutz.

## PHYS 480 Computational Physics (also Phys 680 and Astro 690)

Spring. 3 credits. S-U grades only
Prerequisites: The course assumes a good background in the standard "mathematical methods for physics," and the ability to write programs in Fortran or C. No previous knowledge of numerical analysis is assumed. Lec. T R 10:10-11:25. S. Teukolsky.

A course designed to familiarize students with numerical techniques for solving diverse problems in physics and related fields. The problems will be drawn from many different branches of physics, but the emphasis will be on common techniques of solution. Numerical techniques discussed in the course will include ordinary and partial differential equations, linear algebra and eigenvalue problems, Monte Carlo techniques, solving nonlinear equations, fast Fourier transforms, etc. In contrast to traditional numerical analysis courses, the flavor of the course will be "how-to," rather than theoretical. No theorems will be proved. Students will be expected to solve, both individually and in small teams, assigned numerical exercises. Text: Numerical Recipes: The Art of Scientific Computing, by Press, Teukolsky, Flannery, and Vetterling.

## PHYS 481-489 Special Topics Seminar

Offerings are announced each term. 2 and 3 credits. Limited to senior physics majors and those who receive permission of instructor. S-U grades only

## PHYS 490 Independent Study in Physics

 Fall or spring. Variable to 4 credits. Ordinarily limited to seniors. Prerequisite: permission required of professor who will direct proposed work. A 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 500 Informal Graduate Laboratory Fall, spring; summer. Variable to 2 credits. By permission of instructor. Experiments of widely varying difficulty in one or more areas, as listed under Physics 510, may be done to fill student's special requirements

## PHYS 510 Advanced Experimental

 PhysicsFall, spring, summer. 3 credits. Lab. T W 1:25-4:25. Fall, W. Ho; spring, D. Hartill. About sixty different experiments are available in acoustics, optics, spectroscopy, electrical
circuits, electronics and ionics, magnetic resonance, X-rays, low temperature, solid state, cosmic rays, nuclear physics. Students perform four to eight experiments selected to meet individual needs. Independent work is stressed. An optional lecture associated with Physics 410, M 2:30-4:25 is available. It includes lectures on techniques used in experiments in the advanced laboratory and on current research topics.

## PHYS 520 Projects in Experimental

 PhysicsFall, spring, summer. Variable to 3 credits To be supervised by faculty member. Students must advise department course coordinator of faculty member responsible for their project. Prerequisite: Physics 510
Projects of modern topical interest that involve some independent development work by student. Opportunity for more initiative in experimental work than is possible in Physics 510.

## PHYS 525 Physics of Black Moles, White Dwarfs, and Neutron Stars (also Astronomy 511)

Spring. 4 credits. D. Chernoff. The formation of compact objects: neutrino and gravitational radiation from supernova collapse and neutron stars. Equilibrium configurations, equations of state, stability criteria, and mass limits. The influence of rotation and magnetic fields. Pulsar phenomena. Mass flow in binary systems; spherical and disk accretion; high-temperature radiation processes. Compact X-ray sources and X-ray bursts. Emphasis will be on the application of fundamental physical principles to compact objects. Topics in diverse areas of physics will be discussed: solid-state physics, nuclear physics, relativity, fluid dynamics, high-energy physics, etc. No astronomy or general relativity prerequisites. Text: Pbysics of Black Holes, White Dwarfs, and Neutron Stars, by Shapiro and Teukolsky.

## PHYS 551 Classical Mechanics

Spring. 3 credits. Prerequisite: an undergraduate course in classical mechanics at the level of books by K. Symon or J. B. Marion. Lec. T R

10:10-11:25, rec. R 1:25-2:15. L. Hand. Lagrangian and Hamiltonian formulation of classical mechanics, using modern methods, modern applications in nonlinear dynamics. At the level of Geometric Mechanics, by Talman.

## [PHYS 553-554 General Relativity (also Astronomy 509-510)

553, fall; 554, spring. 4 credits. Prerequisite: knowledge of special relativity at the level of Classical Mechanics, by Goldstein Lec. T R 1:25-2:40. Not offered 1997-98, next offered 1998-99. S. Teukolsky. Physics 553 is a systematic introduction to Einstein's theory, with emphasis on modern coordinate-free methods of computation. Topics include review of special relativity, modern differential geometry, foundations of general relativity, laws of physics in the presence of a gravitational field, experimental tests of gravitation theories. At the level of Gravitation, by Misner. Physics 554 is a continuation of 553 that emphasizes applications to astrophysics and cosmology. Topics include relativistic stars, gravitational collapse and black holes, gravitational waves, cosmology.]

PHYS 561 Classical Electrodynamics
Fall. 3 credits. Lec T R 8:30-9:55. Sec M 2:30-3:20. V. Elser.
Maxwell's equations, electromagnetic
potentials, electrodynamics of continuous media (selected topics), special relativity, radiation theory. At the level of Classical Electrodynamics, by Jackson.

## PHYS 562 Statistical Physics

Spring. 4 credits. Primarily for graduate students. Prerequisites: a good knowledge of quantum mechanics (at the level of Merzbacher), classical mechanics (at the level of Marion), and statistical mechanics (at the level of Reif). Lec. M W F 9:059:55. N. Ashcroft.
Macroscopic or thermodynamic concepts including the laws of thermodynamics, thermodynamic functions, thermodynamic stability, and the thermodynamics of phase equilibria. Microscopic concepts including 1-, $2-$, and N - particle quantum states; the microcanonical, canonical and grand-canonical distributions; Bose-Einstein, Fermi-Dirac and Boltzmann statistics; the density-matrix. The microscopic-macroscopic connection Applications include spin systems-the Ising and related models; strongly correlated fluids, and lattice-gases, including distribution and correlation functions, thermodynamic perturbation theory and introduction to critical phenomena and the renormalization group; dense Fermi- and Bose- systems; linear response of quantal and classical systems; transport properties and the Boltzmann equation. At the level of Statistical Mechanics (2nd edition) by Pathria and Statistical Mechanics of Phase Transition by Yeomans.

## PHYS 572 Quantum Mechanics I

Fall. 4 credits. Lec. M W F 11:15-12:05. D. Cassel.

General principles of quantum mechanics, formulated in the language of Dirac. Systems with few degrees of freedom: hydrogen, including fine and hyperfine structure; the deuteron and neutron-proton scattering; helium. Theory of symmetries, perturbations and collisions will be developed to analyze phenomena displayed by these systems. At the level of Quantum Mechanics by Landau and Lifshitz. A knowledge of the subject at the level of Phys 443 will be assumed, but the course will be self-contained.

## PHYS 574 Quantum Mechanics II

Spring. 4 credits. Lec. M W F 11:15-12:05. E. Flanagan.

Systems with many degrees of freedom. Quantization of the electromagnetic field; interaction of light with matter. Many electron atoms. Second quantization for fermions Quantum liquids. Scattering of complex systems. Introduction to the Dirac equation. A knowledge of the concepts and techniques covered in Phys 561 and 572 will be assumed.

PHYS 599 Cosmology (also ASTRO 599) For description, see ASTRO 599.

## PHYS 635 Solid-State Physics I

Fall. 3 credits. Prerequisites: A good undergraduate solid-state physics course, such as Physics 454. D. Ralph. A survey of the basics of the physics of solids: crystal structure, x-ray diffraction, phonons, and electrons. Selected topics from semiconductors, magnetism, superconductivity, disordered materials, dieletric and optical properties and mesoscopic physics. At level of Solid State Pbysics by Ashcroft and Mermin.

PHYS 636 Solid-State Physics II
Spring. 3 credits. Prerequisite: Physics 635. C. Henley.

A continuation of Physics 635; magnetism, superconductivity, broken symmetries, elementary excitations, and other topics in quantum condensed matter physics not covered in Solid State Pbysics by Ashcroft and Mermin, such as topological defects, superfluids, the quantum Hall effect, mesoscopic quantum transport theory, disordered systems, Anderson localization and other metal insulator transitions.

## PHYS 645 High-Energy Particle Physics

Fall. 3 credits. K. Gottfried.
Introduction to physics of baryons, mesons, and leptons. Strong, electromagnetic, and weak interactions. Relevance of symmetry laws to particle physics. Introduction to the quark model. At level of Introduction to High Energy Physics, by Perkins.
PHYS 646 High-Energy Particle Physics
Spring. 3 credits. Staff.
Topics of current interest, such as high-energy electron and neutrino interactions, electron positron annihilation, and high-energy hadronic reactions. Lectures and reading material are at the level of Introduction to High Enengy Physics, by Perkins.
Note: Only S-U grades will be given in courses numbered 650 or above.

## PHYS 651 Relativistic Quantum Field

 Theory IFall. 3 credits. S-U grades only. P. Argyres.

Topics to be covered include consequences of causality and Lorentz invariance, field quantization, perturbation theory, calculation of cross sections and decay rates, and an introduction to radiative corrections and renormalization with applications to electromagnetic and weak interactions.

## PHYS 652 Relativistic Quantum Fleld Theory II <br> Spring. 3 credits. S-U grades only.

 H. Tye.This course is a continuation of Physics 651 and introduces more advanced methods and concepts in quantum field theory. Topics include functional integral methods, quantization of non-abelian gauge theories, the renormalization group, dispersion relations, and spontaneous symmetry breaking. Applications to the electroweak theory and quantum chromodynamics are emphasized. At the level of An Introduction to Quantum Field Theory by Peskin and Schroeder.

## PHYS 653 Statistical Physics

Fall. 3 credits. Normally taken by graduate students in their second or later years. Prerequisites: Competence in the basic principles of quantum mechanics, statistical physics at the level of Physics 562, and thermodynamics. S-U grades only. C. Henley.
Survey of topics in modern statistical physics: Dynamical statistical physics (kinetic theory, Boltzmann equation, hydrodynamics); theory of simple fluids; scaling theories and the renormalization group; phase transitions in disordered systems; pattern formation in nonlinear systems, percolation theory.

## PHYS 654 Theory of Many-Particle

 SystemsSpring. 3 credits. Prerequisites: Physics $562,574,635,636$, and 653. S-U grades only. Staff.
Equilibrium and transport properties of microscopic systems of many particles studied at zero and finite temperatures. Formalisms such as thermodynamic Green's functions are introduced and applied to such topics as normal and superconducting Fermi systems, superfluidity, magnetism, insulating crystals.

## [PHYS 661 Advanced Topics in High

 Energy Particle TheoryFall. 3 credits. Prerequisites: Physics 652. S-U grades only. Not offered 1997-98, next offered 1998-99.
This course will present advanced topics of current research interest. Subject matter will vary from year to year. Some likely topics are two-dimensional conformal field theory with applications to string theory and condensed matter physics, applications of the electroweak theory, lattice gauge theory, mathematical methods (e.g. group theory), perturbative quantum chromodynamics, anomalies and geometry, supersymmetry, current algebra, heavy quark physics, heavy quark symmetry and phenomenological issues beyond the standard model.]

## [PHYS 665 Topics in Theoretical Astrophysics

Not offered 1997-98.
For description, see ASTRO 699.]

## [PHYS 670 Instrumentation Seminar

 Spring. 2 credits. S-U grades only. Not offered 1997-98, next offered 1998-99. Conception, design, and performance of innovative instrumentation in condensed matter and elementary particle physics.]
## PHYS 680 Computational Physics (also

 Physics 480 and Astronomy 690)For description, see PHYS 480

## PHYS 681-689 Special Topics

Offerings are announced each term. 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 690 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 Language Courses under Languages and Linguistics.

## PORTUGUESE

See Language Courses under Languages and Linguistics.

## PSYCHOLOGY

D. J. Bem, S. L. Bem, U. Bronfenbrenner, J. E. Cutting, R. B. Darlington, T. J. DeVoogd, D. A. Dunning, H. M. Feinstein, D. J. Field,
B. L. Finlay, E. J. Gibson, T. D. Gilovich,
B. P. Halpern, A. M. Isen, R. E. Johnston,
F. C. Keil, B. Khurana, C. L. Krumhansl,
W. W. Lambert, D. A. Levitsky, K. L. Lockhart, J. B. Maas, U. Neisser, M. Owren, H. S. Porte, D. T. Regan, E. A. Regan, M. SpiveyKnowlton, B. J. Strupp
The major areas of psychology represented in the department are perceptual and cognitive psychology, biopsychology, and personality and social psychology. These areas are very broadly defined, and the courses are quite diverse. Biopsychology includes such things as animal learning, neuropsychology, interactions between hormones, other biochemical processes, and behavior. Perceptual and cognitive psychology includes such courses as cognition, perception, memory, and psycholinguistics. Personality and social psychology is represented by courses in social psychology and personality (such as Psychology and Law, Judgment and Decision Making, and Social Construction of Gender), as well as courses in fieldwork and psychopathology. In addition to the three major areas mentioned above, the department also 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 $\mathrm{C}+$ or better. Provisional admission requires two such courses. To apply to the major and receive an adviser, a major application form may be obtained from the department office ( 211 Uris Hall).
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 advisers, a range of courses that covers the basic processes in psychology (laboratory and/or field experience is recommended); 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) Perceptual and cognitive psychology
4) Biopsychology
5) Social, personality, and abnormal psychology
The following classification of Department of Psychology offerings is intended to help students and their advisers choose courses that will ensure that such breadth is achieved.
6) Perceptual and cognitive psychology: Psychology 205, 209, 214, 215, 292, 305, 309, 311, 316, 342, 412, 413, 414, 415, $416,417,418,419,436,492$.
7) Biopsychology: Psychology 123, 290, $307,322,324,326,332,361,396,420$, 422, 424, 425, 429, 431, 492.
8) Social, personality, and abnormal psychology: Psychology 128, 265, 275, $277,280,325,327,328,380,402,404$, $450,481,489,491$.
9) Other courses: Psychology 101, 347, 350, 410, 440, 441, 470, 471, 472, 473, 475, 478, 479. The major adviser determines to which group, if any, these courses may be applied.
With the permission of the adviser, 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.
10) 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.
11) 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.
12) Passing Psychology 350 .
13) Passing an approved course or course sequence in statistics in some other department at Cornell. The approved list of courses and sequences may change. It has usually included Sociology 301, and the sequences Education 352 and 353, and Industrial and Labor Relations 210 and 211. Requests that a particular course be added to this list may be made to Professor Gilovich.
14) 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.
15) 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 advisers 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 adviser.
Concentration in personality and social psychology. This concentration is offered in cooperation with the Department of Sociology. 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 will be permitted to include some major courses in sociology and related fields. Advisers 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 those exceptionally able students who wish to pursue an intensive and independent program of research in psychology. Successful participation in this program serves as evidence of the student's facility in the two most important skills of an academic psychologist: the capacity to acquire and integrate a substantial body of theoretical and factual material and the ability to engage in creative research activity. All qualified students planning on a graduate education in psychology or other academic fields should consider the honors program seriously. The program offers most students the closest contact and consultation with faculty that they will receive during their time at Cornell.
The core of the honors program is a research project that the student carries out in close collaboration with a faculty member in the field of psychology. It is assumed that most students will do so while enrolled in Psychology 470 (Undergraduate Research in Psychology). A written report of the research is to be given to the chair of the honors committee (currently Professor Khurana) toward the end of the last semester of the student's senior year. An oral defense of the thesis is then given before a committee of three faculty members, and the student presents his or her work in a public forum. Final honors standing (summa cum laude, magna cum laude, cum laude) is indicated on the student's diploma. 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.
A student may formally apply to the honors program at any time during the senior year provided that she or he is actively engaged in independent research. However, students must do so by the second week of November. Applications should be given to Professor Khurana and should be made directly by the student.

## Distribution Requirement

The distribution requirement in the social sciences is satisfied by any two courses in psychology with the exception of Psychology $123,290,307,322,324,326,332,350,361$, $396,410,420,422,424,425,429,431,440$, $441,470,471,472,473,475,478,479,491$, 492.

Note: The Department of Psychology has listed all days and times for each course that we offer. If there should be changes in the days, times, or semester that a course is offered, we will post the necessary changes throughout the department and in the supplements of the Course and Time and Course and Room Rosters. Changes are also available on the World Wide Web site, http:// comp9.psych.cornell.edu

## Courses

PSYCH 101 Introduction to Psychology: The Frontiers of Psychological Inquiry
Fall. 3 credits. Students who would like to take a discussion seminar should also enroll in Psychology 103. M W F 10:10. 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 102 Introduction to Cognitive

 Science (also Cognitive Studies 101) Fall. 3 credits. T R 11:40-12:55M. Spivey-Knowlton.

This course surveys the study of how the mind/brain works. We will examine how intelligent information processing can arise from biological and artificial systems. The course 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 will introduce the roles played by these disciplines in cognitive science. The second part of the course will focus on how each of these disciplines contributes to the study of five topics in cognitive science: language, categorization, memory, vision, and action.

## PSYCH 103 Introductory Psychology <br> \section*{Seminars}

Fall. 1 credit. Limited to 300 students.
Prerequisite: concurrent enrollment in
Psychology 101. Hours to be arranged. 12
different time options. J. B. Maas and staff. A weekly seminar that may be taken in addition to Psychology 101 to provide an indepth exploration of selected areas in the field of psychology. Involves extensive discussion and a term paper related to the seminar topic. Choice of seminar topics and meeting times will be available at the second lecture of Psychology 101

## PSYCH 123 Introduction to Biopsychology

Fall. 3 credits. No prerequisites. Can be used to satisfy the psychology major breadth requirement and as an alternative prerequisite for upper-level biopsychology courses. Students who would like to take a discussion/demonstration seminar should also enroll in Psych 125; a one hour per week one-credit section. M W F 10:10. E. A. Regan.

An introduction to psychology from a
biological perspective, including both
evolutionary and physiological approaches to behavior. Topics include the structure,
function, and development of the nervous system, genetic and biochemical bases of behavior, hormones and behavior, biological bases of learning, cognition, communication, and language, and the ecology and evolution of social organization and social development.

## PSYCH 128 Introduction to Psychology:

 Personality and Social Behavior Summer only. 3 credits. M-F 10:10-11:15. Staff.Personality: the behavioral similarities and differences among people and how they develop; Freudian, learning, and humanistic theories of personality; research in personality; and personality assessment through testing. Social behavior: how people behave in interactions with others; attitudes, persuasion, attraction, aggression, and conformity. How personality and social behavior influence each other and cause many interesting social and psychological phenomena
Introductory courses in cognitive psychology. Each of the following four courses (205, 209, 214, 215) provides an introduction to a major area of study within cognitive psychology. These courses are independent of one another, and none has any prerequisites. Students may take any one of the courses or any combination of them (including all four). Courses may be taken in any order or simultaneously.

## PSYCH 201 Explorations of Cognitlve

 Science in Ecological Settings (also Cognitive Studies 201)Fall or spring. 4 credits. Prerequisites: Introduction to Cognitive Science COGST 101 or written permission of the instructor.
Fall: B. Halpern and staff. Spring; D. Field and staff.

A laboratory-oriented course designed to teach the theory and techniques of cognitive science in relation to the full range of both present and anticipated-future activities in the workplace, the classroom, and in everyday life. Lecture time is used to present laboratory exercise results, to supplement laboratory topics, and for discussion of primary research papers. State of the art computing, display (visual, auditory, and other perceptual/sensory systems), digital communication, and simulation approaches, including virtual reality methods when relevant, are used to apply cognitive science principles and concepts to the analysis, exploration, and direct testing of human-machine interfaces that are intended to permit effective and efficient exchange of information and control of functions or operations. This approach is applied to real life settings such as fixed and mobile offices, libraries, laboratories, point-of-sale locations, Internet and World Wide Web communications, manufacturing, storage and distribution facilities and systems, on-site maintenance and repair procedures, and personal and group transportation, vehicles and systems.

## PSYCH 205 Perception

Spring. 3 credits. Open to first-year students. Graduate students, see Psychology 605. T R 11:40-12:55. J. E. Curting. 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 209 Developmental Psychology
Spring. 4 credits. Graduate students, see Psychology 709. TR 10:10-11:25.
F. C. Keil.

One of four introductory courses in cognition and perception. A comprehensive introduction to current thinking and research in developmental psychology that approaches problems primarily from a cognitive perspective. The course focuses on the development of perception, action, cognition, emotion, personality, social understanding, language, and moral reasoning.

## PSYCH 214 Issues in Cognitive

 PsychologyFall. 3 credits. Sophomore standing required. Limited to 150 students. Graduate students, see Psychology 614. M W F 10:10. B. Khurana.
Various approaches to the study of cognition will be discussed. Basic concepts in how humans process different kinds of information such as visual, auditory, and symbolic will be introduced. These concepts will then be used to explore topics such as attention and consciousness, concept formation and representation, memory processes and systems, imagery and cognitive maps, problem solving and reasoning, judgment and choice, language acquisition and comprehension, intelligence and creativity, and social cognition.

## PSYCH 215 Psychology of Language

 (also Linguistics 215)Spring. 3 or 4 credits (4-credit option involves term paper). Graduate students, see Psychology 715. M W F 11:15. J. Sereno.

One of four introductory courses in cognitive psychology. Introduction to the psychological study of language. Covers research in spoken language comprehension and production, reading, and language acquisition.

## Introductory courses in social and

 personality psychology. Each of the following four courses ( $265,275,277,280$ ) provides an introduction to a major area of study within social and personality psychol ogy. These courses are independent of one another, and none has any prerequisites. Students may take any one of the courses or any combination of them (including all four). Courses may be taken in any order or simultaneously.
## PSYCH 216 Cognitive Psychology Lab

Fall. 1 credit. Limited to 16 students.
Prerequisite: concurrent enrollment in
Psychology 214. Hours to be arranged.
B. Khurana.

If you've ever wondered how humans manage to represent their visual world, why telephone numbers are seven digits long, why imagery works as a mnemonic device, why certain things are better remembered than others, whether bilinguals are disadvantaged relative to monolinguals, how children acquire knowledge of the world, how people make decisions . . . this laboratory is for you! A weekly lab meeting that encourages students to discover the scientist in themselves through the study of Cognition. Much of Cognitive research takes place in the laboratory and this course allows students to become familiar with the "how-to" of such research. Students will be given six to eight basic experiments to explore and tinker with. They will be encouraged to pose "what if" questions and eventually test them. The course promotes
independent thinking, problem solving in an experimental setting, proposing and testing of one's own hypotheses, relating laboratory Cognition to the real world, and communication of scientific ideas through informal and formal writing and oral assignments. Be prepared for an interactive learning experience.
PSYCH 265 Psychology and Law
Fall. 3 credits. M W F 1:25.
D. A. Dunning.

This course examines the implications of psychological theory and methods for law and the criminal justice system. We concentrate on psychological research on legal topics (e.g., confession, eyewitness testimony, jury decision making, homicide, aggression, the prison system), social issues (e.g., death penalty, affirmative action), as well as on psychologists as participants in the legal system (e.g., assessing insanity and dangerousness and for expert testimony).
PSYCH 275 Introduction to Personality Psychology (also HDFS 260)
Fall. 3 credits. Prerequisites: Psychology 101, HDFS 115, or permission of instructor. T R 10:10-11:25. D. J. Bem. An introduction to personality psychology, with an emphasis on personality development and contemporary research. Covers the major theories of personality, influences on personality development (including genetic, biological, experiential and environmental factors), and methods for assessing personality.

## PSYCH 277 Social Construction of

 Gender (also Women's Studies 277)Fall. 3 credits. Limited to 240 students. M F 8:40-9:55. S. L. Bem.
Psychology/Women's Sudies 277 is an interdisciplinary course that addresses two broad questions: 1) how an individual's gender and sexuality are constructed; and 2) how hidden assumptions or "lenses" embedded in our social institutions, cultural discourses, and individual psyches perpetuate male power and oppress women and sexual minorities. Three lenses in particular are emphasized: androcentrism, gender polarization, and biological essentialism. A fundamental assumption of the course is that social science has worried too much about difference per se and too little about how even our most neutral-looking institutions invisibly transform difference into disadvantage. Although some attention is given to biological perspectives, the course emphasizes the cultural and psychological processes whereby the historically contingent comes to appear as the natural. Among some of the many topics discussed are the importance of looking at biology in context, the parental "instinct," androcentrism in law, sexual orientation cross-culturally, egalitarian relationships, gender-liberated child-rearing, and homophobia.

## PSYCH 280 Introduction to Soclal

 PsychologySpring. 3 or 4 credits; the optional (or fourth) credit is for participation in a limited enrollment discussion section. T R 1:25-2:40. T. D. Gilovich and D. T. Regan.

An introduction to research and theory in social psychology. Topics include processing of social information; social influence, persuasion, and attitude change; social interaction and group phenomena.

## [PSYCH 290 Moilvation

Spring. 3 credits. Graduate students, see Psychology 676. Not offered 1997-98. T R 10:10-11:25. Staff.
The course surveys traditional and contemporary approaches to motivational behavior from Aristotle to Freud to Skinner to Lorenz. It also draws upon field studies, laboratory analyses, clinical cases and developmental stages to establish a scientific basis for motivation analysis. Normal and pathological feedings will serve as a target behavior.]

## PSYCH 292 Intelligence

Spring. 3 credits. Prerequisites: one 200level course in psychology. $M$ W 2:554:10. U. Neisser.
A scientific overview of the controversial issues that surround intelligence tests and what they measure. Topics include the history of testing, correlates of test scores, alternative approaches to mental ability, genetic and environmental contributions to diversity in intelligence, effects of schooling, worldwide IQ gains, cultural factors and group differences.

## PsYch 305 Visual Perceptlon

Fall. 4 credits. Limited to 20 students. Prerequisite: Psychology 205 or permission of instructor. M W F 10:10. J. E. Cutting.

A detailed examination of pictures and their comparison to the real world. Linear perspective in Renaissance art, photography, cinema and video will be discussed in light of contemporary research in perception and cognition.

## [PSYCH 307 Chemosensory Perception

Fall. 3 or 4 credits; the optional (or fourth) credit is for an independent laboratory project. Registration for the 4 -credit option requires permission of the instructor; students will read, analyze, and discuss difficult original literature in the areas covered. Graduate students, see Psychology 607. Not offered 1997-98. T R 9:05. B. P. Halpern.

An examination of basic theory, data, and processes for perception of the chemosensory environment. After a very brief (about two weeks) lecture survey of the anatomy and physiology of human taste and olfaction, the remainder of the course uses the Socratic method, in which the instructor asks questions of the students, to cover topics such as chemosensory psychophysics, saliva, chemosensory bases for the tastes of foods, taste-smell interactions, chemosensory function in neonates and in the aged, temporal aspects of tasting, sweetness, effects of pollution of the chemosensory environment, and interactions between body state and chemosensory stimuli. At the level of Smell and Taste in Health and Disease, edited by T. V. Getchell et al., Sensory Science Theory and Applications in Foods, edited by H. T. Lawless and B. Klein; Sensory Analysis of Foods, 2nd edition, edited by J. R. Piggott.]

## [PSYCH 309 Development of Perception and Representation

Fall. 3 credits. Prerequisite: Psychology $205,209,214$, or 305 , or permission of instructor. Graduate students, see Psychology 609. Not offered 1997-98. T R 2:55-4:10. Staff.
An introduction to theories and research on the origins and development of knowledge of the immediately surrounding world. The course focuses on knowledge of the world as
an arrangement in space and time, knowledge of the world as a space that can be encountered through multiple sensory modes, knowledge of the world as a place that can be acted upon, and organization of the world into meaningful objects and events.]

## [PSYCH 311 Introduction to

 Human MemorySpring. 3 credits. Limited to 40 students. Some familiarity with statistical methods and experimental design and with the study of cognition is desirable. Graduate students, see Psychology 611. TR 11:4012:55. Not offered 1997-98. B. Khurana. This course offers an overview of experimental findings and theoretical issues in the study of human memory. Coverage includes topics such as the nature of memory, various memory systems, coding and retrieval processes, practice and habit acquisition, organization for learning and memory, interference and forgetting, models of memory, memory dysfunction and its relation to normal memory.]

## PSYCH 316 Auditory Perception

Fall. 3 or 4 credits; the 4 -credit option involves a laboratory project or paper. Prerequisite: Psychology 205, 209, 214, or 215 (other psychology, linguistics, or biology courses could serve as prerequisite with permission of the instructor). Limited to 30 students. Graduate students, see Psychology 716. T R 10:10-11:25. C. L. Krumhansl.

Basic approaches to the perception of auditory information, with special consideration of complex patterns such as speech, music, and environmental sounds.

## PSYCH 322 Hormones and Behavlor (also BIONB 322)

Spring. 3 or 4 credits; the 4 -credit option involves a one-hour section once a week in which students will be expected to read original papers in the field and participate in discussion. Limited to juniors and seniors; open to sophomores only by permission. Prerequisites: BIONB 221 or 222 or one year of introductory biology plus a course in psychology. S-U grades optional. Graduate students, see Psychology 722. TBA. E. Regan.
Following a review of the neural and endocrine systems, this course connects endocrine physiology to specific behaviors observed in various species, including humans. Although the relationship between sexual physiology and behavior is strongly emphasized, the lectures also describe hormonal contributions to parental behavior, aggression, stress, learning and memory, homeostasis and biological rhythms. Topics for the discussion sections are chosen by the students within the context of hormonal influences on behavior

## PSYCH 324 Blopsychology Laboratory

 (also BIONB 324)Fall. 4 credits. Limited to 20 juniors and seniors. Prerequisites: Psychology 123 or BIONB 221 or 222 , and permission of instructor. T R 1:25-4:25. Staff.
Experiments designed to provide experience in animal behavior (including learning) and its neural and hormonal mechanisms. A variety of techniques, species, and behavior patterns are included.

## PSYCH 325 Psychopathology

Fall. 4 credits. Prerequisite: 2 courses in psychology. M W F 11:15. K. L. Lockhart. This course examines the nature and symptoms of the major forms of psychopathology: schizophrenia, depression, anxiety disorders, dissociative disorders and personality disorders. Etiological factors are studied from a variety of different perspectives, e.g., psychological, biological and socio-cultural. Weekly discussion sections focus on controversial issues in the field of psychopathology and examine specific disorders in depth.

PSYCH 326 Evolution of Human Behavlor Fall. 4 credits. Prerequisite: Psychology 123 , or an introductory biology course, or an introductory anthropology course. Graduate students, see Psychology 626. T R 2:55-4:10. R. E. Johnston.
A broad comparative approach to the behavior of animals and humans with special emphasis on the evolution of human behavior. Topics covered will vary but will 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, warfare.

## PSYCH 327 Fleldwork in the Helping

 RelationshipFall, spring. 4 credits. Prerequisites: Psychology 325, HDFS 370 or concurrent registration in 325 or HDFS 370 and permission of instructor. S-U grades only Students do not enroll in advance for this course. Field placement assignments are made during the first two weeks of the semester. Students who have already taken Psychology 325 or HDFS 370 must contact the instructor during the first week of the semester. Enrollment is limited by the fieldwork placements available. Fee, \$25 each semester. T R 12:20-1:10. K. L. Lockhart and staff.

This is a year-long lecture and discussion course. The year-long commitment is mandatory. Psychology 328 will be for students taking the course a second time. An " R " grade will be assigned in the fall semester, and a S-U grade will only be assigned in the spring semester. An introductory fieldwork course for students currently enrolled in or who have taken Psychology 325 or HDFS 370. Fieldwork placements include the school system, psychiatric institutions, halfway houses, and other mental health oriented facilities. In addition to fieldwork, weekly supervisory/seminar meetings are held to discuss fieldwork issues and assigned readings.

## PSYCH 328 Continuing Fleldwork In the Helplng Relationship

Fall, spring. 4 credits. Prerequisites: Psychology 325, 327, or HDFS 370 and permission of instructor. S-U grades only, May not be taken more than twice. Students do not enroll in advance for this course. Fee, $\$ 25$ each semester. T R 12:20-1:10. K. L. Lockhart and staff. Designed to allow students who have done fieldwork as part of Psychology 327 to continue their field placements or begin new field placements under supervision for academic credit. An " R " grade will be assigned in the fall semester, and a S-U grade will only be assigned in the spring semester.

## PSYCH 332 Biopsychology of Learning

 and Memory (also BIONB 328)Spring. 3 credits. Prerequisites: one year of biology and either a biopsychology class or BIONB 222. Limited to 60 students. Graduate students, see Psychology 632. M W F 11:15. Staff
This course will survey the approaches that have been or are currently being used in order to understand the biological bases for learning and memory. Topics will include invertebrate, "simple system" approaches, imprinting, avian song learning, hippocampal and cerebellar function, and human pathology. Many of the readings will be from primary literature.

## PSYCH 342 Human Perception:

 Applications to Computer Graphics, Art and Visual DisplayFall. 3 or 4 credits. The 4 -credit option involves a term paper. Prerequisite: Psychology 101 or permission of instructor Psychology 205 strongly recommended.
Graduate students, see Psychology 642.
T R 11:40-12:55. D. J. Field.
Our present technology allows us to transmit and display information over a variety of media. To make the most of these media, it is important to consider the limitations and abilities of the human observer. The course will consider a number of applied aspects of human perception with an emphasis on the display of visual information. Topics to be covered 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 347 Psychology of Visual Communications

Spring. 3 credits. Limited to 15 students. Prerequisites: Psychology 101 and permission of instructor. R 10:10-12:05. J. B. Maas.

An 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.

## PSYCH 350 Statistics and Research Design

Fall. 4 credits. Limited to 120 students. M W F 2:30-3:20. T. D. Gilovich. Acquaints the student with the elements of statistical description (measures of average, variation, correlation, etc.) 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 361 Blopsychology of Normal and Abnormal Behavior (also Nutritional Sciences 361)

Fall. 3 credits. Prerequisites: an introductory biology course and an introductory psychology course, or permission of instructor. S-U grades optional. Juniors and seniors only. M W F 9:05-9:55. B. J. Strupp.
A critical evaluation of factors thought to underlie normal and abnormal behavior and/ or cognitive functioning. Psychological, biological, and societal influences will be integrated. Topics include: (1) psychiatric disorders (e.g., eating disorders); (2) the psychobiology of attention and memory; (3)
nutritional influences on behavior (sugar, food additives, malnutrition, dieting); (4) cognitive dysfunction (e.g., amnesia, Alzheimer's disease); and (5) cognitive effects of clevelopmental exposure to environmental toxins and drugs of abuse.

PSYCH 380 Community Mental Health (also Human Service Studies 380) Summer only. 3 or 4 credits ( 4 -credit option involves term paper). M-F 10:0011:15. Staff.
Basic concepts in the field of community mental health. Social models of mental illness, epidemiology, the role of culture and social class in mental illness, public attitudes, and civil liberties.

## [PSYCH 396 Introduction to Sensory

 Systems (also BIONB 396)Spring. 3 or 4 credits ( 4 credits with term paper). Registration for the 4 -credit option requires permission of instructor. Prerequisites: an introductory course in biology or biopsychology, plus a second course in neurobiology or behavior or perception or cognition or biopsychology. Students will be expected to have elementary knowledge of perception, neurophysiology, behavior, and chemistry. No auditors. Offered alternate years. Graduate students, see Psychology 696. Not offered 1997-98. M W F 10:10. B. P. Halpern.

The course will be taught using the Socratic method, in which the instructor asks questions of the students. Students read, analyze, and discuss in class difficult original literature dealing with both those characteristics of sensory systems that are common across living organisms and those sensory properties which represent adaptations of animals to particular habitats or environments. Classroom discussion can increase, but not decrease, a student's final grade. There are two preliminary exams and a final exam. The principles and limitations of major methods used to examine sensory systems will be considered. General principles of sensory systems, and auditory, visual, and somesthetic systems are covered. One aspect of each system (e.g., localization of objects in space by sound, color vision, thermoreception) will be selected for special attention. Two or more textbooks and a course packet of reproduced articles will be used. An Introduction to the Pbysiology of Hearing. 2nd edition by J. O. Pickles; Hearing: Pbysiological Acoustics, Neural Coding, and Psychoacoustics, by W. L. Gulick, G. A. Gescheider, and R. D. Frisina; The Retina: An Approachable Part of the Brain, by J. E. Dowling; Handbook of Pbysiology-The Nervous System. III. Sensory Processes, edited by J. M. Brookhard and V. B. Mountcastle.]

## PSYCH 402 Current Research on

 Psychopathology: DepressionSpring. 4 credits. Limited to 20 students. Prerequisite: Psychology 325 or HDFS 370 and permission of the instructor. M 1:254:25. K. Lockhart.
Current research and theory on the nature and etiology of depression. Approaches from various perspectives (biological, psychological, socio-cultural) are considered. Minimal attention to psychotherapy and symptomatology.
[PSYCH 404 Psychopathology and the Family
Spring. 4 credits. Limited to 20 students. Prerequisite: Psychology 325 or HDFS 370 and permission of the instructor. Not offered 1997-98. M 1:25-4:25. K. Lockhart.

This course will explore familial influences on the development of abnormal behavior. It will examine how psychological, biological, and cultural factors in a family might contribute to such disorders as anorexia nervosa, depression, sexual abuse, psychopathy, and psychosomatic illnesses. Emphasis will be placed on early childhood experiences in the family and their impact on the development of later psychopathology. The course will also discuss how the evolution of family structures in more recent times (e.g., the rise in day care and divorce) influences the individual. Family therapy approaches and techniques will also be examined.]

## PSYCH 410 Undergraduate Seminar in

 PsychologyFall or spring. 2 credits. Nonmajors may be admitted, but psychology majors are given priority. Hours to be arranged. Staff.
Information on specific sections for each term, including instructor, prerequisites, and time and place, may be obtained from the
Department of Psychology office, 211 Uris

## Hall.

## [PSYCH 412 Laboratory in Cognition and Perception

Spring. 4 credits. Limited to 15 students. Prerequisite: statistics and one course in cognition or perception is recommended. Graduate students, see Psychology 612. Not offered 1997-98. M W 2:55-4:10. D. J. Field.

A laboratory course is designed to introduce students to experimental methods in perception and cognitive psychology Students will take part in a number of classic experiments and develop at least one independent project. Computers will be available and used in many of the experiments although computer literacy is not required. Projects will be selected from the areas of visual perception, pattern recognition, memory, and concept learning.]
PSYCH 413 Information Processing: Conscious and Non-conscious
Spring. 4 credits. Prerequisites: at least on course in human experimental and permission of instructor; Psychology 350 or equivalent will be useful for evaluating empirical articles. R 10:10-12:35. B. Khurana.

In the past decade or so, a not-so-quiet revolution has been taking place in the field of cognition regarding the problem of conscious mental computation. Data have come from patients with striking neuropsychological syndromes, i.e., the phenomenon of "blindsight" in which patients can respond to visual stimuli without the conscious experience of vision or the "amnesic" syndrome in which patients show interact learning and memory sans the awareness of the learning encounters. This signature of independent mental computations has also been amply demonstrated in normal individuals in laboratory settings. We will critically evaluate the theoretical worth and empirical justification of the distinction between "conscious" and "non-conscious" mental computations in normal and patient populations. Weekly
readings will be from, but not limited to, topics such as visual processes, face recognition, explicit and implicit memory, language processing and social cognition. Students will be required to: (1) lead and partake in advanced level discussions of classic and current papers, (b) submit weekly summaries of the assigned readings, and (c) write a term paper on a topic of their interest. Students should be prepared to read extensively, think analytically, discuss cogently, and write succinctly.

## [PSYCH 414 Comparative Cognition

 Spring. 3 credits. Prerequisites: Psychol ogy $205,209,214$, or permission of instructor. Graduate students, see Psychology 714. Not offered 1997-98. T R 11:40-12:55. M. Owren.Studies of animal behavior, human development, and human pathology may shed light on the nature of knowledge and reasoning This seminar will focus on knowledge and reasoning about space, time, number, physical objects, and persons. Questions will include: (1) How do cognitive abilities vary across species: Are there ways of reasoning that are distinctly human? (2) Do humans and/or other animals reason in the same way about entities in different domains (e.g., numbers, physical objects, and persons)? (3) How do knowledge and reasoning change throughout human development: Is knowledge enriched, or more radically restructured, as children grow and gain experience?]

## PSYCH 415 Concepts, Categories, and Word Meanings

Fall. 4 credits. Prerequisites: Psychology $205,209,214$, or 215 , or permission of instructor. Graduate students, see Psychology 615. M 1:25-4:25. F. C. Keil. A consideration of what types of categories are psychologically important, of how they are represented and used through concepts, and of how concept structure and semantic structure are interrelated. Different models of concept structure and categorization processes are evaluated, as are models of conceptual change and concept acquisition. Other topics include: relations between concepts and broader knowledge representation systems such as scripts, mental models, and intuitive theories; relative roles of associative informa tion and beliefs in concept structure; categorization in other species; neuropsychological studies of categorization; comparisons of categorization systems across cultures; and comparisons of concept structures across different types of categories

## [PSYCH 416 Modeling Perception and

 CognitionSpring. 4 credits. Prerequisites: Psychology $205,209,214$, or 215 , or permission of instructor. Not offered 1997-98. M W F 11:15-12:05. M. Spivey-Knowlton
This course offers a survey of several computational approaches to understanding perception and cognition. We will explore linear systems analysis, connectionist models, dynamical systems, and production systems, to name a few. Emphasis will be placed on how complex sensory information gets represented in these models, as well as how it gets processed. This course will cover computational accounts of language processing, language acquisition, visual perception, and visual development, among others. Students will complete a final project that applies a computational model to some perceptual/cognitive phenomena.]

## [PSYCH 417 The Origlns of Thought and

 KnowledgeFall. 4 credits. Prerequisites: Psychology $205,209,214$, or 215 , or permission of instructor. Graduate students, see Psychology 717. Not offered 1997-98 M 1:25-4:25. F. C. Keil
An in-depth analysis of current theories concerning the growth of thought and knowledge in childhood. Several controversies will be discussed in detail, including: Are mental abilities organized in local domains or modules that have their own patterns of development, or is cognitive development a more general process? Do comparative studies with other species and evolutionary models provide any useful insights into cognitive development in humans? Are there qualitative restructurings of thought and knowledge with development, or is the process more continuous in nature? What restrictions should these developmental considerations place on models of thought and knowledge in adults?]

## PSYCH 418 Psychology of Music

Spring. 3 or 4 credits, depending on whether student elects to do an independent project. Prerequisites: junior or senior standing with major in psychology or music and some background in both, or permission of instructor. Graduate students, see Psychology 618. M W 2:55-4:10. C. L. Krumhansl.
Detailed analysis of topics in the psychology of music, including theories of consonance, perception of tonal-harmonic structure, memory for music, and effects of musical training. Emphasis given to experimental methodologies.

## [PSYCH 419 Neural Networks Laboratory

Spring. 4 credits. Prerequisites: at least one course in biology or biological psychology, one year of calculus, and permission of instructor. Limited to 15 students. Graduate students, see Psychology 619. Not offered 1997-98. T R 2:554:10. D. J. Field.
The course will take a hands-on approach to understanding the limitations and successful applications of neural networks to problems in cognitive and biological psychology. A variety of neural network architectures will be discussed and explored using computer simulations. Applications of networks to perceptual recognition and representation will be emphasized. We will consider the class of problems that different networks can solve and consider the accuracy with which they model real nervous systems. Students will complete weekly lab reports and develop one independent project demonstrating the application of a neural network to a problem discussed in the course.]

## [PSYCH 420 Laboratory In Neuroethology

 (also BIONB 420-03)Spring. 1 credit. Prerequisite: BIONB 424 or Psychology 424 or equivalent. Permission of instructor required. Lab: M 12:205:00. Not offered 1997-98. C. D. Hopkins. Designed as a laboratory component for BIONB 424/Psychology 424, this course will illustrate principles of neuroethology: sensory processing, neuroanatomy, and behavioral analysis. Students will participate in six laboratory exercises scheduled throughout the semester. The laboratory will be open from 12:20 until 5:00 p.m. on Mondays and Wednesdays. Labs will be done in groups of
two. Students in this course will learn the fundamentals of electrophysiology, neuroanatomy, and behavior through a series of six laboratory exercises using electric fish, Drosophila, crayfish and Limulus, bats and moths.]

## PSYCH 422 Developmental

 BiopsychologyFall. 4 credits. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or BIONB 221). Graduate students, see Psychology 622. M W F 9:05-9:55. B. L. Finlay.
We will discuss the relationship of the development and evolution of the brain to the development of behavior. Topics include how neurons are generated, find targets, and establish connections; the emergence of reflexive and complex behavior; how experience affects the developing brain; evolutionary perspectives on the development of perception, memory, and communication systems; and abnormal development.

## [PSYCH 424 Neuroethology (also

 BIONB 424)Spring. 3 credits. Prerequisites: BIONB 221 and 222. S-U grades optional for graduate students only. T 9:05-11:00, R 9:05-9:55. Classes will be held on T R at 9:05-11:00. Thursday's class will run for one hour. Recitations will be scheduled in class. Not offered 1997-98.
C. D. Hopkins.

In the 1950's-1970's ethologists attempted to understand the mechanisms of animal behavior through the use of comparative method's, evolutionary analysis, careful observations of animals in their native habitats, and clever experimentation. Now, with the explosion of knowledge and techniques in the neurosciences, many of the ethologist's mechanisms are being explained in terms of neural systems. This course will review the current status of research in neuroethology, including: mechanisms of acoustic communication in insects and in vertebrates; echolocation in bats and sound ocalization in owls; electroreception and electrolocation; chemical communication; and visual processing. In addition, it will review studies of the neural systems involved in decision making, in initiating action, and in coordinating fixed acts. Assigned readings will include original articles from the scientific iterature. A term paper/poster on neuroethology will be required.]
[PSYCH 425 Cognitive Neuroscience
Fall. 4 credits. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or BIONB 221). Graduate students, see Psychology 625. Not offered 1997-98. M W F 9:05-9:55. B. L. Finlay We will study the relation between structure and function in the central nervous system. The importance of evolutionary and mechanistic approaches for understanding the human behavior and cognition will be stressed. The course will focus on issues in cognitive neuroscience: mechanisms of perception, particularly vision, and the neuropsychology of everyday acts involving complex cognitive skills such as recognition of individuals, navigation in the world, language, memory, and social interaction.J

PSYCH 429 Olfaction and Taste: Structure and Function (also BIONB 429)
Spring. 3 or 4 credits (4-credit option requires a term paper or research project. The research project can, but does not need to, study nonhuman vertebrates). Preference given to junior and senior psychology and biology majors and graduate students. Prerequisite: one $300-$ level course in biopsychology or equiva-
lent. Graduate students, see Psychology 629. T R 9:05. B. P. Halpern.

The structural and functional characteristics of olfaction and taste will be explored by reading and discussing current literature in these areas. Structure will be examined at the light levels of electron microscopes as well as at the molecular level. Function will be primarily neurophysiological and biochemical aspects. The emphasis will be on vertebrates, especially air-breathing vertebrates in the case of olfaction, but there will be some coverage of invertebrate forms. A textbook and a course packet of reproduced articles will be used. At the level of Smell and Taste in Health and Disease, edited by T. V. Getchell,
R. L. Doty, L. M. Bartoshuk, and J. B. Snow;

The Neurobiology of Taste and Smell, edited by

## T. E. Finger and W. L. Silver

## PSYCH 431 Effects of Aging on Sensory

 and Perceptual Systems (also BIONB 421)Fall. 3 or 4 credits; the optional (or fourth) credit involves a term paper. Prerequisites: an introductory course in biology or psychology, plus a second course in perception or neurobiology or cognition or psychology. No auditors. Limited to 25 students. Graduate students, see Psychology 631. T R 10:10-11:25. B. P. Halpem. A literature-based examination of postmaturation changes in the perceptual, structural, and physiological characteristics of somesthetic, chemosensory, visual, and auditory systems. Emphasis will be on human data, with non-human information included when especially relevant. Current developments in human sensory prosthetic devices, and in regeneration of receptor structures, will be examined. Brief written statements (by electronic mail) of questions and problems related to each set of assigned readings will be required at least one day in advance of each class meeting. This course will be taught using the Socratic Method, in which the instructor asks questions of the students. 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.

## PSYCH 436 Language Development (also

 Human Development and Family Studies 436, Lingulstics 436, and Cognitive Studies 436)Spring. 4 credits. Prerequisite: at least one course in developmental psychology, cognitive psychology, cognitive development, or linguistics. Open to undergraduates and graduate students. S-U grades optional. Graduate students will also meet for additional advanced discussion of course content. Graduate students should also enroll under HDFS $700 /$ Linguistics 700 ( 2 credits). T R 3:10-4:25. B. Lust.

> This course is a survey of basic issues,
methods, and research in the study of first language acquisition. Major theoretical
positions in the field are considered in the light of experimental studies in first-language acquisition of phonology, syntax, and semantics from infancy on. The fundamental linguistic issues of "universal grammar" and the biological foundations for acquisition are discussed, as are the issues of relations between language and thought. The acquisition of communication systems in nonhuman species such as chimpanzees is addressed, but major emphasis is on the child.

## PSYCH 440 The Brain and Sleep

Fall. 4 credits. Prerequisites: At least Psychology 123 or BIONB 221. An additional course in biology, biopsychology or neurobiology is recommended.
S-U grades optional. Graduate students, see Psychology 640. M W 8:40-9:55. H. S. Porte.

Taking a comparative evolutionary perspective, this course examines the neural events that instigate, maintain, and disturb the states and rhythms of sleep in various species. Emphasizing human data where possible, special topics will include sleep deprivation and the biological functions of sleep; sleep's putative role in learning and memory; biologically interesting deviations from normal sleep. A cognitive neuroscience of sleep will take shape as we look at sleep's psychological correlates-including dreams in REM sleepin light of what we know about the brain and sleep.

## PsYCH 441 Laboratory in Sleep and

 DreamingSpring. 4 credits. Prerequisites: Psychology 440 or comparable preparation, and permission of the instructor during preregistration. Laboratory fee: $\$ 50$. W 7:30-10:30 p.m. H. S. Porte.
Emphasizing the neurobiology of sleep state, the course introduces the laboratory study of human sleep and dreaming. Serving as both experimenter and subject, each student will learn the rationale and techniques of electroencephalography and other bioelectric measures of behavioral state. Using computerized data analysis, students will complete weekly laboratory reports and a collaborative term projects. Sleep recordings will be done during the day or evening when possible. In addition, overnight recording sessions are required.

## PSYCH 450 The Lenses of Gender (also

 Women's Studies 450)Spring. 4 credits. Permission of instructor. Previous coursework in Women's Studies strongly recommended. Limited to 15 seniors and graduate students. No preregistration; interested students should attend the first class session. Graduate students, see Psychology/Women's Studies 650. F 1:30-3:30. S. L. Bem.

This seminar analyzes the ideological, institutional, and psychological mechanisms that are responsible for the social reproduction of male power in Western-and especially American-culture. It is very interdisciplinary, covering material from biology, history, anthropology, law, sociology, psychology, psychiatry, philosophy, and feminist theory. As much as the central focus of the seminar is on gender, it does not analyze gender in isolation but looks also at its interactions with race and (especially) sexuality. Students must write a final exam, a term paper; plus weekly commentaries on the readings.

PSYCH 470 Undergraduate Research in Psychology
Fall or spring. 1-4 credits. S-U grades optional. Written permission from the staff member who will supervise the work and assign the grade must be included with the course enrollment material. Students should enroll in the section listed for that staff member. A section list is available from the Department of Psychology Hours to be arranged. Staff.
Practice in planning, conducting, and
reporting independent laboratory, field, and/ or library research.

## PSYCH 471 Advanced Undergraduate

 Research in PsychologyFall or spring. 1-4 credits. S-U grades optional. Written permission of the staff member who will supervise the work and assign the grade must be included with the course enrollment material. Students should enroll in the section listed for that staff member. A section list is available from the Department of Psychology. Hours to be arranged. Staff. Advanced experience in planning, conducting, and reporting independent laboratory, field, and/or library research. One, and preferably two, semesters of Psychology 470 is required. The research should be more independent and/or involve more demanding technical skills than that carried out in Psychology 470.

## PSYCH 472 Multiple Regression

Spring, weeks 1-7. 2 credits. Prerequisite: one solid semester of introductory statistics. Analysis of variance is helpful but not required. M W F 10:10. R. B. Darlington.

Uses and pitfalls of multiple regression in causal analysis, path analysis, and prediction. Emphasis on analyzing data collected under uncontrolled conditions. Includes colinearity, indicator variables, sets, adjusted and shrunken $\mathrm{R}^{2}$, suppressors, hierarchical analysis, overcontrol, experimental design. Very little hand computation; uses MYSTAT computer program.
PSYCH 473 General Linear Model
Spring, weeks 8-14. 2 credits. Prerequisite: Psychology 472 or equivalent. M W F 10:10. R. B. Darlington. Includes multicategorical variables, corrections for multiple tests, diagnostic methods, nonlinear relationships, interaction, main and simple effects, and basic power analysis Emphasizes MYSTAT and SYSTAT, briefly discusses SAS PROC REG and SAS PROC GLM.
PSYCH 475 Multivariate Analysis of Psychological Data
Fall. 2 credits. Prerequisite: Psychology
473 or permission of instructor. R 10:10-
12:05. R. B. Darlington.
Students vote on topics to cover, choosing among nonparametric methods, time series, cluster analysis, multidimensional scaling, component analysis, factor analysis, MANOVA, canonical correlation, repeated measures, logistic regression, log-linear models, corrections for unreliability in regression, nesting, power analysis, influence analysis, and other topics. First class sketches all these topics before vote.

## [PSYCH 478 Psychometric Theory

Fall. 2 credits. Prerequisite: Psychology
472 or permission of instructor. Not offered 1997-98. T R 10:10-12:05.
R. B. Darlington.

Statistical methods relevant to the use construction, and evaluation of psychological tests.]

## [PSYCH 479 Multisample Secondary Analysis

Fall, weeks 11-14. 1 credit. Prerequisite: Psychology 350 or equivalent. Not offered 1997-98. T R 10:10-12:05.
R. B. Darlington.

Statistical methods for analyzing and integrating the results of many independent studies on related topics.]

## PSYCH 481 Advanced Social Psychology

 Fall. 4 credits. Limited to 20 students, by application. Senior psychology majors have priority. Graduate students, see Psycholgoy 681. T R 10:10-11:25. D. T. Regan.Selected topics in social psychology are examined in depth with an emphasis on the relationship between experimental research and the development of theory. Readings will be mostly primary sources. Among the theoretical approaches to social behavior we may discuss are social comparison theory, cognitive dissonance, attribution processes and social judgment, dramaturgy and impression management, and biological perspectives.

## PSYCH 489 Seminar: Beliefs, Attitudes,

 and IdeologlesSpring. 4 credits. Prerequisites: admission is by application during the fall preregistration period. Seniors are given priority. M 2:30-4:30. D. J. Bem.
The seminar examines fundamental properties of beliefs and attitudes: how they are formed and changed, what psychological functions they serve for the individual, and how they coalesce into belief systems or ideologies. Several specific idealogies are examined in detail: for example, the political ideologies of the American public, gender, sexual orientation, the ideological factors that promote anorexia in a society, the contrasting worldviews of "pro-choice" and "pro-life" activists, the ideologies of psychology and science, and more. Participants write weekly commentaries on the readings in addition to a term paper examining a particular ideology.

## PSYCH 491 Research Methods in

 PsychologySpring. 4 credits. Enrollment limited to 25 students. Recommended: permission of instructor, Psychology 350, experience in upper-division psychology courses, or graduate standing. Graduate students, see Psychology 691. T R 10:10-11:25.
D. A. Dunning.

An intensive examination of the basic research methods used in social, personality, cognitive, and developmental psychology. The course will focus on designing and conducting experiments, i.e., how to turn vague theories into concrete and testable notions, evaluate studies, avoid common pitfalls, and, finally, remain ethical. Beyond learning methods of "correct" and rigorous experimentation, we will also discuss what makes a research study actually interesting. The course in addition, will cover test construction, survey methods, and "quasi experiments." Students will concentrate on completing a small research project in which they conduct an experiment, interpret its data, and write up the results.

## [PSYCH 492 Sensory Function (also

 BIONB 492)Spring. 3 or 4 credits. The 4 -credit option involves a one-hour section once a week, in which students are expected to participate in discussion. The 4 -credit option is not always offered. Prerequisite: a 300-level course in biopsychology, or BIONB 222 or BIOAP 311, or permission of the instructors. Students are expected to have a knowledge of elementary physics, chemistry, and behavior. S-U grades optional. Offered alternate years. Graduate students, see Psychology 692.
Not offered 1997-98. M W F 10:10.
B. P. Halpern and H. C. Howland.

This course covers classical topics in sensory function such as vision, hearing, touch and balance, as well as some more modern topics like sensory coding, location of stimulus sources in space, the development of sensory systems, and non-classical topics such as electroreception and internal chemoreceptors. Both human and nonhuman systems are discussed. In all cases the chemical, physical, and neurophysiological bases of sensory information are treated, and the processing of this information is followed into the central nervous system. At the level of The Senses, edited by Barlow and Mollon, and $A n$ Introduction to the Physiology of Hearing, 2nd edition, by Pickles.]

## 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 term 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 term and carry 4 credits unless otherwise indicated.

## PSYCH 510-511 Perception

PSYCH 512-514 Visual Perception

## PSYCH 513 Learning

PSYCM 515 Motivation
PSYCH 518 Topics in Psychollnguistics
PSYCH 519-520 Cognitlon
PSYCH 521 Psychobiology
PSYCH 522 Topics in Perception and Cognitlon

PSYCH 523 Hormones and Behavlor
[PSYCH 524 Sex Differences in Brain and Behavior (also BIONB 626)
Spring. 2 credits. Limited to 12 seniors and graduate students. Not offered 1997-
98. Hours to be arranged. T. J. DeVoogd. A survey of the newly discovered animal models for sex differences in the brain. Topics include the role of steroids in brain development, whether hormones can modify the structure of the adult brain, and the consequences of such sex differences in anatomy for behavior.]
PSYCH 525 Mathematical Psychology
PSYCH 527 Topics in Biopsychology
PSYCH 535 Animal Behavior

PSYCH 541 Statistics In Current Psychological Research
PSYCH 543 Psychological Tests
PSYCH 544 Toples in Psychopathology and Personality

PSYCH 551 Dlstinguished Speakers
PSYCH 580 Experimental Soclal Psychology

PSYCH 600 General Research Seminar Fall or spring. No credit.

PSYCH 605 Perception (also Psychology 205)
Spring. 4 credits. T R 11:40-12:55. J. E. Cutting.
[PSYCH 607 Chemosensory Perception (also Psychology 307)
Fall. 4 credits. Not offered 1997-98. T R 9:05. B. P. Halpern.]

## [PSYCH 609 Development of Perception

 (also Psychology 309)Fall. 4 credits. Not offered 1997-98. T R 2:55-4:10. Staff.]
[PSYCH 611 Introduction to Muman Memory (also Psychology 311)
Spring. 4 credits. Not offered 1997-98. T R 11:40-12:55. B. Khurana.]
PSYCH 612 Laboratory in Cognition and Perception (also Psychology 412)
Spring. 4 credits. MW 2:55-4:10. D. J. Field.

PSYCH 613 Obesity and the Regulation of Body Weight (also Nutritional Sciences 315)
Spring. 3 credits. Limited to 30 students. Prerequisites: one course in psychology and one course in nutrition. Undergraduate students may register with permission of instructor. S-U grades optional. Offered alternate years. T 1:30-3:30. D. A. Levitsky.

This course is a 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 614 Issues in Cognitive

 Psychology (also Psychology 214)Fall. 4 credits. M W F $10: 10$. B. Khurana.
PSYCH 615 Concepts, Categories, and Word Meaning (also Psychology 415)
Fall. 4 credits. M 1:25-4:25. F. C. Keil.
PSYCH 618 Psychology of Music (also Psychology 418]
Spring. 4 credits. MW 2:55-4:10
C. Krumhans
[PSYCH 619 Neural Networks Laboratory (also Psychology 419)
Spring. 4 credits. Not offered 1997-98.
T R 2:55-4:10. D. J. Field.]

## PSYCH 622 Developmental

 Biopsychology (also Psychology 422)Fall. 4 credits. M W F 9:05-9:55.
B. L. Finlay.
[PSYCH 625 Cognltive Neuroscience (also Psychology 425)
Fall. 4 credits. Not offered 1997-98. M W F 9:05-9:55. B. L. Finlay.]

PSYCH 626 Evolution of Human Behavior (also Psychology 326)
Fall. 4 credits. T R 2:55-4:10.
R. E. Johnston.

PSYCH 629 Olfaction and Taste: Structure and Function (also Psychology 429 and BIONB 429)
Spring. 4 credits. T R 9:05. B. P. Halpern.

## PSYCH 631 Effects of Aging on Sensory

 and Perceptual Systems (also Psychology 431 and BIONB 421)Fall. 4 credits. T R 10:10-11:25.
B. P. Halpern.

PSYCH 632 Biopsychology of Learning and Memory (also Psychology 332 and BIONB 328)
Spring. 4 credits. M W F 11:15. Staff.

## PSYCH 640 The Brain and Sleep (also

 Psychology 440)Fall. 4 credits. M W 8:40-9:55.
H. S. Porte.

PSYCH 641 Laboratory In Sleep and Dreaming (also Psychology 441)
Spring. 4 credits. W 7:30-10:30.
H. S. Porte.

PSYCH 642 Human Perception: Applicatlons to Computer Graphics, Art, and Visual Display (also Psychology 342)
T R 11:40-12:55. D. J. Field.
PSYCH 650 The Lenses of Gender (also Paychology 450 and Women's Studles 450 and Women's Studies 650)
Spring. 4 credits. F 1:30-3:30. S. L. Bem.
[PSYCH 676 Motlvation (also Psychology 276)
Spring. 4 credits. Not offered 1997-98.
T R 10:10-11:25. Staff.]
PSYCH 681 Advanced Social Psychology (also Paychology 481)
Fall. 4 credits. T R 10:10-11:25.
D. T. Regan.

PSYCH 689 Seminar: Beliefs, Atiltudes and Ideologles (also Psychology 489)
Spring. 4 credits. M 2:30-4:30. D. J. Bem.

## PSYCH 691 Research Methods in

 Psychology (also Psychology 491) Spring. 4 credits. TR 10:10-11:25. D. A. Dunning.[PSYCH 692 Sensory Function (also Psychology 492 and BIONB 492) Spring. 4 credits. Not offered 1997-98. M W F 10:10. B. P. Halpern and H. C. Howland.]
[PSYCH 696 Introduction to Sensory Systems (also Psychology 396 and BIONB 396)
Spring. 4 credits. Not offered 1997-98. M W F 10:10. B. P. Halpern.]

## PSYCH 700 Research in Biopsychology

PSYCH 709 Developmental Psychology (also Psychology 209)
Spring. 4 credits. TR 10:10-11:25. F. C. Keil.

PSYCH 740 Research in Human Experlmental Psychology
PSYCH 713 Information Processing: Consclous and Non-conscious (also PSYCH 413)
Spring. 4 credits. R 10:10-12:35.
B. Khurana.
[PSYCH 714 Comparative Cognitlon (also Psychology 414)
Spring. 4 credits. TR 11:40-12:55. Not offered 1997-98. Staff.]
[PSYCH 715 Psychology of Language (also Psychology 215)
Fall. 4 credits. M W F 11:15. Not offered 1997-98. M. Spivey-Knowlton.]
PSYCH 716 Auditory Perception (also Psychology 316)
Fall. 4 credits. T R 10:10-11:25.
C. L. Krumhansl.
[PSYCH 717 The Origins of Thought and Knowledge (also Psychology 417) Fall. 4 credits. M 1:25-4:25. Not offered 1997-98. F. C. Keil.]
PSYCH 720 Research in Soclal Psychology and Personality
PSYCH 722 Hormones and Behavior (also Psychology 322 and BIONB 322)
Spring. 4 credits. M W F 1:25.
E. A. Regan.

PSYCH 773-774 Proseminar in Cognitive Studies I and II (also Cognitive Studies 773/774, Philosophy 773/774, Linguistics 773/774, and Computer Science 773/774)
Fall: R. grade. Spring: S-U only. 4 credits.
The Cognitive Studies Proseminar consists of two semesters of meetings with the graduate faculty in the field of Cognitive Studies. The proseminar will consist of a general introduction to the field of Cognitive Studies including an introduction to each of the major disciplines that make up the minor: i.e., computer science, linguistics, philosophy, and psychology. In each of these disciplines, faculty members from the field will introduce the theoretical and methodological issues that underlie the field and its relation to Cognitive Studies; in addition, they will introduce various labs in which active research is being conducted in their field at Cornell.
The proseminar will include suggestions from faculty in each field for further advanced interdisciplinary research that can be pursued at Cornell during a Cognitive Studies minor. It will conclude (end of second term) with individual student presentations in which students initiate a critique of some interdisciplinary research, after consultation with a faculty member of their choice.
Although suitable to entering graduate students, the proseminar is also open to graduate students beyond their first year. Advanced undergraduates with a Cognitive Studies concentration may also be admitted. This is a year-long lecture and discussion course. The year-long commitment is mandatory. An " R " grade will be assigned in the fall semester, and a S-U grade only will be assigned in the spring semester.

## PSYCH 775 Proseminar in Social Psychology 1

Fall. 2 credits. Limited to 10 graduate students in social psychology. Hours to be arranged. D. A. Dunning, and
T. D. Gilovich and D. T. Regan.

This is the first term of a year-long discussionseminar course intended to give graduate students an in-depth understanding of current research and theory in social psychology. The course will emphasize social cognition, but
other topics, such as group dynamics, social influence, the social psychology of language, emotional experience, etc., will be covered.

## PSYCH 776 Proseminar In Social

 Psychology IISpring. 2 credits. Limited to 10 graduate students in social psychology. Hours to be arranged. D. A. Dunning and
T. D. Gilovich.

This is the second half of a year-long discussion-seminar course intended to give graduate students an in-depth understanding of current research and theory in social psychology. The course will emphasize social cognition, but other topics, such as group dynamics, social influence, the social psychology of language, emotional experience, etc., will be covered.

## PSYCH 900 Doctoral Thesls Research in

 BlopsychologyPSYCH 910 Doctoral Thesis Research In Human Experimental Psychology
PSYCH 920 Doctoral Thesls Research in Soclal Psychology and Personallty

## 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 will be 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 101 Introduction to Psychology: The Frontiers of Psychological Inquiry
PSYCH 123 Introduction to Biopsychology
PSYCH 128 Introduction to Psychology:
Personality and Social Behavior
PSYCH 280 Introduction to Social Psychology
PSYCH 350 Statistics and Research Design
PSYCH 380 Community Mental Health (also Human Service Studies 380)

## QUECHUA

See Language Courses under Languages and Linguistics.

## RELIGIOUS STUDIES MAJOR

See "Special Programs and Interdisciplinary Studies."

## ROMANCE STUDIES

The Department of Romance Studies (Mitchell Greenberg, chair) offers courses in French literature, Italian literature, and Spanish literature. In addition, the department's program includes courses in the French and Spanish languages, French linguistics, Spanish linguistics, semiotics, and Francophone, Italian, and Hispanic culture. 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

E. Apter, J. Béreaud, director of undergraduate studies; A. Berger, A. M. Colby-Hall, emerita; N. Furman, M. Greenberg, chair;
D. I. Grossvogel, E. Kaufman, R. Klein,
P. Lewis, K. Long, J. Ngate, A. Seznec,
S. Tarrow, M.-C. Vallois, L. R. Waugh.

## The Major

The major in French is divided into three options: French Area Studies, French linguistics, and French literature. For a description of the linguistics option, see Modern Languages or Linguistics, French. The area studies and literature options are described below.

While prospective majors should try to plan their programs as far ahead as possible, especially if they intend to study abroad, no student will be refused admission merely because of a late start. Students wishing to major in French Area Studies or French literature should consult the director of undergraduate studies in the French section of the Department of Romance Studies, Professor Jacques Bereaud.

## The Literature Option

The major in French, literature option, is designed to give students proficiency in the oral and written language, to acquaint them with French literature and culture, and to develop skills in literary analysis.

## Admission

To be admitted to the major, students should have completed FRLIT 201, 220, or 221 plus 222 and FRDML 213 or its equivalent by the end of their sophomore year.
For completion of the major, a student must:
(1) acquire a sound degree of competence in French language. This competence is demonstrated by the successful completion of French 301-312 or their equivalents, such as properly accredited study abroad or the passing of a special language test (the CASE examination) or the permission of the adviser (this option applies only to 312).
(2) take six courses in French literature or civilization at the 300 level or above. These courses, selected in consultation with the student's major adviser, will include at least two pre-19th-century courses and at least one 400 -level course.
(3) take two connected courses in one of the following related areas: literature, linguistics, comparative literature, history, history of art, music, government or another relevant discipline with a significant French component. Students who are double majors are exempted from this last requirement.

## The French Area Studies Optlon <br> Admission

To be admitted to the major, students should have completed French Literature 201, 220 , 221 or 224 plus French Language 213 or its equivalent by the end of their sophomore year.

For completion of the major, a student must:
(1) acquire a sound degree of competence in the French language. This competence is demonstrated by the successful completion of French 301-312 or their equivalents, such as properly accredited study abroad or the passing of a special language test (the CASE examination) or the permission of the adviser (this option applies only to 312 ).
(2) take two courses in Romance Studies (literature or civilization) at the 300 level or above.
(3) take six courses at the 300 level or above in no more than three areas of interest such as-but not limited to-Africana studies, anthropology, comparative literature, French literature, economics, government, history, history of art, linguistics, music, theater arts, women's studies. Each area must be represented by at least two courses, and each course must have a significant French component. At least one of these six courses should be at the 400 level.

## Administration of French Area Studles

Students are admitted to the major by the director of undergraduate studies in the French section of the Department of Romance Studies, but will be guided by their individual advisers. A copy of each student's program will be given to the director of undergraduate studies for approval and safekeeping.

## 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 departments of Romance Studies, Modern Languages, and Linguistics 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 FRDML 213 or its equivalent in advanced credit or placement by the Cornell CASE examination. The taking of FRROM 301 and/ or 312 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 and by Duke University. 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 spend the year or the semester as fully matriculated students at the University of Paris VII and other institutions of higher learning in Paris, including the Institut d'Etudes 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 into French history, society, and daily life. While it is possible to enroll in the EDUCO Program for one semester, admission will be given first to students planning to study abroad for the full academic year.
EDUCO maintains a center in Paris with appropriate support staff. The resident director, chosen annually from the Cornell 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 or culture to do independent work in French outside the structure of courses. The preparation of the senior honors essay, generally spread over two terms, 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.
No special seminars or courses are required of honors students, but they will have regular meetings with the faculty advisers who have agreed to supervise their work. They may receive course credit by enrolling in French 429-430, 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 adviser and two other faculty members. The awarding of honors is determined by the student's grades in the major and the quality of the honors essay.
Fees. Depending on the course, a small fee may be charged for copies of texts used in course work.

## Language and Linguistics

Most language courses and French linguistics courses are offered by the Department of Modern Languages and the Department of Linguistics. Further language courses (conversation and advanced level), French linguistics courses, and all literature courses are listed below.
Note: Students placed in the 200-level courses bave the option of taking language and/or literature courses; see listings under "Literature" for descriptions of the literature courses, some of which may be taken concurrently with French Language 200, 203, 205, or 213
(offered by Modern Languages and by
Linguistics) or Hotel Administration 266.

## FRROM 301 Advanced French I

Fall or spring. 4 credits. Limited to 15 students. Prerequisite: FRDML 213 or Q++ on the Cornell Advanced Standing Examination (CASE). Fall: J. Bēreaud or I. Daly; spring: I. Daly and staff. Class discussions based on reading of selected contemporary texts: half will be short stories by 20 th-century writers, half will be articles on current events taken from French magazines or newspapers. All texts are chosen for thematic or cultural interest and linguistic quality. Special attention will be given to correctness and accuracy in French through grammar review and weekly papers (essays or translations). Two films will be shown to illustrate today's idiomatic language. Course required of French majors.

## FRROM 312 Advanced French II

Fall or spring. 4 credits. Limited to 15 students. Prerequisite: FRROM 301 or placement by the Cornell Advanced
Standing Examination (CASE). Fall,
A. Berger; spring, S. Tarrow and staff.

Continuation of work done in French 301.
The objective of French 301 is to teach students to speak and write correct French; in French 312 students will be expected to have a richer, more idiomatic and hopefully elegant command of the language.
Formal study of grammar will be discontinued, and more attention will be devoted to the examination of texts and to oral presentations by students. Weekly papers as in French 301.

## FRROM 400 Semiotics and Language (also Linguistles 400)

Spring. 4 credits. Prerequisite: some background in an area relevant to semiotics: e.g., linguistics, philosophy, literature, psychology, or anthropology or permission of the instructor. L. Waugh.

For description, see Linguistics 400.

## FRROM 424 French Workshop: Techniques of Written and Oral Expression

Spring. 4 credits. Limited to 15 students. J. Bèreaud.

This course follows the format of an "Atelier d'écriture," but also provides training in oral communication. It is designed for graduate and undergraduate students who have advanced beyond the level of French 312 and will promote a more precise and nuanced competence at different levels of linguistic expression. Exercises will include: oral presentations on topics of personal interest to students, analytical reading and discussion of literary and non-literary texts, stylistic exercises inspired by the Oulipo methodology, pastiches of texts from various registers, essays and translations. Weekly papers.

## Literature

## FRLIT 201 Introduction to French Literature

Fall, spring or summer. 3 credits. Prerequisite: qualification in French (SAT II score of 640 , LPF score of 56 , or French 123). Fall, A. Seznec and staff; spring, M.-C. Vallois and staff.

French 201, like all other 200 -level French literature courses, satisfies the language requirement by giving proficiency in French; but French 201 and 221 are mutually exclusive. Students with an SAT II score of 690 or more, or an LPF score of 60 or more, should take French 221
French 201 is divided into small sections and is conducted in French. Papers can be written in French or in English.
French 201 is designed for students interested in improving their written and oral skills in French and also their literary proficiency. Texts have been chosen both for their literary merit and their manageable linguistic difficulty. Close scrutiny of the works and active class discussions will sharpen students' critical and analytical abilities. Different genres are covered (poetry, drama, and narrative prose); and the reading list may include authors such as Baudelaire, Beckett, Ionesco, Camus, Duras, Rimbaud and Sartre.

## FRLIT 220 French and Francophone

 CultureFall. 3 credits. Prerequisite: SAT II score of 690 and above, or LPF score of 60 , or FRDML 200, 203 or 205. Conducted in French. J. Ngaté.

This course serves as an introduction to French Area Studies. It provides an overview of Francophone culture and society from 1945 to the present. Readings will include a selection of articles dealing with issues of current concern in France; works by French and Maghrebi or African writers; poetry or drama; two films will also be discussed.

FRLIT 221 Modern French LIterature * Fall or spring. 3 credits. Prerequisites: SAT II score of 690 and above, or LPF score of 60 , or FRDML 200, 203, or 205. Conducted in French. Fall: D. Grossvogel and staff; spring: N. Furman and staff. This course, divided into small sections, is intended as a first introduction to French literature, the modern period. Texts have been chosen both as a function of their centrality to the traditional literary canon and with an eye to experimentation. The course considers literary genres (poetry, drama, the novel) as solicitations to read texts differently, at different speeds, with diverse claims on our attention. The course is designed to satisfy a general interest in modern French literature as well as to prepare students to pursue a French major in literature. Readings will include works by Baudelaire, Apollinaire, Sartre, Ionesco, Beckett, Proust, Duras.

## FRLIT 222 Early Modern French Literature \#

Spring. 3 credits. Prerequisite: FRLIT 201, 220,221 or permission of the instructor. Required of all literature majors, but not limited to them. Conducted in French. M. Greenberg and staff.

Study of the classic literature of seventeenthcentury France (Comeille, Racine, Molière, Mme. de Lafayette, La Fontaine) and of eighteenth-century Enlightenment literature (Voltaire, Rousseau, Diderot, Beaumarchais). Special attention is paid to the ways in which these various works represent or deal with the shift from an aristocratic cultural code of values to modern bourgeois ideology and aesthetics. The course will also invite reflection on the status and centrality of female characters in classical and neo-classical French literature; it will attempt to trace the evolution from the classical tragic heroine to more modern (but no less problematic) representations of women.

## FRLIT 224 The French Experience: An Introduction

Fall. 3 credits. M. Greenberg. An examination of French society, culture, and institutions. What has made French culture so distinctive? Its literature and its revolutions, its gastronomy and fashion, its painting, cathedrals, and cinema. Looking attentively at texts, images, and contexts from selected moments in the eighteenth, nineteenth, and twentieth centuries, we will attempt to unravel some of the defining enigmas of the French experience. Readings available both in French and in English translation.
Note: Prerequisite for all 300-level courses in French literature: FRLIT 201, 220, 221, or the equivalent.

FRLIT 226 From Chivalry to Chanel: Perspectives in French Culture
Spring. 3 credits. Conducted in English. R. Klein and staff.

From chivalric and courtly codes of conduct through the poetic and artistic theories of the Renaissance, the rise and articulation of absolutism, the scientific skepticism of the Enlightenment, the manifestoes of the

Revolution, of surrealism, of French feminists from Christine de Pizan to Hélène Cixous, French culture has always analyzed itself with a methodological rigor and theoretical alertness that has frequently been imitated and adopted by others. This course proposes a study of how French culture sees, and reads, itself, by means of a range of texts chosen from the above-mentioned fields, among others.
FRLIT 320 French Civilization II: Contemporary France
Fall. 4 credits. French 213 or equivalent. Conducted in French. J. Bêreaud. Detailed, analytical study of contemporary French society, its structure and its culture. In the second half of the course, students will select a topic for in-depth personal research leading to the writing of a term paper. Short oral presentations will be encouraged. A variety of resources will be used: texts, magazine and television excerpts, and internet items. A few films will be shown to illustrate some aspects of French life.

## FRLIT 326 May '68 and Its

 ConsequencesSpring. 4 credits. Conducted in French. J. Béreaud.

The course will first study the students' revolt of May 1968 in France, placing it in its national and international political and ideological context. It will then try to trace the changes brought about by the spirit of May ' 68 in some areas of French society, especially youth and education. Finally, it will lead to a reflection on current ideologies and the change from modernism to postmodernism.

## FRLIT 330 Francophone African

## Llierature

Fall. 4 credits. Conducted in French. J. Ngaté.

Introduction to the works of representative poets, dramatists, novelists, and short story writers from sub-Saharan Africa and Madagascar. L. S. Senghor, C. Laye, F. Oyono, J. R. Rabearivelo, S. Labou Tansi, and the Afro-Caribbean Aimé Césaire will be among the writers whose works will be read. The focus will be on the twentieth century and the nature of these writers' relationships with the West and with Africa.

## FRLIT 334 The Novel as Masterwork (also FRLIT 684)

Spring. 4 credits. Conducted in French. N. Furman.

This course traces the evolution of the ninteenth-century French novel. Readings include novels by Stendhal, Balzac, Flaubert, and Zola.

## FRLIT 349 Love and Hate In the Middle Ages *

Fall. 4 credits. Prerequisite: FRLIT 221 or permission of instructor. Conducted in French. K. Long.
This course is designed to offer an introduction to medieval French literature and old French while tracing the invention and decline of courtly ideals and the rise of satirical misogyny. The basic tenets of courtly love and courtly poetics will be illustrated by selections from the Lais of Marie de France, the Cbevalier au Lion of Chrétien de Troyes, and the Roman de la Rose of Guillaume de Lorris. Satirical revisions of the courtly ideal will be studied in selections from the Roman de la Rose of Jean de Meun, the lyric poetry of Rutebeuf, Charles d'Orleans, François Villon,
and Christine de Pizan, as well as in medieval farces and fabliaux. Readings in old and medieval French.

## FRLIT 356 Urban Cultures: Lyon and

 Paris \#Spring. 4 credits. Prerequisite: FRLIT 221 or permission of the instructor. Conducted in French. K. Long.
This course will explore the importance of royal patronage and systems of censorship for the evolution of a centralized culture in France. This culture, however, is surrounded by multiple alternative cultures which intersect at various points: popular culture, with its tendency to mock the institutions of Church and State; Huguenot (Protestant) culture, the repression of which is a defining moment in the rise of absolutism; women's culture, which alternately creates new intellectual parameters and is mocked and suppressed by representatives of the predominant institutions. Texts will include works by Labē, Marguerite de Navarre, Ronsard, du Bellay, d'Aubigné,
Mme. de Lafayette, Moliere, among others.
FRLIT 370 Perspectives on the Age of Enlightenment: "Enlightened" Literature \#
Fall. 4 credits. Conducted in French. M.-C. Vallois.

Through a reading of various works of the French eighteenth century (by Montesquieu, Voltaire, Diderot, Rousseau and Sade), we will study the emergence of new literary discourses and practices aiming at a
"secularisation" of the literary field, in conjunction with the ideological and epistemological changes that took place under the name of Enlightenment.

## FRLIT 371 French Comedy In the

 Seventeenth and Eighteenth Century \#Fall. 4 credits. Conducted in French. A. Seznec.

Starting with L'Illusion comique of Comeille and ending with Beaumarchais's Le Mariage de Figaro, we will read plays by Moliere, Sedaine, Lesage, and Marivaux. The course will study the evolution of the comic form, as well as the political and social changes these works reflect.

## FRLIT 381 Nineteenth-Century French Women Writers (also WOMNS 381) \#

Fall. 4 credits. Conducted in French. A. Berger.

While situating the works read within their specific historical and literary context, this course will attempt to address two sets of questions: 1) How does the inscription of literature as a Public Institution within a phallocentric cultural order affect women authors' status and writing strategies? 2) To what extent and at what levels does being a women inform or shape the text produced? In what ways is literary writing concerned with sexual difference? Writers will include Mme. de Stael, George Sand, M. DesbordesValmore, Flora Tristan, and Rachilde.

## FRLIT 393 Fin de Siècle or Belle Epoque?: Parisian Culture around 1900 (also Comparative Literature 393)

Spring. 4 credits. Conducted in English. E. Apter.

For description, see Comparative Literature 393.

FRLIT 419-420 Speclal Toplcs in French Literature
419 , fall; 420 , spring. $2-4$ credits each term. Prerequisite: permission of instructor. Staff.
Guided independent study of special topics.
FRLIT 429-430 Honors Work in French 429 , fall; 430 , spring. 8 credits year-long course, R grade fall semester, letter grade spring semester, with permission of the adviser. Open to juniors and seniors. Consult the director of the honors program. R. Klein.
FRLIT 448 Medieval Literature " Spring, 4 credits. Prerequisite: French 221 or permission of the instructor. Conducted in English. A. Colby-Hall. French 448 deals with the romance and the lyric. Facility in reading Old French and appreciation of these two major genres are the primary goals of this course.
FRLIT 476 The Libertine Novel \# Fall. 4 credits. Conducted in French. M.-C. Vallois.

From Montesquieu and Crebillon to Sade, we will study the rise of the libertine novel in eighteenth-century France. Foucault writes that this type of novel marks the beginning of the "epoch of sexuality." We will try to understand what is at stake in this new staging of "sexuality." The assertion of the supremacy of desire over social rules and values participated in the undermining of the theological and patriarchal order. We will inquire about the extent of this process as we discuss the place and representation of women's desire in these novels.

## FRLIT 483 France and lts Jows (also

 FRLIT 681 and JWST 452)Spring. 4 credits. Prerequisite: one 300 -
level course in French literature or permission of the instructor. Conducted in English. N. Furman.
From their expulsion from Paris during the Middle Ages to the French Revolution that extended citizenship to the Jews of France; from the Dreyfus affair to their deportation during the Holocaust, France has in turn welcomed and expelled the Jews. We will study this uneasy relationship through a variety of texts: historical documents, antiSemitic tracts, essays by Zola and Sartre, novels (Proust and Modiano) and films.

## FRLIT 484 Perfume, Jewelry,

 Cigarettes: Cultural Artifacts In French LiteratureFall. 4 credits. Conducted in French. R. Klein.

This course invites reflection on some of the cultural artifacts that have played a large part in the social imagination of the French, and in France's idea of itself. Literary texts, poetry and prose, will serve as the principle means for understanding the function of these artifacts and their beauty, their utility and frivolousness-the dreams they incite and the ambitions they fulfill. Readings will include works of Banville, Baudelaire, Mallarmè, Merrime, Maupassant, Mauriac, Pierre Louys, Colette, and Sartre.

## FRLIT 486 Hospitality in Twentieth-

 Century French and Francophone Literature (also S HUM 486)Fall. 4 credits. Conducted in French. E. Kaufman.

Through readings in French and North African literature, this course seeks to explore the
various dynamics of hospitality, a fundamental ethical mode of relating to an other. Topics considered include hospitality and exile, gendered and racialized relations of hospitality, same-sex hospitality, hospitality to the non-human, transgressive hospitality, and nomad hospitality. Readings will include works by Albert Camus, Simone de Beauvoir, Tahar Ben Jelloun, Pierre Klossowski, Bouganim Ami, Georges Bataille, Marguerite Duras, and Ken Bugul.
FRLIT 489 Politics and Sllence In the
Wake of World War Two (also
S HUM 489)
Spring. 4 credits. French recommended but not required. E. Kaufman.
This course will focus on texts that engage the events of World War Two (as well as the Moroccan and Algerian revolutions) with restraint, reserve, circumlocution, and silence. We will read literature that might be variously categorized as apolitical, political allegory, and poeticized history. Our theoretical readings will analyze the complexity of the very terms "politics" and "silence"; they will also address the specific relation of the intellectual to politics and silence (specifically with regard to accusations of collaboration). Readings will include works by Sartre, Anouilh, Jabes, Celan, Césaire, Djebar, Duras, Blanchot, Derrida, Agamben, and Lyotard.

## FRLIT 495 Existentialism

Spring. 4 credits. Conducted in French. R. Klein.

This course will focus on the writing of JeanPaul Sartre, with special emphasis on his principle philosophical text, Being and Nothingness. Sartre's literary work, as well as that of some of his contemporaries (de Beauvoir, Vian, Camus), will be read in conjunction with specific chapters of L'etre et le néant. The question of what it means for there to have been such a profoundly theoretical, philosophical influence on literature, at that moment in French history, will be at the center of our concern.

## FRLIT 499 France During the Occupation

Fall. 4 credits. Prerequisite: FRLIT 221 or
ability to read French. D. I. Grossvogel. This course intends to examine an important moment of French history: the period between 1940 and 1944 when France was defeated by Nazi Germany. During four years, there were those who collaborated and those who resisted. The trauma was felt long after Germany was finally defeated. The texts to be read were for the most part written during the Occupation. The films to be shown were either made during the Occupation or reflect upon it.

## FRLIT 639-640 Speclal Toples In French

 Literature639, fall; 640, spring. 4 credits each term. Staff.
Guided independent study for graduate students.
FRLIT 681 France and Its Jews (also FRLIT 483 and JWST 452)
Spring. 4 credits. Prerequisites: one $300-$ level course in French literature or permission of the instructor. Conducted in English. N. Furman.
For description, see FRLIT 483.

FRLIT 684 The Novel as Masterwork (also FRLIT 334)
Spring. 4 credits. Prerequisite: FRLIT 201
or permission of instructor. Conducted in French. N. Furman.
For description, see FRLIT 334.

## FRLIT 695 Theorizing Film (also ENGL 703)

Fall. 4 credits. T. Murray. For description, see ENGL 703

## Italian

M. Migiel, director of undergraduate studies.

## The Major

Students who wish to major in Italian should choose a faculty member to serve as a major adviser; the general plan and the details of the student's course of study will be worked out in consultation with the adviser. Italian majors are encouraged to take courses in related subjects such as history, art history, music, philosophy, anthropology, classics, linguistics, and other modern languages and literatures. While a major often occupies only the junior and senior years, it is wise for students to seek faculty advice about the major as early as possible.
Students who elect to major in Italian ordinarily should have completed Italian 201 by the end of their sophomore year. Exemptions can be made on the basis of an examination. 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 history, and to develop some skill in literary analysis. To this end, students will be expected to complete successfully 32 credits of Italian literature courses at the 300 level or higher, with papers to be written in Italian or English. Required courses for the major are ITALL 303, 304, and a course on Dante. ITALA 402, History of the Italian Language, and 403, Linguistic Structure of Italian, may be counted toward the 32 credits required for the major (an introductory linguistics course is a prerequisite of ITALA 402 and 403).
Students majoring in Italian will also be expected to acquire competence in the handling of the language. That competence may be demonstrated by passing an oral and written examination to be arranged with the adviser.
Italian majors will also be required to complete successfully two courses in related fields (for example, Italian history, Italian art history, literary theory).
Italian majors may study in Italy, generally during their junior year, under any of those study-abroad plans organized by American universities that allow the transfer of grades and credit, such as the Cornell program in Rome.
The College of Architecture, Art, and Planning maintains a program open to all qualified students attending Comell. The program is housed in the sixteenth-century Palazzo Massimo, designed by the architect Baldassare Peruzzi, on the Corso Vittorio Emanuele, in the heart of Rome. Students may enroll for a semester in the fall or spring. Courses regularly taught at the Palazzo Massimo include Italian language (beginning and
intermediate); Architecture 300, 401, 402, 500, 502, Design Studio; Architecture 338 and 399, Special Topics in Architectural History; Architecture 458, Special Projects in Design Communications; Architecture 367, Contemporary Italian Culture; Architecture 510, Thesis Introduction; Art 251, 311, 322, and 371; and History of Art 371, Renaissance and Baroque Art in Rome.
To be eligible, students must have completed the first two years of their curriculum requirements and be in good academic standing.

## Literature

Most language courses and Italian linguistics courses are offered by Modern Languages and by Linguistics. Advanced language courses and all literature courses are listed below.

## ITALL 201-202 Introduction to Itallan

 Llterature3 credits. Prerequisite: permission of instructor. ITALL 201 is not prerequisite to ITALL 202 or ITALL 205. Conducted in Italian. Fall, 202; spring, 201. M. Migiel and staff.
In this course, students will develop their language skills in Italian by reading, discussing, and writing about short works of fiction (twentieth-century short stories in ITALL 201; twentieth-century novels in ITALL 202).

## ITALL 250 Introduction to Italian Cultural Studles

Spring. 3 credits. Conducted in Italian. M. Migiel and staff.

This course is a historical, socio-political, and cultural survey of 20 th century Italy. We will be looking at literature, movies, television, music, newspaper articles, advertisements, various other cultural products from the Fascist period to the present. By incorporating a variety of texts across disciplines the course will attempt to contextualize works within a historical framework as well as suggesting the limitations of such a framework through the use of feminist and poststructuralist theories. Students will be expected to speak, read, write, and understand Italian at a high level of proficiency. They will improve and polish these skills during the course of the semester.
ITALL 303 Introduction to Medieval and Renalssance Literature \#
Spring. 4 credits. Conducted in Italian. Prerequisite: one Italian literature course at the 200 level or permission of the instructor. M. Migiel.
Manageable readings selected from authors such as: early Italian lyric poets, Dante, Petrarch, Boccaccio, Machiavelli, Castiglione, Ariosto, Tasso, and lyric poets of the sixteenth century. The course is designed not only to introduce students to the major authors and currents of the Italian Middle Ages and Renaissance, but also to help students improve their critical thinking and their

## linguistic skills.

## ITALL 323 Encounters with the Dead (also ITALL 623 and COM L 323)

 Spring. 4 credits. Conducted in English. M. Migiel.Focusing on two epic works obsessed with death and with the dead (Dante Alighieri's Comedy [1321] and Claude Lanzmann's Shoab [1985]), this seminar will explore how Dante's poem and Lanzmann's film, often along analogous lines, address such issues as: the
problems inherent in the representation of events; the search for a poetic/cinematic language adequate to convey experiences surpassing human comprehension; the creation of a narrating " $I$ "; the "education" of the reader/spectator; national, political, and religious identities; the possibility of heroism; the place of women in the epic enterprise; the challenge of writing a history based on ironic displacement; the redemptive potential of art (and its ability to deceive as well as to enlighten and console); the call to bear witness, both to life and to loss. The seminar will also ask what value there is in comparing such vastly different works (a pre-Renaissance conversion narrative bearing witness to the Creator vs. a post-Holocaust testimonial marked by a crisis of witnessing). Students may read in English translation or the original; Shoah will be shown with English subtitles.

ITALL 374 Opera and Culture (also MUSIC 374 and OERST 374)
Spring. 4 credits. Prerequisite: any threecredit music course or proficiency in German or Italian. A. Groos.

## For description, see MUSIC 374.

ITALL 394 Calvino and Levl: Then and Now (also ITALL 694)
Fall. 4 credits. Conducted in English. M. Migiel.

A study of the principal works by Italo Calvino and Primo Levi, two of the most important Italian writers of the second half of the twentieth century, and a critical examination of the theoretical frameworks that have been used to understand them so far.

ITALL 419-420 Special Topics in Itallan Literature
419, fall; 420, spring. 2-4 credits each term. Prerequisite: permission of instructor. M. Migiel.
Guided independent study of specific topics.

## ITALL 429-430 Honors in Itallan

## Llterature

429 fall; 430 , spring. 8 credits. Year-long course, R for fall semester; letter grade for spring semester. Limited to seniors. Prerequisite: permission of instructor. M. Migiel.

ITALL 445 Boccaccio: Gender, Power, and the Medieval Text (also COM L 456, WOMNS 448, ITALL 645) \#
Fall. 4 credits. Conducted in English. M. Migiel.

A study of the discourses about reading and sexual difference in Boccaccio's Decameron. We will devote special attention to two questions: 1) What does it mean to carry out a feminist reading of a male-authored text? 2) How do the narrators of the Decameron rework earlier discourses about reading and sexual difference found in literary, historical, and philosophical material drawn from Italian, Old French, and Latin sources? All readings will be done in English translation; students who command the pertinent foreign languages may read texts in the original language. An extra hour-long discussion section will be organized for students who read and speak Italian.
ITALL 623 Encounters with the Dead (also ITALL 323, COM L823)
Spring. 4 credits. Conducted in English. M. Migiel.

For description, see ITALL 323.

ITALL 639-640 Special Topics in Italian Literature
639, fall; 640, spring. 4 credits each term. M. Migiel.

ITALL 645 Boccaccio: Gender, Power, and the Medieval Text (also ITALL 445, WOMNS 648) \#
Fall. 4 credits. Conducted in English.
M. Migiel.

For description, see ITALL 445.
ITALL 694 Calvino and Levi: Then and Now (also ITALL 394)
Fall. 4 credits. Conducted in English. M. Migiel.

For description, see ITALL 394.

## Spanish

C. Moron Arroyo, director of undergraduate studies; L. Carrillo, D. Castillo, M. A. Garcēs, M. Gil, J. W. Kronik, J. E. Paz-Soldān,
J. Piedra, J. R. Resina, M. Stycos, J. Tittler.

## The Major

The major is designed to give students proficiency in the oral and written language, to acquaint them with Hispanic culture, and to develop their skill 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, or 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 a Spanish major are encouraged to seek faculty advice as early as possible. For acceptance into the major, students should consult the director of undergraduate studies in Spanish-Professor Arroyo-who will admit them to the major and choose an adviser from the Spanish faculty. Spanish majors will then work out a plan of study in consultation with their advisers. Previous training and interests as well as vocational goals will be taken into account when the student's program of courses is determined.
SPANL 201 and SPAND 204 (or equivalent) are prerequisite to entering the major in Spanish. All majors will normally include the following core courses in their programs:

1) SPANR 311 and 312
2) SPANL 315,316 , and 318 (not necessarily in that order)
Spanish majors have great flexibility in devising their programs of study and areas of concentration. Some typical options of the major are:
3) Spanish literature, for which the program of study normally includes at least 20 credits of Spanish literature beyond the core courses. Literature majors are strongly urged to include in their programs courses in all the major periods of Hispanic literature.
4) A combination of literature and linguistics.
5) Either of the above options with a maximum of three (3) courses at the 300 level or above in other disciplines counted toward the major. Whichever
option a student chooses, he or she is 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 interdepartmental programs in Latin American Studies and Latino Studies sponsor relevant courses in a variety of areas.
The J. G. White Prize and Scholarships are available annually to students who achieve excellence in Spanish.
For the concentration in Spanish linguistics, see Department of Linguistics-Spanish.
Study abroad in Spain. Cornell, the University of Michigan, and the University of Pennsylvania cosponsor an academic year in Spain program. Students enrolled in this program spend the first three weeks before the fall semester begins in a residential college located on the campus of the University of Madrid, where they take a course in Spanish language and contemporary society and take advantage of special lectures and field trips in Madrid and Castile. This course carries three credits. In early October the program moves to Seville, where students enroll in as many regular classes at the University of Seville as their language competency and general education permit. Their academic work is supplemented by courses designed explicitly for the program by Seville faculty, as well as a seminar regularly offered by the resident director, who is chosen from the faculty of either Comell, Michigan or Pennsylvania. The special courses normally include history of art and architecture, Spanish composition and syntax, and modem Spanish history. In Seville students live with selected families in "residencias," or in a few cases in "colegios mayores." Cornell-Michigan-Pennsylvania also maintains a center in Seville, which is used by students for special seminars, tutorials, lectures, and informal gatherings.
Applicants are expected to have at least completed SPAND 204 prior to departure. Students are strongly encouraged to study abroad for the entire year rather than for one semester. Students interested in the study abroad program should consult with the Cornell Abroad office for further information.
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 essays (see Spanish 429-430).
Fees. Depending on the course, a small fee may be charged for film use or for copies of texts for course work.

## Language

Most language courses and Spanish linguistics courses are offered by the Department of Modern Languages and the Department of Linguistics. Advanced language courses and all literature courses are listed below.
Note: Students placed in the 200-level courses bave the option of taking language and/or literature courses; see listing under SPANL 201 for description of the literature course that may be taken concurrently with SPAND 203-204 (offered by Modern Languages).

SPANR 311 Advanced Composition and Conversation
Fall. 4 credits. Prerequisite: SPAND 204 or 212 or equivalent. M. Stycos and staff. Advanced language skills, developed through reading, grammar review, and intensive practice in speaking, writing, and translation. Analysis of present-day Spanish usage in a wide variety of oral and written texts.

## SPANR 312 Advanced Composition and

 ConversationSpring. 4 credits. M. Stycos and staff. Readings and class discussion will focus on the stylistic analysis of modern texts.
Increased emphasis, through weekly essays, on students' development of an effective Spanish prose style.

## Literature

SPANL 201 Introduction to Hispanic Llterature ©
Fall or spring. 3 credits. Prerequisite: qualification in Spanish or permission of instructor. The course is divided into small sections and is conducted mainly in Spanish. (Fulfills both the language proficiency requirement and the humanities distribution requirement. The literature course that normally follows SPANL 201 is either 316 or 318.) D. Castillo and staff.

SPANL 239 Cultural History of the Jews of Spain (also NES 239, JWST 239, COM L 239, and RELST 239)
Fall. 3 credits. Conducted in English. R. Brann.

For description, see NES 239.

## SPANL 246 Contemporary Narratives by Latina Writers (also LSP 246)

Spring. 3 credits. L. Carrillo.
This course offers a survey of narratives, including novels, short fiction, essays, political/feminist manifestoes and memoirs by representative Latina writers of various Latino ethnic groups in the United States including Chicana, Chilean, Cuban, Dominican, and Puerto Rican, among others. We will investigate the parallel development of a Latina perspective on personal, social, and cultural issues alongside that of the U.S. ethnic liberation/revitalization movements of the 1960s through to contemporary feminist activism and women of color movements. We will investigate these works as artistic attempts to deal with such issues as culture, language and bilingualism, family, gender, sexuality, and domesticity. We will account for regional distinctions and contributions. Readings will include works by Julia Alvarez, Gloria Anzaldúa, Elena Castedo, Ana Castillo, Denise Chávez, Sandra Cisneros, Judith Ortiz Cofer, Cristina García, Nora Glickman, Nicholasa Mohr, Cherrie Moraga, Achy Obejas,
Esmeralda Santiago, Ana Lydia Vega, and Helena Maria Viramontes.

## SPANL 301 Hispanic Theater Productlon

Fall or spring. 1-2 credits. S-U only

## D. Castillo.

Students involved in Hispanic Theater
Production develop a specific dramatic text for full-scale production. The course will involve 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 signing up for the course will be involved in some aspect of production of the play, and will write a final paper as a course requirement. Credit will be
variable depending upon the student's role in play production: a minimum of 50 hours of work is required for one credit; a maximum of two credits will be awarded for a 100 hours or more of work.
Note: SPANL 316 and 318 can be taken in any order. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor.

## SPANL 315 Renalssance Hlspanisms:

 Spain and the Americas "Spring. 4 credits. Conducted in Spanish Prerequisite: SPANL 316 or SPANL 318. C. M. Arroyo.

Study of canonical texts of the "Golden Age" of Spanish Literature. Discussions on the historical and ideological background-the era of Charles V, Lutheranism, the very notions of Renaissance, Humanism and Baroque, etc. Readings include Columbus, Lazarillo de Tormes, Garcilaso, St. Teresa of Avila, Cervantes, and plays by Lope de Vega, Calderon, and the birth of the Don Juan myth.

## SPANL 316 Readings In Modern Spanish

 LiteratureFall or spring. 4 credits. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor
Taught in Spanish. Fall: M. Stycos or
J. R. Resina; spring: J. R. Resina or M. Gil.

Readings and discussion of representative texts from Spain from the romantic period to the present. Bécquer, Galdós, Unamuno, García Lorca, Cela, and others.

## SPANL 318 Readings in SpanishAmerlcan Literature (a)

Fall or spring. 4 credits. Fall:
J. E. Paz-Soldan or M. Gil; spring:
J. E. Paz-Soldàn or J. Piedra.

Readings and discussion of representative texts of the nineteenth and twentieth centuries from Spanish America: Darío, Borges, Vallejo, Paz , Cortàzar, García Mảrquez, and others.
Note: The prerequisite for the following courses, unless otherwise indicated, is SPANL 315,316 , or 318 , or permission of instructor.]

## SPANL 333 The Spanish-Amerlcan Short

 StorySpring. 4 credits. Conducted in Spanish. D. Castillo.

A study of the short narrative genre as it has been practiced in Spanish America during the past two centuries. In addition to representatives of the Romantic, Realist, Modernist, and criollista schools, the course focuses on contemporary writers such as Arreola, Borges, Cortảzar, Fuentes, García Mảrquez, and Rulfo.
SPANL 339 Muslims, Christians, and Jews In Isiamic Spain: Literature and Soclety (also SPANL 699, NES 339, JWST 339, COM L 334, and RELST 334) \#
Spring. 3 credits. S/U option. This course can be used to fulfill the requirements of the Medieval Studies Program. Taught every other year. R. Brann.
For description, see NES 339.
SPANL 363 The European Novel (also Comparative Lliterature 363)
Fall. 4 credits. C. M. Arroyo.
For description, see COM L 363.
SPANL 381 "Fin de Siglo" and Modernity Fall. 4 credits. Conducted in Spanish. J. Paz-Soldân.

A comprehensive review of the literature written in Spanish America during the period
known as the "fin de siglo." Movements such as "naturalismo" and "modernismo," and a variety of genres will be examined in the context of the crisis of liberal projects of modernization, and in the light of the specific nature of modernity in Latin America. A selection of texts includes Martí, Cambaceres, Darío, Clorinda Matto, Silva, Quiroga, Agustini, and others.

## SPANL 384 Literature and Revolution

 Spring. 4 credits. Conducted in Spanish. J. Piedra.A study of primary and secondary documents of and about Spanish American revolutionaries with a literary flair or literary and meta-literary texts which endorse revolution. Materials range from testimonies and manifestoes to novels and films, from Evita Peron to Che Guevara, from national liberation and civil war to gender and sexual liberation.

## SPANL 387 The Novel of Memory

Spring. 4 credits. Conducted in Spanish. J. R. Resina.

In the 1960 s a category of novels develops in Spain that seeks to account for history in terms of personal experience and selfunderstanding. Through an ideological reversal, the 1980 s and ' 90 s are a period of political aestheticization driven by the impulse to forget the past. Some of the theoretical issues explored include the relation between fiction and memory, the fantastic, and the social construction of memory. Authors studied include Matute, Rodoreda, Benet, Goytisolo, Martín Gaite, Marsē and Vảzquez Montalbán.

## SPANL 399 Spanish Fllm

Fall. 4 credits. Conducted in Spanish.
Screenings to be announced. J. R. Resina. Examines the evolution of Spanish cinema since Franco's death in 1975, both from a historical and a cinematic perspective. The focus will be on documentary, fictional and allegorical reconstructions of the past, and on the images of the new democratic society which illustrate a postmodern aesthetics. Selected films include works by directors who started their careers under the dictatorship (Saura, Erice, Borau), and by members of the younger generation, such as Almodóvar.

## SPANL 404 Trauma and Captivity from

 Cervantes to García Märquez
## (also 5 MUM 404)

Fall. 4 credits. Conducted in English.
M. A. Garcés.

For description, see S HUM 404
SPANL 417 Maladies of the Soul: Don Quljote and the Modem Novel (also S HUM 417)
Spring. 4 credits. Conducted in English. M. A. Garcès.

For description, see S HUM 417
SPANL 419-420 Special Topics in Hispanic Llterature
419, fall; 420, spring. 2-4 credits each term. Prerequisite: permission of instructor. Staff.
Guided independent study of specific topics. For undergraduates interested in special problems not covered in courses.

## SPANL 429-430 Honors Work In

 Hispanic Literature429 , fall; 430 , spring. 8 credits. Year-long course, R grade fall semester, letter grade spring semester. Limited to seniors. Prerequisite: permission of instructor. D. Castillo.

SPANL 451 Spanish Theater of the Golden Age \#
Fall. 4 credits. Prerequisite: limited to juniors, seniors, and graduate students. Conducted in Spanish. C. M. Arroyo. This course will examine plays of the "Spanish National Theater" from Juan del Encina to Calderon; philosophical anthropology of the period and the art of characterization; topical themes and structures, and originality; text and performance. Readings include Encina, Gil Vicente, Lope de Vega, Tirso, Alarcôn, Mira de Amescua, and Calderôn. Open to Spanish majors and to other students who can read the texts in Spanish.

## SPANL 483 MACONDO/McONDO: Our "Fin de Siglo"

Spring. 4 credits. Conducted in Spanish.
J. Paz-Soldản.

A review of Latin American narrative of the last two decades, in the context of the modernity/postmodernity debate, and in view of the social, cultural, and political changes brought about by globalization. Topics will include the new historical novel, the emergence of new cultural actors, magical realism and the revolt against it by the new generation of Latin American writers. Works by Vargas Llosa, Allende, Tomas Eloy Martinez, Mastretta, among others.
SPANL 609 The Generation of 1898 Spring. 4 credits. Conducted in Spanish. C. M. Arroyo.

Graduate seminar on one of the most controversial moments in Spanish civilization. Topics covered will include the Cubans' wars of independence; Josê Martí; the SpanishAmerican War; the idea of generation in literature; the search for "the soul of Spain"; the contemporary European discourse on national identity; the origins of Catalan and Basque nationalism; the generation of 1898 and Modernism. Readings include Unamuno, Rubèn Darío, Valle-Inclân, Benavente, Azorín, Baroja, R. de Maeztu, A. Machado.

## SPANL 639-640 Special Toples in

 Hispanic Llterature639 , fall; 640 , spring. $2-4$ credits each term. Staff.

SPANL 690 Hispanic Feminisms (also WOMNS 692)
Fall. 4 credits. Conducted in Spanish. D. Castillo.

This seminar is designed to explore the interrelationship of feminist literary theory and the narrative production of the Hispanic world. In this inquiry, we will be developing feminist critical methodologies (based on readings of essays by thinkers such as Barthes, Castellanos, Derrida, Freud, and Glantz) and defining strategies or possibilities for feminist criticism(s). Finally, we will study the ways in which feminist analyses of literature alter our readings of texts by men (Isaacs, Cortāzar, Onetti, García Lorca) as well as by women (Pardo Bazàn, Tusquets, Valenzuela, Garro), and how they change our conceptions of criticism and the task of the critic.
SPANL 699 Musllms, Christlans, and Jews In Islamic Spain: Literature and Soclety (also SPANL 339, COM L 339, NES 639) *
Spring. 3 credits. S-U option. This course can be used to fulfill the requirements of the Medieval Studies Program. Taught every other year. R. Brann.
For description, see NES 639.

## RUMANIAN

See Language Courses under Languages and Linguistics.

## RUSSIAN

P. Carden, director of undergraduate studies [literature], 235 Goldwin Smith Hall, 255-8350;
E. W. Browne, G. Gibian, N. Pollak,
S. Senderovich, G. Shapiro

## The Russian Major

Russian majors study Russian language, literature, and linguistics, emphasizing their specific interests. It is desirable, although not necessary, for prospective majors to complete Russian 121-122, 201-202, and 203-204 as freshmen and sophomores, since these courses are prerequisites to most of the junior and senior courses that count toward the major. Students may be admitted to the major upon satisfactory completion of Russian 122 or the equivalent. Students who elect to major in Russian should consult Professor Carden as soon as possible. For a major in Russian, students will be required to complete (1) Russian 301-302 or 303-304 or the equivalent, and (2) 18 credits from 300 - and 400 -level literature and linguistics courses, of which 12 credits must be in literature in the original Russian.
Certain courses may, with the permission of the instructor, be taken for one additional hour's credit. Such courses will involve a one-hour section each week with work in the Russian language. These courses count one hour each of credit toward the 12 courses of Russian titerature in the original language required for the major.

## Study Abroad

Cornell is an affiliated institution in the Council on International Educational Exchange program for Russian language study at St. Petersburg State University. Cornell students also frequently attend the American Council of Teachers of Russian program in Moscow and other Russian language programs. Opportunities are available for study during the summer, a single semester, or the full year. Further information is available from W. Browne, in the Department of Modern Languages.
Honors. Students taking honors in Russian undertake individual reading and research and write an honors essay.
Fees. Depending on the course, a small fee may be charged for photocopied texts for course work

Freshman writing seminar requirement.
The following courses will satisfy the
freshman writing seminar requirement:
Russian 103, 104, 105, and 109.

## Russian and Soviet Studies Major

See "Special Programs and Interdisciplinary Studies," which follows the department listings.

## Russian Literature

P. Carden (director of undergraduate studies, 235 Goldwin Smith Hall, 255-8350),
G. Gibian, N. Pollak, S. Senderovich, G. Shapiro.

The Department of Russian Literature offers a variety of courses: some with readings in English translation, others in the original Russian, or both. The connection between Russian history, society, and literature is particularly close, so instruction and discussion in class often include a variety of topics, such as culture and intellectual history, as well as literature. Several courses are interdisciplinary, cosponsored with the departments of History, Economics, Government, Comparative Literature, etc. Students interested in majoring in Russian are strongly urged to take Russian 121-122 as soon as possible, preferably in their first year, or by their second at the latest Russian 203-204, offered by the Department of Modern Languages, and Russian 201-202, offered by the Department of Russian Literature, complete basic language instruction and introduce students to literature. A further sequence of literature courses in Russian follows Russian 202.
For further information about courses and majors, see Modern Languages.

## RUSSL 103 Freshman Writing Seminar: Classles of Russian Thought and

 LiteratureFall or spring. 3 credits. Staff. Russian society has always seen its literature as having a mission important to the development of the nation. In this course we will examine Russian literature as it participates in the debate, whither Russia? We will look in particular at the conflict between the Slavophiles, those who thought Russia had its own unique destiny, and the Westernizers those who thought Russia should look to the West for a model in its development. We will be reading such Russian authors as Turgenev, Dostoevsky, Herzen, and Solzhenitsyn in English translation. The course will examine the rhetorical means each author uses to make his argument. All reading is in English translation.

## RUSSL 104 Freshman Writing Seminar: Nineteenth-Century Russian Literary <br> Masterpieces

Fall or spring. 3 credits. Staff.
This course will introduce students to a broad selection of the major short works of the Russian literary tradition. Our emphasis will be on what makes each work interesting as writing, what themes have been particularly interesting to Russians, and how we recognize the distinctive voice of each of the writers we are studying. Among the authors read are Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy, and Chekhov. All reading is in English translation.

## RUSSL 105 Freshman Writing Seminar: Twentleth-Century Russian Literary

 MasterplecesFall. 3 credits. Staff.
We will read and write about a selection of works from the major Russian literary movements of the twentieth century. The course will concentrate in part on important literary responses to the first Russian
Revolution and the society it created. Authors to be read include Zamyatin, Olesha,
Zoshchenko and Vladimov. Readings in English translation.

## RUSSL 109 Freshman Writing Seminar: Russian Science Fiction

Spring. 3 credits. P. Burge.

## RUSSL 201-202 Readings in Russian

 Literature \#201, fall; 202, spring. 3 credits each term. Prerequisites: qualification in Russian; 201 is prerequisite to 202. Open to freshmen. Fall or spring: N. Pollak.
These courses are designed as the initial courses students take after qualification in Russian and are conducted mainly in Russian. Considerable guidance is provided, however, and there is no presumption of fluency. The goals of the courses are to introduce students to Russian literature in the original, to sample differing literary styles, and to accomplish both with minimal recourse to English in class Several short papers in Russian and English will be assigned. Readings from nineteenthand twentieth-century masters of prose and verse such as Pushkin, Lermontov, Tiutchev, Tolstoy, Chekhov, Babel, and Zoshchenko.

## [RUSSL 207 Themes from Russian

 Culture \#Spring. 3 credits. Not offered 1997-98. G. Shapiro.

This course is based on lectures, discussions and audio-visual presentations (slides, tapes, films). It includes within its scope various aspects of Russian culture such as literature, art, music, religion, philosophy, and social thought from its very beginnings through the eighteenth century. The course is designed to give undergraduates a broad familiarity with the cultural traditions of the country which plays a major role in the world today. Russian culture will be presented as part of Western civilization with attention given to its distinctive character. The basic texts are literary works of moderate length in English translation.]

## [RUSSL 208 Themes from Russian

 Culture IISpring. 3 credits. Not offered 1997-98. G . Shapiro.
This course is based on lectures, discussions, and audiovisual presentations (slides, tapes, films). It includes various aspects of Russian culture such as literature, art, music, religion, philosophy, and social thought over the last two hundred years. The course is designed to give undergraduates a broad familiarity with the cultural traditions of the country that plays a major role in the world today. Russian culture will be presented as part of Western civilization with attention given to its distinctive character. The basic texts are literary works of moderate length in English translation.]

## [RUSSL 330 Understanding Russia Today (also Govt 357)

Fall. 4 credits. Not offered 1997-98.
G. Gibian and guest speakers.

An interdisciplinary inquiry into Russian society and its history, designed as an introduction for students not majoring in Russian studies, also a synthesis for those who are studying various aspects of Russia in separate disciplines. Organized into a variety of approaches to Russian language, culture, history, and literature. It aims to teach both basic information and different ways of interpreting that information. Topics will include: the land and the people; doing business in Russia; literary traditions and revolts; Russian national identity; nationalism; persistent cultural traits; religion, history;
politics and government; relations with other nations, inside Russia and outside; Jews and Russians; folklore; social matters, customs, values; position of women; education; music, architecture; agriculture and industry; Russian maximalism; regionalism; the ecology; film, TV, theatre, journalism.]

## [RUSSL 331 Introduction to Russian Poetry \#

Fall. 4 credits. Prerequisites: Russian 202 or equivalent and permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students. Not offered 1997-98. S. Senderovich.

A survey of Russian poetry with primary emphasis on the analysis of individual poems by major poets.]

## [RUSSL 332 Russian Drama and Theatre (also Thetr 322)

Fall. 4 credits. Not offered 1997-98.
S. Senderovich.

Selected topics. Discussion of a number of the most representative Russian plays of the nineteenth and twentieth centuries in chronological order. Introductions to the historical period, cultural atmosphere, literary trends, and crucial moments in the history of the Russian theater will be especially emphasized. Among the works we will be studying will be Gogol's Inspector General, Ostrovsky's The Storm, and Chekhov's Tbe Cherry Orchard. All readings will be in English translation. Additional assignments in critical literature will be made for graduate students.I

## [RUSSL 333 Twentleth-Century Russian Poetry

Spring. 4 credits. Not offered 1997-98. N. Pollak.

Close readings of lyrics by major twentiethcentury poets. All reading is in Russian. Geared towards undergraduates.]
[RUSSL 334 The Russlan Short Story \# Fall. 4 credits. Prerequisites: Russian 202 or equivalent and permission of instructor. This course may be counted toward the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students. Not offered 1997-98. N. Pollak.

A survey of two centuries of Russian story telling. Emphasis on the analysis of individual stories by major writers, on narrative structure, and on related landmarks of Russian literary criticism.]

## [RUSSL 350 Education and the Philosophical Fantasies

Spring. 4 credits. Not offered 1997-98. P. Carden.

A major philosophical tradition has conceived of education as encompassing the whole of our lives. What we should do or be is seen as the result of every choice we make. The whole of our human contacts is understood as a school in which we form ourselves. This all-encompassing vision of education has been embodied in the works of the great philoso-pher-fantasists who use the forms of fiction to explore fundamental issues of education. In this course we will examine several key philosophical fantasies, among them Plato's Republic, Rousseau's Emile, and Tolstoy's War and Peace. Our aim will be to understand how the discourse on education became a central part of our Western tradition.]

## RUSEL 367 The Russian Novel (also

 Comparative Literature 367) \# Fall. 4 credits. Also open to graduate students. Special discussion section for students who read Russian. G. Gibian. Sentimentalism, Romanticism, Realism, Modernism. Novels and short stories by Gogol, Turgenev, Tolstoy, Dostoevsky, Chekhov, and others. Readings in English translation.RUSSL 368 Russian Literature from 1917 to the Present
Fall. 4 credits. Also open to graduate students. No prerequisites. There will be a special section for students who read Russian. G. Gibian.
In translation. A survey of Russian literature focusing on the most important writers. Among the themes to be explored will be Russian Modernism, social command, socialist realism, the Thaw, dissident and emigre literature, post-modernism. Writers include Blok, Mayakovsky, Babel, Olesha, Platonov, Pasternak, Nabokov, Solzhenitsyn, the two Erofeevs, and contemporary women poets and short story writers.
[RUSSL 369 Dostoevsky
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 373 Chekhov in the Context of Contemporary European Literature and Art \# Ialso Comparative Literature 375)
Spring. 4 credits. Not offered 1997-98. S. Senderovich.

Reading and discussion of Anton Chekhov's short stories in the context of the European art of the short story and painting of that era. The course is designed for nonspecialists as well as literature majors. All reading is in English translation.]

## [RUSSL 377 Baltic Literature (also

 German Studies 377)Spring. 4 credits. Not offered 1997-98. I. Ezergailis.

Estonia, Latvia, and Lithuania have created a rich literary tradition since the beginning of a written indigenous culture in the nineteenth century. We will read texts from each of these literatures, selected for their quality, importance, and the availability of acceptable translations, representing, as much as possible, writers from the pre-Soviet independence period, those writing under Soviet rule, and emigres.]

## RUSSL 379 The Russian Connection

 (also Comparative Literature 379) * Spring. 4 credits. P. Carden. Our topic will be the development of a poetics of introspection in European prose in the course of the 19th century, culminating in two major Russian novels: Tolstoy's War and Peace and Dostoevsky's The Idiot. Among other works we will read: Constant's Adolphe, Stendhal's Cbarterbouse of Parma, and several short works relevant to the theme.
## [RUSSL 384 Dialogue In/as Text (also

 Comparative Literature 384)Spring. 4 credits. Not offered 1997-98. P. Carden.

An examination of the principle of dialogue and dialogism as it appears in fictional discourse. Using the theories of Mikhail Bakhtin as a point of departure, we will examine the use of dialogue as a form of discourse beginning with Plato's Phaedrus. Dostoevsky's novels Notes from Underground,

The Possessed, and The Brothers Karamazov will be discussed as dialogic, or polyphonic forms of discourse. Finally, we will discuss selected works of Gide, Sartre and Camus, who acknowledged their debt to Dostoevsky, to see if they are indeed polyphonic in structure.]

## [RUSSL 385 Reading Nabokov (also

 Comparative Literature 385 and English 379)Fall. 4 credits. Not offered 1997-98. G. Shapiro.

This course offers an exciting trip to the intricate world of Nabokovian fiction. After establishing himself in Europe as a distinguished Russian writer, Nabokov, at the outbreak of WWII, came to the United States where he reestablished himself, this time as an American writer of world renown. In our analysis of the Nabokovian artistic universe, we shall focus on his two splendid achievements as a Russian writer, The Defense (1930) and Despair (1934) (both in their English form), and then examine the two widely read novels that he wrote in Ithaca while teaching literature at Cornell-Lolita (1955) and Pnin (1957).]
[RUSSL 389 Contemporary Literature in Central and East Europe (also Comparatlve Literature 389) Spring. 4 credits. Not offered 1997-98. G. Gibian.

The course this year will study developments in literature (and to some extent in other areas of culture) in Hungary, Poland, Slovakia, and the Czech Republic in the most recent periods. We shall focus on novels and short stories, but some consideration will also be given to drama and poetry. No knowledge of Eastern European languages is required. The reading will be done in English translation.]

## RUSSL 393 Honors Essay Tutorial

 Fall and spring. 8 credits. Must be taken in two consecutive semesters in senior year. Credit for the first semester will be awarded upon completion of second semester. For information, please see Director of Undergraduate Studies.[RUSSL 404 History and Nationality in Russia and Eastern Europe (also S Hum 404) "
Fall. 3 credits. Not offered 1997-98. G. Gibian.

Ethnicity and nationality appear as the main forces behind the recent dramatic changes in Eastern Europe. The seminar addresses these issues in Russia, Czech Republic, and elsewhere, mainly from a literary perspective and also in the context of rising ethnic and national consciousness throughout the world.l
[RUSSL 409 Russian Stylistics
Fall. 4 credits. Also open to graduate students. Prerequisite: three years of Russian. Not offered 1997-98.
A few steps beyond normative grammar. Introduction to the subtleties of idiomatic Russian on the levels of morphology, syntax, vocabulary, and phraseology. Introduction to the genres of live colloquial and written language. Development of writing skills through short assignments and their analyses. First notions of literary stylistics and their practical application.]
[RUSSL 427 Russlan Formalism (also Comparative Llterature 427)
Fall. 4 credits, Not offered 1997-98 N. Pollak.

This is a course on Russian Formalism, a trend in literary interpretation that flourished in the 1910 s and the first part of the 1920s. We will read the writings of such scholars as Tynianov, Eikhenbaum, Shklovsky, and Jakobson, as well as the works they studied. The course provides a historical examination of a school that gave rise to some of the most important movements in twentieth-century Western criticism--and in other disciplines, such as linguistics and anthropology. The course also provides both a look at classics of Russian prose and an approach to literature that has something to offer readers today. No knowledge of Russian is required.]

## RUSSL 428 Futurlsm and Formalism

 Fall. 4 credits. S. Banks In the linguistic inventiveness of the Futurists, theorists such as Viktor Shklovsky found the vital engagement with the material of poetry which they believed could truly renovate Russian literature. In this course we will read key critical essays by members of the Petersburg OPAYAZ and the Moscow Linguistic Circle, while we also carefully examine the material and textual elements of Futurist poetry collections and dramatic productions. We will also study the literary and theoretical impact of new genres such as the manifesto which, with its status between literary utterance and performative program incarnates the intersection of literature and theory. Readings in English translation.
## RUSSL 429 Music in Russian

 Symbolist PoetrySpring. 4 credits. S. Banks. In his hierarchy of the arts, Schopenhauer placed music at the apex as the pure manifestation of world will. Poetry claimed second place, and to the Russian Symbolists this meant that a heightening of the musical aspects of poetry could bring it closer to the ideal art. In this course we will read essays and poems by Blok, Ivanov, Briussov, and others as well as excerpts from Schopenhauer and a few selected works of the French Symbolists, whom the Russians admired and translated. We will examine the idea of musicality as expressed in the rhythm and sonority of the poems while we also interpret musical metaphors and themes against the backdrop of larger aesthetic and philosophical valuations of music. Our attention to musical motifs and techniques will take us out of the traditionally defined chronological boundaries of Symbolism, but this breadth will help us to define an essential aspect of the movement as well as to assess the movement's impact on other artistic programs of the early twentieth century. Readings in English translation.

RUSSL 430 Practice in Translation Spring. 4 credits. Prerequisites: proficiency in Russian or approval of instructors. W. Browne and S. Senderovich. A practical workshop in translation: documents, scholarly papers, literary works (prose and poetry). Translation mostly from Russian to English, partly from English to Russian. Attention to problems and development of skills.

## [RUSSL 431 Contemporary Russian

 ProseSpring. 4 credits. Prerequisites: Russian 301-302 or 303-304, and permission of instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major. Graduate students may audit the course. Not offered 1997-98. Staff.
This course is designed to acquaint students with the way Russian prose has developed during the past forty years. Although the emphasis will be on comprehension of the text, we will also discuss literary structure, modern literary history, social and political problems, and the ways in which life in Russia is reflected in its literature. Authors to be read include Viktor Nekrasov, Yuri Kazakov, Alexander Solzhenitsyn, Varlam Shalamov, Abram Tertz (Andrei Sinyavsky), Vasili Axyonov, and Tatyana Tolstaya. This course is specifically intended for third- and fourthyear Russian majors.]

## [RUSSL 432 Pushkin \#

Spring. 4 credits. Prerequisites: Russian 202 or equivalent, and permission of instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major. Also open to graduate students.
Not offered 1997-98. S. Senderovich.
Reading in the original language and
discussion of selected works by Pushkin:
lyrics, narrative poems, and Eugene Onegin.]
RUSSL 445 Batiushkov and Pasternak
Fall. 4 credits. Prerequisites: at least one 300-level course in Russian literature in the original, or permission of the instructor. N. Pollak.

A study of the works of Konstantin Batiushkov (b.1787) and Boris Pasternak (b. 1890), two poets who have been described as innovators in Russian poetic language. We will examine the poetry (and prose) of these poets and some of their contemporaries, with a view to exploring their parallel roles in two ages of poetry a century apart.

## RUSSL 460 Short Works of Tolstoy and

 DostoevskySpring. 4 credits. Days and hours, TBA. G. Gibian

Readings in Russian and in translation. Open to graduate students.

## RUSSL 491 Reading Course: Russian

 Literature in the Original LanguageFall or spring. 1 credit each term.
Prerequisite: permission of instructor. Staff.
This course is to be taken in conjunction with any Russian literature course in English translation. Students will receive one credit for reading and discussing works in Russian in addition to their normal course work.

RUSSL 492 Supervised Reading in Russian Literature
Fall or spring, 1-4 credits each term. Prerequisite: permission of instructor. Staff.
[RUSSL 499 The Avant-Garde in Russian Literature and the Arts
Spring. 4 credits. Open to any student who has completed RussL 202. May be used in satisfaction of the twelve hours of reading in Russian required for the Russian major. Not offered 1997-98.
In this course we will examine closely
representative short texts in Russian by such
leading figures of the Russian avant-garde as Blok, Belyi, Remizov, Mayakovsky,
Khlebnikov, Kruchenykh, and Babel. We will also examine related developments in theater, film, and the visual arts.]

## Graduate Seminars

## [RUSSL 603 Graduate Seminar:

 Neglected Masterpieces of Short Russian ProseSpring. 4 credits. Not offered 1997-98. G. Gibian.

Nineteenth- and twentieth-century works chosen according to the needs of the students enrolled. Stress on skills useful in teaching Russian literature.]

## RUSSL 611 Supervised Reading

 and ResearchFall or spring. $2-4$ credits. Prerequisite: permission of the department. Staff.
[RUSSL 617-618 Russian Stylistics I and II
Not offered 1997-98.]
[RUSSL 619 Seventeenth-Century

## Russian Literature

Fall. 4 credits. Not offered 1997-98. G. Shapiro.

Seventeenth-century Russian literature is often studied together with Medieval literature. Is such an arrangement justified, or does seventeenth-century literature have its own problematic that makes it worth studying separately? In scholarship the seventeenth century is referred to as the Age of Baroque. Did Muscovite Russia experience its own Baroque, and, if so, what are its unique features? These and other important issues will be addressed in the seminar. In the course of the seminar a variety of concepts, genres, and themes characteristic for the epoch will be discussed. We will read the works of such authors as Simeon Polotsky, Silvester Medvedev, Karion Istomin, and the archpriest Avvakum.]

## [RUSSL 620 Twentieth-Century Russian

 PoetrySpring. 4 credits. Open to advanced undergraduates with permission of instructor. Not offered 1997-98.
N. Pollak.

An in-depth study of the writings of selected twentieth-century poets. Authors may include Blok, Mandelstam, Pasternak, Tsvetayeva, and Khlebnikov.]
[RUSSL 621 Old Russian Literature Spring. 4 credits. Not offered 1997-98. S. Senderovich.

A survey.]

## [RUSSL 622 Eighteenth-Century

 LliteratureSpring. 4 credits. Not offered 1997-98. S. Senderovich.

Introduction to the first century of modern Russian literature. Cultural identity of the age: Baroque, Neo-Classicism, Enlightenment, Sentimentalism. Reading of representative texts of the major writers of the century: Trediakovsky, Lomonosov, Sumarokov, Novikov, Karamzin, etc. Main connections with nineteenth-century literature: roots, evolution, intertextuality.]

## RUSSL 624 Russian Romanticism

Spring. 4 credits. Taught in Russian
S. Senderovich.

A survey of concepts, themes, genres, and main individual contributions in Russian literature of the Age of Romanticism. The Age of Romanticism encompasses the first four decades of the nineteenth century.
Zhukovsky, Batiushkov, Pushkin, Baratynsky, Gogol, and Lermontov are the major representatives of this style and the most important period of Russian literature. The emphasis is on poetry, its historical and theoretical problems. It was, above all, the golden age of Russian poetry, which prepared and deeply influenced the following age of great Russian prose. Turgenev, Tolstoy, Dostoevsky, and Chekhov are full of allusions to the texts of the golden age and cannot be properly understood without it.

## [RUSSL 625 Russian Realism

Fall. 4 credits. Not offered 1997-98. P. Carden.

A study of the development of psychological realism in Russian prose of the nineteenth century, with some attention to the poetic tradition. In addition to reading representative works, we will pay attention to the historical background of the period. We will approach the works through the critical writings of several important theorists, in particular those of Lydia Ginzburg.]

## [RUSSL 626 The Tradition of

 Russian PoetrySpring. 4 credits. Not offered 1997-98. N. Pollak.

This course will examine a selection of poems that have been particularly important for the tradition of Russian literature in the nineteenth and twentieth centuries. Our focus will include critical and literary responses to these poems as well as close readings.]
[RUSSL 627 Russian Formalism (also Comparative Literature 627)
Spring. 4 credits. Not offered 1997-98. N. Pollak.

See RussL 427 for course description.]

## [RUSSL 630 Gogol

Fall. 4 credits. Taught in Russian. Not offered 1997-98. G. Shapiro. Gogol's artistic career from his "Ukrainian" cycles to Dead Souks. We will examine representative works from each of the major divisions of Gogol's early work, in particular from his cycles Evenings on a Farm near Dikanka and Mirgorod, and will trace the writer's development toward his magnum opus, Dead Souls. Although some of the readings will be done in English to enable the class to cover a significant amount of material the class work will be focused on close analysis of the Russian text.]

## RUSSL 641 Bakhtin as Reader (also COMP L 641)

Spring. 4 credits. Also open to undergraduates with permission of instructor. P. Carden.

The course will investigate the literary and cultural theories of Mikhail Bakhtin, focusing in particular on his interpretations of literary texts. We will read a representative selection of works by Bakhtin covering the chronological development of his ideas. Each member of the class will select one or more of the literary texts commented on by Bakhtin as an occasion for independent work. A reading knowledge of Russian is not required,
although Russian readers may have alternative assignments in the language.

## [RUSSL 650 Russian Intellectual Mistory

 Spring. 4 credits. Not offered 1997-98. S. Senderovich.Nineteenth- and twentieth-century selected topics. Taught mostly in English.]

## [RUSSL 669 Dostoevsky

Fall. Also open to advanced undergraduates. Not offered 1997-98. G. Gibian and guest lecturers.
Study of representative works from various periods of Dostoevsky's life, including some articles, speeches, and parts of The Diary of a Writer, against the context of nineteenthcentury Westem European and Russian literature. A variety of critical and scholarly approaches (from Russian formalists to recent Western scholars) will be sampled and evaluated.]
RUSSL 671 Seminar in NineteenthCentury Russian Literature
Fall. 4 credits. P. Carden.
Topic: War and Peace.
[RUSSL 672 Seminar In TwentiethCentury Russian Literature Fall. 4 credits. Open to advanced undergraduates. Not offered 1997-98.]

## RUSSL 673 The Russian Nabokov

Fall. 4 credits. Also open to advanced undergraduates. G. Shapiro.
Vladimir Nabokov wrote much verse, several plays, numerous short stories, and nine novels in Russian before switching to English. He is a major Russian writer of the twentieth century. This seminar will examine his work in the context of modern Russian literature, concentrating in particular on the novels. Knowledge of Russian is highly desirable, but all the works discussed also exist in English translation.

## [RUSSL 675 Russian Literature,

1917-1945
Fall. 4 credits. Not offered 1997-98. This semester will focus on the achievements of Russian prose between the two World Wars. Among the authors whose works will be closely read and discussed, there are Babel, Olesha, Zoshchenko, Ilf and Petrov, Bulgakov, and Nabokov.I

## [RUSSL 676 Russian Literature, 1945-Present <br> Spring. 4 credits. Not offered 1997-98.] <br> [RUSSL 698 Russian Symbolism

Fall. 4 credits. Not offered 1997-98. P. Carden.

Around 1886 the trends in French culture represented by Baudelaire and Mallarme crystallized into a new cultural movement, called in some of its aspects the Decadence and in others Symbolism. The new sentiments about the nature of art spread throughout Europe, drawing in England, the Scandinavian countries, Germany, and Russia. The first stirrings of Symbolism were in the ascendant in Russian cultural life and it remained the dominant force until 1910. Our task will be to study the phenomenon of Symbolism as it touched the arts in Russia, including not only literature, but dance, theater, and the visual arts. Because Symbolism was a movement that cut across national boundaries, we will study the seminal works of European art that created the climate in which Russian Symbolism was conceived and came to maturity.]

## [RUSSL 699 Russian Modernism

Spring. 4 credits. Not offered 1997-98. P. Carden.

We will be investigating the rich and innovative period of the avant-garde in Russia from 1910 to 1925. In addition to examining outstanding works in a variety of forms, we will look at the movements, social context, and ties to the European avant-garde. Among the writers whose works we will examine are Blok, Bely, Mayakovsky, Khlebnikov, Pilnyak and Babel. We will examine theater through the Futurist performance piece, "Victory Over the Sun," through Meyerhold's productions of Mayakovsky's plays and other experimental pieces, and through mass spectacles. We will discuss the film theories of Eisenstein and Dziga Vertov and see several of their films. In the visual arts we will be examining the experiments of Larionov and Goncharova, Malevich, Kandinsky, and Tatlin. We will also look at the photomontage of Rodchenko.]

## RUSSIAN AND EAST EUROPEAN STUDIES MAJOR

See "Special Programs and Interdisciplinary Studies."

## SANSKRIT

See Language Courses under Languages and Linguistics.

## SERBO-CROATIAN

See Language Courses under Languages and Linguistics.

## SCIENCE AND TECHNOLOGY STUDIES

S. Jasanoff, chair; R. N. Boyd, P. R. Dear, M. A. Dennis, S. H. Hilgartner, R. Kline, B. V. Lewenstein, W. R. Lynn, R. W. Miller, T. J. Pinch, A. G. Power, J. V. Reppy, M. W. Rossiter, L. P. Williams, emeritus Adjunct faculty: J. J. Brumberg,
J. F. MacDonald, W. B. Provine, Z. Warhaft

The importance of science and technology in the modern world is difficult to overstate. Whether one looks at the role of computers in society, the history of evolutionary theory, the challenges of environmental controversies, the ethical dilemmas of biomedicine, or the military applications of research, science and technology profoundly affect our lives-often in ways that we scarcely understand or only dimly perceive. The field of science \& technology studies uses tools from the history, philosophy, sociology, and politics of science and technology to examine science and technology in their social and cultural context and to explore their political and policy implications. Systematic, integrated study of the origins and impacts of science and technology provides an understanding of the interactions among science, technology, and society and yields invaluable insights into the nature of the modern world.

## The Science \& Technology Studies Major

The major in Science \& Technology Studies offers students wishing to pursue careers in law, public policy, health care, or management an opportunity to develop a full appreciation of the place of science and technology in society. The curriculum aims to further students' understanding of the historical, social, political, and ethical aspects of science and technology and to enable students to participate effectively in policy debates and decision making. In today's world, issues at the intersection of the technical and social arise continually in professional practice, management, and research. Thus, the integrated approach of the S\&TS major provides a strong foundation for careers in the professions, in public policy, and in management, as well as in research and teaching.

## Themes of the Major

Students in the S\&TS major develop a program individually tailored to their particular interests. To give their coursework a coherent focus, students select a theme that draws together a group of related courses Available themes include:

1. Science, Technology \& Public Policy. Many of the most important policy issues of our time involve science and technology. This theme offers students an opportunity to gain a deep appreciation of the problems this situation raises in democratic societies. Through courses that survey the place of science in American politics and through courses that focus on such substantive issues as national technology policy or the politics of genetic engineering, this theme explores the tensions between expertise and democracy, the uses of scientific knowledge in making and legitimating policy, social movements that question technology and science, and contemporary debates over economics, innovation, and technology policy.
2. Technology, Culture, and Society Students interested in this theme may examine the connections among technology and society by studying the manifold ways in which social groups (scientists, engineers, inventors, corporations, government agencies, and consumers) interact to construct technological artifacts and systems, and how the use of these artifacts and systems is related to social and cultural change. Areas of particular interest are: computers and society, the military and technological change, gender and technology, biotechnology and society, and telecommunication policy.
3. Environment, Science, \& Society. By focusing on the relationship between scientific knowledge and political power this theme offers unique insights into the making and implementation of environmental policy. Courses are available on such topics as American environmental politics, international environmental policy, science and the law, the history of agricultural science, and environmental communication. Students explore the causes and consequences of environmental controversies, the nature of risk and uncertainty in environmental issues, the roles of experts and the public in
environmental decisions, and the challenges of global environmental policy
4. History and Pbilosophy of Science and Technology. This theme provides students with an appreciation of science and technology in historical perspective and with an understanding of the philosophical problems posed by scientific knowledge. Courses available range from broad surveys to intensive studies of focused subjects. Students in this theme address such topics as the emergence of modern science; gender and science; the goal of achieving valid knowledge and the philosophical and institutional problems that this entails; the issues for history and philosophy of science raised by the new sociology of scientific knowledge; the relationship between knowledge, technology, and ethics; and the impact of major institu-tions-such as religion, medicine, the military, and the modern consumer economy-on the development of the sciences.
Beyond the four themes described above, S\&TS majors may also create their own themes, carefully tailored to their particular interests. Examples might include "Comput ers, Innovation, and Society" or "Science, Technology and Globalization."

## Admission to the Major

Students intending to major in Science \& Technology Studies should submit an application during their sophomore year. Juniors are considered on a case-by-case basis. The application includes (1) a onepage statement explaining the student's intellectual interests and why the major is consistent with the student's academic interests and goals; (2) the theme the student wishes to pursue in the major; (3) a tentative plan of courses fulfilling S\&TS requirements; and (4) an up-to-date transcript of work completed at Cornell University (and elsewhere, if applicable).
Acceptance into the major requires completion of the following prerequisites: a) Two introductory courses chosen from some combination of history, philosophy, sociology, or government; b) The science requirement of the College of Arts and Sciences; c) Mathematics or computer science courses in fulfillment of the Arts College Group Two distribution requirement. Sophomores in the process of completing these prerequisites may be admitted to the major on a provisional basis. Further information and application materials are available at 275 Clark Hall (255-6047).

## Requirements

S8TS majors must complete the following requirements:

1. Core Courses: Science and Technology Studies majors will be required to take:
(a) either S\&TS 250 (Technology in Society) or S\&TS 282 (Science in Western Civilization); and
(b) either S\&TS 381 (Philosophy of Science: Knowledge and Objectivity) or S\&TS 389 (Philosophy of Science: Evidence and Explanation) or S\&TS 201 (What is Science? An Introduction to Social Studies of Science and Technology); and
(c) either S\&TS 390 (Science in the American Polity: $1800-1960$ ) or S\&TS 391 (Science in the American Polity: 1960-now) or S8iTS 442 (Sociology of Science).
2. Additional Science and Technology Studies Courses: Science and Technology Studies majors will be required to complete at least 21 credit hours of additional courses in Science and Technology Studies, subject to the following restrictions:
(a) Breadth requirement: At least one course beyond the core courses in each of the three areas of concentration (history, philosophy, and social studies of science and technology);
(b) Depth requirement: At least two courses in one area beyond the core courses and intended for advanced undergraduates or graduate students.
3. Science Requirement: In addition to the science requirement of the College of Arts and Sciences, Science and Technology Studies majors are required to take an additional two semesters of a natural science or engineering (including computer science). Mathematics sufficient to follow the additional science requirement should be completed before undertaking that requirement. Choice of these courses should be made in consultation with the student major advisers and should be related to the theme selected by the student.

## 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 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 spring semester before their junior year. More information on the honors program is available from the S\&TS undergraduate office at 275 Clark (255-6047).

## The Biology and Society Major

The Department of Science \& Technology Studies also offers the Biology and Society major, which includes faculty from throughout the university. The Biology and Society major is ideally suited for students who wish to combine training in biology with exposure to perspectives from the social sciences and humanities on the social, political, and ethical aspects of modern biology. In addition to providing foundational training in basic 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 and the College of Human Ecology Undergraduates in the College of Agriculture and Life Sciences can develop an approved sequence of courses from the Biology and Society curriculum under general studies. 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 275 Clark Hall, 255-6042.

A full description of the Biology and Society major can be found in the Courses of Study section entitled Special Programs and Interdisciplinary Studies.

## The Concentration in Science and Technology Studies

S. Jasanoff, chair; R. N. Boyd, P. R. Dear, M. A. Dennis, S. H. Hilgartner, R. Kline, B. V. Lewenstein, W. R. Lynn, R. W. Miller, T. J. Pinch, A. G. Power, J. F. Reppy, M. W. Rossiter, L. P. Williams, emeritus. Adjunct faculty: J. J. Brumberg, J. F. MacDonald, W. B. Provine, Z. Warhaft

The concentration (or 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 concentration is intended for students with varied academic interests an 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 multiple disciplinary perspectives.
The S\&TS concentration permits students to develop an individualized program of study closely related to their major field. For example, students might use the $S \& T S$ concentration to further explore issues related to their major focusing on such topics as computers and society; gender and technology; science and law; biotechnology; science and politics; and environmental policy. By choosing courses in S\&TS which fit their particular goals, students can tailor the concentration to provide breadth and depth in areas of special interest.

S\&TS courses are organized into three areas: history, philosophy, and social studies of science and technology. To satisfy the requirements for the S $\&$ TS concentration, students must complete with letter grades a minimum of four courses selected from the course offerings listed for the major. At least one course should be chosen from the list of core courses. The remaining three courses should be chosen in consultation with an S\&TS faculty adviser and must be drawn from at least two of the three areas. Interested students may obtain further information about courses by contacting the S\&TS undergraduate office, 275 Clark Hall (255-6042).

## Course Offerings

History
Philosophy
Social Studies of Science
Independent Study

## History

## [S\&TS 233 Agrlculture, Mistory, and Society: From Squanto to Biotechnology <br> Fall. 3 credits. Not offered 1997-98. <br> M. W. Rossiter.

This course will survey the major themes in the development of agriculture and agribusiness in the United States in the nineteenth and twentieth centuries. These include particular individuals (such as 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 recent Green and "Gene" Revolutions.]

## S8TS 250 Technology in Society (also Electrical Engineering 250 and History 250)

Fall. 3 credits
For description, see ENGRG 250.

## S\&TS 281 Science in Western

 Civilization \#Fall. 4 credits.
For description, see HIST 281

## S\&TS 282 Science in Western Civllization \#

Spring. 4 credits.
For description, see HIST 282.

## S\&TS 287 Evolution (also HIstory 287)

 Fall. 4 credits.For description, see BIO G 207.
S\&TS 292 Inventing the Power and Information Socletles (also Electrical Engineering 298 and Engineering 298 and History 292)
Spring. 3 credits.
For description, see ENGRG 298.

## S\&TS 355 Computers: From Babbage

 to GatesFall. 4 credits. M. Dennis. Computers have not always been the ubiquitous beige boxes gracing our desktops in Victorian London, Charles Babbage attempted to build his analytical engine using brass gears and steel rods; and during World War II the Allied governments used sophisticated electro-mechanical and electronic "brains" to break Axis codes. Machines that once occupied entire rooms now travel in knapsacks. How did this technology, once considered esoteric and useful to only technical specialists, colonize industry, academia, the military, the federal government, and the home? Using primary historical materials, including novels, films, archival documents and other texts we will follow computers from Babbage's Victorian dream of an analytical engine to the visions of contemporary moguls like Bill Gates whose goal is "information at your fingertips." We will explore not only how computer technology affects society, but how culture and politics enable and sustain the development of the machine. This is a course in the history and sociology of computers; a background in computer science is not required. (No technical knowledge of computer use is presumed or required.)

## S\&TS 416 Enlightened Science (also

 History 416)Spring. 4 credits. P. Dear, M. Dennis. For description, see HIST 416 .

## S\&TS 433 International History

 of ScienceSpring. 4 credits. M. W. Rossiter. A survey of the major scientific events and institutions in several foreign nations, including developing countries. The course
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.

## S\&TS 444 Historical Issues of

 Gender and Science (also Women's Studies 444)Fall. 4 credits. Open to sophomores. M. W. Rossiter.

One-semester survey of women's role in science and engineering from antiquity to the 1980s, with special emphasis on the United States in the twentieth century. Readings will 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, we shall have attained a broad view of the problems that have faced women entering science and those that still remain.

## S\&TS 447 Seminar in the History of Biology (also Biology and Society 447, History 415, and Biological Sciences 467)

Summer. 4 credits. Limited to 18 students.
S-U grades optional.
For description see Biology Sci (BIO G) 467.

## S\&TS 525 Seminar in the History of

 Technology (also History 525)Fall. 4 credits. R. Kline.
Exploration of the history of technology in Europe and the United States from the eighteenth century to the present. Typical topics include the industrial revolution in Britain, the emergence of engineering as a profession, military support of technological change, labor and technology, the "incorporation" of science and engineering, technological utopias, cultural myths of engineers and inventors, social aspects of urbanization in the city and on the farm, post-war consumerism, and gender and technology. The interests of students and recent literature in the field will! be considered in selecting the topics for the seminar.

## [S\&TS 644 Toples in the History of

 Women In ScienceFall. 4 credits. Not offered 1997-98

## M. W. Rossiter

This is a one-semester graduate seminar on selected topics in the history of women and gender in science and technology, covering mostly the U.S. in the 20th century but broadly defined to include earlier periods and other countries. It seeks to acquaint advanced students with some of the best recent literature on this topic and to identify and explore possible new topics. Weekly readings and a research paper.]

## [S8TS 680 Seminar in Historiographical

 Approaches to Sciences (also Mistory 680)Fall. 4 credits. Not offered 1997-98.
For description, see History 680.1
[S8TS 682 Topics in the Scientific Revolution (also History 682)
Fall. 4 credits. Not offered 1997-98. For description, see HIST 682.J

## SaTS 687 Seminar in the History of the

 Agricultural SciencesFall. 4 credits. Open to advanced students interested in the history of the agricultural sciences, broadly defined. M. W. Rossiter.

Weekly readings and a research paper.
[seTS 777 Sclence, Technology and the Cold War
Fall. 4 credits. Permission of instructor required for undergraduate students. Not offered 1997-98. M. Dennis.
This graduate seminar will examine the historical transformation wrought in the organization and practice of the physical, biomedical, and environmental sciences since 1945. How did military and federal patronage affect the development of the sciences, the organization of the postwar university, and the armed services? Students will read contemporary historical materials as well as primary texts to understand the development of particular institutions, technologies, and individuals. In addition to participation in the weekly discussion, each student will prepare a research paper for presentation to the

## seminar.]

## Philosophy

SaTS 205 Ethical Issues In Health and Medicine (also Biology and Society 205)
Fall. 4 credits.
For description, see B\&SOC 205.
S\&TS 206 Ethics and the Environment (also Blology and Socioty 206)
Spring. 4 credits.
For description, see B\&SOC 206.

## SRTS 286 Science and Human Nature

 (also Phllosophy 286)Spring. 4 credits.
For description, see PHIL 286.

## SatS 381 Philosophy of Science: Knowledge and Objectlvity (also Phllosophy 381) <br> Fall. 4 credits.

For description, see PHIL 381.

## seTS 681 Philosophy of Sclence (also Philosophy 681)

Spring. 4 credits.
For description, see PHIL 681.

## Social Studies of Science

S\&TS 201 What Is Science? An Introduction to the Social Studies of Science and Technology
Spring. 3 credits. T. Pinch.
This course is not a science or engineering course. It is not an introduction to science and technology. It is a course which allows both science and non-science majors to reflect a little on the nature of science and technology as activities. How come science is so successful? Has it always been that way? How different really is science from other activities? How does a new invention come about?
In order to understand better what science is we will also look at what it is not. We will look at episodes of mainstream science, along with science from the X-Files. One week students may study what went on in the confirmation of Einstein's theory of relativity; another week we may hear about crop circles and parapsychology. In technology we will focus on the development of the electronic music synthesizer and look at Cornell Ph.D. Robert Moog's legendary music synthesizer.
Throughout, we will be looking at the infrastructure of science and technology-the bits that scientists, engineers, and their
textbooks take for granted. No particular science or arts requirements are needed for this course. The materials are chosen so as to be understandable by all. We will use a variety of media, including still images, video and computer simulations.

## S\&TS 311 Soclology of Medicine

Fall. 4 credits. S. Hilgartner
This course provides an introduction to the ways in which medical practice, biomedical technology, and the medical profession are embedded in society and shaped by social phenomena. Accountability to patients and the public, and struggles over the control of medical practice in a world where medicine is connnected to gender, class, race, and personal autonomy are important overarching themes. We will examine the structure of the medical profession; medical training and professional socialization; the social organization of the hospital; and doctor-patient interactions. The course will also explore how biomedical knowledge and technology get produced, assessed, and introduced into clinical practice. Topics may include the intensive care unit, the training of surgeons, the regulation of pharmaceuticals, AIDS and breast cancer activism, genetic testing, and priority setting in biomedical science.

## SRTS 324 Environment and Soclety (also Rural Soclology 324) <br> Spring. 3 credits. <br> For description, see R SOC 324.

S\&TS 350 Atomic Consequences: The Incorporation of Nuclear Weapons In Postwar America (also Government 305)
Spring. 4 credits. M. Dennis.
This course will explicate the development of atomic weapons from early twentieth-century ruminations about super bombs in science fiction through the Manhattan Project, the postwar development of thermonuclear weapons and civil defense, and more recent plans for strategic defense. Our focus will expand to cover the lives of researchers at such institutions as Los Alamos during and after World War II as well as discussions of national politics. Other topics include the Nazi effort to develop an atomic bomb, the role of technical espionage during and after World War II, and the problems posed by the classification of technical knowledge. We will seek to understand how the bomb became part of American culture through the use of literature and film, as well as readings in primary historical documents and secondary analyses. In addition to class meetings, there is also a required screening session on T 7-10 p.m. in Uris media room b. Films will generally last less than two hours, but some are longer. Viewing the movies is an essential part of the course.
S\&TS 352 Science Writing for the Mass Media (also Communication 352)
Fall. 3 credits.
For description, see COMM 352.

## 58Ts 360 Ethical Issues in Engineering

 (also Engineering 360)Spring. 3 credits.
For description, see ENGR 360.
S\&TS 390 Science In the American Pollty, 1800-1960 (also Government 308)
Fall. 4 credits. M. Dennis.
How did America become a leading nation in scientific and technical research? This course
charts the development of American science from its origins in gentlemanly societies in the early nineteenth century through the development of large-scale federally funded research or Big Science. Particular attention will be paid to the importance of government patronage in creating new social and intellectual spaces for research; the importance of medicine and the biomedical disciplines for the development of universitybased research; the origins and expansion of research in corporations; and the role of war in the political economy of American science.

## S\&TS 391 Science in the American Polity, 1960-Now (also

 Government 309)Spring. 4 credits. S. Jasanoff. This course reviews the changing political relations between science, technology and the state in America from 1960 to the present. It focuses on the politics of choices involving science and technology in a variety of institutional settings, from Congress to courts and regulatory agencies. The tensions and contradictions between the concepts of science as an autonomous republic and as just another special interest provide the central theme for the course. Topics addressed will include research funding, technological controversies, scientific advice, citizen participation in science policy, and the use of experts in courts.
[S\&TS 400 Components and Systems: Engineering In a Social Context (also Mechanlcal and Aerospace Engineering)
Spring. 3 credits. Not offered 1997-98. For description, see M\&AE 400.]
S\&TS 401 Blology and Soclety: The Social Construction of Llfe (also Blology and Soclety 301)
Fall. 4 credits.
For description, see B\&SOC 301.

## [S\&TS 406 Biotechnology and Law (also

 Biology and Society 406)Fall. 4 credits. Limited to 16 students. Recommended: a course in genetics or rDNA, a course in American government or law, or permission of instructor. Fee for course reading material. Not offered 1997-98. S. Jasanoff.
Biotechnology, with myriad applications in areas such as medicine and agriculture, is developing more rapidly than the social institutions that are capable of controlling it. This course explores the use and potential abuse of biotechnology in areas such as genetic screening and counseling, reproductive technologies, intentional release of genetically engineered organisms, patents, and ownership of human tissue. Particular attention will be given to evolving legal and management strategies for regulating the applications of biotechnology. Readings are from science, medicine, law, and public policy. A research paper is required.]

## [S\&TS 407 Law, Science and Publlc Values (also Government 407 and

 Biology and Society 407)Fall. 4 credits. Not offered 1997-98. S. Jasanoff.

This course explores the varied interactions between science and the legal process that have developed in recent years as a result of attempts to bring greater public accountability to the use of science and technology. It examines the activities of both legislatures and
courts in controlling science and analyzes the values underlying these initiatives. Three major types of science-law interactions form the focus of the course: expert testimony in the courtroom, regulation of hazardous technologies, and legal control of professional standards in science and medicine. Specific topics include the regulation of toxic chemicals and nuclear power, controversies about biotechnology, reproductive technologies and biomedical research, and scientific misconduct.]

## S\&TS 425 Science and Technology

 Policy in Global Perspective (also Government 468)Spring. 4 credits. S. Jasanoff
This course examines the influence of globalization on contemporary science and technology policy. The development of science and technology is increasingly shaped by national as well as transnational forces, such as strategic alliances or confrontations between companies, supranational institutions, and international NGOs. Furthermore, many scientific and technological developments, from the damming of rivers in India to power generation in the United States, arouse socia! resistance on a cross-national level. Is a coherent national science and technology policy possible in this field of apparently centrifugal forces? What values, philosophies, and institutions could guide a socially responsible science and technology policy in the post-cold war era? These questions will be at the center of the course. We will approach the normative questions by looking at the evolution of science and technology policy in a comparative framework covering the U. S., Japan, Europe, and various Third World countries

## S\&TS 427 Politics of Environmental

 Protection In America (also Government 427)Fall. 4 credits. S. Jasanoff. An introduction to the distinctive feature of environmental protection in America, focusing particularly on the role of law, science, and citizen activism in public policymaking. Readings from law, political science, and policy analysis will examine the changing role of expert agencies, courts, public interest groups, Congress, and the states in environmental politics since the late 1960 s. Case studies of specific environmental controversies (nuclear power, siting, pesticides, endangered species) will be used to explore dominant public conceptions of risk and safety, regulatory costs and benefits, and the goals and instruments of environmental policy.

## S\&TS 442 The Soclology of Science (also City and Regional Planning 442 and Biology and Society 342)

Spring. 4 credits. T. J. Pinch.
A view of science less as an autonomous activity than as a social institution. We will discuss such issues as controversies in science, analysis of scientific text, gender and the social shaping of scientific knowledge.
seTs 467 Innovation: Theory and Policy Fall. 4 credits. Open to upper-level undergraduates and interested graduate students. Prerequisite: Economics 102 or permission of the instructor. J. Reppy. In this course we will study the innovation process (that is, the introduction of new technology into practice) through the critical analysis of selected theories of innovation and supporting empirical evidence. Economic
theories will be contrasted to the insights to be found in science and technology studies. The focus will be on the context of interests and ideology in which the various theories have been framed and their differing implications for technology policy. Authors to be covered include Schumpeter, Solow,
Scherer, Nelson and Winter and Bijker and Pinch.

SeTS 469 Food, Agriculture, and Society (also Biology and Soclety 469, and Biology General 469)
Spring. 3 credits.
For description, see BIO G 469.
S\&TS 483 The Military and New Technology
Spring. 4 credits.
For description, see GOVT 483.

## [S\&TS 490 The Integrity of Scientifle

 PracticeFall. 4 credits. Not offered 1997-98 S. Hilgartner.

Recent scandals over scientific fraud, debates about financial conflicts of interest, disputes about the use of human and animal subjects, and tensions over ownership of data have raised concern about integrity in science. In addition, changes in the American research system-from the emergence of new university-industry relationships to the growth of electronic communication-pose new questions about who owns and controls research. The course addresses practices that present problems of integrity in research (e.g., fraud, secrecy, commercialization). It also examines how scientific practices affect the structural integrity of science as an institution. Through these complementary concepts of integrity, the course explores the connections between the conduct of science and its cultural authority.]

## S\&TS 520 Economics Meets Science

 StudiesSpring. 4 credits. J. Reppy.
This course will cover a variety of possible interactions between the disciplines of economics and science and technology studies. Economists (at least some economists) are interested in science and technology as important components in economic growth, while scholars in science studies often appeal to economic motives and institutions to explain behavior in the production of scientific and technological knowledge. We will explore ways in which economics can provide new questions and theoretical approaches for science and technology studies. From another perspective, economics, as the most "scientific" of the social sciences, is itself a subject for study. Internal critiques by economists will be compared to external analyses in the science studies literature. Readings will include works on the epistemology and use of rhetoric in economics and on the "new economics of science" and examples of the use of economic analysis in the science studies literature.

## S8TS 532 Inside Technology: The

 Social Construction of Technology Spring. 4 credits. T. J. Pinch. Rather than analyze the social impact of technology upon society, in this course we will investigate 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 possible which embody different assumptions aboutsociety? 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 will be illustrated by detailed examinations of particular technologies, such as the ballistic missile, the bicycle, the electric car, and the refrigerator.

## [S\&TS 626 Workshop on Law,

 Science, and Technology (also Government 626)Spring. 4 credits. Prerequisite: Gov 407 S\&TS 407/B\&Soc 407 or S\&TS 442/CRP
442/B\&Soc 342. Not offered 1997-98.

## S. Jasanoff.

Legal proceedings provide a powerful mechanism for deconstructing, and to some extent reconstructing, a society's understanding about the nature and social role of expertise, the boundaries of science and technology, and the meaning or validity of scientific "facts." Using a combination of primary legal materials and theoretical studies in science and technology, this course will explore how varying scientific realities are constructed in legal forums and what impact these constructions have on the social relations of science and technology. The course will also consider the policy implications of conflicting legal and scientific approaches to the discovery and verification of scientific facts.]

## [S\&TS 627 Comparative Methods

 in Policy Analysis (also
## Govermment 627)

Fall. 4 credits. Not offered 1997-98.
S. Jasanoff.

Comparisons, at levels of analysis ranging from individual biographies to national decisionmaking, have emerged as an important methodological approach in policy analysis. Focusing primarily on historical and social studies of science and technology, this course seeks to enhance the student's ability to carry out effective comparative analyses at a variety of research sites including laboratories, regulatory agencies, and new social movements. Work in structuralist as well as post-structuralist idioms will be examined in order to sharpen and refine notions such as national styles and political culture that have loomed large in the comparative literature on the politics of science and technology. Topical areas include military research, biotechnology, and environmental controversies.]

## S\&TS 631 Qualitative Research Methods

 for Studying ScienceSpring. 4 credits. T. J. Pinch
Much has been leamed about the nature of science by sociologists and anthropologists donning lab coats and studying scientists in action. In this course we will look at the methods used in this new wave of science studies. We will examine what can be learned by interviewing scientists, from videos and from detailed examinations of scientific texts. Students will gain hands-on experience by conducting a mini-project in which they investigate some aspect of scientific culture.
[S\&TS 645 Genetic Engineering: Politics and Soclety in Comparative Perspective (also Government 634)
Spring. 4 credits. Limited to seniors and
graduate students. Not offered 1997-98.
S. Hilgartner.

Since its development, genetic engineering has been a passionately debated technology,
creating high hopes for some and deep anxieties for others. This course will trace the conflicts and power struggles over genetic engineering from its origins to the present. We will use genetic engineering as a case to discuss some crucial issues in the relationships among science, technology, and politics: the political shaping of modem biology; the relationship between eugenics and molecular biology; the regulation of risks; the state and modern biotechnology; university-industry relationships; agriculture medicine; and biotechnology; the rise of bioethics; social movements, Green parties and technology; the socioeconomic impacts of genetic engineering; the Third World and biotechnology; and the politics of the Human Genome Project. We discuss how society deals with highimpact technologies and explore the question of the adequacy of the political-legal framework of contemporary "risk-society."]

## [S\&TS 688 International Environmental

 Policy (also Government 687)Spring. 4 credits. Not offered 1997-98. S. Jasanoff

This course examines the emergence of the environment as an important item on the political agendas of nations and the evolution of national and international policy responses to environmental issues. Analytically, the course attempts to define the distinctive characteristics of environmental policy and politics in our time and to identify the factors that promote convergences and divergences among different national approaches to the same environmental problems. The scope of the course is therefore both cross-national and international, embracing developing as well as industrialized countries. Particular attention is given to the role of legal and scientific institutions, processes, and instruments in the resolution of environmental controversies. Among the specific issues to be considered are chemical control, risk communication, export of hazards, stratospheric ozone depletion, and global climate change.]

## S\&TS 700 Special Topic 1: Science

 Studies and the Politics of ScienceFall. 4 credits. Prerequisites: S\&TS 711 or permission of the instructor. S. Jasanoff Theoretical developments in science and technology studies have called attention to the contingent and socially embedded character of both knowledge claims and technological systems. Drawing on literature from several disciplines, this seminar explores the consequences of these findings for social and political studies of science. Issues and problems to be considered include trust and skepticism, political and legal agency, reflexive institutions, relativism and social action, science and norms, and the coproduction of knowledge and social order.

## [S\&TS 700 Special Topic 2; Technology

 Transfer IssuesSpring. 4 credits. Not offered 1997-98. J. Reppy.

The goal of this course is to develop a coherent analytical framework for analyzing technology transfer, using insights from economics, sociology and history, and to employ that framework to evaluate current policy issues. We will study the process of technology transfer in different contexts, ranging from intra-firm and intra-industry to technology transfer between civil and military sectors and between industrialized countries and LDCs. The readings will include a mix of theoretical writings and case studies.]

S8TS 711 Introduction to Sclence and Technology Studles (also HIST 711) Fall. 4 credits. P. Dear.
This introductory course will provide students with a foundation in the field of science and technology studies. Using classic works as well as contemporary exemplars, seminar participants will 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 properties; science and the state; the role of instruments; fieldwork; politics and technical knowledge; philosophy of science; sociological studies of science and technology; and popularization.

## S\&TS 751 Ethical Issues and Professional Responsibilities (also Biological Sciences 751 and Toxicology 751) <br> Spring. 2 credits. <br> For description, see BIOBM 751.

## Independent Study

S\&TS 399 Undergraduate Independent Study
Fall or spring. 1-4 credits
Please apply in 275 Clark Hall
S\&TS 699 Graduate Independent Study
Fall or spring. 2-4 credits.
Please apply in 275 Clark Hall.
S\&TS 700 Special Topics
Spring. 3-4 credits.

SINHALA (SINHALESE)
See Language Courses under Languages and Linguistics.

## SOCIOLOGY

D. Strang, P. Becker, R. L. Breiger, S. Caldwell, S. Han, D. P. Hayes, S. Kanazawa, M. Macy, P. Moen, V. Nee, J. M. Stycos, H. A. Walker

Emeritus: R. McGinnis, B. C. Rosen, R. M. Williams, Jr.

The subject matter of sociology is human social organization and institutions. The Department of Sociology offers courses in social organization that include (among other issues) examination of inequality on the basis of race, ethnicity, income, and occupation; political behavior and public policy; social pyschology and group processes; and contemporary social movements for change. Courses that analyze institutions include the family, politics and issues of public policy, the analysis of voluntary organizations, and the study of networks of political and organizational action.

The Department of Sociology offers the opportunity to develop fundamental theoretical insight and advanced research skills appropriate for the study of social behavior and institutions. Graduates of the department take up careers in university, government, and business settings and in law, management, architecture, and other professions seeking men and women who demonstrate a disciplined understanding of society and social issues.

## Sociology Courses for Nonmajors

Sociology provides students with particularly effective ways to understand the complexities of modern life. For many students, the undergraduate years are a last opportunity to gain the insights these fields have to offer. The Department of Sociology is continuing to design an array of beginning and advanced courses that convey a broad understanding of the methods and insights of sociological analysis--courses that will be of particular interest to undergraduates who may not major in sociology. First- and second-year students should note that the introductory courses (101, 103, 110, 115, 150) provide substantial focus on the sociological analysis of major issues of public life. A wide selection of general education courses is available at the 200 level. Advanced undergraduates who are majors in other fields should also see, in particular, the descriptions of Sociology 303, $310,354,370,380$, for which there are no prerequisites other than junior or senior status.

## Related Courses in Other Departments

Students interested in sociology should consult the course lists of the other social science departments in the College of Arts and Sciences (including Anthropology, Economics, Government, and Psychology) and of these other departments: Organizational Behavior (College of Industrial and Labor Relations), Human Development and Family Studies (College of Human Ecology), and Rural Sociology (College of Agriculture and Life Sciences).

## The Major

Requirements for general sociology: (1) 101 and any other 100 -level or 200 -level course (excluding Freshman Writing Seminar) with a 2.5 minimum grade-point average; (2) no later than the junior year, the 301 and 303 methods courses; (3) one course in the department at the 400 level or higher ( 491 is recommended); and (4) 20 additional credits in sociology, of which 6 may be taken in related departments on the approval of the student's major adviser A list of pre-approved courses is maintained by the director of undergraduate studies, some of which are listed under "Related Courses."
Requirements for honors: Potential honor students are encouraged to begin taking the methods and statistics courses during their sophomore year and to take at least 2 credits of Sociology 491, Independent Study, during their junior year. Honors students take Sociology 495-496 during their senior year. Graduation with honors requires a cumulative average of at least B+ in all sociology courses and the successful completion of an oral defense of the honors thesis. Interested students should consult the director of undergraduate studies no later than the second semester of their junior year.

Cornell-in-Washington program. Qualified sociology majors may include a semester in the Cornell-in-Washington program, in which students take courses and undertake a closely supervised internship. For further information, see p. 19.
Supervised research. Qualified sociology majors are invited to participate with faculty members in conducting research. Such projects are usually initiated in one of two ways: the student may offer to assist the faculty member in an ongoing project, or the student may request that the faculty member
supervise the execution of a project conceived by the student. In either case the student should enroll in Sociology 491. Interested students may direct inquiries to any faculty member.

## Society and Economy Concentration

Sociology majors or students in other disciplines who wish to prepare for graduate study in any of the social sciences or in a profession (business, management, or law) may elect to acquire a concentration in society and economy (including international dimensions). This program is designed to provide training in economic sociology, formal organizations, and social science methods. The requirements for the concentration in society and economy include courses in economic sociology, formal organizations, and methods. For further information, consult Professor Victor Nee, 330 Uris Hall.

## Introductory Couses

SOC 101 Introduction to Sociology Fall and spring. 3 credits. Fall,
S. B. Caldwell; spring. M. Macy.

This course provides an introduction to theory and research in sociology. It demonstrates how the insights, theories, and methods of sociological analysis can be brought to bear on major issues of social life. A primary goal is to convey a sense of the manner in which sociologists formulate theories and how the collection and analysis of data are used to evaluate those theories. The course will provide "hands-on" experience in analyzing sociological issues. Students undertake guided research exercises that involve using computers to analyze actual data. No prior background is presumed; necessary skills are covered in class and section meetings.

## SOC 103 Introduction to Sociology: Microsociology

Spring. 3 credits. D. P. Hayes. An introduction to microsociology, focusing on social processes within small groups, including the family. Emphasis is on leadership, conformity, social influence, cooperation and competition, distributive justice, and micro analyses of interaction.

## SOC 110 Introduction to Economy and Soclety

Spring. 3 credits. V. G. Nee. Modern social thought arose out of attempts to explain the relationship between economic development and the social transformations that gave rise to the contemporary world. Classical theorists from Karl Marx and Max Weber to Karl Polanyi focused their writings on emergent capitalist economies and societies. Contemporary social theorists likewise have sought to understand the interaction between capitalism and the social forces reacting against and emerging from modern economic development. From exchange and rational choice theories to network analysis and institutional theory, a central theme in contemporary social thought has been the relationship between the economy and society, economic action and social structure, rationality and fundamental social processes. This course provides an introduction to social thought and research seeking to understand and explain the relationship between economy and society in the modern era.
[SOC 115 Utopia In Theory and Practice
3 credits. Not offered 1997-98. D. Strang. This course examines imaginings of the "ideal society" and efforts to realize them. We discuss the classic literary utopias, from Plato's Republic to More's Utopia to Bellamy's Looking Backward, and also the dystopias of Huxley and Orwell. We also examine social experiments like the nineteenth-century American intentional communities, various socialisms, and the design of contemporary political constitutions. Throughout, the emphasis is on two sociological questions. What leads people to conceive of particular social arrangements as ideal? How can we tell social structures that can work from those that cannot?]

## SOC 150 Introduction to American Religion (also RELST 150)

Fall. 3 credits. MW 11:15-12:05 plus section. P. Becker.
This course will introduce students to the sociological study of religion. Our main focus will be on how religion shapes social identity and influences public debate in our society. We will examine how religion serves as a marker for social status and contributes to the construction of gender and ethnic identities. We will explore how religion serves as a basis for moral critique and political mobilization by looking at local and national religiously based social movements. Our readings will provide the basis for our discussion of these themes, and will reflect the diversity of religious life in the contemporary United States.

## General Education Courses

## [SOC 203 Gender, Work, and Family (also Women's Studles 203)

3 credits. Not offered 1997-98.
The line that divides men and women is one of the deepest and most firmly entrenched in societies. Many people believe that gender differences are natural and thus unmchangeable, but most sociologists argue these differences are created and maintained by culture and social relationships. In this course, we will explore the social construction and maintenance of gender differences and inequalities, focusing primarily on the areas of work and family. Students of all levels (and genders) are welcome.]
SOC 204 Race and Ethnic Relations
Fall. 4 credits. Prerequisite SOC 101,
SOC 103, or R SOC 101. H. A. Walker. This course focuses on race and ethnic relations in contemporary perspective. It examines the social and behavioral implications of attributions of race and ethnicity in small group interaction, the world of work, and the larger society. Topics: inequalities in income and employment, affirmative action, ethnic political mobilization, patterns of marriage and family formation.

## SOC 210 Group Solidarlty

Spring. 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? We will explore these questions from an interdisciplinary perspective, drawing on sociobiology, economics, and social psychol-
ogy, as we apply 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.

## SOC 215 Organizations: An Introduction

Fall. 3 credits. S. Han.
This is an introductory course in the study of organizations. We will start by taking a look at various examples of organizing, including a street gang in a Boston neighborhood, General von Moltke's Prussian army, a government agency, and an industrial corporation. These brief glimpses serve as exercises in looking behind and beyond diverse rhetoric for common patterns in organizational phenomena. We will consider these both from the inside and outside perspectives. The focus of the course is upon research scholarship, not the training of managers. Nonetheless, the analytical skills you will acquire are applicable to work in firms, government agencies, and nonprofit organizations.

## SOC 217 Embedded Markets

Spring. 3 credits. S. Han.
This is a course designed for a wide range of students who are generally interested in organization perspectives on markets and businesses. The primary focus of the course is on modes of organizing. In particular, we will look at the ways in which economic actions are played out in social settings. Call that "embedded markets." For example, what are the differences, if any, between the shops in the Pyramid Mall and the Commons? What kind of books do you find in small boutique bookstores vs. supermarket bookstands, or huge chains like Bames and Noble or Borders? Basic conceptual frameworks will be provided. Yet the course will extensively use, and ask you to come up with, contemporary and local problems to illustrate the core issues.

## SOC 220 Culture and Conflict in Organizations

Spring. 3 credits. P. Becker. How do the organizations we belong to shape us? What is organizational identity and how does it come about? How do cultural beliefs shape organizations? What kinds of organizations strike us as legitimate and effective, and why? Organizations may be goal-directed problem-solvers, but they're also locations for storing and transmitting social facts, like the hierarchical relations among groups, and powerful ideas, including moral codes. Organizations may seem to evolve naturally, but are often shaped by internal conflicts or powerful outsiders. The first part of this course will examine theories of organizational culture and power; the second part will consist of case studies or organizations, businesses, religious denominations, little league teams, and social movement organizations.
[SOC 222 Soclal Policy and Organization in Health, Education, and Welfare Fall. 3 credits. Not offered 1997-98. D. Strang.

Introduces the development of three central kinds of social policy: those concemed with delivering medical care, schooling the young, and providing resources for the economically vulnerable. The course treats the historical development of large-scale public programs, regulatory systems, or attempts to stimulate provide action; political struggles over social
rights and the allocation of resources; and the organizations that are constructed to carry out policy. The focus is on American policy, but with considerable comparative attention to the health, education, and welfare programs of other nations.]
[SOC 230 Knowlege and Power
Spring. 3 credits. Not offered 1997-98. D. Stark.

Modernity will be studied in this course by examining dual aspects of the rationalization of power 1) as attempts to bring ever-larger spheres of social action under rationalized control, and 2) as the production of rationalized justifications by which power is represented and legitimated. These processes will be examined in three historical settings: Frederick Winslow Taylor's schemes of "scientific management" at the turn of the century in the United States; the Leninist project of "scientific socialism" in Eastern Europe; and the International Monetary Fund's current project of "scientific capitalism" in contemporary post-socialist societies. Our century begins and ends with blueprints for making capitalism by design-but whereas Taylor's project was attempted in the microsphere at the level of the firm, current recipes attempt to shape entire national economies by making capitalism according to a plan.]
[SOC 235 Paradoxes of Cooperation and Collective Action
4 credits. Not offered 1997-98 All theories of rational behavior predict that individuals will not voluntarily contribute to collective goods when they can receive the benefit without doing so; individuals will be freeriders unless they are somehow forced to contribute. Yet many examples of successful and seemingly voluntary collective action abound in natural settings. The same theories of rational behavior also largely overlook issues of self-image, identity, and commit ment, yet most of us know how important these things are in our own behavior. How can we reconcile the theory with evidence? We will focus on the paradoxes of cooperation and self-interest, rationality and commitment, self-image and self-enhancement.]

## [SOC 245 Soclal Inequallty

4 credits. Not offered 1997-98
Why do some people have a great deal of money and influence while others have barely enough to eat? Some degree of inequality among individuals exists in all modern industrial societies, inequality that is related to class, race, gender, and other social characteristics. This course focuses on the social systems that generate this inequality. We will learn how to analyze and interpret the processes that generate social stratification, drawing on alternative theoretical viewpoints to aid in our understanding. Specific topics include class consciousness, class hierarchies, social mobility, income and poverty. Course structure will be a mixture of lectures and class discussion. Homework includes handson data analysis using computers. No prerequisites or experience necessary.]

## [SOC 250 Rellgion and Public Life (also RELST 249)

3 credits. Not offered 1997-98. P. Becker This course explores how religion provides a basis for moral critique, political mobilization and social identity in a modern society. The first part introduces basic issues-definitions of religion, the sociological approach to the study of religion, religion and modernity. In
the main body of the course, we will read studies of specific religious groups and organizations in the contemporary United States-examining such questions as: "How does religion provide a basis for gender identity and gender norms? "What do religious groups and discourses contribute to public debate on issues ranging from economic justice to abortion? "How do religious leaders mobilize citizens for social action in their communities?"]

## SOC 265 Latinos in the U.S. (also LSP 201]

Spring. 3 credits (4-credit option available). H. Velez.
Exploration and analysis of the Hispanic experience in the United States. An examination of 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 275 Women at Work (also Women's Studies 275) <br> 3 credits. Not offered 1997-98. E. Bell

 Women have always contributed their labor to production and reproduction. With industrial development and the movement of market production out of the home and into the public sphere, however, women's work was relegated to the private sphere of the family Recently this has changed as women seek employment outside the home. We will examine women's position and the role women play in the labor force, looking at data from both developed and developing societies. Specific topics will include sex differences in pay and sex segregation in the labor force, theoretical explanations from rational choice to Marxist feminism, the relationship between women's paid and unpaid labor, and the role of the state and government policy.][SOC 283 Groups and Relationshlps
3 credits. Not offered 1997-98.
S. Kanazawa.

We will tackle the mysteries of human behavior and pursue a single question throughout this course: Why do human beings behave the way they do? We will first discuss several celebrated examples of seemingly unusual and bizarre behavior and then try to explain these with the help of selected social psychological theories: behaviorism, attribution theory, exchange theory and game theory. The emphasis will be on the application of the theories to explain empirical examples of human behavior.]

## SOC 290 Social Psychology of

 Interpersonal RelationsFall. 3 credits. H. A. Walker.
The focus of this course is on the relationship between the individual and the social group. It will examine the way in which the individual shapes "society," and in turn, how society influences individual behavior. Topics include formation of self, influence and conformity, and the emergence of racial and gender differences in status and power

## Methods and Statistics Courses

SOC 301 Evaluating Statistical Evidence Fall. 3 credits. R. L. Breiger.
A first course in statistical evidence in the social sciences, with emphasis on statistical inference and multiple regression models. Theory is supplemented with numerous applications
[SOC 303 Design and Measurement
4 credits. Prerequisite: a course in sociology. Not offered 1997-98. D. P. Hayes

Foundations of sociological analysis; issues arising from using humans as data sources; the quality of our primary data; methods of its collection; research designs in wide use and their limitations; pragmatic considerations in doing research on humans, organizations, communities, and nations.]

## Intermediate Courses

## [SOC 310 War \& Peace

4 credits. Not offered 1997-98.
R. M. Williams, Jr

Every human group, community, or society presents many examples of altruism, helping, cooperation, agreement, and social harmony. Each grouping or society also manifests numerous examples of competition, rivalry, opposition, disagreement, conflict, and violence. Both conflict and cooperation are permanent and common aspects of the human condition. Collective conflicts, especially wars and revolutions, are frequent and dramatic events. But "peace" and "war" are equally active social processes, not passive happenings. This course describes various commonly accepted but erroneous notions of the causes and consequences of war and deterrence. It deals with the major theories concerning the sources of war in international and intranational social systems. The last half of the course analyzes the modes, techniques, and outcomes of efforts to restrict, regulate, and resolve international conflicts.]

## [SOC 313 Social Networks and Social Structure (also SOC 513)

4 credits. Not offered 1997-98.
R. L. Breiger.

A critical survey of theories and techniques of structural analysis in sociology, centering on the usefulness of social network analysis in providing integration of studies at different levels of generality. Applications in the areas of the sociology of organizations, community studies, social stratification, and dependence relations among nations. Emphasis on the mutual relevance of theories and operational research procedures.]

## [SOC 315 Business Organization

 for the 1990s4 credits. Not offered 1997-98. D. Strang. In the last two decades, American business organizations have undergone a revolution in form and process. Corporate downsizing has changed the face of American management, and altered white-collar career paths. Large bureaucratic organizations are giving way to smaller firms that develop complex relations with each other rather than building from within. Japanese organizational styles and organizational reform strategies like Total Quality Management have become the buzzwords of the 1980s and 1990s. This course discusses the new forms of business
organization (and their manifestation in other domains, such as education and healthcare) that mark a crucial shift in the world of work and the way it shapes people's lives.]

SOC 326 Social Policy (also SOC 526)
Fall. 4 credits. S. B. Caldwell.
The dramatic growth of the policy research sector as an institutional and intellectual force signals a changing relationship of social science to social policy in the United States. With an eye on that relationship, this course examines the development of social policy in selected areas, among them welfare, poverty, housing, crime, and health. The policy research sector itself-people, values, and institutions-is also surveyed.
[SOC 340 Health, Behavior, and Health Policy
3 credits. Not offered 1997-98.
S. B. Caldwell.

This course examines the social contexts of physical and mental health, illness and medical care; its purpose is to explore the contributions of social science to health promotion and health policy. Topic areas include: social context of health, disease and illness; social organization of health services; use of health services; effectiveness of health service use; health promotion and disease prevention; and national health care policies.]

## [SOC 345 Gender Inequality

3 credits. Not offered 1997-98.
Gender inequality in contemporary perspective; emphasis on social origins of gender categories and implications of gender status for collective and individual behavior. Topics include inequalities in interpersonal relations, the family and work organizations, and implications of gender inequality for family violence, sexual harassment, and rape.]

## [SOC 350 Comparative Revolutlons

 Not offered 1997-98.For description, see GOVT 350.]

## SOC 354 Law and the Social Order

Fall. 4 credits. R. L. Breiger. In what ways, if any, do laws and legal institutions make a difference to people who have disputes? How did lawyering come to be a modern profession? How do business organizations deal with legal ambiguity in constructing symbols of compliance with laws? How do networks of interpretive communities structure the authority of law? By exploring selected topics such as these, we seek to understand the distinctive contributions of sociology to the study of law and the social order.

## [SOC 358 Modes of Institutional Analysis (also SOC 558)

3 credits. Not offered 1997-98. D. Strang. Much social theory treats individual behavior as occurring within and shaped by "institutions." For example, discussions of American health care policy emphasize not only the preferences of physicians, businesses, and ocnsumers, but also the institutional structure of American government that provides multiple veto points and makes broad crossclass coalitions difficult to build. This course will examine the main types of institutional analysis active in contemporary social science, including sociological accounts of institutions as cultural rules, political accounts of institutions as decision-making systems, and economic accounts of institutions as decisionmaking systems, and economic accounts of institutions as choice-theoretic equilibria.

These approaches will be examined via the discussion of classic problems such as the bases of collective action, the construction of the rationalized actor, the diffusion of new models of appropriate behavior, and the explanation of cross-societal differences in national policies.]

## [SOC 370 Careers

Spring. 4 credits. Not offered 1997-98. S. Han.

By examining various career paths, we will consider the implications of career as a continuous process or as a sequence of positions. We will explore the differences and similarities among different career paths and lay out the patterns and structures of the career formation from a sociological point of view. We will also discuss the settings in which the career development takes place, giving some comparative attention to the ways of organizing careers in other societies.]
[SOC 380 Gender, Ideology, and Culture 4 credits. Not offered 1997-98. P. Becker. This course will explore representations of women in popular culture, including images, narratives, and religious practices. We will examine the relationship between popular culture and ideology, and look at how women "read" popular culture. The aim of the course is to enable students to think critically and analyze the effects of ideological representations of difference on personal identity construction, status, and power relationships. Readings are drawn mostly from sociology of culture and cultural studies; most texts deal with popular culture and gender in the 19thand 20th-century United States.]

## 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 400 -level courses is one introductory course plus 301 (or an equivalent statistics course). Students who are not sure whether their background is sufficient for a particular course should consult the professor in charge.

## SOC 408 Qualitative Methods (also SOC 508)

Spring. 4 credits. P. Becker. This course will cover a range of qualitative methods, from fieldwork to cultural/ interpretive methods. The course is designed to give students an introduction to a range of methods and techniques. Students will be required to engage in an ongoing research project on which they will report periodically throughout the course of the semester, in class discussions and in short papers that concentrate on solving concrete research problems.

## [SOC 410 Comparative Societal Analysis

 (also SOC 510)4 credits. Offered 1998-99. D. Stark. This course examines contending analytic strategies for comparing institutions (and institutional configurations) across societies and social systems. How, for example, does the institutional analysis of the socialist economy contribute to our understanding of the specificities of modern capitalism? Special emphasis will be given to comparing transitions from state socialism (in Eastern Europe and elsewhere) with transitions from authoritarianism in Latin America and Southern Europe.]

## [SOC 429 Culture and Agency (also SOC 529)

3 credits. Not offered 1998-99. P. Becker. This course will look at the development of sociological theory on questions of culture and agency. Starting with various reflection or materialist approaches to culture that decenter agency, we will then follow the development of theories that explicitly link culture to actors and events in an attempt to account for both social reproduction and social change. The readings will cover a broad time span and a variety of intellectual approaches, including critical theory and cultural studies, but will center on the sociology of culture.]

## [SOC 434 The Sociology of Reproduction

 (also Women's Studies 435)4 credits. Not offered 1997-98. Women's biological potential to bear children and their childbearing experiences are socially constructed. The social context of women's reproductive capacity is one area in which women themselves are socially defined, and therefore within this realm exists the potential to control women through the control of reproduction and childbirth. We will examine the social construction and control of reproduction using both empirical findings and theoretical arguments. Specific topics include: historical trends in fertility; the medicalization and medical control of conception and childbirth; biological versus social definitions of women as mothers; the role of state policy; and theoretical explanations of reproduction and gender stratification.]
SOC 438 Immigration and Ethnic Identity
Spring. 4 credits. V. G. Nee.
Immigration has been a central process in the peopling of American society. The early immigration to the United States involved primarily the migration and settlement of European national groups. Since 1965, the mix of immigration has shifted to include increasing diversity of ethnic groups, especially from Latin America and Asia. As American society moves into an era of increasing ethnic diversity, the issue of ethnic boundaries and identity become increasingly complex and problematic. This course seeks to examine the causes of international migration, the dynamics of immigrant incorporation into American society, and the making of new ethnic groups and identities.

## [SOC 439 Philosophy of Social Sciences

 (घlso SOC 539)4 credits. Not offered 1997-98.
S. Kanazawa.

In this course, we will discuss issues related to science. We will first survey different approaches to science (positivism, realism, conventionalism, instrumentalism, pragmatism, and relativism), and then discuss questions such as: What is the purpose of science? What is the difference between science and engineering? Are there any differences between natural sciences and social sciences? What is theory? How do we evaluate theory? What is the relationship between theory and experiment? Doe theories have to be realistic? How can we construct true theories from unrealistic assumptions? What is the difference between methodological individualism and methodological holism? What is the future of general theories in social sciences? Can one theory explain all human behavior at all times? Can social sciences ever be as good as natural sciences? This course will be ideal for graduate students in all fields of natural
and social sciences, and advanced undergraduate students who plan to go on to graduate school in natural or social sciences.]

## SOC 444 Contemporary Research In Social Stratification

Spring. 4 credits. R. L. Breiger
Stratification and mobility as paired concepts, requiring mutual articulation. The interplay of structure (occupational groups, labor markets, organizational demographics, social classes) and process (tracking, career trajectories, socioeconomic attainment). Recently formulated log-linear models of mobility and structure provide a central focus of the course.

## SOC 480 Simulating Social Dllemmas (also SOC 580)

Fall. 4 credits. M. Macy.
This course introduces students to the use of computer simulation to study emergent properties of nonlinear systems. The course will focus on applications involving problems of cooperation among interdependent agents trapped in a social dilemma. Readings will consist of articles based on theoretical research using computer simulation of social dilemmas. Students will learn how to write a computer simulation program, and then use these skills to replicate one or more published studies in the social dilemma literature Assignments will include source-code exercises during the first few weeks, and a final seminar-length paper reporting results of the student's experiments. Previous programming experience would be helpful but is not expected or required.

## SOC 491 Independent Study

Fall or spring. $1-4$ credits. For undergraduates who wish to obtain research experience or to do extensive reading on a special topic. Permission to enroll for independent study will be granted only to students who present an acceptable prospectus and secure agreement of a faculty member to serve as supervisor for the project throughout the term. Graduate students should enroll in 891-892.

## SOC 495 Honors Research

Fall or spring. 4 credits. Limited to sociology majors in their senior year. Prerequisite: permission of instructor.

SOC 496 Honors Thesis: Senior Year Fall or spring. 4 credits. Prerequisite: Sociology 495.

## SOC 497 Soclal Relations Seminar (also

 Anthropology 495)Spring. 4 credits. Limited to seniors majoring in social relations.

## 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. Graduate students in sociology will normally take each of the five courses listed below, but with the concurrence of their special committees other arrangements may be made.

## SOC 501 Basic Problems In Soclology I

Fall. 4 credits. V. Nee
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 contempo-
rary 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 502 Basic Problems in Soclology II

 Spring. 4 creditsContinuation of Sociology 501. Emphasis is on the logical analysis of theoretical perspec tives, theories, and theoretical research programs shaping current sociological research. The course includes an introduction to basic concepts used in the logical analysis of theories and examines their application to specific theories and theoretical research programs. Strategies include functionalism, social exchange, and interactionism.

## SOC 505 Research Methods I: Logic of Soclal Inference

Fall. 4 credits. Prerequisite: a first course in statistics and probability. S. B. Caldwell. This course is an introduction to techniques of social inference. We will cover research methods, sources of evidence, model design, and questions of empirical validity

## SOC 506 Research Methods In

 Sociology IISpring. 4 credits. Prerequisite: Sociology 505 or equivalent. S. Han
A survey of methods for analyzing sociological data, including measurement error models, confirmatory factor analysis, panel models, and general structural equation methods Readings from the sociological research literarure will illustrate various methods. Periodic assignments on micro and mainframe computers will integrate theory, method, and data.]

## SOC 507 Research Methods in

 Soclology IIIFall. 4 credits. Prerequisite: Sociology 506. D. Strang.

Models and methods for the quantitative and formal analysis of social dynamics. The course focuses on event history analysis in the case of discrete outcomes and pooled crosssectional and time-series analysis in the case of continuous outcomes.

## Graduate Seminars

These seminars are primarily for graduate students but may be taken by qualified advanced undergraduates who have permission of the instructor. Which seminars are to be offered any term is determined in part by the interests of the 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 term.

## SOC 508 Qualitative Methods (also SOC 408)

Spring. 4 credits. P. Becker.
This introductory graduate course will cover a range of qualitative methods, from fieldwork to cultural/interpretative methods. The course is designed to give students an introduction to a range of methods and techniques. Students will be required to engage in an ongoing research project on which they will report periodically throughout the course of the semester, in class discussions and in short papers that concentrate on solving concrete research problems.
[SOC 510 Comparative Socletal Analysis (also SOC 410)
4 credits. Offered 1998-99. D. Stark.
For description, see SOC 410.]
[SOC 513 Social Networks and Social Structure (also SOC 313)
4 credits. Not offered 1997-98.
R. L. Breiger.]
[SOC 524 Ratlonal Choice Theory 4 credits. Not offered 1997-98.
S. Kanazawa.

Rational choice perspective has gained popularity in all social sciences. The main focus in this course will be sociological rational choice, although we will discuss the work of economists, political scientists, psychologists, and others where relevant. We will first discuss the foundations of rational choice as a macro-sociological perspective, and emphasize the deductive derivation of various rational choice theories from this perspective. We will discuss the pioneering work of Coleman Hechter and Willer as wel as the more recent work by Heckathorn Macy, Jasso, and others. We may have some guest speakers to talk about their current research.]

## SOC 526 Social Pollcy (also SOC 326)

 Spring. 4 credits. S. B. Caldwell.[SOC 529 Culture and Agency (also soc 429)
4 credits. Not offered 1997-98. P. Becker. For description, see SOC 429.]

## [SOC 530 Social Organizatlon of

 Economic Actlon4 credits. Not offered 1997-98. S. Han The issue of organizational boundary has been a central concern for both organizational sociology and economic sociology. The seminar approaches the issue, although it covers many other relevant literatures, mainly by playing two lines of argument against each other: transaction cost economics and transfer pricing problem. Meta-analytic techniques are also introduced, which are to be used for the final team project reviewing the empirical research on vertical integration.]

## [SOC 539 Philosophy of Soclal Sclonces

 (also SOC 439)4 credits. Not offered 1997-98.
S. Kanazawa.

For course description, see SOC 439.]
[SOC 558 Modes of Institutlonal Analysis (also SOC 358)
4 credits. Not offered 1997-98. D. Strang.]
SOC 580 Simulating Social Dilemmas (also SOC 480)
Fall. 4 credits. M. Macy.
SOC 591 Special Seminars In Soclology Fall and spring. $2-4$ credits.
These graduate seminars will be offered irregularly. Topics, credit, and instructors will vary from semester to semester. Students should look at the sociology department bulletin board at the beginning of each semester for possible offerings.

## SOC 606-607 Sociology Colloqulum

Fall and spring. No credit. Required of all
sociology graduate students.
A series of talks representative of current
research interests in sociology, given by
distinguished visitors and faculty members.

## SOC 608 Proseminar in Sociology

Fall. One credit. Enrollment restricted to first-semester sociology graduate students. Discussions on the current state of sociology and on the research interests of the members of the field, given by members of the field.
SOC 660 Social Movements
For description, see GOVT 660.
SOC 891-892 Graduate Research
891, fall; 892, spring. Up to 4 credits each term, to be arranged. Prerequisite: graduate status and permission of a faculty member willing to supervise the project.

## SOC 895-896 Thesis Research

895, fall; 896, spring. Up to 6 credits each term, to be arranged. Prerequisite:
permission of thesis director.

## Related Courses

HDFS 150 Families and the Life Course E. Wethington.

HDFS 457 Health and Social Behavior E. Wethington

HDFS 655 Work Families and Gender P. Moen.
ILROB 325 Organizations and Social Inequality P. Tolbert.

ILROB 421 Regulating the Corporation R. Stern.
ILROB 425 Sociology of Industrial Conflict R. Stern.

ILROB 427 Professions: Organization and Control P. Tolbert.

ILROB 470 Group Processes E. Lawler.
ILROB 521 Macro Organizational Behavior and Analysis Staff.
ILROB 625 Conflict, Power, and Negotiation E. Lawler.

ILROB 722 Advanced Macro Organizational Behavior Staff.

SPANISH LANGUAGE
See Language Courses under Languages and Linguistics.

## SPANISH LITERATURE

See Department of Romance Studies.

## SWAHILI

See Africana Studies and Research Center.

## SWEDISH

See Language Courses under Languages and Linguistics.

## TAGALOG

See Language Courses under Languages and Linguistics.

## TAMIL

See Language Courses under Languages and Linguistics.

## THAI

See Language Courses under Languages and Linguistics.

## THEATRE, FILM \& DANCE

D. Bathrick, chair; R. Archer, S. Brookhouse, J. Chu, S. Cole, M. Dewey, D. Feldshuh,
A. Fogelsanger, D. Fredericksen, J. E. Gainor, K. Goetz, D. Hall, C. Hatcher, E. Intemann, J. Johnson, J. Kovar, B. Levitt, P. Lillard, J. Morgenroth, C. Orr Brookhouse, M. Rivchin, R. Schneider, J. Self, B. Suber, A. Van Dyke, A. Villarego and R. Wilson

Through its courses and production laboratories, the department provides students with a wide range of opportunities in theatre, film, and dance. It offers a theatre arts major with concentration in theatre or film and a major in dance. These majors educate students in accordance with the general liberal arts ethic of the college. The programs in dance and film and the advanced undergraduate theatre program give some measure of professional preparation in those arts as well. The department encourages academic and studio participation by students from all disciplines and also provides the Cornell community with an opportunity to take part in its productions on an extracurricular basis.

## Theatre Arts Major

## Theatre Concentration

The theatre concentration 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, Film \& Dance).

## Course requirements for

 theatre concentration:Credits

1) THETR 240 and THETR 241 (twosemester introduction to theatre)
THETR 250 Introduction to Theatre Design and Technology

THETR 280 Introduction to Acting3
2) Four laboratory courses distributed as follows:

Credits
THETR 151 Production Lab I
THETR 153, THETR 253, or
THETR 353 Stage Management
Lab I, II, or III
THETR 155 Rehearsal and Performance or THETR 151 in a different area 1-3
THETR 251 or THETR 351
Production Lab II or III
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 300 level
one course must be at 400 level
two additional courses at the 300 or above level
one of the four courses must be pretwentieth century.
4) Three courses (at least 9 credits) in other Theatre courses chosen in consultation with the faculty advisor. 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 Arts major.

## 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 course of study please see listing of courses at end of departmental listings.) Approval process will include 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.

## Film

The study of film began in this department in the 1930s and continues to be based here. In the interim years, however, it has also spread into a significant number of other departments in the college: Africana studies, anthropology, Asian studies, comparative literature, English, German studies, history, psychology, and romance studies. 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. In addition, courses in film production and the history and theory 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 four ways currently being used are as follows: 1) concentrating on film within the Department of Theatre, Film \& Dance; 2) constructing an individually tailored Independent Major in film (including the possibility of placing film in tandem with another medium or discipline); 3) focusing on film as a College Scholar; and 4) concentrating in Visual Studies. Students interested in option 4 should consult Marilyn Rivchin (Theatre, Film \& Dance). Students interested in options 2 or 3 should consult Don Fredericksen (Theatre, Film \& Dance) and Lynne Abel (director, College Scholar and Independent Major programs). Students interested in the first option should consult Don Fredericksen (director, Film Studies, Theatre, Film \& Dance).

## Film Concentration Requirements

The department's film concentration requires a total of 50 credits in film and related courses. Students should note that a number of film courses-including two required "core" courses: Theatre Arts 375 and 376-are offered in alternating years, during the fall semester. 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 adviser. In particular, students must plan to be in residence at Cornell during both their junior and senior year fall semesters. Within the "core" required courses, Theatre Arts 274, Introduction to Film Analysis, should be taken during the sophomore year.
Majors wishing to utilize the production courses in a substantial manner must plan carefully and work within certain limits. These courses are: Theatre Arts 277, 377, 383, 413, 477, 493 and 653. Enrollment in each of these courses is limited by the nature of the work and by facilities. Enrollment in Theatre Arts 477 and 493 depends upon the quality of previous work in Theatre Arts 277, 377, 383 and/or 413; enrollment is not guaranteed. Majors without a strong interest in production can complete the production requirement with one course: Theatre Arts 277. Majors with a strong interest in production should begin instead with Theatre Arts 377, after they have taken Theatre Arts 274 in their sophomore year. The total credits in production courses cannot exceed twenty hours; this limit is strictly enforced.

1. A core of four film courses:

THETR 274 Introduction to Film Analysis
THETR 375 History and Theory of Commercial Narrative Film (offered alternate fall semesters)
THETR 376 History and Theory of Documentary and Experimental Film (offered alternate fall semesters)
THETR 277 Video Production I
(offered alternate years, and summers) OR

THETR 377 Fundamentals of 16 mm Filmmaking
2. One of the following theatre courses:

THETR 250 Fundamentals of Theatre Design/Technology

THETR 280 Introduction to Acting
THETR 398 Directing I
(prerequisite permission)
3. Four courses ( $15-16$ credits) in film offered by Theatre, Film \& Dance as below, or by other departments (with consent of adviser):
THETR 290 Filming Other Cultures
THETR 313 Japanese and Asian Film
THETR 378 Soviet Film of 20s
and French Film of 60s
(offered alternate spring semesters)
THETR 379 Documentary Film from 1945 to present (offered alternate spring semesters)
THETR 383 Screenwriting
THETR 386 Third Cinema

THETR 395 Video: Art, Theory, Politics
THETR 396 German Film
(offered occasionally)
THETR 413 Film and Performance 4

AS\&RC 435 African Cinema
THETR 475 Seminar in the Cinema I
THETR 476 Seminar in the Cinema II
THETR 477 Intermediate Film and Video Projects
THETR 493 Advanced Film and Video Projects

THETR 653 Myth onto Film
4. 15 credits of related coursework inside or outside of the Department of Theatre, Film \& Dance (as approved by adviser). The courses chosen to fulfill this requirement should reinforce the student'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-a-vis intellectual or social history, will be encouraged to choose "related course work" in those areas
5. With a grade of less than C, a course cannot be used toward the concentration.
6. Course work in production cannot exceed twenty credit hours.

## Honors

Students who have at the end of their junior year a GPA above 3.4 in their film concentration courses and an overall GPA above 3.0 may elect to work for honors in film during their senior year. They should consult their adviser on this matter during the spring of their junior year. Theses may be undertaken in film analysis, filmmaking and screenwriting.

## The Advanced Undergraduate Film Program

The department offers advanced study in filmmaking to students who qualify on the basis of outstanding achievement in film studies and film production courses. Acceptance to the AUFP and admission to the advanced film production course (THETR 493) will be determined by a committee of film faculty in December of each year, based on applications from students who have a proposal (script or treatment) for a film or video project. Up to four of these students will also be selected to receive the Melville Shavelson Award to help fund their advanced film projects

## Film Study Abroad

The College of Arts and Sciences, through this department and in consort with a number of other colleges and universities, offers up to a full year of study at the Inter-University Center for Film and Critical Studies in Paris, France. The center's program is theoretical, critical, and historical. It is most useful to students pursuing a major in film studies and serves as an intensive supplement to their Cornell film courses. Fluency in French is required, and Theatre Arts 274 and 375 are prerequisites. Inquiries should be addressed to Professor Fredericksen, Comell's liaison with the center

## The Dance Program

The dance program offers courses in dance technique, improvisation, composition, performance, anatomical analysis of movement, and the history, theory, and criticism of dance. Technique courses include modern dance at four levels and ballet at three levels Other dance forms, such as historical dances, Japanese Noh, Indian and Javanese, dance are offered on a rotating basis. Courses in African, jazz and ballroom dance, taken through the Physical Education program, supplement these offerings. Technique classes 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 eight academic credits (one each semester) in technique classes. Students may also satisfy the physical education requirement by taking dance technique classes in the dance program. The schedule for all dance technique classes is available in the main office of the Center for Theatre Arts. Students taking technique for academic credit must also register through their own colleges.
The faculty offer rehearsal and performance workshops in which they choreograph and rehearse original dances, performed in public concert. Admission to rehearsal and performance classes is by audition. Students may receive one academic credit ( $\mathrm{S}-\mathrm{U}$ grades only) when performing in student-faculty concerts by registering for THETR 155.

## The Dance Major

To be admitted to the major, students must have completed two technique courses in modern dance or ballet at level II or above, Theatre Arts 233 or 305 (Explorations in Movement and Performance) and Theatre Arts 210 (Beginning Dance Composition and Music Resources). It is also recommended that Theatre Arts 201 (Dance Improvisation), Theatre Arts 250 (Fundamentals of Theatre Design and Technology) and Music 105 (Introduction to Music Theory) be taken before the junior year. The following requirements are expected of the major.

## Prerequisites for the Major:

THETR 210 Beginning Dance Composition and Music Resources

THETR 233 or 305 Explorations in Movement and Performance

Two technique courses in modern dance or ballet at level II or above

## Requirements for the Major: <br> Credits

Music 105 Introduction to Music Theory (or substitute at the appropriate level)
ONE course in historical dance, jazz, a non-western form, folk dance, or ballroom dance
TWO semesters each of ballet and modern dance (in addition to the prerequisite)
THETR 155 Rehearsal and Performance 1
THETR 201 Dance Improvisation
THETR 250 Fundamentals of Design and Technology

THETR 310-311 Intermediate Dance Composition
THETR 312 Physical Analysis of
Movement
THETR 314-315 Western Dance History
THETR 410 Advanced Dance
Composition
THETR 418 Seminar in History of
Dance (or other 400-level academic dance course)
THETR 491 Senior Project

> Total

Students will be expected to perform in at least two concerts and to present at least two of their own dances, in addition to the senior project.

## Department Courses:

See individual sections for: Freshman Writing Seminars; General Survey Courses; Theatre Studies; Acting; Directing; Playwriting; Design; Technology; Stage Management; Independent Study, Internships and Honors; Film; Dance.

## Freshman Writing Seminars

THETR 115 Staging Shakespeare
Fall and spring. 3 credits. M. Gay. Considering various stage and screen productions of Shakespeare's plays, from Elizabethan English to the present, this seminar will examine the ways in which staging choices-acting, setting, costumes, textfundamentally affect a play's meaning. Students will learn to critically interpret productions, analyze texts, and also participate in acting workshops. Occasional screenings. No previous acting experience is required.

## THETR 125 Deviance

Fall and spring. 3 credits. R. Saunders. This class will explore the interplay among the performance of the abnormal, its audience, and society. Creative and analytical exercises will explore the social politics and functions of deviance, both conscious and involuntary. Representative texts will include the play Ubu Roi and the film Trainspotting.

## THETR 165 Theatre Behind Bars

Fall and spring. 3 credits. M. Mitchell. The United States has the highest per capita incarceration rate. This course will discuss the ethical, cultural and political aspects of imprisonment today through the lens of theatre by and about the imprisoned. A direct link with prisoners studying theatre will be maintained; recent inmates may be guest speakers.

## THETR 178 Desire (also Engllsh 178)

Fall. 3 credits. E. Hanson.
For description, see English 178 in the Fall Freshman Writing Seminar listings, available in August for the fall term.

## THETR 185 Secret Stages: The

 Theatre of Living Dangerously (also Engllsh 185)Fall. 3 credits. C. Burroughs.
For description, see English 185 in the Fall Freshman Writing Seminar listings, available in August for the fall term.

THETR 190 When a Girly Girl Meets a Manly Man: Gender \& Tales of Love
Fall and spring. 3 credits. T. Rhys. Romantic love remains one of the most persistent themes of popular entertainment. By examining selected plays and films that depict men and women in the search for love, we will explore questions of gender construction in popular culture.

## General Survey Courses

## THETR 230 Creating Theatre

Spring. 3 credits. Limited to 25 students.
K. Goetz and faculty.

An introduction to theatrical production for the non-major. Students will develop a new critical perspective of the performing arts by examining the creation of theatre onstage and backstage through lectures, demonstrations, discussions with various faculty and staff at the Center for Theatre Arts, and by attending department productions. Some writing is required.

## [THETR 301 Mind and Memory:

 Explorations of Creativity in the Arts and Sciences (also English 301)4 credits. Limited to 40 students. Not offered 1997-98.
For description, see English 301.]

## THETR 430 Introduction to Theatre

 ManagementFall. 4 credits. Limited to 15 students. J. E. Gainor.

This class is designed to introduce students to the profession of theatre management. The class will be a project-oriented study of components of the field, such as marketing, fundraising, contracts, organizational structures, personnel management, accounting, and box office.

## Theatre Studies Courses

[THETR 223 The Comic Theater (also Comparatlve Literature 223 and Classics 223) \#
Summer. 3 credits. Next offered summer 1998 and spring 1999. J. Rusten.
For description, see Classics 223.]
THETR 240 Introduction to World Theatrel \#
Fall. 4 credits. R. Schneider. A survey of the roots of theatrical representation around the world from ritual practice to classical Greek and Roman theatre as well as Indian, Chinese, Japanese, African, and Circum-Atlantic performance. A charting of major developments in the theatreplaywriting, acting, staging, architecturethrough the 18th century,

## THETR 241 Introduction to World

 Theatre II *Spring. 4 credits. R. Schneider. A survey of the major developments and innovations in world theatre since 1900 , exploring the evolution of naturalism, the birth of the director, as well as the emergence of the avant-garde in the West and its supposed demise today. This course will examine the impact of colonialism on theatre practices around the world.
THETR 325 Classic Plays of the
American Theatre (also English 323
and American Studies 325)
Summer. 3 credits. J. E. Gainor.

This class will examine major plays from the 20th century in America, and discuss how they intersect with issues in American culture and American history. We will read, and see film versions of, plays by Eugene O'Neill,
Tennessee Williams, Arthur Miller, Lillian Hellman, David Mamet, August Wilson, and Sam Shepard, among others.

## [THETR 322 Russian Drama and Theatre

 [also Russian Literature 332)4 credits. Not offered 1997-98.
S. Senderovich.

See Russian Literature 322 for description.]
THETR 333 European Drama 1660-1900: Moliere to Ibsen (also English 335 and Comparatlve Literature 336)
Spring. 4 credits. R. Parker.
See English 335 for description.

## [THETR 335 The Modern and

 Contemporary Theatre (also Comparative Literature 337)4 credits. Prerequisites: THETR 240 or permission of instructor. Not offered 1997-98. Faculty.
A study of the drama and its cultural contexts from the late nineteenth century to the present. This course will raise questions about modern as well as postmodern theories of performance and the role of theatre in society. It may also examine western style theatre in non-western settings.]

## THETR 336 American Drama and

 Theatre (also English 336)Spring. 4 credits. Limited to 25 students.
Prerequisite: permission of instructor.
J. E. Gainor.

A survey of American theatre from 1900-1960. Emphasis will be placed on the relationship among theatre, culture, and history.

## [THETR 337 Contemporary American

 Theatre (also English 337)4 credits. Limited to 20 students. Not offerd 1997-98. J. E. Gainor.
A survey of American drama and theatre post1960. Particular emphasis will be placed on plays by women and dramatists of color to explore questions of identity and theatrical responses to contemporary American culture.]

## THETR 339 Theorles and Techniques of

 20th Century Western TheatreFall. 4 credits. Prerequisite: permission of instructor. R. Schneider.
A look at Western performance across the 20th century emphasizing theatre theory and directing technique rather than drama. Beginning with symbolism, naturalism and the avant-garde we'll move on to explore Meyerhold, dada, Brecht, Artaud, Happenings and performance art, Boal, theatre images, feminist theatre, multicultural theatre, theatre of AIDS, and other theatre issues and innovations. Students will engage in performance projects.

## THETR 345 The Tragle Theater

 (also Classics 345 and Comp. LIterature 344)Spring. 4 credits. Limited to 40 students. F. Ahl.

See Classics 345 for description.

## THETR 372 English Drama to 1700 (also

 English 372) *Fall. 4 credits. S. McMillin.
See English 372 for description.

## [THETR 373 English Drama from 1700 to

 the Present (also English 373)4 credits. Not offered 1997-98.
S. McMillin.

See English 373 for description.)
[THETR 420 Brecht, Artaud, Mueller, Wilson (also German Studies 430 and Comparatlve Literature 430)
4 credits. Not offered 1997-98.
D. Bathrick.

See German Studies 430 for description.]

## [THETR 425 Introduction to Dramaturgy

 and Dramatle Criticism4 credits. Prerequisite: THETR $240 \& 241$, or their equivalents. Limited to 15 students. Not offered 1997-98.
J. E. Gainor.

What is dramaturg? What does a dramaturg do? We will examine this position in the theatre in both historical and practical modes. The class will be primarily a practicum, involving dramaturgical work on departmental productions, participation with student playwrights on new script development, and practice in the writing of dramatic criticism.]

## [THETR 431 Theory of the Theatre

 and Drama [also Comparative Literature 433) \#4 credits. Prerequisite: some theatre history and dramatic literature work at the 300 level or permission of instructor. Not offered 1997-98.
A survey of dramatic theory and theories of theatrical representation from Aristotle to the present.]
THETR 433 Dramaturgy: Play and Perlod (also English 435)
Fall. 4 credits. J. E. Gainor.
Topic for 1997: The Theatre of George Bernard Shaw. A survey of the plays and non-dramatic writings in their social, historical,

## and theatrical contexts.

## ITHETR 435 Special Topics: Theories of

 Contemporary Performance (also Comparative Literature 436)4 credits. Limited to 15 students.
Prerequisite: permission of instructor. Not offered 1997-98. Faculty.]
[THETR 436 The Female Dramatic Tradition (also Women's Studies 433)
4 credits. Not offered 1997-98.
J. E. Gainor.

Is there a "female dramaturgy"? What is the female tradition in the theatre? The course will explore 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 438 East and West German

 Drama (also German Studies 438 and Theatre 648)4 credits. Not offered 1997-98.
D. Bathrick.

Major historical and textual developments in German theatre from the end of World War II to the present. Leading dramatists from West and East Germany, Switzerland, and Austria (Brecht, Frisch, Durrenmatt, Weiss, Hochhuth, Muller, Braun, Kroetz, Handke, and others) will be treated in the light of the political events and aesthetic-dramaturgical traditions from which they emerge and with which they are taking issue.]

THETR 445 Text Analysis for Production: How to Get from the Text onto the Stage
Fall. 4 credits. Prerequisite: THETR 240 or THETR 281 or THETR 250 or THETR
398, and permission of instructor. Limited to 15 students. B. Levitt.
This course 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 454 American Musical Theatre

 (also English 454)Spring. 4 credits. S. McMillin.
See English 454 for description.
[THETR 470 The Japanese Noh Theater and Modern Dramatlsts (also Aslan Studles 470 and Comparative Literature 470) ©
4 credits. Alternates with THETR 471. Not offered 1997-98. K. Brazell.
For description, see Asian Studies 470.J
THETR 471 Japanese Theatre (also Asian Studies 4711 © *
Fall. 4 credits. K. Brazell.
For description, see Asian Studies 471.

## THETR 600 Proseminar in Theatre

 StudlesSpring. 4 credits. Limited to Theatre Arts graduate students. J. E. Gainor,
An introduction to the theory and methods involved in the study of the theatre. Attention will focus on pedogogy and the profession in Part I. Part II will explore current scholarly trends.

THETR 637 Seminar In Dramatic Theory (also Comparative Literature 638)
Spring. 4 credits. Prerequisite: Permission of instructor. R. Schneider.
Topic for 1998: Theatre and Postmodernity: Appropriation, Adaptation, and Simulation. Exploration of the rash of postmodern theatre artists who appropriate and replay "classic" drama or art against itself. This is sometimes called adaptation, sometimes parody, sometimes "performativity." Examination of the development in the avant-garde of representation about representation, laying some historical groundwork. Cultural critical theory will accompany the readings of plays or viewing of video.
[THETR 648 East and West German Drama: Post-1945 (also THETR 438 and German Studies 438)
3 credits. Not offered 1997-98.
D. Bathrick.]
[THETR 660 Visual Ideology (also Comparative Literature 660 and German Studies 660)
4 credits. Not offered 1997-98. G. Waite. For description, see German Studies 660.]
[THETR 679 Bertolt Brecht In Context (also German Studies 679 and Comparative Literature 679) 4 credits. Requirements: seminar paper that will form the basis for an oral presentation for class discussion. Not offered 1997-98. D. Bathrick.
See German Studies 679 for description.]
[THETR 692 The Politics of Criticism (also Comparative Literature 692 and German Studies 692)
Fall. 4 credits. Not offered 1997-98.
D. Bathrick.

See German Studies 692 for description.]
THETR 703 Theorizing Film (also English 703 and French Lit 695)
Fall. 4 credits. T. Murray.
See English 703 for description.

## Acting

THETR 155 Rehearsal and Performance
Fall or spring. $1-2$ credits. 1 credit per production experience per term up to 2 credits per term. Students must register for the course in the term in which credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the 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 205 Rehearsal Workshop

Fall or spring. 2 credits. Limited to 30 students. Prerequisites: participation in a particular department production; and by permission. Staff.
This course will enable students participating in a particular production to gain expertise and/or knowledge to contribute to that production. The focus of the class will depend on the needs of a particular production (history, choreography, textwork, dramaturgy, etc).

## THETR 280 Introduction to Acting

Fall or spring. 3 credits. Each section is limited to 16 students. Registration only through roster in the department office, Center for Theatre Arts. A. Van Dyke and 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 will be on physical and vocal exercises, improvisation, and text and character. There is required play reading, play attendance, and some scene study.

## THETR 281 Acting I

Fall or spring. 3 credits. Each section limited to 14 students. Prerequisites: THETR 280 and audition. Registration only through roster in department office, the Center for Theatre Arts. 281 is restricted to sophmores and above. B. Levitt and S. Cole.

Practical exploration of the actor's craft through improvisation and exercises in physical and psychological action. Scene study utilizing the plays of Williams, Inge, and Miller.

## [THETR 283 Volice and Speech for Performance

2 credits. Limited to 12 students. Primarily for department majors. Prerequisite: permission of instructor. Not offered 1997-98. Faculty.
Registration only through department roster in the main office of the Center for Thearre Arts.

Development of the speaking voice with additional emphasis on dramatic interpretation.]

## 【THETR 204 Speoch and Dialecte for

 Performance3 credits. Limited to 12 students. Primarily for department majors or advance undergraduate training program candidates. Prerequisites: THETR 281 and permission of instructor. Registration only through department roster in the main office of the Center for Theatre Arts. Not offered 1997-98. A. Van Dyke.
Development of speech and dialects in dramatic text.]
THETR 285 Creativity and the Actor Summer. 3 credits. Limited to 16 students. Alhough this course is focused particularly on the actor, creativity training is equally applicable to any area of performance (for example, sports, dance, music) and those areas relying on individual creativity such as writing and the visual arts. No previous experience or course work in the area of theatre is required. D. Feldshuh. Using mime, physical and vocal exercises, karate, Gestalt therapy, theatre games, and Zen meditation, this course will attempt to make the student more aware of how he/she participates in and can influence the creative process of acting and to assist the student toward a greater capacity for stage presence.

## THETR 287 Summer Acting Workshop

Summer. 3 credits. Limited to 16 students in a section. Levitt and staff.
An introduction to the processes of acting. Practice in training techniques, rehearsal procedures, and methodology.

## THETR 380 Acting II

Fall. 3 credits. Prerequisite: THETR 281
and audition. Limited to 12 students.
R. Wilson.

A continuation of Acting I. Special consideration will be given to a physical approach to characterization utilizing the plays of Chekhov and Ibsen.

## THETR 381 Acting III: Advanced Scene Study

Spring. 3 credits. Prerequisite: THETR 380 and audition. Limited to 10 students. B. Levitt.

This course focuses on advanced problems in language and period style (movement, bows, curtsies, and period dances). Monologues and scenes will be drawn from these playwrights: Shakespeare and Moliere.

## THETR 385 Techniques in Advanced Scene Study

Fall. 3 credits. Prerequisites: THETR 380, Audition and permission of instructor. Limited to 10 students. S. Cole. Content varies each semester from scenes focusing on advanced physical problems within characterization, working with avant garde, period and contemporary texts, scenes concentrating on dialects or musical theatre.

## [THETR 386 Movement for the Actor

3 credits. Prerequisites: THETR 281 and permission of instructor. Limited to 10 students. Not offered 1997-98. R. Wilson. Physical skills for the actor will be developed through work with LeCoq-based Neutral Mask corporeal mime, and physical acting techniques.]

## THETR 415 The History of Acting

Spring. 3 credits. Limited to 10 students.
Prerequisites: THETR 380 and permission of instructor. S. Cole.
A study of the art of acting in its historical and cultural context from the Greeks to the early 20th Century, with an emphasis on an analytical understanding of acting methodology in relation to social context. Lectures and film showings, with student papers and presentations required.

## THETR 454 American Musical Theatre

 (also English 454)Spring. 4 credits. Prerequisite: ENGL 272 or THETR 240 and 241 and ability to read music at the level of MUSIC 105 S. McMillin.

See English 454 for description.

## Directing

## THETR 177 Student Laboratory Theatre Company

Spring. 1-2 credits.
The Student Laboratory Theatre Company is a group of student-actors who earn credit by acting in three scenes directed by students taking THETR 498. Students enrolling in SLTC for credit will earn 1 credit for 2 projects and 2 credits for 3 projects. SLTC also meets with directors once a week.

## THETR 398 Fundamentals of Directing I

 Fall. 3 credits. Limited to 10 students. Prerequisite: permission of instructor. Special consideration is given to students who have completed THETR 280 or are intending to continue in the area of stage or screen directing. 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 will direct a number of exercises as well as a short scene.

## THETR 498 Fundamentals of Directing II

 Spring. 4 credits. Enrollment strictly limited. Prerequisite: THETR 280 and 398, and permission of instructor. Special consideration is given to students who have completed THETR 280 or are intending to continue in the area of stage or screen directing. Recommended: THETR 250 and 281. D. Feldshuh. This course builds on the staging techniques learned in Fundamentals of Directing I. In this course each student will direct a series of projects and public presentations focusing on specific directorial challenges
## THETR 499 Practicum in Directing

 Fall or spring. $1-4$ credits. Prerequisites: THETR 240, 250, 280, 398, 498, and permission of instructor. D. Feldshuh. This course will allow the student who has completed the appropriate prerequisites the opportunity to direct a full presentation of theatre in conjunction with a faculty mentor It may also involve an internship with a prominent director on campus or the opportunity to assistant direct a faculty or guest director.
## Playwriting

## THETR 348 Playwriting

Fall. 4 credits. Limited to 12 students. Prerequisite: permission of instructor. R. Wilson.

Various approaches and techniques are examined as the student is introduced to the art and craft of dramatic owriting. The student is required to read dramatic texts, observe theatre productions and rehearsals and write. The semester culminates in the completion of a twenty to thirty minute one-act play.

## [THETR 349 Advanced Playwriting

4 credits. Prerequisite: THETR 348 or
permission of instructor. Not offered
1997-98. R. Wilson.
A continuation of Theatre Arts 348, emphasizing advanced techniques and culminating in the completion of a full-length play.]

## THETR 497 Seminar in Playwriting

$1-4$ credits. Prerequisite: THETR 348 and 349 and permission of instructor. R. Wilson.

## Design, Technology, and Stage Management

## Design

## THETR 250 Fundamentals of Theatre Design and Technology

Fall and spring. 4 credits. Not open to first term freshman. Limited to 12 students. Registration only through department roster in CTA 225. A minimum of one credit of Production Lab (THETR 151 or 251) is strongly recommended concurrently. K. Goetz, R. Archer, J. Johnson, C. Hatcher, C. Orr Brookhouse, and E. Intemann.
An introduction to design and technology in the theatre. Lectures, discussion, and project work introduce the principles of designing scenery, costumes, lighting and sound, and the technical process of realizing designs on stage. Students are required to purchase materials, which the instructors will specify (approximate cost, $\$ 40$ ).

## THETR 263 Computer-Aided Design for

 the TheatreSpring. 3 credits. Limited to 6 students. Prerequisite: THETR 250 or permission of instructor. K. Goetz and selected theatre production faculty and staff.
Through lectures, discussion, and project work, this course will introduce the application of existing software to the design process for scenery, and lighting, for the live theatre. In addition to three-dimensional photorealistic modeling and rendering, (MINICAD and Strata StudioPro) the course will investigate other performing arts specific software. Familiarity with the Macintosh computer is essential.

## THETR 343 Costume History: From Fig

 Leaf to VanityFall. 3 credits. Limited to 20 students.
C. Orr Brookhouse.

Costume History will offer an overview of the history of clothing from the first signs of clothing to the early 20th century. It will investigate personal, social, religious, political, and regional reasons for why and how clothing evolved.

THETR 362 Lighting Design Studio I: Lighting In the Performing Arts
Fall. 4 credits. Prerequisite: THETR 250 or permission of instructor. Limited to 6 students. E. Intemann.
The theory and practice of lighting design as a medium for artistic expression. This course will explore the aesthetic and mechanical aspects of light and their application in the theatre. Artistic style and viewpoint will also covered.

## THETR 364 Scenic Design Studlo

Fall. 3 credits. Students are required to purchase materials which the instructor will specify (approximate cost: $\$ 50.00$ ) Limited to 10 students. Prerequisite: THETR 250 and 340 or permission of instructor. K. Goetz.
An exploration of the process of designing scenery for the live theatre. Projects will employ various media to explore dramatic use of architecture, the scenic space, and elements of interior design. Experience in theatre production and graphic skills is helpful but not essential.

## THETR 366 Costume Design Studlo

Spring. 3 credits. Students are required to purchase materials which the instructor will specify (approximate cost: $\$ 50.00$ ). Limited to 10 students. J. Johnson.
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. May be repeated for credit.

## THETR 368 Sound Design Studio

Spring. 4 credits. Limited enrollment to 6 students. Prerequisite: THETR 250 or 252 or permission of instructor. Students are required to purchase supplies (approximate cost $\$ 30.00$ ). C. Hatcher.
The use of sound as a medium of design for the theatre; research and creation of sound score, recording and engineering techniques, live effects and projects in live and studio sound production.

THETR 462 Lighting Design Studlo II Spring. 4 credits. Prerequisite: THETR 362 or permission of instructor. Limited to 6 students. E. Intemann.
This course concentrates on designing lighting for different genres in various venues, developing the lighting designer as a versatile artist. Personal style and artistic commitment will be stressed.

## Technology

## THETR 252 Technical Production

 Studio 1Fall. 3 credits. Limited to 6 students. C. Hatcher and M. Williams. Stage Lighting and Sound Technology: The practical aspects of lighting and sound technology including equipment setup, engineering, electrics, organization, recording techniques, and production paperwork will be explored through projects, lectures, and class discussions. In addition to twice-weekly class meetings the course requires a laboratory commitment of fifty hours for the semester.

## THETR 254 Theatrical Make-up Studio

Fall. 3 credits. Students are required to purchase make-up kits which the instructor will provide (approximate cost $\$ 50.00$ ). Limited to 12 students.
J. Johnson.

Basic techniques of make-up for the stage including corrective, old age, and fantasy; use of prosthetics, wigs, hair and hairpieces.

## THETR 340 Theatrical Drafting and Technical Drawing Studio

Fall. 3 credits. Limited to 6 students. Prerequisite: THETR 250 or 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. A series of projects to familiarize students with the convention and process of visualization and drafting.

## THETR 352 Themed Entertainment: The

 Technical PerspectlveFall. 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 will deal with planning and development aspects of large-scale entertainment proejcts including architecture, engineering, construction, and attraction installation. Focus will be on the specialized entertainment technologies that make these attractions work: audio and lighting design, ride and show control systems, and special effects.

## THETR 354 Stagecraft Studlo

Fall. 3 credits. A minimum of one credit of production laboratory (THETR 151 or 251) is strongly recommended concurrently. Prerequisite: THETR 250 or permission of instructor. R. Archer. An exploration of the techniques and practice of theatre operation, scenic construction, stage mechanics, rigging, painting, and model building.

## THETR 356 Costume Construction

 StudioSpring. 3 credits. A minimum of one credit of production laboratory (THETR 151 or 251 ) is strongly recommended concurrently. Prerequisite: THETR 250 or permission of instructor. Lab fee of $\$ 25$ to be paid in class. C. Orr Brookhouse. A project/lecture/discussion class in costume research, patterning, cutting, construction, and fitting.

## Stage Management

## THETR 153 Stage Management

 Production Laboratory IFall and spring. 1-2 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at $7: 30$ p.m. on the 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 S.L.T.C. under the supervision of the faculty Production Manager. THETR 370 complements this course.

## THETR 253 Stage Management

 Laboratory IIFall and spring. 1-4 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the 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 370 complements this course.

## THETR 353 Stage Management

 Laboratory IIIFall and spring. 1-4 credits. May be repeated for credit. Before registering, students must attend orientation meeting in the Proscenium theatre at the Center for Theatre Arts at 7:30 p.m. on the first
Tuesday of classes. Prerequisite: permission of the instructor. P. Lillard.
Practical experience in theatrical production as Stage Manager for a Dance Theatre Concert, for an AUTP production or as Production Stage Manager for the Black Box lab season under the supervision of the faculty Production Manager. THETR 370 complements this course.
THETR 370 Stage Managoment Studio
Fall. 2 credits. Prerequisite: THETR 250 or 280. 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 153,253, and 353 complement this course.

## THETR 453 Stage Management

 Laboratory IVFall 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 151 Production Laboratory I
Fall and spring. $1-3$ credits. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the CTA Proscenium Theatre. P. Lillard,
S. Brookhouse, N. Cross, T. Honesty,
C. Hatcher, M. Williams,
C. Orr Brookhouse.

This course provides practical experiences in theatrical production. Students can work on scenery, costumes, properties, lighting, or stage crew. No prerequisites or experience required.

## THETR 251 Production Laboratory II

 Fall and spring. $1-3$ credits. Prerequisite: permission of instructor. May be repeated for credit. Orientation meeting on the first Tuesday of classes each semester at 7:30 p.m. in the CTA Proscenium Theatre. P. Lillard, S. Brookhouse, D. Hall, C. Hatcher, C. Orr Brookhouse, M. Williams.Practical experience in theatrical production, as a light board operator, sound board operator, sound technician, head dresser or scenery/props special project.

THETR 351 Production Laboratory III Fall and spring. $1-3$ credits. May be repeated for credit. Prerequisite: permission of instructor. P. Lillard, R. Archer, S. Brookhouse, K. Goetz, D. Hall, E. Intemann, M. Williams, C. Hatcher, J. Johnson, C. Orr Brookhouse.

Practical experience in theatrical production as a master electrician, assistant technical director, assistant costume shop manager or assistant to a faculty or guest director.
THETR 451 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. Brookhouse, K. Goetz, D. Hall,
C. Hatcher, J. Johnson, E. Intemann,
C. Orr Brookhouse.

Practical experience in theatrical production, in the position of designer, shop manager, technical director or sound engineer.

## Independent Study, Internships and Honors

## THETR 300 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 inclependent study

## THETR 485 Undergraduate Internship

Fall, spring, or summer. $1-6$ credits. To be eligible to enroll and receive credit for an internship, Theatre Arts students must either be majors or be admitted to the Advanced Undergraduate Theatre Program (AUTP). Students are responsible for arranging their own internships in consultation with the AUTP faculty in their area of choice prior to preregistration of the semester in which the internship is planned to take place. To receive credit for this course, it must be an unpaid internship; if it is a paid internship, it is possible to receive independent study (see THETR 300) credit for it.

## THETR 495 Honors Research Tutorial

Fall or spring. 2-8 credits. Limited to
Theatre Arts seniors only.
This course is the first of a two-semester sequence (the second is THETR 496), Up to eight credit hours and one grade will be given upon completion of second semester. The Theatre Arts 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 a part of the honors program the student must maintain an average of 3.5 in departmental courses and an average of 3.0 in all courses. Students should consult with their advisers in their junior year if deciding to do honors. Admissions to honors is at the discretion of the departmental committee.

## THETR 496 Honors Thesis Project

Fall or spring. $2-8$ credits. Limited to Theatre seniors only.
This course is the second of a two-semester sequence (the first is THETR 495). Up to
eight credit hours and one grade will be given upon completion of second semester. See THETR 495 for further information.

## Film

THETR 274 Introduction to Film Analysis: Meaning and Value Fall. 4 credits. Limited to thirty-five students. D. Fredericksen.
An 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. Prospective film majors should enroll in their sophomore year.

## THETR 277 Video Production I

Spring, alternate years and occasionally in summer. 3 credits. Limited to 12 students. Permission of instructor. Open to sophomores, juniors, and seniors. M. Rivchin.

A hands-on, beginning video production course using Super-VHS cameras and editing equipment. Students will learn camera, lighting, sound recording, editing and digital effects through a series of technical exercises. Students will develop two short, original video projects to be shown publicly at the end of the semester. A $\$ 100$ equipment maintenance fee per student will be collected in class. Cost for videotape approximately $\$ 50-100$.

## THETR 291 Filming Other Cultures (also Anthropology 291)

Spring. 3 credits. Limited to 20 students, with preference given to those who have taken either Anthropology 102 or Theatre Arts 274. R. Ascher.
For description, see Anthropology 291.

## THETR 313 Japanese and Asian FIIm

 (also Astian Studies 313 and Comparative Literature 313) (i)Spring. 4 credits. B. de Bary.
For description, see ASIAN 313.
THETR 329 Political Theory and Cinema (also German Studies 330, Comparatlve Literature 330 and Government 370)
Fall. 4 credits. G. Waite
For description, see German Studies 330.

## [THETR 375 History and Theory of the

 Commercial Narrative FilmFall. 4 credits. Fee for screening expenses, $\$ 10$ (paid in class). Offered alternate years. Next offered fall 1998. Prerequisite for film majors THETR 274. A. Villarejo.

Consideration of the broad patterns of narration in the history of the commercial narrative film. Emphases placed upon the early articulation of a cinematic means of narration, realism as an artistic style, the nature and functions of popular film, and the modes of modernist and post-modernist "art cinema" narration.]
THETR 376 History and Theory of Documentary and Experimental Film Fall. 4 credits. Fee for screening expenses, $\$ 10$ (paid in class). Prerequisite: THETR 274 is strongly recommended, but not required. Offered alternated years. A. Villarejo.

First, the history and theory of documentary film up to the end of World War II. Second, the history and theory of the experimental and
personal film forms in Europe and the United States.

## THETR 377 Fundamentals of 16 mm

 FilmmakingFall. 4 credits. Limited to 12 students. Intended for juniors and seniors (who may need to sign up a year or more in advance). Prerequisite: THETR 274 (or higher-level film studies course) and permission of instructor. Fee for maintenance costs, $\$ 100$ (paid in class). The average cost to each student for materials and processing is $\$ 400$. M. Rivchin. A hands-on course in the basics of 16 mm filmmaking techniques, requiring no prior production experience, emphasizing creative development of filmic ideas through critical discussion. Students may explore narrative, experimental, documentary, animation, and abstract genres, producing short exercises and a final sound film project ( $8-12$ minutes) to be screened publicly.
[THETR 378 Soviet Film of the 1920s and French Film of the 1960s
Spring. 4 credits. Fee for screening expenses, $\$ 10$ (paid in class). Prerequisite: THETR 375 is strongly recommended, but not required. Offered alternate years.
Next offered spring 1999. D. Fredericksen. An intensive treatment of two distinct periods of radical innovation in film theory and history. Emphasis on the vital relationship between theory and practice in these two periods. Major figures include Eisenstein, Pudovkin, Vertov, Dovzhenko, and Room, in the Soviet 1920's; Godard, Truffaut, Resnais, Rohmer, Tati, Rouch and Bresson in French 1960's.]

## THETR 379 Documentary Film from 1945

 to presentSpring. 4 credits. Prerequisite: THETR 376 or permission of the instructor. Fee for screening expenses, $\$ 10$ (this fee is paid in class). Offered alternate years. D. Fredericksen.

Emphases on the contemporary documentary film as a sociopolitical force, as an ethnographic tool within and without a filmmaker's own culture, and as an artistic form with a distinct history and set of theoretical questions.

## THETR 383 Screenwriting

Spring. 3 credits. Prerequisites: THETR 274 and 377 , and permission of instructor. Limited to 12 students. R. Wilson. Exercises in various genres of screenwriting will be explored: the commercial narrative, documentary, experimental, and abstract. This class will culminate in the writing of a finished script for a ten to fifteen-minute film. Note: This class is an intensive writing experience that will demand a great deal of outside work.

## THETR 386 Third Cinema

Spring. 4 credits. Prerequisite: previous course in film history or analysis helpful, though not mandatory. A. Villarejo. This course explores postcolonial film and video through the rubric of "third cinema." We will investigate the diverse historical, national, political and generic commitments of films from Africa, South Asia, Latin America, the US and UK (Sembene, Ray, Brocka, etc.). Readings in film and postcolonial theory will guide our critical analyses of the films.

## THETR 395 Video: Art, Theory, Polltics

 (also Engllsh 395)Fall. 4 credits. T. Murray.
For description, see English 395.
THETR 396 German Film (also Comparative Llterature 396 and German Studies 396)
Spring. 4 credits. Requirements: participation in class discussion, one paper, midterm, and final. D. Bathrick. This course will explore German film from the Weimar and Nazi periods to the present in relation to the cultural and sociopolitical context of which it was a part. Readings and lectures will be devoted to formal and cultural developments historically as well as interpretive analysis of selected individual films.

## THETR 413 Film and Performance

Spring. 4 credits. An interdisciplinary, collaborative course taught by: M. Rivchin (Film/Video) with guest lectures by: David Borden (Music) Kent Hubbell (Architecture) Gail Scott-White (Fine Arts) Staff (Dance) Limited to $15-18$ students (3-4 accepted from each area listed). Permission of the instructors required. $\$ 50$ maintenance fee to be collected in class. Topic for 1998: New Technologies for Art \& Performance. An experimental lab/group production course encouraging collaboration across the fields of electronic music; computer art, animation and 3-D design; video production and digital editing; dance and performance art. Intended for advanced students to produce live performance work and interactive projects using digital and electronic technologies.

## THETR 475 Seminar in the Cinema I

 (also College Scholar Seminar) Fall. 4 credits. Limited to 20 students Offered alternate years. Prerequisite: some analytic studies in film.D. Fredericksen.

Topic for 1997: Cognitive studies and film. A close reading of Anderson's The Reality of Illusion: An Ecological Approach to Cognitive Film Theory, Currie's Image and Mind: Film, Philosophy, and Cognitive Science, and Tumer's The Literary Mind, to evaluate the merits of the cognitive studies challenge to existing paradigms in film studies.

## THETR 476 Seminar in the Cinema II

 (also College Scholar Seminar) Spring. 4 credits. Limited to twenty students. This topic offered alternate years. D. Fredericksen.Topic for 1998: Jung, film, and the process of self-knowledge. "Know thyself": this has been frequently offered as the raison d'etre for liberal studies. The seminar will trace the Jungian elaborations of this position and test the critical capacities of this position with respect to film images.
[Topic for 1999: Film and Spiritual Questions. The use of film as a medium for the expression of spiritual questions has a long and rich history, although very little attention is given to this fact in contemporary film studies. This seminar will examine films and writings by filmmakers who are so inclined.]

## THETR 477 Intermediate Film and

 Video ProjectsFall. 4 credits. Limited to 8 students
Prerequisites: THETR 377 or 277 as minimum; preference given to those who have taken THETR 383 (Screenwriting), 398 (directing), or 413 (acting and
directing for the camera), and permission of instructor. Fee: $\$ 100$ cinema maintenance fee to be collected in class. Film projects costs: $\$ 500-1000$; video $\$ 50-150$. M. Rivchin.

16 mm filmmaking and video skills course designed to increase the student's knowledge and practice of: cinematography, lighting, sync-sound filming and editing techniques; working with labs and sound houses; S-VHS and digital video camera and editing methods. Each student will direct, shoot, and edit one, original short, sync-sound scene.

## THETR 493 Advanced Film and

 Video ProjectsSpring. 4 credits. Limited to 4 students, those selected to the Advanced Undergraduate Film Program by application in December. Prerequisite: THETR 377 or 277 , and 477; recommended: 383 (screenwriting) and 398 (Directing 1). M. Rivchin.

This is a third-level film production course for those students who have already written and proposed a scripted dramatic narrative, a documentary treatment, or a storyboarded experimental or animated film project.
Working in two production crews, rotating as directors, cinematographers, and sound recordists students may shoot in sync-sound, film, or video. Students will edit the films they write and direct, and will be individually responsible for editing and all completion costs of their projects, which will be screened publicly at the end of the semester.

## [THETR 653 Myth onto Film

4 credits. Not offered 1997-98. Next
offered spring 1999. R. Ascher.
For description, see ANTHR 653]

## THETR 691 Filming Other Cultures (also

 Theatre 291 and Anthro 291/691) ( Spring. 4 credits. Fee for film screening and maintenance, \$35.For description, see Anthropology 291
THETR 699 German FIIm Theory (also
German Studies 699 and Comparative Literature 699)
Fall. 4 credits. Offered every fourth year. D. Bathrick.

This course examines critically major German film theories from the Weimar period to the present. Works by Balazs, Arnhelm, Kracauer, Benjamin, Adorno, Horkheimer, Kluge, Syberberg, Koch, Elsaesser, and others will be discussed in relation to the context in which they emerge as well as current debates in film theory.

## Dance

## THETR 123 Ballet I (also Physical

 Education 423)Spring. 0 or 1 credit. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. B. Suber. The fundamentals of classical ballet technique. Material covered includes all of the exercises at the barre, and elementary work in the areas of port de bras, adage and petite and grande allegro. The acceleration of the class is determined by the ability of the majority of the class.

## THETR 124 Modem Dance I (also

 Physlcal Education 424)Fall and spring, 0 or 1 credit. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. Fall: J. Chu; spring: J. Kovar.
The fundamentals of modern dance technique. Elementary dance movement phrases, with attention to rhythm, placement, and vitality of performance.

THETR 155 Rehearsal and Performance Fall and/or spring. $1-2$ credits. 1 credit per production experience per term up to 2 credits per term. Students must register for the course in the term in which credit is earned; requests for retroactive credit will not be honored. Limited to students who are assigned roles after tryouts at the dance program's 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 201 Dance Improvlsation

Fall. 3 credits. Limited to 12 students. Concurrent enrollment in a dance technique class at the appropriate level is required. Registration only through department roster in the main office of the Center for Theatre Arts. Attendance at dance concerts is required. J. Self.
When the body knows when, where, and how to move without prior direction, we call that improvisation. This course offers the possibility of "training" one's movement instincts to respond with lightness, humor, grace, and spontaneity. Solo and group forms are covered. Includes some dance history.

## THETR 210 Beginning Dance

 Composition and Music ResourcesSpring. 3 credits. Concurrent enrollment in a dance technique class at the appropriate level is required. Registration only through the department roster in the main office of the Center for Theatre Arts.
Attendance at dance concerts is required. J. Chu and A. Fogelsanger.

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. Study of contemporary music and ways to combine movement and music. Informal showing at end of semester.

## THETR 211 Dance Movement Workshop

Summer. 3 credits. Limited to 15 students. For students with varied levels of training, including those with no experience. J. Kovar.

Students explore new ways of moving and creating dances and prepare short studies each week based on material covered in class. Modern dance technique, improvisation, and composition are covered. Students observe and discuss the main concerns of contemporary performance from the artist's/performer's perspective. Viewings of films, videotapes, and live performances.

## THETR 231 Ballet II (also Physical

## Education 431)

Fall and spring. 0 or 1 credit. Prerequisite: Ballet I or permission of instructor. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. B. Suber.

An intermediate ballet class that is a continuation of Ballet I with intermediate work in the areas of port de bras, adage and petite and grande allegro. There is an emphasis on placement through muscular harmony.

## THETR 232 Modern Dance II (also

 Physical Education 432)Fall and spring. 0 or 1 credit. Prerequisite: Modern Dance I or permission of instructor. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. Fall: J. Kovar; spring: J. Morgenroth.

A continuation of Modern Dance I, for students with at least a year of dance training. Practice of longer dance phrases, with attention to clarity of design, rhythm, and expression.

THETR 233 Explorations in Movement and Performance A (also Physical

## Education 440)

Fall. 0 or 1 credit. Limited to 16 students. Satisfies PE requirement if taken as PE. Attendance at dance concerts is required. 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.

## THETR 304 Ballet III (also Physical Education 434)

Fall and spring. 0 or 1 credit. May be repeated for credit. Satisfies the PE requirement if taken as PE. Attendance at dance concerts is required. B. Suber. Study and practice of classical ballet at an advanced level. Work is done on strenghtening the body through harmonic muscular control combining Russian, Danish and American techniques.
[THETR 305 Explorations In Movement and Performance B (also Physlcal Education 440)
0 or 1 credit. Explorations A, dance improvisation or permission. May be repeated for credit. Limited to 16 students. Satisfies the PE requirement if taken as PE. Attendance to dance concerts is required. Not offered 1997-98. J. Self.
This course continues the investigations of Explorations A with special emphasis on performance and ritual. The class will create performance opportunities throughout the semester.]

## THETR 306 Modern Dance III (also

 Physical Education 436)Fall and spring. 0 or 1 credit. May be repeated for credit. Prerequisite: Modern Dance II or permission of instructor. Satisfies PE requirement if taken as PE. Attendance at dance concerts is required. J. Chu.

Advanced work with rhythm, placement, and phrasing for students who are prepared to refine technical skills of dancing. Students will be physically and mentally challenged by lengthy, complex phrases and will be expected to bring the instructor's material to life.

THETR 307 AsIan Dance and Dance Drama (also PE 427) ©
Sec 01. Indian Dance. Fall. 0,1 or 3 credits. May be repeated for credit. Satisfies the PE requirement if taken as PE. Attendance to dance concerts is required. D. Bor.

This course is designed to give the student a practical working knowledge of Indian classical dance, specifically in the indigenous style of Orissa known as Odissi. The technique strengthens the body and develops grace, rythmic expression, and dexterity that can benefit all forms of dance.

Sec 02. Japanese Noh Theatre. Not offered 1997-98.
Sec 03. Indonesian Dance Theatre.
Not offered 1997-98.
THETR 308 Modern Dance IV (also Physical Education 438)
Fall and spring. 0 or 1 credit. May be repeated for credit. Prerequisite: Modern Dance III or permission of instructor. Satisfies PE requirement if taken as PE. Attendance at dance concents is required. Fall: J. Self; spring: J. Morgenroth. A continuation of, and supplement to, Theatre
Arts 306/Physical Education 436.

## THETR 310 Intermediate Dance

## Composition and Music Resources

Fall and spring. 3-4 credits. Prerequisite: THETR 210 and concurrent enrollment in a technique class at the appropriate level is required. Registration only through department roster in 225 Center for Theatre Arts. Fall, J. Chu and
A. Fogelsanger; spring, J. Morgenroth and A. Fogelsanger.

Intermediate choreographic projects will be critiqued in progress by faculty and peers. Consideration of design problems in costuming and lighting. Weekly music sessions will aim to expand music vocabulary and skills through a survey of contemporary music for dance, the study of music and dance
collaborations, and rhythm studies.
THETR 311 Intermediate Projects in Dance Composition
Spring. 3-4 credits. Prerequisite: THETR 310. Attendance at dance concerts is required. J. Chu.
A continuation of THETR 310.
[THETR 312 Physical Analysis of Movement
3 credits. Not offered 1997-98.
J. Morgenroth.

This course is an examination of human movement with particular attention to dance movement. Readings in texts on human anatomy, physiology, and kinesiology and in Sweigard's Human Movement Potential. Guest lectures by experts in anatomy and health areas. Practical and laboratory work. Demonstration of dissection.]

THETR 314 Western Dance History I: Classlcal Ballet Mistory as a Reflection of Western Ideology Fall. 4 credits. Attendance at dance concerts is required. B. Suber. A critical survey of the history of classical ballet defining elements of classicism and determining why ballet is defined as classical. Texts, videotapes, and through live performance, the class will explore how ballet has perpetuated or confronted social issues of race, class, gender, sexuality, the body, and abuse.

## THETR 315 Western Dance History II: History of Modern Dance

Spring. 4 credits. Attendance at dance concerts is required. J. Chu.
This class will study the course of modern dance in the twentieth-century United States. We will examine each generation of dancers, starting with Isadora Duncan and ending with performers emerging today. Issues of gender, cultural identity, elitism, and democracy will be discussed.

## THETR 317 Asian Dance II

Spring. 0,1 or 3 credits. Prerequisite: THETR 307 or previous training in Odissi Classical Dance. Theatre Arts and Physical Education Registration at Teagle Hall only. Satisfies the PE requirement if taken as PE.
Attendance at dance concerts is required. D. Bor.

The continuation of THETR 307, Odissi Classical Dance. Emphasis is mainly on choreography as well as continuing to refine and perfect the basic movements learned in the preliminary course. We will meet twice weekly for movement classes; an extra class will be arranged to learn the art of makeup.

## THETR 410 Advanced Dance

 Composition IFall and spring. 3-4 credits. Prerequisite: THETR 310 and 311. Attendance at dance concerts is required. Fall: J. Chu and A. Fogelsanger; Spring: J. Morgenroth and A. Fogelsanger.

Students work on advanced choreographic problems, to be presented in performance. Work in progress will be critiqued by faculty on a regular basis.

## THETR 411 Advanced Dance Composition II

Fall and spring. 3-4 credits. Attendance at dance concerts is required. Fall: J. Chu and $A$. Fogelsanger.

## A continuation of THETR 410.

## THETR 418 Seminar in Hlstory of Dance -

Spring. 4 credits. Attendance at dance performances required. B. Suber. Topic for 1998: Cyberdance. Considers the dynamic body as it has interfaced with technology in performance and within a social context, beginning with tools of primitive agriculture and warfare and continuing through industrialism to computer technology.

## THETR 490 Senior Paper in Dance

Spring. 4 credits. Prerequisite: THETR
418 , senior standing. Attendance at dance concerts is required.
Under faculty direction, the student will write a senior paper in dance history, criticism, or theory.
THETR 491 Senior Project in Dance
Fall or spring. 4 credits. Prerequisite:
THETR 410 or permission. This course is
limited to senior dance majors only. Students who take this course will create a project in choreography and performance, dance film or video, dance pedagogy, or other appropriate area agreed upon with a member of the dance faculty. Senior projects that are to be performed, must be presented within one of the three regularly scheduled department concerts.

## Tracks toward admission Into the advanced undergraduate theatre program

## Design, Technology, and Stage <br> Management

Recommended for individuals interested in a Design, Technology, or Stage Management track:

THETR 250 Fundamentals of Theatre Design and Technology
THETR 151 and 251 Production Lab I and II (at least one credit of each)
Recommended for Scenic Design emphasis:
THETR 340 Theatrical Drafting and Technical Drawing Studio
THETR 351 Production Lab III (as Design Assistant)
THETR 354 Stagecraft Studio
THETR 364 Scene Design Studio
Upon admission to the program: THETR 451
Production Lab IV (at least 1 credit)
Recommended for Costume Design emphasis:
THETR 254 Theatrical Make-up Studio
THETR 351 Production Lab III (as Design Assistant)
THETR 356 Costume Construction Studio THETR 366 Costume Design Studio I Upon admission to the program: THETR 451 Production Lab IV (at least 1 credit)
Recommended for Lighting Design emphasis:
THETR 252 Technical Production Studio I
THETR 351 Production Lab III (as Student Electrician)
THETR 351 Production Lab III (as Design Assistant)
THETR 362 Lighting Design Studio I Upon admission to the program: THETR 451 Production Lab IV (at least 1 credit)
Recommended for Sound Design emphasis: THETR 251 Production Lab II (as Student Sound Technician)
THETR 252 Technical Production Studio I
THETR 351 Production Lab III (as Design Assistant)
THETR 368 Sound Design Studio
Upon admission to the program: THETR 451
Production Lab IV (at least 1 credit)
Recommended for Technical Direction emphasis:
THETR 252 Technical Production Studio I
THETR 256 Technical Production Studio II
THETR 340 Theatrical Drafting and Technical Drawing Studio
THETR 351 Production Lab III (as Assistant Technical Director)
THETR 354 Stagecraft Studio
Upon admission to the program: THETR 451
Production Lab IV (at least 1 credit)
Recommended for Stage Management emphasis:
THETR 253 or 353 Stage Management Lab II or III--two assignments
THETR 280 Introduction to Acting
THETR 370 Stage Management Studio
THETR 398 Fundamentals of Directing I
Upon admission to the program: THETR 453 Stage Management Lab IV

## Dlrecting

Recommended for individuals interested in a directing track:
THETR 151 and THETR 251 Production Lab I and Il (at least 2 combined credits)
THETR 240/THETR 241 Introduction to Western Theatre (1 Semester ONLY)

THETR 250 Fundamentals of Design and Technology
THETR 280 Introduction to Acting
THETR 398 Directing I
THETR 498 Directing II

## Playwriting

Recommended for individuals interested in a playwriting track:
THETR 240/THETR 241 Introduction to Western Theatre ( 1 Semester ONLY)
THETR 250 Fundamentals of Design and Technology
THETR 280 Introduction to Acting
THETR 348 Playwriting
THETR 349 Advanced Playwriting
Students in the advanced undergraduate theatre program may also elect to take THETR 485 (Undergraduate Internship) in addition to or in place of one production assignment.

## TURKISH

See Department of Near Eastern Studies.

## UKRAINIAN

See Language Courses under Languages and Linguistics.

## URDU

See Language Courses (under "Hindi") under Languages and Linguistics.

## VIETNAMESE

See Language Courses under Languages and Linguistics.

## WELSH

See Language Courses under Languages and Linguistics.

## WOMEN'S STUDIES MAJOR

See "Special Programs and Interdisciplinary Studies."

## WRITING PROGRAM

See John S. Knight Writing Program in the section, "Special Programs and Interdisciplinary Studies."

## YIDDISH

See Department of Near Eastern Studies

## YORUBA

See Language Courses under Languages and Linguistics.

# SPECIAL PROGRAMS AND INTERDISCIPLINARY STUDIES 

## Africana Studies and Research Center

J. Turner, director (255-5218); A. Adams,
N. Assiê-Lumumba, A. Bekerie, B. Blacksher,
K. Bowman, L. Edmondson, R. Harris,
S. Hassan, A. Mazrui, A. Nanji, D. Ohadike. Offices: 310 Triphammer Road, 255-4625 or 255-4626.

The Africana Studies and Research Center is concerned with the examination of the history, culture, intellectual development, and social organization of Black people and cultures in the Americas, Africa, and the Caribbean. 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 including Mandinka, Swahili, and Yoruba.

The center 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 AfricanAmerican), through the university's Graduate School.
A student may major in Africana studies; however, another attractive alternative is the center's joint major program. This program enables the student to complete a major in any of the other disciplines represented in the college while at the same time fulfilling requirements for a major in Africana Studies. This requires only a few more credits than is usually the case when one completes a single major course of study. Courses offered by the center are open to both majors and nonmajors and may be used to meet a number of college distribution requirements, including historical/ temporal breadth (\#) and geographical breadth (@) requirements, such as freshman writing seminars, language (Mandinka,
Swahili, Yoruba), expressive arts, humanities, social sciences, and history.
The center also brings distinguished visitors to the campus, sponsors a colloquium series, and houses its own library.

## The Africana Major

The undergraduate major offers interdisciplinary study of the fundamental dimensions of the African-American and African 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 or AfricanAmerican) for the undergraduate concentration; and
3) a full transcript of courses taken and grades received.
The center's undergraduate faculty representative will review the applications and notify students within two weeks of the status of their request.

After acceptance as a major in the Africana Center, a student must maintain a C+ cumulative average in the center's courses while completing the major program. The Africana major must complete 36 credits in courses offered by the center, to include the following four core courses: AS\&RC 205, 231, 290 , and 422 . Beyond the core courses, the student must take 8 credits of center courses numbered 200 or above and 15 credits numbered 300 or above. The program of an undergraduate major may have a specifically Afro-American focus or a specifically African focus.

## Joint Majors

The center encourages joint majors in the College of Arts and Sciences and in other colleges. Joint majors are individualized programs that must be worked out between the departments concerned. The center's undergraduate faculty representative, Professor Adams, will assist students in the design and coordination of joint major programs. However, in any joint major program, the center will require at least 16 credits be taken in Africana studies courses, including AS\&RC 290.

## Double Majors

In the case of double majors (as distinct from joint majors) students undertake to carry the full load of stipulated requirements for a major in each of the two departments they have selected.

## Certificate in African Studies

In conjunction with the Institute for African Development, the Africana Studies and Research Center administers an undergraduate Certificate in African Studies program. The certificate is offered as a minor concentration available to students in all of the undergraduate colleges at Cornell. Many of the courses in the program might be used to fulfill other course distribution requirements. By pursuing this certificate, students acquire an interdisciplinary understanding of Africa. After developing a foundation of knowledge on the culture, society, and development of Africa in the core course "Africa: The Continent and Its People," students pursue 15 credit hours in a humanities or development studies track or a combination of the two, including an additional core course, either "African Civilizations and Cultures" or "Contemporary African Development Issues." The requirements for the cetificate are a minimum of 18 credit hours, including the core courses. Students interested in the certificate program must contact Professor Adams (the center's undergraduate faculty representative) who will register them in the program and assign them a faculty adviser from their own college. The faculty adviser will be responsible for determining completion of the certificate requirements.
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 $\mathrm{B}+$ cumulative average in the center's courses. Each student accepted into the honors program will have an honors faculty commit-
tee consisting of the student's adviser 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.

## Distribution Requirement

Two Africana Studies and Research Center courses from the appropriate group may be used in fulfillment of the following distribution requirements:
Social sciences: AS\&RC 171, 172, 190, 191,
208, 231, 280, 290, 344, 345, 346, 351, 352, $400,410,420,451,460,481,484,485,495$, 550, 551.
History: AS\&RC 203, 204, 205, 283, 344, 350, $360,370,380,381,405,460,471,475,482$, 483, 490, 510.
Humanities: AS\&RC 202, 211, 219, 422, 425, 450, 455, 525.
Expressive arts: AS\&RC 209, 285, 303, 425, 430.

Freshman writing seminars: AS\&RC 100.

## Language Requirement

Courses in Mandinka, Swahili, and Yoruba may be used to satisfy the College of Arts and Sciences language requirement. Successful completion of the Mandinka or Yoruba series AS\&RC/DMLL 121, 122, 123 provides qualification, and study through 203 in either language provides proficiency. In Swahili, successful completion of AS\&RC 131, 132, 133, and 134 provides qualification, and the addition of 204 provides proficiency. AS\&RC majors are not required to take an African language, but the center recommends the study of one to complete the language requirement.

## Courses

AS\&RC 123 Sec 01 Continuing Yoruba
Fall. V. Carstens and staff.
For description, see YORUB 123.

## AS\&RC 131 Swahili

Fall. 4 credits. A. Nanji. Beginner's Swahili. Part 1-Grammar. Requires no knowledge of language.
AS\&RC 132 Swahili
Spring. 4 credits. Prerequisite: Swahili 131. 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 help develop the student's comprehension. Swahili tapes are highly used.

## ASARC 133 Swahill

Fall. 4 credits. Prerequisites: Swahili 131 and 132. A. Nanji.
Advanced study in reading and composition.

## ASaRC 134 Swahili

Spring. 4 credits. Prerequisite: Swahili 133. A. Nanji.

In this course of the sequence more emphasis is placed on the development of reading ability and the acquisition of writing skills. Students are expected to read and comprehend selected Swahili stories and write compositions on chosen topics. Ample
consideration is given to oral practice in the classroom.

## AS\&RC 171 Black Families and the Socialization of Black Children

Fall. 3 credits. Staff.
This course provides an examination of the evolution of the Black family from its roots in Africa, the evolution of family forms, the impact of social policy, and a consideration of the literature stressing family well-being. Among the major topics considered will be male/female relationships, childbearing and parental roles. the extended family, economic and health issues. The component of the course focusing on youth will primarily cover child and adolescent development.
ASARC 172 The Education of Black Americans: Historical and Contemporary Issues
Spring. 3 credits. Staff.
This course will be devoted to the history of educating Black Americans. Considerable attention will be given to contemporary issues. The major topics of focus will include an examination of the debates concerning the type of the education needed, public and private schooling efforts, the Africana Studies movement, community control issues, busing, affirmative action, re-segregation debates and new initiatives in education including vouchers, and charter schools.

## ASsRC 191 Africa: The Continent and

 Its PeopleFall. 3 credits, L. Edmondson. An introductory interdisciplinary course focusing on Africa's geographical, ecological, and demographic characteristics; indigenous institutions and values; the triple cultural heritage of Africanity, Islam, and Westem civilization; main historical developments and transitions; 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 will also be explored.

## AS\&RC 202 Swahili Literature ©

Fall. 4 credits. Prerequisite: Swahili 134. A. Nanji.

Students gain mastery over spoken Swahili and are introduced to the predominant Swahili literary forms.

## ASeRC 204 History and Politics of

 Racialisation: A Comparative Study Spring. 4 credits. A. Bekerie.The primary focus of this course will be on the historical and contemporary significance of racialisation in the United Stares and South Africa with regard to societal development and inter-relations. It will include an analysis of the historical development of racialised barriers as an instrument of power and privilege. The ways with which racialisation is used as an instrument of ideology to social status, cultural hierarchy and economic positions will also be examined. Particular emphasis will be given to the development and perpetuation of scientific racism in both places. The apparent success against Jim Crow form of racism in the United States and apartheid in South Africa appears to transform racism into subtle and 'scientific' sphere. This transformation and its continued impact in perpetuating social inequality will be further analyzed.

## AS\&RC 205 African Cultures and Civillzatlons

Spring. 3 credits. D. Ohadike.
This course is concerned with the peoples of Africa and the development of African cultures and civilizations from the earliest times to the present day. It 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. The course also deals with the socio-political organization of African societies, their kinship systems, cross-cutting ties, rites of passage, gender relations, arts (including music, dance, folklore, architecture, sculpture, painting, and body decoration).

## ASeRC 210 Major Works of Black World Writing

Fall. 3 credits. A. Adams.
This course surveys classic texts by African American, Caribbean, and African writers. The focus is on literary texts by authors such as Langston Hughes, Toni Morrison, James Baldwin, Maryse Conde, and Chinua Achebe, with a view toward analyzing common experiences, references, themes, and literary strategies across the Black world. The works of fiction, poetry, and drama that constitute the central material of the course are supplemented by essays and biographies from other authors who have influenced the creative vision and the movement of the peoples of Africa and the Diaspora, e.g., W.E.B. DuBois and Marcus Garvey, Nelson and Winnie Mandela.

## ASARC 231 African American Social and Polltical Thought

Spring. 3 credits. J. Turner.
This is an introductory course that will review and analyze the major theoretical and ideological formulations developed and espoused by African-Americans in the struggle for liberation. This semester we will focus specifically on the political philosophy and historical significance of Malcolm X, and the work and movement of Marcus Garvey, as the prime movers of nationalism and panAfricanism among Black people in this century. Such themes as slave resistance, nationalism, Pan-Africanism, emigration, antiimperalism, socialism and internal colonialism, and the political and social views of Black women will be discussed. Black political thought will be viewed in its development as responses to concrete conditions of oppression and expression.

## ASgRC 271 Introduction to African Development (also CRP and Govemment 271) 상 <br> For description, see CRP 271

## [ASARC 280 Raclam In American Society

Fall. 3 credits. Not offered 1997-98. Next offered fall 1998. D. Barr and J. Turner. This course will be a topical treatment of the history and theory of racism in the United States. The course will begin with an examination of basic concepts and theories of racism. From there we will examine the history of racial groups in America, AfricanAmericans, Native Americans, Asian Americans, and the Hispanic groups. Particular attention will be paid to the political economy of racism and the sociological and the psychological aspects of race relations in America, with specific reference to the differences and intersections of race, class, gender, and ethnicity.]

## A58RC 285 Black Theater and

## Dramatlc Literature

Fall. 3 credits. K. Bowman
This course is an introduction to the history and literature of African American Drama at times incorporating drama from other parts of the African diaspora. It also provides an opportunity for students to cultivate an interest in individual and group presentation of Black dramatic materials. Students who successfully complete this course will be granted preference for the limited enrollment in AS\&RC 425 (Advanced Seminar in Black Theatre and Dramatic Literature), which produces a public performance in the spring

## AS\&RC 290 The Soclology of the AfrlcanAmerlcan Experience

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 human kind 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. This course is required for all undergraduate students majoring at the Africana Center.

AS\&RC 304 African American Art
Spring. 3 credits. S. Hassan.
This course investigates the different forms of African American visual artistic rraditions in relation to their historical origins and sociocultural context from the early days of slavery to the present time. The course will start with an overview of African art and the experiences of the Middle Passage and slavery in relation to African American traditions in the decorative arts including: pottery, architecture, ironwork, quiltmaking, basketry. This is followed by a fine art survey starting with the eighteenth and nineteenth centuries, continuing through the early twentieth-century Harlem Renaissance up to the present Certain issues related to African American arts and creativity such as "improvisation," "Black Aesthetic," and "Pan Africanism" will also be explored. Slides, films, film strips will be used extensively to illustrate topics discussed Visits to museums and relevant current exhibitions may be arranged.

## AS8RC 310 Art in Afrlcan Culture and

 SocietyFall. 3 credits. S. Hassan
This course is a survey of the visual art and material cultural traditions of sub-Saharan Africa. It aims at investigating the different forms of visual artistic traditions in relation to their historical and sociocultural context. The symbolism and complexity of traditional African art will be explored through the analysis of myth, ritual, and cosmology. Indepth analysis of particular African societies will be used to examine the relationship of the arts to indigenous concepts of time, space, color, form, and sociopolitical order. New and contemporary art forms associated with major socioeconomic changes and processes of assimilation and acculturation will also be explored. These include tourist art, popular art, and elite art.

## [AS\&RC 311 Government and Politics In Africa

Fall. 3 credits. Not offered 1997-98. Next offered fall 1998. A. Mazrui
Power and political participation in Africa. The colonial background and its political
consequences. The pre-colonial continuities in the post-colonial politics. Ethnicity and allegiance in the African polity. The monarchical tendency in African political culture. 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. Class versus ethnicity in African politics. The one-party versus the multiparty state. Sociocultural versus socio-economic ideologies. The gender question in African politics. The soldier and the state. The African political experience in a global context.]

## [AS\&RC 362 Global Perspectives on Gender

Spring. 4 credits. Not offered 1997-98.
Next offered spring 1999.
N. Assiē-Lumumba.

The course will examine how forms of gender inequality have been shaped by international forces and structured by differences in national histories. The class will be taught by a rotating set of two faculty members from different departments. Contingent on the particular faculty member directing the course, the class will consider such issues as cross-cultural perspectives on gender; the history of work and family life in different societies; the gendered division of labor in local, national, and international economies; the impact of colonialism; the organized efforts of women to define gender relations; the role of the state in constructing an engendered economy and polity.]
[ASaRC 370 African American Hlstory: The Twentieth Century
Spring. 3 credits. Not offered 1997-98.
Next offered spring 1999. R. Harris.
Examines the transition of African Americans from countryside to city through the process of migration and urbanization and their transformation into industrial laborers. Probes the transition from segregation to civil rights through the process of protest and the transformation of African Americans from second-class into first-class citizens. The purpose is to understand historical antecedents for the current socioeconomic, political, and cultural status of African Americans.]

## ASaRC 380 African History: Earllest Times to 1800 \# ©

Fall. 3 credits. A. Bekerie
This course covers the history of Africa from the origins of humankind, through the emergence of small-scale societies and state systems, such as Egypt, Meroe, Mali, Bunyoro, the Swahili city-states and the Luba-Lunda complex, that had regional and international significance. Emphasis is placed on understanding the way in which historic ecological conditions, political developments, and religious change affected gender, class, and ethnic relations within these societies and their relations with other societies. The course also examines Africa's interaction with Islamic and European cultures up to 1800 .
AS\&RC 381 Afrlcan History, 1800-Present ©
Spring. 3 credits. D. Ohadike This is a survey of African history in the nineteenth and twentieth centuries. It deals with African revolutions in the nineteenth century; the ending of the slave trade and the politics of the abolition; European scramble and partition of Africa; resistance to European colonial conquest; African societies in the colonial period; Christian missionaries and

Western educated Africans; colonial administration; French and British styles; PanAfricanism and the politics of decolonization; liberation movements in Africa; the armed struggles in Algeria, Angola, Mozambique, Zimbabwe, Namibia and South Africa; Neocolonialism; the rise and decline of military regimes the World Bank, the IMF, African debt crisis, and the Structural Adjustment Programs.

## ASeRC 404 Afrocentrlcity: Paradigm

 and Critical ReadingsFall. 4 credits. A. Bekerie.
What is Afrocentricity? It is a theoretical framework designed to study and interpret the histories and cultures of peoples of Africa and African descent by locating them at the center of their experiences. In other words, it is a method of knowing the life experiences of African peoples from the inside out. The course will examine-through the writings of Asante, Keto, Clarke, Jean, Myers, Amin, Mazrui, Gates, Appiah, Richards, Schlesinger and T'hiongo-the conception and depth of the paradigm, its relevance in the production and utilization of knowledge, particularly emancipatory knowledge, the history of the paradigm, and the debate it generates among a wide range of thinkers and scholars

## [ASARC 410 African American Polltics

Spring. 4 credits. Not offered 1997-98.
Next offered spring 1999. 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 seventeenth century is a complex political legacy. This course will conduct 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 will be analyzed. Critical historical stages in the process of Black politics will be examined. The development of electoral offices in federal and statewide politics, and the significant urban political power bases giving rise to African American mayoralty politics in critical industrial centers, as well as rural hamlets will center the course. Presidential politics-the Jesse Jackson campaigns-and new political formations including Black Republicans/conservatives will constitute the emphasis on contemporary events. The course will review the development of the literature in African American politics.!

## AserC 420 Public Policy and the African

 American Urban CommunitySpring. 4 credits. J. Turner.
The socioeconomic conditions of the African American urban community will be the central focus of the course. Community development models will be explored in relationship to the social needs of the African American population. The changing configuration of internal organization of the African American community nationally will be examined.

## As悬RC 422 African Literature

Spring. 4 credits. A. Adams.
With such great focus, both inside and outside Africa, on issues of Africa's "development," what place does "literature" take? Is African literature influencing or influenced by the mundane realities of daily living faced by African people? Or does African literature concern itself with philosophical ideas and ideals that transcend those realities to embrace the general human condition? Or, does it do
both? The texts that we will be reading this course will be approached in terms of these issues of "African development" and "the universal human experience."

## AS\&RC 425 Advanced Seminar In Black Theater and Dramatic Literature

 Spring. 4 credits. Enrollment limited. Staff.This course will be devoted to the study, rehearsal, production, and public performance of a play or plays drawn from the annals of Black American dramatic literature. Students will participate in all the various phases and categories of theatrical production, from acting to production crews to theater group management. A field trip to a Black Theater attraction in New York City will also be arranged if possible. Students who have successfully completed AS\&RC 285 (Black Theater and Dramatic Literature) will be granted preference for the limited enrollment in this course.

## As\&RC 435 African Cinema (also Soclety for the Humanities 435) <br> Spring. 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.

## AS\&RC 451 Politics and Social Change

 In the Carlbbean (C)Fall. 4 credits. L. Edmondson. A study of the historical, geostrategic, political, economic, and social (including racial and cultural) forces bearing on the domestic and international experiences of Caribbean societies. Special attention will be given to conflicting definitions and perceptions of the Caribbean; contending theories of Caribbean social structure and models of development; the continuing salience of struggles for change and transformation; prospects of regional integration; and Caribbean challenges to the global system, especially with regard to the region's relations with the United States and the region's position in the Third World in the context of the North-South cleavage.

## AS\&RC 455 Carlbbean Literature ©

Fall. 4 credits. A. Adams.
This course will examine the prose literature of the Caribbean islands. Through the reading of several novels and short stories from the various languages and cultural strains that comprise the Caribbean societies, students will study the points of commonality and the diversity within this body of literature. The recurrence of certain historical, social, and cultural issues that have formed the multiethnic Caribbean peoples will be analyzed in their varying manifestations across the linguistic and other boundaries to uncover the underlying shared experience.

As\&RC 459 Educational Innovatlons in Africa and the African Dlaspora (also Soclal Sclences 459 and Women's Studies 459) ©
Fall. 4 credits. N. Assiê-Lumumba
This course deals with theories and concepts of planned change for social development and their application to educational innovations geared to promoting equal opportunity based on gender, race, and class in Africa and the African diaspora. The first part of the course will be concemed with the stage of innovations from their inception to their implementation, resistance, diffusion and impact on different social categories. The second part of the course will deal with concrete cases of educational innovations such as the creation of educational institutions and change in curriculum development and medium of instruction. Historical and contemporary cases of educational innovations will be presented and analyzed. The case studies include the development of African Studies as a discipline, the creation and expansion of historically black institutions such as Lincoln University in Pennsylvania, Tuskegee Institute in Alabama, Spelman College in Georgia, and the Westside Preparatory School of Chicago. The African cases to be studied include education for selfreliance in Tanzania, African languages as a medium of instruction in Nigeria and Mali, and television as a medium of instruction in Cote d'Ivoire. Gender will be a main focus in the analysis of the agents and beneficiaries of the innovations.

## AS\&RC 462 The Black Church: Resistance and Empowerment

Spring. 4 credits. Staff.
The course will be devoted to the study of the Black Church historically as the most viable institution in African American life. Consideration will be given to the African spiritual heritage, development of the rural and metropolitan churches, leadership in the church, the African American worship experience, the range of issues and challenges confronting the church's future and the emergence of non-Christian Black churches. The instructor's lectures will be supplemented by audio-visuals and class discussion.

## AS\&RC 475 Black Leaders and

 Movements In African-American HistoryFall. 4 credits. R. Harris. Analyzes the personalities, ideas, and activities central to the struggle for African-American liberation from the eighteenth-century to the present. Examines theories of leadership and the structure of protest movements with the goal of understanding current leadership needs and trends among African Americans.

## AS\&RC 478 Family and Society in Africa

 (also Women's Studies 478) (e)Fall. 4 credits. N. Assié-Lumumba. The family as a social institution is structured according to socio-economic, historical, political, and cultural specificities. The topics to be discussed include the concepts of nuclear and extended family, the place and role of different age-groups and generations in the family, marriage and related issues, such as dowry, divorce, parenthood, childrearing, gender roles, class differences, "family planning." The course also deals with the impact of westernization, urbanization, and modern economy on the structure of the family in Africa. Finally, the course addresses the legacy of African family values in the African diaspora. Examples will be drawn from urban and rural communities.

## As\&RC 479 Women \& Gender Issues in Atrica (also Women's Studies 479)

Spring. 3 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, economically active and independent, possessing an identity independent of men In this seminar we will discuss the status and role of women in Africa historically as well as in the contemporary period. Among the topics to be covered are: women in nonwestemized/precolonial societies, the impact of colonial policies on the status and position of women, gender and access to schooling, women's participation in the economy and politics, the attitudes of African women toward feminism, and the 1985 NGO and the United Nations Nairobi Conferences on women.

## As8 RC 483 Thomes in African History: Resistance Movements ©

Fall. 4 credits. D. Ohadike.
This course deals with African resistance to European colonial conquest and domination It examines the organization, strength, and historical importance of the resistance and liberation movements in Africa, together with their linkages with the civil rights movement in the United States. Use will be made of films for illustrative purposes

## ASERC 484 Politics and Soclal Change in Southern Africa

Spring. 4 credits. L. Edmondson. This course focuses on the legacies of apartheid and the challenges of transformation toward a post-apartheid society in South Africa. Topical emphases 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; geo-political, economic, and racial dimensions of the American connection; politics of negotiation and transition to majority rule; prospects for stability, democracy and equality; South Africa's new role in the African continental and global arenas. Instructor's lectures will be supplemented by films and class discussions

## AS\&RC 498-499 Independent Study

Hours to be arranged. 498-fall
499 -spring. Africana Center 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.

## ASARC 501 Global Africa: Comparative Black Experience ©

Spring. 4 credits. A. Mazrui.
This seminar will address two diasporas in the Black experience. The diaspora of enslavement concerns slaves and descendants of slaves in both the Western and Eastern Diaspora. The diaspora of colonization concerns demographic dispersal as a result of colonialism. African-Americans are in their majority part of the Diaspora of Enslavement. Recent Algerian immigrants into France are part of the Diaspora of Colonization.
Jamaicans and Trinidadians in Britain are part of a double diaspora-products of both enslavement and colonialism. The course will
address these areas of Black comparison: Comparative Slavery-A Triple Heritage; Race and Race Mixture in Four Traditions; Comparative Emancipation from Slavery; Comparative Liberation from Colonialism; Comparative Struggle for Civil Rights; The Gender Question in Global Africa; Comparative Quest for Global Equality.

## ASaRC 502 Education and Development in Africa :

Spring. 4 credits. N. Assiē-Lumumba. In the 1950s and 1960s, the human capital theory that emphasizes the importance of formal education for achievement of full productive potential of individuals and countries enjoyed a renewed popularity African countries promoted educational expansion with the expectation that it would lead to socio-economic development. The initial euphoria, however was followed by skepticism and then disillusion. Education began to be perceived even as a hindrance to development. This course examines the relationship between formal education and individual and national development. In this seminar, different paradigms of development including modernization and dependency theories and Third World Forum are presented with an emphasis on the perceived and actual roles of education in individual and national development

## AssRC 503 African Aesthetics

Fall. 4 credits. S. Hassan.
The goal of this course is to investigate in depth the principles of aesthetics and philosophy of African visual arts. The course will offer a critical survey of the different writings and the growing body of research on this relatively new area of inquiry. The objectives of the course are to review how African aesthetics has been studied to date, to provide a critical analysis of the different approaches to the subject and related issues, and to suggest future directions of research. In-depth analysis of particular African societies will be used to examine the relationship of arts and aesthetics to indigenous concept of time, space, color, form, and sociopolitical order. In addition, issues related to African aesthetics and arts such as style, gender, class, and social change will also be explored.

## [ASRRC 504 Political Change In Africa

Fall. 4 credits. Not offered 1997-98. Next offered fall 1998. A. Mazrui.
The study of Africa can be approached either dialectically (focusing on the tension between opposing forces) or thematically (focusing on themes as chapters of experience). This course will borrow from both those approaches. In their class assignments and examinations students are free to use either approach.
The first approach will explore the dialetic between continuity and change; tradition and modernity; dependency and liberation; foreign and indigenous influences; anarchy and order; political decay and political development; democracy and authoritarianism; socialism and capitalism. The thematic approach will examine African Nationalism; race consciousness and Pan-Africanism; political parties and interest groups; executive power; ethnicity in politics; class-formation; civil-military relations; economic and cultural dependency; subregional and continental Pan-Africanism; crisis of the African state; and Africa in World Politics.]
[ASARC 510 Hlstoriography and Sources: The Development of African-Amerlcan History
Spring. 4 credits. Prerequisite: upperclass or graduate standing or permission of instructor. Not offered 1997-98. Next offered spring 1999. R. Harris.
Studies the way Black historians in particular have explained the African-American past Examines the development of writing on African-American history from the earliest writers to the present. Seeks to determine the principles for interpreting African-American history. Acquaints participants with the methodologies and sources central to understanding the African-American experience]

## ASeRC 530 Womanist Writing In Afrlca and the Carlbbean

Spring. 4 credits. A. Adams.
Theoretical essays on the nature, relevance, and articulation of feminist thought from African and Caribbean writers will complement literary texts. Gender issues, as manifested both at home and in emigrant situations abroad will be examined in texts by such writers as Sistren, Conde, Dangarembga, Aidoo, Warner-Vieyra, Ba, Emecheta, Kincaid W. Mandela. (Francophone works may be read in the original by individuals who so desire.)

## AS\&RC 598-599 Independent Study

598-fall; 599-spring. Variable credit. For all graduate students.

## ASeRC 602 Research, Theory and Methodology In Africana Studies

 Spring. 4 credits. Faculty.This course, which will be conducted as a seminar, is designed for first-year AS\&RC graduate students. It will cover basic research design, methodology and means of gathering and organizing data and will also address specific issues related to research and theoretical discourse in African, Caribbean, and African American humanities and social sciences.

The course will be coordinated and supervised by one professor (the Director of Graduate Studies or by rotation) but teamtaught by three or four faculty per semester. Each participating faculty will be responsible for a topical segment of the course related to her/his areas of specialization or an area of interest pertaining to theory and methodology of Africana Studies.

Readings will be assigned and distributed in advance before each faculty presentation, to allow students to prepare for discussion. This course will allow first-year graduate students wider exposure to faculty and to the field of Africana Studies early in their tenure in the program, and thus help them make an informed decision regarding faculty adviser and topic for their thesis. Each student will be required to produce a bibliographic essay related to his/her thesis topic, and a fully developed thesis proposal as an end product of the course.

## A58RC 698-699 Thesls

698, fall; 699, spring. Limited to Africana Studies and Research Center graduate students.

## Agriculture, Food, and Society Concentration

A. G. Power, coordinator; G. Altschuler,
M. M. Devine, emeritus; M. J. Esman,
J. Fessenden MacDonald, C. C. Geisler,
A. Gillespie, B. Ginsberg, D. J. Greenwood,
S. L. Kaplan, D. R. Lee, T. J. Lowi, T. A. Lyson,
P. L. Marcus, P. McMichael, V. Nee,
D. I. Owen, D. Pimentel, N. T. Uphoff,
D. Usner. Office: 275 Clark Hall, 255-6042.

Agriculture, Food, and Society is an interdisciplinary concentration that is designed to introduce students to the study of agricultural and food issues from diverse perspectives within the liberal arts. The Agriculture, Food, and Society concentration seeks to make available to students a coherent program of study in which the role of agriculture in modern or prehistorical-historical and developed or developing societies can be understood in biological, social, scientific, and humanistic perspective. The concentration draws upon courses in several colleges-in particular, the Colleges of Arts and Sciences, Agriculture and Life Sciences, and Human Ecology.
The concentration is administered by a committee, the members of which are drawn from the faculty associated with the concentration. The members of this committee include faculty from each of the major colleges from which courses in the concentration are drawn. The work of the committee is supported administratively through the Biology and Society Major. The office of the Biology and Society Major ( 275 Clark Hall) also provides a central location for students to receive information about relevant course offerings, upcoming seminars and presentations, faculty interests, and so on.

## Basic Requirements

The requirements for the Agriculture, Food, and Society concentration are designed to ensure a broad background in the biological, socioeconomic, and humanistic dimensions of agricultural and food issues. These requirements include foundation courses in biology; the Senior Seminar B\&Soc/BioG/S\&TS 469, Food, Agriculture, and Society; plus a minimum of five electives totaling 15 credits drawn from the courses offerings.
Students enrolling in the Agriculture, Food, and Society concentration should take the following foundation courses in biology to prepare themselves for course work in agricultural science: a two-semester introductory biology sequence selected from Biological Sciences $109 / 110,105 / 106$, or 101-104. (Advanced placement in biology with a score of 4 or 5, or Biological Sciences 107/108, offered during the eight-week Cornell summer session, also satisfies the biological sciences requirement). These courses may be used to meet group 1 (physical or biological sciences) distribution sequence requirements in the College of Arts and Sciences.
It is recommended (but not required) that students in the Agriculture, Food, and Society concentration elect one or more freshman writing seminars with agriculturally related content to meet basic college requirements for graduation. The electives for the concentration, from which a minimum of five courses and 15 credits must be taken, are organized into three groups: agricultural and nutritional
science, humanities, and social science/ history. Students must select one agricultural and nutritional science course, one humanities course, and three social science or history courses. A maximum of six of the 15 credits may be earned in 100-level courses.
In addition, students are required to take the senior seminar, B\&Soc/BioG/S\&TS 469, Food, Agriculture and Society. Adjustments to these and other requirement of the concentration may be made with the approval of the student's Agriculture, Food, and Society faculty adviser.

## American Studies

J. Porte, chair and director of undergraduate studies; G. Altschuler, S. Blumin, L. Brown, J. Brumberg, M. Kammen, I. Kramnick, T. Lowi, B. Maxwell, D. McCall, R. L. Moore, R. Polenberg, N. Salvatore, S. Samuels,
M. E. Sanders, J. Silbey, S. Wong.

Emeritus: F. Somkin, S. C. Strout

## The Major

The major in American Studies, appropriate for a wide variety of future professions, is basically a program of coordinated study in the history, literature, and politics of the United States. The prerequisites are two courses from the following: American Studies 101, American Studies 102, English 275, English 268, Govemment 111, History 101, History 102. Students who contemplate becoming American Studies majors are encouraged to speak with the chair as early as possible to arrange for a major adviser.
In consultation with their advisers, American Studies majors elect, in addition to the prerequisites, 36 credits (or nine courses) of work in American history, American literature, and American government. Their work must include courses in all of the three large periods into which the nation's development can be divided (defined for the purposes of the program as colonial, nineteenth century, and twentieth century). Students must take no fewer than 4 courses before 1900. At least one of these courses must be in the period before 1800. Each student must also take one of the adviser-approved seminars at the 400 or 600 level. When the subject matter is appropriate, such a seminar may count toward the satisfaction of the period requirements. Students divide their work among history, literature, and politics in whatever proportion serves their interests, so long as their advisers consider their programs to be well-balanced. No more than 18 credits may be in any one department.
Beyond the basic core requirements for the major, 8 credits of work in the history or literature or both of another culture are required; students are also encouraged to take at least 4 credits in American thought, society, or culture studies from the perspective of another discipline such as anthropology, economics, history of art, or sociology. (This last 4 -credit supplement may be satisfied outside the college.)
Courses in American history that will satisfy the 36-credit requirement are offered by the Department of History; those in American literature are offered by the Department of English, the Department of Theatre Arts, and the Africana Studies and Research Center; those in American government are offered in
the Department of Government. Occasionally a course that fits an individual student's program may be offered elsewhere. Substitution will depend on the adviser's approval. Advisers determine what courses count for the interdisciplinary seminar.
Honors. Candidates for honors must maintain an average of $B+$ in courses pertinent to the major. To be eligible for a degree with honors in American Studies, a student must in the senior year write an honors essay for American Studies 493 , Honors Essay Tutorial, and take an oral examination in the declared area of special interest.
Cornell-in-Washington Program. American Studies majors may apply to the Cornell-inWashington program to take courses and participate in a closely supervised externship during a fall or spring semester. For further information, see Interdisciplinary Centers, Programs, and Studies or inquire at 471 Hollister Hall, 255-4090.

## AM ST 101 Introduction to American Studies: Amerlcan Revolution to the Beginning of the 20th Century <br> Fall. 4 credits. G. Altschuler and

## D. McCall.

In this interdisciplinary course we will analyze American values and behavior as the intersection of culture, politics, literature, and society. Among the topics explored in the course will be the democratization of American society and politics, the formation of the middle class, the Civil War, the rise of industrialization, the Victorians and sexuality, the Pragmatist revolt against Formalism. Intensive examination of Hawthome's Scarlet Letter, Melville's Moby-Dick, James's Portrait of a Lady, and Mark Twain's Huckleberry Finn will help illuminate the relationship between literature and American values.

AM ST 102 Introduction to American Studles: Progressive Era to the Present
Spring. 4 credits. G. Altschuler and D. McCall.

In this interdisciplinary course we will analyze American values and behavior as the intersection of culture, politics, literature, and society. Among the topics explored in the course will be the death of the West and the rise of the Western, the Roaring Twenties, the New Deal and Writers on the Left, the Great War, the ideology of anti-Communism, the Civil Rights Movement, Vietnam, the Reagan Revolution, Post-Modernism and the politics of multiculturalism. Intensive examination of the works of Emest Hemingway,
F. Scott Fitzgerald and William Faulkner will help illuminate the relationship between literature and American values.

## [AM ST 201 Popular Culture in the United

 States 1800-1945Fall. 4 credits. Not offered 1997-98. Next offered fall 1998. American Studies 201 will deal with American popular culture in the period between 1900 and the end of World War II. As we examine best-sellers, films, sports and television, radio, ads, newspapers, magazines and music, we will try to better understand the ways in which popular culture shapes and/or reflects American values. The course will also depict 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 for 201 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; Jackie Robinson and the American Dilemma.]

【AM ST 202 Popular Culture in the United States 1945 to Present
Spring. 4 credits. Not offered 1997-98.
Next offered spring 1999
American Studies 202 will treat the period from 1945 to the present. As we examine best-sellers, films, sports and television, radio, ads, newspapers, magazines and music, we will try to better understand the ways in which popular culture shapes and/or reflects American values. The course will also depic 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 for 202 include: The "Honeymooners" and 1950's Television; soap operas; "Gross-out" movies; Elvis, The Beatles, and Guns ' $n$ Roses; Gothic Romances; People Magazine and USA Today.]

AM ST 251 Black Rellglous Traditions from Slavery to Freedom
[also History 251 and Religlous Studies 251|
Spring. 4 credits. M. Washington.
For description, see HIST 251
AM ST 258 Historical Development of Women as Professionals, 1800 to the Present (also Human Development and Family Studles 258, History 238, and Women Studies 238)
Spring. 3 credits. J. Brumberg
AM ST 260 Introductlon to Amorican Indian Literature (also English 260)
Fall. 4 credits. D. Moore
For description, see ENGL 260
[AM ST 267 American Literary Identities: Nineteenth Century (also English 267)
3 credits. Not offered 1997-98.]
AM ST 275 The American Literary Tradition (also English 275 )
Fall, spring. 4 credits. Fall, B. Maxwell; spring, D. Moore
For description, see ENGL 275
[AM ST 291 Amerlcan 1920s: Literature and Culture (also English 291)
4 credits. Not offered 1997-98.]
AM ST 302 Social Movements In American Polltics (also Government 302)
Fall. 4 credits. E. Sanders.
For description, see GOVT 302
[AM ST 304 American Culture in Historical Perspective (also History 304)
4 credits. Not offered 1997-98. Next offered 1998-99.]

AM ST 311 Structure of American Political History (also History 311) \#
Fall. 4 credits. J. Silbey.
For description, see HIST 311
AM ST 312 Structure of American Political History (also Hlstory 312)
Spring. 4 credits. J. Silbey
For description, see HIST 312.

AM ST 316 The American Presidency (also Government 316]
Spring. 4 credits. E. Sanders
For description, see GOVT 316.
[AM ST 320 Understanding Work In America 1880-1990 (also History 315)
4 credits. Not offered 1997-98
This course examines both the experience and the perception of work in American life in the century framed by two fundamental formations: the emergence of a system of industrial capitalism largely nationalistic in its orientation and the development of a more international economic system in more recent times Among the topics considered will be the effects of technological change, its impact on the experience of work across numerous occupational categories, and the changing perceptions of work as reflected in contemporary cultural expression, literature, and commentary across the century.]

AM ST 324 Varieties of Amerlcan Dissent, 1880-1990 (also History 324)
Fall. 4 credits. N. Salvatore The idea of dissent in American society raises a variery 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 will explore the varieties of economic, political, and cultural dissent in America between 1880 and 1990, and will examine how understanding dissent in its specific historical context illuminates major aspects of American life and culture.
[AM ST 330 The Age of Jackson, 1815-1850 (also History 330) \#
4 credits. Not offered 1997-98.]
[AM ST 331 American Clvil War and Reconstruction, 1850-1877 (also History 331) \#
4 credits. Not offered 1997-98.]
[AM ST 332 The Urbanization of American Society: 1600 to 1860 (also History 332) \#
4 credits. Not offered 1997-98.]
[AM ST 333 The Urbanization of American Soclety: 1860 to 2000 (also Hlstory 333)
4 credits. Not offered 1997-98.]
[AM ST 336 The American Ethos of Entrepreneurialism: Capitalism and Society in Developing America, 1607-1877 (also Mlstory 336) \#
4 credits. Not offered 1997-98.]
[AM ST 337 Entrepreneurlalism and Organization in the Age of the Corporation: Capitalism and Society In Modern America, 1840-2000 (also HIstory 337)
4 credits. Not offered 1997-98.J
AM ST 345 Intellectual/Cultural Life of Nineteenth-Century Americans (also History 345 and Religious Studies 345) \#
Fall. 4 credits. R. L. Moore.
For description, see HIST 345.
AM ST 346 Modernization of the American Mind (also History 346) Spring. 4 credits. R. L. Moore,
For description, see HIST 346.
[AM ST 359 American Families In Historlcal Perspective (also Human Development and Famlly Studies 359, Women Studles 357, and History 359)
3 credits. Not offered 1997-98.J
[AM ST 360 Painting and Everyday Life in Nineteenth-Century America (also History of Art 360)
4 credits. Not offered 1997-98.]
AM ST 361 Early American Literature (also English 361) \#
Fall. 4 credits. S. Samuels
For description, see ENGL 361
AM ST 362 The American Renalissance (also English 362)
Spring. 4 credits. J. Porte
For description, see ENGL 362.
AM ST 363 The Age of Reallsm and Naturalism (also English 383)
Spring. 4 credits. J. Goldsby.
For description, see ENGL 363.
AM ST 364 American Literature Between the Wars (also English 364)
Spring. 4 credits. L. Herrin
For description, see ENGL 364
AM ST 365 American Literature Since 1945 (also English 365)
Spring. 4 credits. B. Maxwell
For description, see ENGL 365.
[AM ST 366 The Nineteenth-Century Amerlcan Novel (aiso English 366)
4 credits. Not offered 1997-98.]
[AM ST 367 The Modem Amerlcan Novel (also English 367)
4 credits. Not offered 1997-98.]
AM ST 369 Survey of African Amerlcan Literature to 1917 (also English 375)
Fall. 4 credits. J. Goldsby
For description, see ENGL 375.
[AM ST 371 American Poetry to 1950 (also English 371)
4 credits. Not offered 1997-98.]
AM ST 374 19th-Century Amerlcan Women Writers (also English 374 and Women's Studies 374) 糔
Spring. 4 credits. L. Brown
For description, see ENGL 374
[AM ST 376 American Politlcal Thought from Madison to Malcolm X (also Government 366) \#
4 credits. Not offered 1997-98.]
AM ST 392 Aslan American LIterature (also English 392 and Aslan American Studles 392)
Fall. 4 credits. S. Wong.
For description, see ENGL 392.
AM ST 394 Toplce in American Indian Literatures: Native Cultural Studies (also English 394)
Spring. 4 credits. D. Moore
For description, see ENGL 394.
AM ST 398 Independent Research
Fall and spring. 1-4 credits. By permission only. J. Porte
This is a course of individualized research for junior or senior students. Topics, readings and writing requirements will be designed through consultation between the student and the instructor

AM ST 399 Readings In American Studies
Fall and spring. $1-4$ credits. By permission only. J. Porte.
This is a course of individualized readings for junior or senior students. Topics, readings, and writing requirements will be designed through consultation between the student and the instructor.
[AM ST 411 Seminar: American Political History (also History 411)
4 credits. Not offered 1997-98.]
AM ST 417 History of Female Adolescence (also Human Development and Family Studies 417, Women Studies 438 and History 458) \#
Spring. 3 credits. J. Brumberg.
For description, see HDFS 417.

## AM ST 419 Seminar in American Social History (also History 419) <br> Spring. 4 credits. N. Salvatore. <br> For description, see HIST 419.

[AM ST 421 Cultural Taste Levels In HIstorical Perspectlve (also History 421)
4 credits. Prerequisite: permission of instructor. Not offered 1997-98.]
AM ST 442 Rellglon and Polltics In American History from J. Winthrop to R. Reed (also History 442 and Rellgious Studios 442)
Fall. 4 credits. R. L. Moore.
For description, see HIST 442.

## AM ST 465 Proseminar in American

 Studies (also English 465)Spring. 4 credits. J. Porte. Selected topics in American history, literature, the arts, politics, and popular culture.
Recommended for American Studies majors.

## AM ST 467 Studies In American Flction:

 1870-1915 (also English 467)Fall. 4 credits. J. Porte.
For description, see ENGL 467.
AM ST 471 American Indian Women's Literature (also English 471)
Fall. 4 credits. K. Shanley.
For description, see ENGL 471.

## [AM ST 479 Jewish-American Writing (also English 479 and Jewlsh Studies 478)

4 credits. Not offered 1997-98.]
[AM ST 485 Amerlcan Modernist Writing (also English 485)
4 credits. Not offered 1997-98.]

## AM ST 492 Honors Seminar II, Wrlting

 the Clvil War (also English 492)Spring. 4 credits. Permission by instructor. S. Samuels.
For description, see ENGL 492.
AM ST 493-494 Honors Essay Tutorial 493, Fall; 494, Spring. Up to 4 credits each semester. See J. Porte for appropriate advisers.

## AM ST 500 Research Seminar in

Amerlcan Studies (also History 500)
Fall or spring. Offered in Cornell-inWashington Program only. J. H. Silbey and others.
For description, see HIST 500.
[AM ST 521 Seminar In Amerlcan Cultural Studies (also Mlstory 521)
4 credits. Not offered 1997-98.]
[AM \$T 665 American Political Thought (also Government 665)
4 credits. Not offered 1997-98.]

## 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 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 applicationoriented 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 in "Interdisciplinary Centers, Programs, and Studies."

## Archaeology Program

S. Baugher (landscape architecture), R. G. Calkins (history of art), K. M. Clinton (Classics), J. E. Coleman (Classics), D. Evett (Language House Program), R. T. Farrell (English), K. L. Gleason (landscape architecture), J. S. Henderson (anthropology), K. A. R. Kennedy (ecology and systematics), P. I. Kuniholm (history of art), M. Landon (Classics), D. I. Owen (Near Eastern Studies), A. Ramage (history of art), S. Saraydar (Arts and Sciences), B. S. Strauss (history), T. P. Volman (anthropology).

Archaeology is an interdisciplinary field at Cornell, which is one of the few universities in the United States to offer a separate archaeology major. 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 Archaeology 100 or one of the basic courses as defined below before they will be admitted to the major. This initial course will not be counted toward the major requirements.
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 an additional 32 credits from the courses listed below, selected in consultation with a major adviser of their choosing. These
courses should provide exposure to a broad range of archaeologically known cultures and the methods of revealing and interpreting them. Sixteen of the credit hours should be at the 300 level or above. At least two courses must be taken from each of categories B-E.
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 should take at least two of the basic courses in each category. Further courses in languages and in geology are also recommended.
Honors. Honors in archaeology is awarded on the basis of the quality of an honors essay and the student's overall academic record. Prospective honors students should have a 3.5 gradepoint in the major and a 3.0 gradepoint overall. They should consult with the director of undergraduate studies before the beginning of the senior year. The honors essay is normally prepared in consultation with a faculty adviser during the senior year; students may enroll in Archaeology 481, fall; 482, spring for this purpose.
Fieldwork. Every student should gain some practical experience in archaeological fieldwork on a project authorized by his or her adviser. 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 Comell and other approved institutions.

## The Concentration

Students in Comell schools and colleges other than Arts and Sciences may elect a concentration in archaeology. To concentrate in archaeology, the student must complete five courses, all with a grade of C or better. The five courses must consist of either (1) Archaeology 100 and four other courses from categories $\mathrm{B}-\mathrm{D}$, at least three of which must be basic courses, or (2) five courses from categories B-D, at least four of which must be basic courses. Concentrators are encouraged to gain some fieldwork experience. They are eligible on the same basis as majors for Hirsch Scholarships in support of fieldwork.

## Freshman Writing Seminars

For course descriptions, see the freshman writing seminar brochure.

## A. Introductory Courses and Independent Study <br> Courses

## ARKEO 100 Introduction to

 Archaeology \#Spring. 3 credits. Staff.
A broad introduction to archaeology-the study of material remains to answer questions about the human past. Case studies illustrate current methods and interpretive frameworks. Guest lectures by members of the Cornell Archaeology Program are an integral part of the course.

## ARKEO 300 Indlvidual Study in

Archaeology and Related Flelds
Fall and spring. Credit to be arranged. Prerequisite: Archaeology 100 or permission of instructor.
Students pursue topics of particular interest with the guidance of a faculty member.

ARKEO 481-482 Honors Thesis
481, fall; 482, spring. S-U only. Prerequisite: admission to Honors Program. The student, under faculty direction, will prepare a senior thesis.

## ARKEO 600 Special Topics in

 ArchaeologyFall and spring. 4 (V) credits
Students pursue advanced topics of particular interest under the guidance of a faculty member(s).

## ARKEO 681-682 Master's Thesis

 681, fall; 682, spring. S-U only. Limited to students admitted to Master's Program in Archaeology.Students, working individually with faculty member(s), prepare a Master's Thesis in Archaeology
B. Theory and Interdisciplinary Approaches ARKEO 202 Interpretive Archaeology (also Anthropology 202) \#
Fall. 3 credits. Basic. Limited to 50 students. T. P. Volman.
For description, see ANTHR 202.
[ARKEO 203 Early People: The Archaeological and Fossil Record (also Anthropology 203)
Spring. 3 credits. Basic. Not offered 1997-98. T. P. Volman.]
[ARKEO 204 Ancient Civilizatlons (also Anthropology 204) © "
Fall. 3 (4) V credits. Not offered 1997-98. J. S. Henderson.]

ARKEO 317 Stone Age Archaeology (also Anthropology 317)
Fall. 4 credits. T. P. Volman
For description, see ANTHR 317
[ARKEO 409 Approaches to Archaeology (also Archaeology 609 and Anthropology 409/609)
Spring, 4 credits. Basic. Prerequisite: permission of instructor. Not offered
1997-98. J. S. Henderson, T. P. Volman.
For description, see ANTHR 409.
ARKEO 494 Seminar in Archaeology: The Archaeology of Human Origins (also Anthropology 494) © 퓸
Spring. 4 credits. T. P. Volman.
For description, see ANTHR 494.

## [LA 261 Urban Archaeology

 (also CRP 261)3 credits. Not offered 1997-98
S. Baugher.

For description, see LA 261.]

## LA 569 Archaeology in Preservation

 Planning and Design (also CRP 569)Spring. 3 credits. S. Baugher
For description, see LA 569.

## C. Old World Archaeology

[ARKEO 221 Minoan-Mycenaean Art and Archaeology (also Classics 221 and History of Art 221] "
3 credits. Basic. Not offered 1997-98; next offered spring 1999. J. Coleman.
For description, see CLASS 221.J
[ARKEO 233 Archaeology in Action II (also History of Art 225 and Classics 233) \#
Spring. 3 credits. Prerequisite: permission of instructor. Not offered spring 1998. P. I. Kuniholm.]
[ARKEO 262 Laboratory in Landscape Archaeology (also Landscape Architecture 262)
3 credits. Not offered 1997-98
S. Baugher.

For description, see LA 262.]
ARKEO 263 Introduction to Biblical History and Archaeology (also NES 263, Jewish Studies 263, and Religious Studies 264) (i) \#
Fall. 3 credits. J. Zorn.
For description, see NES 263.
[ARKEO 275 Ancient Seafaring (also Near Eastern Studies 261) \# \# Spring. 3 credits. Not offered 1997-98. D. I. Owen.]

ARKEO 351 The Clity of Rome (also Classics 351 and Hlstory of Art 321] "
Fall. 3 credits. M. Landon.
For description, see CLASS 351
ARKEO 380 Introduction to the Arts of China (also History of Art 380) ©
Fall. 4 credits. S. Oertling.
For description, see ART H 380.
[ARKEO 417 Early Medieval Archaeology and Literature (also Archaeology 617; English 417 and 617)
4 credits. Prerequisite: permission of instructor. Enrollment limited to 15 students. This course may be used as one of the three pre- 1800 courses required of English majors. Not offered 1997-98; next offered 1998-99. R. T. Farrell.
For description, see ENGL 417.1
[ARKEO 425 Seminar on the Bronze Age Architecture of Asia Minor (also Art History 425 and Classics 430)
4 credits. Prerequisite: permission of insturctor. Not offered 1997-98. P. I. Kuniholm]
[ARKEO 432 Sardis and the Cities of Asia Minor (History of Art 424 and Classics 432) \#
4 credits. Prerequisite: permission of instructor. Not offered 1997-98. A. Ramage.]

ARKEO 434 The Rise of Classical Greece (also History of Art 434 and Classics 434) \#
Spring. 4 credits. Recommended: Classics 220 or 221 or History of Art 220 or 221, or permission of instructor.
P. I. Kuniholm.

For description, see ART H 434.
ARKEO 435 Seminar on Roman Art and Archaeology (also Classics 435 and History of Art 427) \#
Spring. 4 credits. Prerequisite: permission of instructor. A. Ramage.
For description, see ART H 427
ARKEO 520 Seminar in Classical Archaeology (also History of Art 520 and Classics 630)
Fall. 4 credits. P. I. Kuniholm.
For description, see ART H 520.
[ARKEO 617 Early Medleval Archaeology and Literature (also Archaeology 417; English 417 and 617)
4 credits. Not offered 1997-98; next
offered 1998-99. R. T. Farrell
For description, see ENGL 417.]
[ARKEO 629 The Prehistoric Aegean (also Classics 629) \#
4 credits. For graduate students, and advanced undergraduates with permission of instructor. Not offered 1997-98; next offered spring 1999. J. E. Coleman.
For description, see CLASS 629.]
CLASS 220 Introduction to Art History: The Classical World (also History of Art 220) \#
Fall. 4 credits. A. Ramage.
For description, see ART H 220.
[CLaSS 322 Greeks and Their Neighbors (also History of Art 328) *
4 credits. Prerequisite: Classics 200 or
221, or permission of instructor. Not
offered 1997-98; next offered 1990-2000.
J. E. Coleman.

For description, see CLASS 322.]
[Class 326 Greek Cities and Towns (also Alstory of Art 326) \#
4 credits. Prerequisite: Classics/History of Art 220 or permission of instructor. Not offered 1997-98; next offered 1998-99.
J. Coleman.

For description, see CLASS 326.]
[CLASS 329 Greek Sculpture (also History of Art 329) \#
4 credits. Not offered 1997-98.
J. E. Coleman.

For description, see CLASS 329.]
[CLASS 333 Greek and Roman Mystery Cults and Early Christianity (also Rellgious Studies 333) \#
4 credits. A previous course in Classics (civilization or language) or Religious Studies 101 is recommended. Not offered 1997-98; next offered 1990-2000. K . Clinton.
For description, see CLASS 333-]
[ART H 322 Arts of the Roman Empire (also Classics 350)
Spring. 4 credits. Not offered 1997-98. A. Ramage.

For description, see ART H 322.]
ART H 325 Greek Vase Painting (also Classics 325) "
Spring. 4 credits. A. Ramage
For description, see ART H 325 .
ART H 327 Greek and Roman Colns (also Classics 327) \#
Fall. 4 credits. A. Ramage.
For description, see ART H 327.
[NES 367 History and Archaeology of Ancient Egypt ©
Fall. 4 credits, Basic. Not offered 1997-98. D. I. Owen.]
D. New World Archaeology
[ARKEO 355 Ancient Mexico and Central America (also Anthroplogy 355) © \# Spring. 4 credits. Basic. Not offered 1997-98. J. S. Henderson.]
[ARKEO 493 Seminar in Archaeology (also Anthropology 493) "
Fall. 4 credits. Not offered 1997-98.]
[ANTHR 456 Mesoamerican Rellgion, Sclence, and HIstory \#
Fall. 4 credits. Not offered 1997-98.]
LA 360 Pre-Industrlal Clties and Towns of North America (also CRP 360)
Fall. 3 credits. S. Baugher.
For description, see LA 360.

## E. Methodology and Technology

ARKEO 285 Art, Archaeology, and Analysis (also Engineering 185, MS\&E 285, Physlcs 200, Ar 372, and NS\&E 285)
Spring. 3 credits. 3 lecs. Does not meet liberal studies distribution requirements. Staff.
For description, see ENGRI 185
ARKEO 309 Dendrochronology of the Aegean (also History of Art 309 and Classics 309)
Fall and spring. 4 credits. Limited to 10 students. Prerequisite: permission of instructor. P. I. Kuniholm.
For description, see ART H 309.
[ARKEO 370 Environmental Archaeology (also Archaeology 670 and Anthropology 370 and 670)
Fall. 4 credits. Prerequisite: two previous courses in archaeology or permission of instructor. Not offerd 1997-98.
T. P. Volman.]
[ARKEO 405 Archaeological Research Design (also Archaeology 605 and Anthropology 405/605)
Spring. 4 credits. Basic. Prerequisite: permission of instructor. Not offered 1997-98. J. S. Henderson, T. P. Volman.]

## [ARKEO 423 Ceramics (also History of

 Art 423 and Classles 423)4 credits. Prerequisite: permission of instructor. Not offered 1997-98. Staff.]

ARKEO 458 Archaeclogical Analysis (also Archaeology 658 and Anthropology 458/658) ©
Spring. 4 credits. Prerequisite: one course in archaeology or permission of instructor. Enrollment limited to 15 students. J. S. Henderson.
For description, see ANTHR 458.

## ARKEO 601 Graduate Colloquilum in Archaeology

4 credits. Open to graduate students and advanced undergraduates by permission of instructor. Staff.
Faculty members of the Program in Archaeology and invited speakers will present summaries of the different aspects of archaeological analysis. Topics may include: lithics, ceramic typology, petrographic and neutron activation analysis, dendrochronology and other chronological techniques, settlement patterns, inscriptions, human and animal bones.
[ARKEO 670 Environmental Archaeology (also Archaeology 370 and Anthropology 370 and 670)
Fall. 4 credits. Prerequisite: two previous courses in archaeology or permission of instructor. Not offered 1997-98.

## T. P. Volman.]

ANTHR 371 Human Paleontology (also Biological Sclences 371)
Fall. 4 credits. Prerequisite: one year of introductory biology, Anthropology 101, or permission of instructor.
K. A. R. Kennedy.

For description, see ANTHR 371.
[ANTHR 474 Laboratory and Fleld Methods In Human Biology (also Biologlcal Sciences 474)
5 credits. Prerequisite: one year of introductory biology, Anthropology 101, or permission of instructor. Not offered 1997-98. K. A. R. Kennedy.]

## 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 Asian Americans and to serve as a resource to the campus and regional communities. The program's undergraduate courses, offered within the program and cross-listed with departments in various colleges, meet distribution requirements and count toward a concentration 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 Concentration

The program's undergraduate concentration affords students an opportunity to develop a multidisciplinary approach to the study of Asians in America. The course of study stresses developments 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 adviser from among the program's affiliated faculty and must complete at least fifteen (15) units of credits as follows: (a) AAS 110 and two (2) additional courses in Asian American Studies; (b) one (1) course in Africana, American Indian, Latino Studies, or Women's Studies"; and (c) one (1) course in East Asian, South Asian, or Southeast Asian Studies." ("These courses must be approved by the student's faculty adviser, and they should address issues of race, gender, or the histories and cultures of Asian peoples.) Students must file an application for the concentration with the Asian American Studies Program.

## Resource Center

The program's Asian American Studies Resource Center provides meeting space for the more than twenty-five undergraduate student organizations of the Cornell Asian Pacific Student Union and the graduate student Asian Pacific American Graduate Association. It also holds a modest print collection of books, periodicals, and newspapers; a current news clip file; a comprehensive data base of publications on Asian Americans since 1977; and a sizable collection of videotapes 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 year-long intensive study of selected themes.

## Afilliated Faculty

Gary Y. Okihiro, director; B. Anderson (Government), T. Chaloemtiarana (Southeast Asia Program), P. Chi (Consumer Economics and Housing), B. de Bary (Asian Studies), S. Han (Sociology), V. P. Kayastha (Kroch

Library), J. V. Koschmann (History), L. C. Lee (Human Development), V. Munasinghe (Anthropology), V. Nee (Sociology) G. Okihiro, (History), R. E. Ripple (Education), N. Sakai (Asian Studies), S. Samuels (English), P. S. Sangren (Anthropology), A. M. Smith (Government), K. W. Taylor (Asian Studies), S. Tien (Gannett Health Center), S. Wong (English), D. Yeh (Vice President Student/ Academic Services)

## Courses

AAS 110 Introduction to Aslan American Studles
Fall and spring. 3 credits. Interdisciplinary, cross-cultural introduction to Asian American Studies focusing on contemporary issues. Major themes include: identity and stereotypes, gender, family, community, education, migration and labor, and antiAsianism. Coverage will be given to both Hawaii and the U.S. mainland, and to Asian Indians, Chinese, Filipinos, Hawaiians, Japanese, Koreans, and Southeast Asians.

## AAS 213 Asian American Hlstory

For description, see HIST 213.

## AAS 303 Asians In the Americas: A Comparative Perspective (also Anthropology 303)

Fall. 4 credits.
The common perception of ethnicity is that is 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 thre 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.
[AAS 350 The Art and Politics of Defining the Self in Media Images (also Theatre Arts 350)
Spring. 3 credits. Not offered 1997-98. The focus of this course is an exploration of the way films deal with the representation of people of poor within the American experience. Through the analysis of selected films and class discussions we will explore filmic representations of history, culture, class, gender, and identity.]

## AAS 392 Asian American Literature

 For description, see ENGL 392.
## AAS 412 Undergraduate Seminar in

 Asian American History (also Mistory 412)Spring. 4 credits.
A reading and research seminar that will cover various topics in Asian American history. The topic will be the idea of the "yellow peril" in European and American thought.
[AAS 435 Aslan American Images in Film
3 credits. Prerequisite: AAS 110 or permission of instructor. Not offered 1997-98.
Examination of images of Asians in American film and television productions within their historical and socio-cultural contexts. Use of film and media theory to assess the impact of those images on both Asian and non-Asian American viewers. Students will be challenged to create, in video or on paper, images that avoid stereotypes and depict more realistically the Asian American experience.]

## [AAS 478 Self and Nation In Asian-

 Amerlcan Literature (also English 478)Not offered 1997-98.
A study of the ways in which Asian American writers have constructed discourses of self and nation. Topics will include nationalism, feminism, identity politics, and theories of minority discourse. In our reading of selected works of prose, poetry and drama by Chinese American, Filipino American, Japanese American and Korean American writers, we will be asking questions about the relation of these works to the moment of their production and reception, and the manner in which these textual representations engage with shifting cultural and political struggles. Writers under discussion may include: Carlos Bulosan, Theresa Hak Kyung Cha, Frank Chin, Jessica Hagedorn, David Henry Hwang, Maxine Hong Kingston, Joy Kogawa, David Mura.]

## AAS 495 Independent Study

Fall or spring. $1-4$ credits.
Topic and credit hours to be mutually arranged between faculty and student. Independent Study Forms must be approved by Asian American Studies Program Office.

## Biology and Society Major

S. Jasanoff, chair; S. Hilgartner, director of undergraduate studies, colleges of Arts and Sciences and Agriculture and Life Sciences; S. K. Obendorf, advising coordinator, College of Human Ecology; D. Bates, B. Bedford, C. Bisogni, R. Boyd, T. Brenna,
U. Bronfenbrenner, emeritus, R. Canfield, S. Ceci, B. Chabot, C. C. Chu, T. Dawson, P. Dear, C. Eberhard, G. W. Evans,
G. W. Feigenson, J. Ford, J. Fortune,
C. Geisler, K. Grazier, C. Greene, D. Gurak
J. Haas, A. Hedge, S. Hilgartner, R. Howarth,
H. C. Howland, K. A. R. Kennedy, B. Knuth, A. Lemley, D. Levitsky, B. Lewenstein,
B. A. Lewis, J. Fessenden MacDonald,
J. Mueller, A. Netravali, N. Noy, L. Palmer,
A. Parrot, D. Pimentel, T. Pinch, A. G. Power,
W. Provine, S. Robertson, E. Rodriquez,
M. Rossiter, P. Schwartz, J. Shanahan, M. Small, N. Sturgeon, J. M. Stycos,
V. Utermohlen, E. Wethington

The Biology and Society major is ideally suited for students who wish to combine training in biology with exposure to perspectives from the social sciences and humanities on the social, political, and ethical aspects of modern biology. In addition to providing foundational training in basic 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, which involves faculty from throughout the
university, is offered by the Department of Science \& Technology Studies. Students in the College of Arts and Sciences and the College of Human Ecology are eligible for the major. In addition, undergraduates in the College of Agriculture and Life Sciences can develop an approved sequence of courses from the Biology and Society curriculum under general studies. 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 undergraduate records office in 275 Clark 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; mathematics; 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 and Society. In addition, 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 and Society. Recommended themes in the Biology and Society major include biology, behavior, and society; biology and human population; biology and public policy; environment and society; food agriculture, 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 adviser, 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 and Society office.
There are student advisers and faculty available (according to posted office hours or by appointment) in the Biology and Society offices, 275 Clark Hall or 278 Clark Hall, to answer questions and to provide assistance.

## Admission to the Major

All students should have completed a year of college-level biology and submit an application during their sophomore year. Juniors are considered on a case-by-case basis. Upperdivision applicants should realize the difficulties of completing the major requirements in fewer than two years. The application includes (1) a one-page statement explaining the student's intellectual interests in the Biology and 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 and Society requirements, including courses taken and those the student plans to take; and (4) a transcript of work completed at Comell 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 on satisfactory completion of the introductory biology sequence. Although only introductory biological science is a prerequisite for acceptance, students will find it useful to have completed some of the other requirements (listed below) by the end of their sophomore year, preferably in the first semester. Human Ecology students should also consult the current Human Ecology Guide and meet with the college advising coordinator, Kay
Obendorf, 202 Martha Van Rensselaer Hall, 255-3151

## Major Requirements

## 1) Basic courses

A. Biological sciences 101-104 or 105-106 or 107-108 (prerequisite for admission to Biology and Society)
B. College calculus (one course): ${ }^{*}$ Math $106,111,112$ or any higher level calculus

Recommended but not required: General chemistry (one year sequence) (prerequisite to biochemistry and other chemistry courses): Chemistry 103-104, 207-208, or 215-216
2) Foundation Courses (should be completed by end of junior year)
A. Ethics: One course; B\&SOC 205 (also S\&TS 205) or B\&SOC 206 (also S\&TS 206)
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 from three of the following subject areas: Ecology (BIO ES 261); Evolutionary Biology (BIO ES 278); Biochemistry, Molecular and Cell Biology (BIO BM 231 or 330 or 331 or 333); Microbiology (BIO MI 290); Genetics and Development (BIO GD 281 or 282 or Plant Breeding 225); Neurobiology and Behavior (BIO NB 221 or 222); Botany (BIO PL 241); and Anatomy and Physiology (BIO AP 311 or NS 341 but NOT BIO AP 212)
D. Biology foundation (Depth requirement): One biology course for which one of the above (2.C.) is a prerequisite
E. Statistics: One course selected from BTRY 200, ILR 210, BTRY 215, AG EC 310, EDUC 353, Soc 301, Psych 350, Econ 319, OR\&IE 370, BTRY 601, CRP 320
3) Core Course: (one course). Should be completed by end of junior year.
B\&Soc 301 Biology and Society: The Social Construction of Life (also S\&TS 401); or Phil 286: Science and Human Nature (also S\&TS 286)
4) Theme (five courses that correspond to the theme selected by the student). These courses must be above the 100 level, at least 3 credit hours and taken for a letter grade)
A. Natural Science Issues/Biology Elective (two courses). Select from the list of B\&SOC approved Natural Science Issues courses or choose course(s) with introductory biology as a prerequisite from: ALS, AN SC BIOSCI, ENTOM, FOOD, HDFS, NS, NTRES, PL BR, PL PA, PSYCH, VTMED).
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).
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.
** Among the courses taken to meet the social sciences and humanities requirements (2.A, 2.B, 3, and 4.C), a minimum of two social science courses and two humanities courses must be chosen. History of science and philosophy of science courses may be counted toward the humanities requirement for the major.


## Independent Study

Projects under the direction of a biology and 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 Biology and Society 375 (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 and Society office, 275 Clark Hall. Independent study credits may not be used in completion of the major requirements.

## The Honors Program

The honors program is designed to provide independent research opportunities for academically talented undergraduate students whose major is Biology and Society (B\&SOC). Students who enroll in the honors program are expected, with faculty guidance, to do independent study and research dealing with issues in biology and society. Students who participate in the program should find the experience intellectually stimulating and rewarding whether or not they intend to pursue a research career
Biology and Society majors are considered for entry into the honors program at the end of the spring semester before their senior year. Application forms for the honors program are available in the Biology and Society office, 275 Clark Hall. The honors program is available to Biology and Society majors from the College of Arts and Sciences. Biology and Society majors in the Colleges of Human Ecology and Agriculture and Life Sciences must be selected by an honors committee within their college. To qualify for the Biology and Society honors project, students must have an overall Cornell cumulative gradepoint average not lower than 330 , have formulated a research topic, and have found a project supervisor (with a Cornell appoint-
ment) and a Biology and Society faculty member willing to serve as their advisers. 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. More information on the honors program is available in the Biology \& Society office, 275 Clark Hall (255-6047).

## I. Freshman Writing Seminars

[BRSOC 103 In the Company of Animals Spring. 3 credits. Not offered 1997-98.]

B\&SOC 104 Ecosystoms and Ego Systoms
Spring. 3 credits
II. Foundation Courses
A. Etbics (select one)

B8SOC 205 Ethical Issues in Health and Medicine (also Sclence and Technology Studies 205)
Fall. 4 credits. Limited to 125 students Open to sophomores, juniors, and seniors. Prerequisites: none. S. Hilgartner. 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 arise in contemporary medicine, health care, and biomedical research. Tools for ethical analysis are applied to a variety of cases and fundamental questions in bioethics. Perspectives from social science, history, and law also inform the course. We will explore ethical questions that arise in a number of substantive contexts, including the doctorpatient relationship, medical decision making near the end of life, human experimentation, genetics and reproductive technology, public health, and the allocation of scarce resources.

Bo SOC 206 Ethics and the Environment (also Sclence and Technology Studies 206)
Spring. 4 credits. Limited to 50 students. Open to all undergraduates; permission of instructor required for freshmen.
S. Hilgartner.

We address how ethical analysis helps shape our responses to environmental problems. Case studies will help guide our assessments. You will be challenged to develop ethical solutions or approaches on your own and in groups. Major aims include: articulating the relationships between knowledge and values; exploring the ethical implications of different conceptions of "nature"; and distinguishing between ethics and economics, ecology, ideology, politics, and prudence or wisdom. A background in basic ecology OR environmental issues OR ethics is helpful.
B. Social Sciences/Humanities Foundation (2 courses, 1 from any 2 areas)

1. History of Science

BIOG 207 Evolution (also Sclence and Technology Studies 287 and Mistory 287|
Fall. 3 credits. (May not be taken for credit after BIOES 378, Evolutionary Biology.) W. Provine.
For description, see BIOG 207.

HIST 282 Science In Westem Civillzation (also Sclence and Technology Studles 282) \#
Spring. 4 credits. P. Dear.
For description, see HIST 282.
[S8TS 233 Agriculture, History, and Soclety: From Squanto to Biotechnology
Fall. 4 credits. Not offered 1997-98.
M. Rossiter.]
seTs 322 From Hippocrates to HMO's:
An Introduction to the History of
MedicIne
Summer. 4 credits. J. Harkness,
Sers 355 Computers: From Babbage to Gates
Fall. 4 credits. M. Dennis.

## sers 390 Science in the American

 Pollty: 1800-1960 (also GOVT 308)Fall. 4 credits. M. Dennis
For description, see S\&TS 390.

## sats 433 Comparative Hlstory of Science <br> Spring. 4 credits. M. Rossiter

sets 444 Historical Issues of Gender and Sclence [also Women's Studies 444)
Fall. 4 credits. M. Rossiter.
For description, see S\&TS 444.

## 2. Philosophy of Science

PHIL 286 Science and Human Nature (also Sclence and Technology Studies 286)
Spring. 4 credits. May be used to meet the philosophy of science requirement if not used to meet the core course requirement.
For description, see PHIL 286
PHIL 381 Phllosophy of Science: Knowledge and Objectlvity (also Science and Technology Studies 381)
Fall. 4 credits. Limited to 30 students. R. Boyd.

For description, see PHIL 381.
3. Sociology of Science

BESOC 301 Blology and Society: The Soclal Construction of Life (also Sclence and Technology Studies 401)
Fall. 4 credits. Prerequisite: two semesters of social science or humanities and one year of introductory biology. Limited to 75 students. May be used to meet the sociology of science requirement if not used to meet the core course requirement. C. Cussins.
See Core Courses for description.
BeSOC 342 Soclology of Science (also Sclence and Technology Studies 442 and City and Regional Planning 442)
For description, see S\&TS 442.
HSS 246 Major Determinants of Human Behavior (also PAM 201)
Fall. 3 credits.
[R SOC 208 Technology and Soclety Fall. 3 credits. Not offered 1997-98.]
[SOC 434 The Sociology of Reproduction (also Women's Studles 435)
Spring. 4 credits. Not offered 1997-98.
For description, see SOC 434.]

S\&TS 201 What Is Science? An Introduction to the Soclal Studies of Sclence and Technology
Spring. 3 credits. T. Pinch.
S\&TS 311 The Soclology of Medicine Fall. 4 credits. S. Hilgartner.
4. Politics of Science
[B\&50C 406 Blotechnology and Law (also Science and Technology Studies 406)
Fall. 4 credits. Limited to 16 students. Recommended: a course in genetics or rDNA, a course in American govemment or law, or permission of instructor. Fee for course reading materials. Not offered 1997-98. S. Jasanoff.]
[B\&SOC 407 Law, Sclence, and Public Values (also Government 407 and Sclence and Technology Studies 407)
Fall. 4 credits. Not offered 1997-98. S. Jasanoff.]

S8TS 391 Science in the Amerlcan Pollty: 1960-Now (also GOVT 309)
Spring. 4 credits. S. Jasanoff.
For description, see S\&TS 391.
S\&TS 425 Science and Technology Policy In Clobal Perspective
Spring. 4 credits. S. Jasanoff.
S\&TS 427 Politics of Environmental Protection in Amerlca (also GOVT 427)
Fall. 4 credits. S. Jasanoff.
For description, see S\&TS 427.
[S8TS 431 Introduction to Science and Technology Pollcy (also GOVT 401)
Fall. 4 credits. Not offered 1997-98. Staff.]
5. Science Communication

COMM 260 Sclentlic Writing for Public Information
Fall or spring. 3 credits. Limited to 25 nonfreshman or graduate students per section. Prerequisite: any college-level writing course.

COMM 285 Communication in the Life Sclences
Spring. 3 credits. B. Lewenstein.
COMM 315 Introduction to Health Communication
Fall. 3 credits. Staff.
COMM 352 Science Writing for the Mass Medla (also Science and Technology Studies 352)
Fall. 3 credits. Not open to freshmen. Limited to 25 students. Prerequisite: one college writing course. B. Lewenstein.
For description, see COMM 352.
[COMM 421 Communication and the Environment
Spring. 3 credits. Not offered 1997-98. J. Shanahan.]
C. Biology foundation (Breadth Requirement): Three courses: one from three of the following subject areas:

1. Biochemistry, Molecular and Cell Biology
[BIOBM 231 General Biochemistry Fall. 3 credits. Not offered 1997-98.]

BIOBM 330 Principles of Biochemistry, Individual Instruction
Fall or spring. 4 credits.
BIOBM 331 Principles of Blochemistry, Lectures
Fall. 4 credits. ( 2 credits if taken after Biological Sciences 231.)

NS 262 The Cell and the External World Spring. 3 credits.

## 2. Ecology

BIOES 261 Ecology and the Environment Fall. 4 credits.
3. Genetics and Development

BIOGD 281 Genetlcs
Fall, spring, or summer. 5 credits.
BIOGD 282 Human Genetics Spring. 3 credits. ( 2 credits if taken after Biological Sciences 281.)
PL BR 225 Plant Genetics Spring. 4 credits. Offered alternate years.
4. Evolutionary Biology

BIOES 278 Evolutionary Blology Spring. 4 credits.
5. Microbiology

## BIOMI 290 General Mlcrobiology

 LecturesFall, spring, or summer. 3 credits. Prerequisties: BIOMI 101-102 and 103104 and CHEM 104 or 208, or equivalent. Recommended: concurrent registration in BIOMI 291.
6. Neurobiology and Behavior

BIONB 221 Neurobiology and Behavior I: Introduction to Behavior
Fall. 3 or 4 credits ( 4 credits with discussion and written projects). Not open to freshmen.
BIONB 222 Neurobiology and Behavior II: Introduction to Neuroblology
Spring. 3 or 4 credits. ( 4 credits with discussion and written projects). Not open to freshmen. Limited to 20 students.
7. Botany

BIOPL 241 Introductory Botany Fall. 3 credits. Prerequisite: one year of introductory biology or permission of instructor.
8. Physiology and Anatomy

BIOAP 311 Introductory Animal Physiology, Lectures (also Veterinary Medicine 346) Fall. 3 credits. Prerequisite: one year of college biology, chemistry, and mathematics. Recommended: previous or concurrent course in physics.

NS 341 Human Anatomy and Physiology Spring. 4 credits.
D. Biology foundation (depth requirement): One course for which one of the above breadth requirement courses (2C) is a prerequisite.
E. Statistics (select one)

ARME 210 Introductory Statistics Fall. 4 credits.
BTRY 200 Statistics and the World We Live In
Fall. 3 credits.

BTRY 215 Introduction to Statiatical Methods
Fall. 3 credits.
BTRY 601 Statistical Methods I
Fall. 4 credits.
CRP 320 Introduction to Statistical Reasoning for Urban and Reglonal Analysis
Fall. 3 credits
ECON 319 Introduction to Statistics and Probabillty
Fall or summer. 4 credits. Prerequisites: Economics 101-102 and Mathematics 111-112
ILRST 210 Statistics: Statistical Reasonlng
Fall and spring. 4 credits.
PSYCH 350 Statistics and Research Deslgn
Fall. 4 credits.
SOC 301 Evaluating Statistlcal Evidence Fall. 4 credits

## III. Core Courses

B\&SOC 301 Blology and Soclety: The Social Construction of Life (also Science and Technology Studies 401)
Fall. 4 credits. Prerequisite: two semesters of social science or humanities and one year of introductory biology or permission of instructor. Limited to 75 students. C. Cussins.
Critical thinking about the diverse influences shaping the life sciences. Topics include evolution and natural selection, heredity and genetic determinism, biotechnology and reproductive interventions. We interpret episodes, past and present, in biology in light of scientists' historical location, economic and political interests, use of language, and ideas about causality and responsibility. Readings, class activities, and written assignments are designed so that students develop interpretive skills and explore their own intellectual and practical responses to controversies in biology and society.

PHIL 286 Science and Human Nature (also Science and Technology Studies 286]
Spring. 4 credits.
For description, see PHIL 286.

## IV. Themes

A. Natural Science Issues/Biology Elective (two courses). Select from the list of B\&SOC approved Natural Science Issues courses or choose course(s) with intro biology as a prerequisite from: ALS, AN SC, BIOSCI, ENTOM, FOOD, HDFS, NS, NTRES, PL BR, PL PA, PSYCH, VTMED).
ASTRO 202 Our Home in the Solar System
Spring. 3 credits.
[BIOAP 214 Blological Basls of Sex Differences (also Biology and Socioty 214 and Women's Studies 214)
Fall. 3 credits. Not offered 1997-98.
For description, see BIOAP 214.]
[BIOES 275 Human Biology and Evolution (also Anthropology 275 and Nutritional Sciences 275)
Fall. 3 credits. Offered alternate years.
Not offered 1997-98.]
BIOPL 247 Ethnobiology
Fall. 3 credits.
[HDFS 347 Human Growth and Development: Blologlcal and Behavioral Interactions (also Biology and Society 347 and Nutritional Sclences 347)
Spring. 3 credits. Prerequisites: Biological Sciences 101 or 109 or equivalent, and Human Development and Family Studies 115 or Psychology 101. Offered alternate years. Not offered 1997-98.]

HDFS 370 Experimental Psychopathology
Spring. 3 credits.
NS 222 Maternal and Chlld Nutrition Spring. 3 credits.

NS 361 Blology of Normal and Abnormal Behavior (also Psychology 361)
Fall. 3 credits
For description, see NS 361.
NTRES 201 Environmental Conservation Spring. 3 credits.
Examples of biology electives
AN SCI 300 Anlmal Reproduction and Development
Spring. 3 credits.
[HDFS 466 Neurobiology of Personality and Psychopathy
Fall. 3 credits. Not offered 1997-98.]
NS 331 Physiologlcal and Blochemical Bases of Human Nutrition Spring. 3 credits.
B. Humanities/Social Science elective (two courses)
Courses listed earlier as social science/ humanities foundation courses (2.B.) are particularly appropriate as social science/ humanities electives. However, a single course cannot be used to meet both requirements. Additional courses that are recommended as social science or humanities electives are:

Examples of social science electives
ARME 464 Economics of Agricultural Development
Spring. 3 credits.
ANTHRO 211 Nature and Culture (숭 Spring. 3 credits.
[BIOES 673 Human Evolution: Concepts, History, and Theory (also Anthropology 673)
Fall. 3 credits. Not offered 1997-98.
For description, see BIOES 673.]
CRP 480 Environmental Politics Spring. 4 credits

CRP 451/551 Environmental Law Fall. 4 credits.
[MDFS 241 History of Childhood In the United States
Spring. 3 credits. Not offered 1997-98.]
[HDFS 258 The Historical Development of Women as Professionals, 1800 to the Present (also Women's Studies 238 and History 238)
Fall. 3 credits. Limited to 120 students.
Not offered 1997-98.]
HSS 315 Human Sexuality Spring. 3 credits.

HSS 325 Health Care Services and the Consumer
Fall. 3 credits. Offered alternate years
HSS 330 Ecology and Epidemiology of Health
Spring. 3 credits.
HSS 335 Contemporary Issues in Women's Health
Fall. 3 credits.
HSS 634 Health Care OrganizationProviders and Relmbursement Fall. 3 credits.

HSS 688 Long-Term Care and the Aged: Alternative Health and Social Services Delivery Systems Spring. 3 credits.

NS 245 Soclal Science Perspectives on Human Nutrition
Fall. 3 credits.
NS 457 Natlonal and International Food Economics (also Economics 374) Spring. 3 credits.

NTRES 400 International Environmental Issues
Fall. 4 credits.
PSYCH 326 Evolution of Human Behavior Fall. 4 credits.
R SOC 201 Population Dynamics (also Sociology 205)
Spring. 3 credits.
R SOC 205 Rural Sociology and International Development Spring. 3 credits.
R SOC 324 Environment and Society Spring. 3 credits.
[R SOC 490 Soclety and Survival Fall. 3 credits. Not offered 1997-98.]
Examples of humanities electives
NTRES 407 Religion, Ethics, and the Environment
Spring. 4 credits.
PHIL 241 Ethics (by petition for breadth requirement)
Spring. 4 credits.
PHIL 368 Global Climate and Clobal Justice (also Government 468) Fall. 4 credits.
[PHIL 681 Philosophy of Science (also Science 8 Technology Studies 681) Spring. 4 credits. Not offered 1997-98. For description, see PHIL 681.]
[S\&TS 626 Workshop on Law, Science, and Technology (also GOVT 626) Spring. 4 credits. Enrollment limited. Permission of the instructor required. Not offered 1997-98.]
C. Senior Seminars

BIO G 467 Seminar in the History of Biology (also Biology \& Society 447, Mistory 415, and Sclence \&
Technology Studies 447)
Summer. 4 credits.
For description, see BIO G 467.
BIO G 469 Food, Agriculture, and Society (also Blology \& Society 469 and Sclence \& Technology Studies 469) Spring. 3 credits.
For description, see BioG 469.
BIOES 661 Environmental Policy (also Biology \& Society 461 and Agriculture and Life Sciences 661)
Fall, spring. 6 credits.
For description, see BIOES 661.
[CEH 444 Housing for the Elderly: A Service Learning Experience
Spring. 3 credits. Not offered 1997-98.]
[HDFS 466 Neurobiology of Personality and Psychopathy
Fall. 4 credits. Not offered 1997-98.]
[HDFS 470 Advanced Experimental Psychopathology
Fall. 3 credits. Not offered 1997-98.]
HDFS 473 Schizophrenia
Fall. 3 credits.
Permission of instructor required.
[HDFS 610 Processes in Human Development
Spring. 3 credits. Not offered 1997-98.]
HDFS 660 Social Development Spring. 3 credits.
Permission of instructor required for undergraduates.
[HDFS 685 Seminar on "Critical Issues In Human Development: Research and Reality
Spring. 3 credits. Not offered 1997-98.
Permission of instructor required for undergraduates.]

HSS 335 Contemporary lssues in Women's Health
Fall. 3 credits.
HSS 625 Health Care Services: Consumer and Ethical Perspectives
Fall. 3-4 credits.
Permission of instructor required. If using this course as a senior seminar, B\&SOC majors must take it for 4 credits by writing a major paper. Enrollment limited-preference given to HSS students.

## HSS 631 Managed Health Dellvery

 Systems: Primary-Ambulatory Care Spring. 3 credits.
## NS 349 Gerlatrlc Nutrition

 Fall. 3 credits.NS 421 Nutrition and Exercise Spring. 2-3 credits.
[R SOC 408 Human Fertllity in Developing Nations (also Blology \& Society 404)
Spring. 3 credits. Not offered 1997-98. For description, see R SOC 408.1
[R SOC 418 Population Pollicy (also Biology \& Society 414)
Spring. 3 credits. Not offered 1997-98.
For description, see R SOC 418.]
[S\&TS 406 Blotechnology and the Law (also Blology \& Soclety 406)
Fall. 4 credits. S. Jasanoff. Not offered 1997-98.
For description, see S\&TS 406.]
S\&TS 427 Polltics of Environmontal Protection in America lalso Biology a Soclety 427 and Government 427)
Fall. 4 credits. S. Jasanoff.
For description, see S\&TS 427

## [S\&TS 490 Integrity of Sclentiflc

 PractlceFall. 4 credits. Not offered 1997-98
S. Hilgartner.]
[SeTS 628 Workshop on Law, Science and Technology (also Government 626)
Spring. 4 credits. Not offered 1997-98. S. Jasanoff

For description, see S\&TS 626.]

## [S8TS 645 Genetic Engineering: Politics and Socloty In Comparative Perspective (also Government 634) <br> Spring. 4 credits. Not offered 1997-98. S. Hilgartner.

For description, see S\&TS 645.]

## [S\&TS 688 International Environmental Pollcy (also Govemment 687) <br> Spring. 4 credits. S. Jasanoff. Not offered 1997-98. <br> For description, see S\&TS 688.]

## V. Other Courses

## B\&SOC 375 Independent Study

Fall or spring. 1-4 credits. Prerequisite: must have written permission of faculty supervisor and Biology and Society major. 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 $1-4$ credits in Biology and Society 375 (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, 275 Clark Hall. Independent study credits may not be used in completion of the major requirements.

## BASOC 400 Undergraduate Seminar

Fall or spring. Variable credit. May be repeated for credit.
From time to time different seminars on topics of interest to undergraduates are offered. Topics and instructors are listed in the biology and society supplement issued at the beginning of each semester.

## B8SOC 499 Honors Project

Fall and spring. 3-5 credits each term Open only to Biology and Society students in their senior year.
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.

Students may take 3-5 credits per semester up to a maximum of 8 credits in B\&SOC 499, Honors Project. Students should note that B\&SOC 499 is to be taken in addition to those courses that meet the regular major requirements. The student and the project supervisor must reach clear agreement at the outset as to what sort of work will need to be completed during the first semester. Minimally, an honors thesis outline and bibliography should be accomplished. At the end of the first semester, a letter grade will be assigned and the advisers, in consultation with the Director of Undergraduate Studies, will evaluate whether or not the student should continue working on an honors project. Students who do continue in the honors program for the second semester will receive a letter grade at the end of their final term whether or not they complete a thesis and whether or not they are recommended for honors.

Applications and information are available in the Biology and Society office, 275 Clark Hall.

## Cognitive Studies Program

J. Halpern (computer science), B. Lust (human development and family studies, modern languages and linguistics), codirectors.
C. Cardie, R. Constable, B. Donald, J. Halpern, D. Huttenlocher, R. Rubinfeld, R. Zabih (computer science); A. Hedge (design and environmental analysis); J. Dunn, J. Novak, R. Ripple, D. Schrader (education);
R. Canfield, S. Ceci, B. Koslowski, B. Lust, M. Potts, S. Robertson, G. Suci, E. Wethington (human development and family studies); J. Russo (Johnson Graduate School of Management); J. Bowers, A. Cohn, M. Diesing, J. Gair, W. Harbert, S. Hertz, A. Jongman, J. Lantolf, S. McConnell-Ginet, C. Rosen, M. Suñer, L. Waugh, J. Whitman, D. Zec (linguistics); A. Nerode, R. Shore (mathematics); H. Howland, (neurobiology and behavior); R. Boyd, C. Ginet, H. Hodes, S. Shoemaker, J. Stanley, Z. Szabó (philosophy); J. Cutting, R. Darlington, D. Dunning, D. Field, B. Finlay, T. Gilovich, B. Halpern, A. Isen, R. Johnston, F. Keil, B. Khurana, C. Krumhansl, U. Neisser, R. Nijhawan, J. Sereno, M. Spivey-Knowlton (psychology)

Cognitive studies is comprised of a number of disciplines that are linked by a major concern with fundamental capacities of the mind, such as perception, memory, reasoning, language, and the organization of motor action. In the College of Arts and Sciences these disciplines are represented in the departments of Computer Science, Linguistics, Mathematics, Modern Languages, Philosophy, and Psychology. Elsewhere in the university they are represented in the Department of Human Development and Family Studies (College of Human Ecology), the Section of Neurobiology and Behavior (Division of Biological Sciences), the Department of Education (College of Agriculture and Life Sciences), and the Johnson Graduate School of Management.
The issues addressed in cognitive studies 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 also how they develop and change. 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 studies 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 studies." Even greater progress can be expected in the furure as a consequence of increasing cooperation among the disciplines.

## Undergraduate Concentration

An interdisciplinary undergraduate concentration in Cognitive Studies is available to Comell University undergraduates in the College of Arts and Sciences. Students from other colleges who seek such a concentration should discuss such possibilities with the Cognitive Studies office, which will provide information and contacts concerning such concentrations.

The undergraduate concentration in Cognitive Studies is designed to enable students to engage in a structured program directly related to the scientific study of cognition and the mind. The concentration 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 coursework 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 concentration. The Cognitive Studies Program faculty have designed five structured "tracks" that offer students different ways of satisfying the concentration. In addition, students are always able to construct their own programs of study subject to approval by their concentration adviser. In all cases, however, it is expected that students in the concentration will take Cognitive Studies 101, Cognitive Studies 201, and three courses at the 300 or 400 level in at least two departments. Even though only five courses are required to complete the concentration, we expect that students interested in cognitive studies will often end up taking more, and we encourage them to do an independent research project (COGST 470). The five tracks are as follows:

1. Cognitive Studies in Context: The

Workplace, the Classroom, and Everyday Life.

Foundational issues in cognitive science are intimately relevant to real world settings. The Cognitive Studies in Context track offers students the opportunity to learn and independently explore how theory and research on the mind can help us better understand how we use information in much of our daily activities, whether it be the workplace, the classroom, or any other aspect of everyday life. Students will come to better understand the cognitive ergonomics of such diverse settings as an aircraft cockpit, a quality control station on an assembly line, or an anesthesia station in a surgical suite. They will come to better understand the perceptual constraints that help tailor the nature of visual communi-
cation systems, or the linguistic constraints that help tailor text-based communication. They will come to see how the functional architecture of human memory guides the presentation and use of information in a wide array of settings. They will also leam how design constraints on computer hardware and software interact with human capacities and biases.

The Cognitive Studies in Context track consists of the following required courses: Cognitive Studies 101 (Introduction to Cognitive Studies) and Cognitive Studies 201 (Cognitive Science in Context: Laboratory Explorations of Cognitive Science in Ecological Settings). In addition, three more upper-level approved courses in Cognitive Studies areas will normally be expected.
The other four tracks are structured around specific content domains and consist of sets of suggested course clusters. (The courses listed under these tracks are merely suggestions. The student should consult with his/her Cognitive Studies advisor to develop a more customized curriculum.) In all of the following, COGST 101 and COGST 201 are required and a set of three additional courses would be selected. Please note, many of these courses have substantial prerequisites.
2. 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.
COGST 101, Introduction to Cognitive Science
COGST 201, Cognitive Science in Context COM S 462, Robotics and Machine Vision
BIONB 326, The Visual System
PSYCH 305, Visual Perception
PSYCH 309, Development of Perception and Representation
PSYCH 316, Auditory Perception
PSYCH 418, Psychology of Music
PSYCH 342, Human Perception: Applications to Computer Graphics, Art and Visual Display
PSYCH 412, Laboratory in Cognition and Perception
PSYCH 416, Modeling Perception and Cognition
PSYCH 419, Neural Networks Laboratory
3. Language and Cognition

This track focuses on the representation, processing, 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 101, Introduction to Cognitive

 ScienceCOGST 201, Cognitive Science in Context
COM S 411, Programming Languages and Logic
LING 203, Introduction to Syntax and Semantics
LING/PHIL/COGST 270, Truch and Interpretation
LING 301-302, Phonology I \& II

LING 303-304, Syntax I \& II
LING 309-310, Morphology I \& II
LING 319-320, Phonetics I \& II
LING 325, Pragmatics
LING 350/COG ST 350, Representing Language: Knowledge Taught and Untaught
LING 403, Introduction to Applied Linguistics
LING 409, Psycholinguistics of Second Language Reading
LING 421-422, Semantics I \& II
PHIL 332, Philosophy of Language
PSYCH 215/LING 215, Psychology of Language
PSYCH 370/LING 370, Language and Cognition
PSYCH 415, Concepts, Categories, and Word Meanings
PSYCH 416, Modeling Perception and Cognition
PSYCH 436/LING 436/HDFS 436, Language Development
4. 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 101, Introduction to Cognitive Science
COGST 201, Cognitive Science in Context
COM S 211, Computers and Programming
COMS 212, Structure and Interpretation of Computer Programs
COM S 472, Foundations of Artificial Intelligence
COM S 473, Practicum in Artificial Intelligence
PHIL 262, Philosophy of Mind
PHIL 362, Philosophy of Mind
PSYCH 309, Development of Perception and Representation
PSYCH 311, Introduction to Human Memory
PSYCH 412, Laboratory in Cognition and Perception
PSYCH 413, Information Processing: Conscious and Non-conscious
PSYCH 414, Comparative Cognition
PSYCH 415, Concepts, Categories, and Word Meanings
PSYCH 416, Modeling Perception and Cognition
PSYCH 417, The Origins of Thought and Knowledge
5. 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 101, Introduction to Cognitive Science
COGST 201, Cognitive Science in Context COM S 410, Data Structures
COM S 401, Programming Languages and Software Engineering
PSYCH 328, Biopsychology of Learning and Memory
PSYCH 396, Introduction to Sensory Systems
PSYCH 416, Modeling Perception and Cognition
PSYCH 419, Neural Networks Laboratory

PSYCH 425, Cognitive Neuroscience PSYCH 440 , The Brain and Sleep
Students in any major of the College of Arts and Sciences are eligible to apply for any of the above versions of the concentration as well as to construct their own. Independent majors and College Scholars may also apply. Students from other colleges may apply, but colleges vary in their procedures for formal recognition of this concentration (contact the Cognitive Studies office for details). To enter the concentration formally, the student should consult with a member of the Cognitive Studies Undergraduate Concentration Committee (see below), who will assist the student with selection of a concentration adviser with expertise in the student's main areas of interest.
In addition to assisting in and approving the student's selection of courses, the concentration adviser serves as a general source of information about the field of cognitive studies, relevant resources around the university, and job and graduate school opportunities. Often, the adviser can help the student develop independent research experience.
A Cognitive Studies undergraduate laboratory and computer facility is available for all students with a Cognitive Studies concentration. 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 studies.
Students who complete the concentration requirements will have their concentration in Cognitive Studies officially represented on their transcript. In addition, students who have made very substantial progress towards completing the requirements for the concentration will be eligible for enrollment in the Graduate Proseminar in Cognitive Studies during their senior year (COGST 773-774).
Concentration Application Procedures.
The selection of courses will be individually tailored according to the student's interests. The Cognitive Studies Program faculty have designed five structured "tracks" (listed above) that offer students different ways of satisfying the concentration. In addition, students are always able to construct their own programs of study subject to approval by their concentration adviser. In all cases, however, it is strongly expected that students in the concentration will take COGST 101, COGST 201, and approved courses at the 400 level.
The student must gain approval for the selection of courses from his or her concentration adviser. The courses selected must form a coherent cluster that makes sense to both the adviser and the student. To be admitted to the concentration, the student must submit this Plan of Study to the Cognitive Studies undergraduate faculty committee for final approval.
Independent Research. The concentration encourages each student to be involved in independent research that bears on research issues in cognitive studies, if possible. COGST 470 is available for this purpose. It is recommended that students report on their research activities in an annual undergraduate forum. The Undergraduate Concentration Committee is committed to helping students find an appropriate research placement when needed.

Initial inquiries concerning the undergraduate concentration should be made to the
Cognitive Studies Program coordinator, Sue Wurster, cogst@cornell.edu, 255-6431, who will provide application materials and set up a meeting with a relevant member of the Undergraduate Concentration Committee,
The Committee for Undergraduate Concentration in Cognitive Studies consists of: Ramin Zabih, computer science, 5-8413, 4119C
Upson Hall, RDZ@cs.cornell.edu; Draga Zec, linguistics, 5-0728, 217 Morrill Hall,
DZ17@cornell.edu; Jason Stanley, philosophy, 5-6829, 216 Goldwin Smith,
JCS27@cornell.edu; Beena Khurana, psychology, 5-6434, 222 Uris Hall, BK140cornell.edu

## Graduate Minor

For information, consult the program office (235 Uris Hall, 255-6431, cogst@comell.edu or the director of graduate studies, Carol Rosen 255-0722, cgr1@cornell.edu).

## Courses

## Cognitive Studies

COGST 101 Introduction to Cognitive Sclence (also COM S 101, LING 170, PHIL 191, PSYCH 102)
Fall. 3 credits. M. Spivey-Knowlton. This course surveys the study of how the mind/brain works. We will examine how intelligent information processing can arise from biological and artificial systems. The course 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 will introduce the roles played by these disciplines in cognitive science. The second part of the course will focus on how each of these disciplines contributes to the study of five topics in cognitive science: language, categorization, memory, vision, and action.

## COGST 201 Cognitive Science in

 Context: Laboratory Explorations of Cognitive Science in Ecological SettIngs (also PSYCH 201)Fall or spring. 4 credits. Prerequisites:
Introduction to Cognitive Science COGST
101 or written permission of the instructor
Fall: B. Halpern and staff. Spring:
D. Field and staff.

A laboratory-oriented course designed to teach the theory and techniques of cognitive science in relation to the full range of both present and anticipated-future activities in the workplace, the classroom, and in everyday life. Lecture time is used to present laboratory exercise results, to supplement laboratory topics, and for discussion of primary research papers. State of the att computing, display (visual, auditory, and other perceptual/sensory systems), digital communication, and simulation approaches, including virtual reality methods when relevant, are used to apply cognitive science principles and concepts to the analysis, exploration, and direct testing of human-machine interfaces that are intended to permit effective and efficient exchange of information and control of functions or operations. This approach is applied to real life settings such as fixed and mobile offices, libraries, laboratories, point-of-sale locations, Internet and World Wide Web communications, manufacturing, storage and distribution facilities and systems, on-site maintenance and
repair procedures, and personal and group transportation vehicles and systems.
cogst 301 Cognitive Studies in Context: Advanced Laboratory Investigatlons
Fall or spring. 4 credits. Staff
Designed for students who successfully complete COGST 201. This course offers intensive investigations into one of the topic modules covered in COGST 201. All students must have prior approval from the Cognitive Studies office before registering for this course.
COGST 470 Undergraduate Research in Cognitive Studies
Fall or spring. $1-4$ credits. S-U grades optional. Prerequisite: permission of major adviser; written permission of Cognitive Studies faculty member who will supervise the research and assign the grade. Hours to be arranged. Cognitive Studies faculty
Experience in planning, conducting, and reporting independent laboratory, field, and/ or library research in an interdisciplinary area relevant to cognitive studies.
PHIL 270 Truth and Interpretation (also LING 270 and COGST 270)
Spring. 4 credits. J. Stanley and M. Diesing.

In this course, with the use of classic papers in the philosophy of language and linguistics we will motivate and introduce the basic concepts behind the project of giving a rigorous theory of meaning for natural language. Our goal will be to understand how philosophers and linguists have used concepts such as reference and truth to explain linguistic content. We will also discuss how issues of learnability and language processing raise constraints for this project.

## Computer Science

COM $\$ 211$ Computers and Programming Fall or spring. 3 credits.
COM S 212 Structure and Interpretation of Computer Programs
Fall or spring. 4 credits.
COM S 280 Discrete Structures Fall or spring. 4 credits.
COM 5381 (or 481) Introduction to Theory of Computing Fall. 3 or 4 credits.
COM $\$ 410$ Data Structures
Fall or spring. 4 credits.
COM $\$ 411$ Programming Languages and Logles
Fall. 4 credits. Not offered every year
COM S 462 Robotics and MachIne VIsion Spring 1997. 3 credits. Not offered every year.

COM S 463 Robotics and Machine Vislon Lab
Spring 1997. 2 credits. Not offered every year
COM $\$ 472$ Foundations of Artificlal Intelligence
Fall. 3 credits.
COM $\$ 473$ Practlcum in Artificial Intelligence Fall. 2 credits.

COM S 482 Introduction to Analysis of Algorithms<br>Spring. 4 credits.

COM S 486 Applled Logic (also Mathematics 486)
Fall or spring. 4 credits.

## Education (College of Agriculture and Life Sciences)

## EDUC 210 Psychology of Learning and Memory <br> Fall. 3 credits.

EDUC 212 Psychological Foundations of Education
Spring. 2-3 credits.
EDUC 311 Educational Psychology Fall. 3 credits.
EDUC 402 Knowing and Learning in Science and Mathematics Fall. 4 credits.

EDUC 472 Philosophy of Education Fall. 3 credits.

Human Development and Family Studies (College of Human Ecology)
MDFS 115 Human Development Fall or summer. 3 credits.
[HDFS 334 The Growth of the Mind Spring. 4 credits. Not offered 1997-98.]

HDFS 344 Infant Behavior and Development Fall. 3 credits.

HDFS 347 Human Growth and Development: Blological and Behavioral Interactlons Spring. 3 credits.

HDFS 436 Language Development (also Psychology 436 and Lingulstics 436) Spring. 4 credits

HDFS 438 Thinking and Reasoning Fall. 3 credits.
[HDFS 439 Cognitlve Development: Infancy through Adolescence Spring. 3 credits. Not offered 1997-98.]

## Linguistics

LING 101 Theory and Practice of Lingulstics
Fall, spring or summer. 4 credits.
LING 115 Language and Culture Spring. 3 credits.

LING 201 Introduction to Phonotics and Phonology
Spring. 4 credits.
LING 203 Introduction to Syntax and Semantics
Fall. 4 credits.
[LING 264 Language, Mind, and Braln Fall. 4 credits. Not offered 1997-98.]
LING 301-302 Phonology I, II Fall and spring. 4 credits each term.
LING 303-304 Syntax I, II Fall and spring. 4 credits each term.

LING 309 Morphology I Spring. 4 credits.
[LING 310 Morphology II Fall. 4 credits. Not offered 1997-98.]

LING 319-320 Phonetics I, II
Fall. 4 credits each term.
[LING 325 Pragmatics
Spring. 4 credits. Not offered 1997-98.]
[LING 334 Non-Linear Syntax
Fall. 4 credits. Not offered 1997-98.]
LING 350 Representing Language: Knowledge Taught and Untaught (also COOST 350)
Fall. 4 credits.
[LING 370 Language and Cognition (also Psychology 370)
Spring. 4 credits. Not offered 1997-98.
[LING 400 Semlotics and Language (also Comparative LIterature 410)
Spring. 4 credits. Not offered 1997-98.I
LING 401 Approaches to Language Typology I
Fall. 4 credits.
LING 402 Approaches to Language Typology II Spring. 4 credits.
LING 421-422 Semantics I, II Fall and spring. 4 credits each term.

LING 436 Language Development (also Psychology 436 and HDFS 436) Spring. 4 credits.
[LING 450 Mathematical Methods for Linguistics
Fall. 4 credits. Not offered 1997-98.]

Mathematics
[MATH 481 Mathematical Logic (also Philosophy 431)
Spring. 4 credits. Not offered 1997-98.]
MATH 483 Intenslonal Logics and Alternatlves to Classical Logics (also Philosophy 436)
Fall. 4 credits.
MATH 486 Applied Logic (also Computer Science 486)
Spring. 4 credits.
Neurobiology and Behavior (Division of
Biological Sclences)
BIONB 221 Neuroblology and Behavior I: Introduction to Behavior
Fall. 3, 4, or 5 credits.
BIONB 222 Neurobiology and Behavior II: Introduction to Neurobiology
Spring. 3 or 4 credits.
BIONB 326 The Visual System Spring. 4 credits.

BIONB 328 Blopsychology of Learning and Memory (also Psychology 332) Spring. 3 credits.

BIONB 396 Introduction to Sensory Systems (also Psychology 396) Spring. 3 or 4 credits.

BIONB 421 Effects of Aging on Sensory and Perceptual Systems (also PSYCH 431 and 631) Fall. 3 or 4 credits.

BIONB 424 Neuroethology (also Paychology 424) Spring. 3 credits.

BIONB 492 Sensory Function (also Psychology 492) Spring. 3 or 4 credits.
[BIONB 496 Bioacoustic Signals in Animals and Man
Spring. 3 credits. Not offered 1997-98.]

## Philosophy

PHIL 231 Introduction to Formal Logic Fall. 4 credits.

PHIL 261 Knowledge and Reality Spring. 4 credits.

PHIL 262 Phllosophy of Mind Fall. 4 credits.

PHIL 286 Science and Human Nature (also Science and Technology Studies 286)
Spring. 4 credits.
PHIL 318 Twentieth-Century Philosophy Spring. 4 credits.
PHIL 331 Formal Logic Spring. 4 credits.

PHIL 332 Philosophy of Language Fall. 4 credits.

PHIL 361 Metaphysics and Epistemology Fall. 4 credits.

PHIL 381 Philosophy of Sclence: Knowledge and Objectivity (also Science and Technology Studies 381)
Fall. 4 credits.
[PHIL 382 Philosophy and Psychology 4 credits. Not offered 1997-98.]
[PHIL 389 Philosophy of Science: Evidence and Explanation 4 credits. Not offered 1997-98.]
[PHIL 431 Deductive Logic (also Mathematics 481)
4 credits. Not offered 1997-98.]
[PHIL 433 Philosophy of Logic 4 credits. Not offered 1997-98.]
PHIL 436 Intensional Logic (also Mathematics 483) 4 credits.
[PHIL 437 Problems in the Philosophy of Language
Spring. 4 credits. Not offered 1997-98.]
PHIL 461 Metaphysics Spring. 4 credits.

Psychology
PSYCH 205 Perception Spring. 3 credits.

PSYCH 209 Development Spring. 4 credits.
PSYCH 214 Issues In Cognitive Psychology Fall. 3 credits.

PSYCH 215 Psychology of Language Spring. 3 or 4 credits.

PSYCH 305 Visual Perception Fall. 4 credits.
[PSYCH 309 Development of Perception and Representation
Fall. 3 credits. Not offered 1997-98.]
[PSYCH 311 Introduction to Human Memory
Spring. 3 credits. Not offered 1997~98.]

PSYCH 316 Auditory Perception
Fall. 3 or 4 credits.
PSYCH 332 Biopsychology of Learning and Memory (BIONB 328)
Spring. 3 credits.
PSYCH 342 Human Perception: Applications to Computer Graphics, Art, and Visual Display
Fall. 3 credits.
PSYCH 361 Blopsychology of Normal and Abnormal Behavior (also Nutrítional Sciences 361)
Fall. 3 credits.
[PSYCH 396 Introduction to Sensory Systems (also BIONB 396)
Spring. 3 or 4 credits. Not offered 1997-98.]

PSYCH 412 Laboratory in Cognition and Perception
Spring. 4 credits.
PSYCH 413 Information Processing: Conscious and Non-conscious Spring. 4 credits.
[PSYCH 414 Comparative Cognition Spring. 3 credits. Not offered 1997-98.]

PSYCH 415 Concepts, Categories, and Word Meanings
Fall. 4 credits
[PSYCH 416 Modeling Perception and Cognition
Spring. 3 credits. Not offered 1997-98.]
[PSYCH 417 The Origins of Thought and Knowledge
Fall. 4 credits. Not offered 1997-98.]
PSYCH 418 Psychology of Music Spring. 3 or 4 credits.
[PSYCH 425 Cognitive Neuroscience Fall. 4 credits. Not offered 1997-98.]
PSYCH 436 Language Development (also Linguistics 436, HDFS 436 and COGST 436)
Spring. 4 credits.
[PSYCH 492 Sensory Function (also BIONB 492)
Spring. 3 or 4 credits. Not offered 1997-98.]

## 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 concentration must approve an
undergraduate's use of any of these for satisfying the concentration requirements.
COGST 773-774 Proseminar In Cognitive Studies I and II (also Com S 773/774; Ling 773/774; Phil 773/774; Psych 773/774)
Fall: R grade; spring: S-U only. 4 credits. T 1:25-2:40. Staff.
The Cognitive Studies Proseminar consists of two semesters of meetings with the graduate faculty in the field of Cognitive Studies. The proseminar will provide a general introduction to the field of Cognitive Studies including an introduction to each of the major disciplines that comprise the minor: i.e., computer science, linguistics, philosophy, and psychology. In each of these disciplines, faculty from the field will introduce the theoretical and methodological issues that underlie the field
and its relation to Cognitive Studies; in addition, they will introduce various labs in which active research is being conducted in their field at Comell.

The proseminar will include suggestions from faculty in each field for further advanced interdisciplinary research that can be pursued at Cornell during a Cognitive Studies minor. It will conclude (end of second term) with individual student presentations in which students initiate a critique of some interdisciplinary research, after consultation with a faculty member of their choice.
Although suitable to entering graduate students, the proseminar is also open to graduate students beyond their first year. Advanced undergraduates with a Cognitive Studies concentration may also be admitted This is a year-long lecture and discussion course. The year-long commitment is mandatory. An "R" grade will be assigned in the fall semester, and an S-U grade will only be assigned in the spring semester

## cOGST 600/700 Oraduate Seminars

## EDUC 614 Epistemological Development and Reflective Thought

Fall. 3 credits.

## EDUC 714 Moral Development and Education <br> Spring. 3 credits.

HDFS 600/700 Graduate Seminars
LING 637 Experimental Research for Language Sclences
Fall. 4 credits. A. Jongman, J. Lantolf.
LING 700 Ormduate Seminars
MATH 581 Logic
MATH 655 Mathematical Foundations of Computer Modeling and Simulation

MATH 684 Recursion Theory
MATH 688 Automated Theorem Proving
PHIL 700 Oraduate Seminars
PSYCH 500-700 Graduate Seminars

## College Scholar Program

L. Abel, director, 55 Goldwin Smith Hall, 255-3386.

The College Scholar program is described in the introductory section of Arts and Sciences.

COLLS 397 Independent Study
Fall or spring. 1-4 credits. Prerequisite: permission of program office.

COLLS 499 Honors Research Fall or spring. 1-8 credits; a maximum of 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit a brief proposal approved by the honors committee.

## East Asia Program

## 140 Uris Hall

J. V. Koschman, director; E. M. Gunn, associate director, T. Bestor, K. W. Brazell, R. Bullock, P. Chi, T. Christensen,
S. G. Cochran, B. de Bary, C. d'Orban, G. Fields, P. J. Katzenstein, F. Kotas,
J. M. Law, L. C. Lee, T. P. Lyons, T. L. Mei, V. Nee, C. A. Peterson, J. R. Piggott, V. Pucik, N. Sakai, P. S. Sangren, Y. Shirai, T. Shiraishi, V. B. Shue, R. J. Sukle, K. W. Taylor, H. Wan, M. Watanabe, J. K. Wheatley, J. Whitman, M. W. Young. Emeritus; K. Biggerstaff, E. H. Jorden, R. J. Smith

East Asian studies at Cornell is led by thirtyfive faculty members from five colleges, who participate in a program of research and teaching on the civilizations and cultures of East Asia. Courses are offered through various departments in most of the humanities and social science disciplines, as well as in the fields of business, city and regional planning, international and comparative labor relations and rural sociology. Language courses in Mandarin, Cantonese, Korean, and Japanese are offered, in addition to the Full-year Asian Language Concentration (FALCON) in Japanese and Mandarin. Undergraduates major in the Department of Asian Studies and concentrate on the language and culture of one East Asian country, while graduate students may work toward an M.A. in East Asian studies, a dual M.B.A./M.A. degree, or an M.A./Ph.D. degree in a discipline such as agricultural economics, anthropology, city and regional planning, government, history, history of art, linguistics, literature, rural sociology, or sociology. A variety of fellowships, travel grants, awards, and assistantships are available for graduate students concentrating on East Asia.

The formal program of study is enriched by a variety of extracurricular activities, including a Japanese and Chinese language house, film series, career workshops, art exhibits, and numerous lectures, symposia and performances related to East Asia. The Wason Collection in Olin Library is a comprehensive collection of books on East Asia in Western languages, Japanese, Chinese, and Korean. The Mary Rockwell Galleries of the Herbert F. Johnson Museum of Art have an excellent collection of East Asian art.

## Freshman Writing Seminars

For information about the requirements for freshman writing seminars and descriptions of seminar offerings, see the John S. Knight Writing Program section, and consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in late October for the spring term

## Human Blology Program

J. Haas (nutritional sciences), director, 211 Savage Hall, 255-8001; J. Bertram (anatomy), B. Finlay (psychology), J. Fortune (physiology/women's studies), E. Frongillo (nutritional sciences), R. Johnston (psychology), K.A.R. Kennedy (ecology and systematics/ anthropology), D. Levitsky (nutritional sciences), P. W. Nathanielsz (physiology), D. L. Pelletier (nutritional sciences), W. Provine (ecology and systematics/history), R. Robertshaw (physiology), S. Robertson (human development and family studies), R. Savin-Williams (human development and family studies), 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 program 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 systematics, psychology, physiology, genetics, and the health-related sciences. It serves to bring together students with 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 with a program for selecting elective courses that deal with the biology of the human species. Students in their junior year may develop a program of study in human biology while majoring in 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 physical diversity of the human species. Adjustments may be made in these requirements, depending upon the student's academic background and affiliation with colleges and schools within the university.

The basic requirements are one year of introductory biology (Biological Sciences $101-103$ plus $102-104$ or $105-106$ or Biological Sciences 107-108 offered during the eight week Cornell Summer Session); one year of general chemistry (Chemistry 103-104 or 207-208 or 215-216); one year of college mathematics (Mathematics 111-112 or 105-106 or 111-105); one course in genetics (Biological Sciences 281 or 282 ); one course in biochemistry (Biological Sciences 231, 330 or 331). 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 adviser in human biology for help in selecting appropriate courses.
Elective courses should be taken that will 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 adviser 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 advisers in his or her department who is listed as faculty in human biology to be their principal adviser, or he or she may have an adviser in the department of the major and seek the advice of a human biology faculty adviser in matters pertaining to satisfaction of the requirements. In certain cases a faculty adviser may represent both the major and the curriculum of study in human biology.

## Courses

## Human Anatomy and Physiology

BIO AP 214 Blologlcal Basis of Sex Differences (also Biology and Soclety 214 and Women's Studies 214)
Fall. 3 credits.
BIO ES 274 The Vertebrates: Structure, Function, and Evolution
Spring. 4 credits.
B10 AP 311 Introductory Animal Physiology, Lectures (also Veterinary Physiology 346)
Fall. 4 credits.
BIO AP 319 Animal Physiology Experimentation
Fall. 4 credits.
BIO AP 458 Mammalian Physiology Spring. 3 credits.
BIO ES 474 Laboratory and Field Methods in Human Blology (also Anthropology 474)
Spring. 5 credits.
NS 115 Nutrition and Health: Concepts and Controversies
Fall. 3 credits.
NS 222 Maternal and Child Nutrition Spring. 3 credits.
NS 331 Physiological and Blochemical Bases of Human Nutrition Spring. 4 credits.
NS 341 Human Anatomy and Physlology Lab
Spring. 4 credits.

NS 361 Biology of Normal and Abnormal Behavior (also Psychology 361)
Fall. 3 credits.
NS 441 Nutrition and Disease Fall. 4 credits.
PSYCH 322 Hormones and Behavior (also Biological Sciences 322) Spring. 3 or 4 credits.
PSYCH 425 Cognitive Neuroscience Fall. 3 or 4 credits.

## VET MI 431 Medical Parasitology

 Fall. 2 credits.
## Human Behavior

ANTHR 390 Primate Behavlor and Ecology Spring. 4 credits.
ANTHR 490 Primates and Evolution Spring. 4 credits.
BasOC 301 Biology and Soclety I: The Social Construction of Life (also Science and Technology Studies 401)
Fall. 4 credits.
BIO NB 421 Effects of Aglng on Sensory and Perceptual Systems (also Psychology 431 and 631)
Fall. 3 or 4 credits.
BIO NB 427 Animal Social Behavior Fall. 4 credits.
HDFS 344 Infant Behavior and Development
Fall. 3 credits.
HSS 315 Human Sexuality Spring. 3 credits.
NS 245 Social Science Perspectives of Food and Nutrition
Fall. 3 credits.
NS 347 Human Growth and Development: Biological and Behavioral Interactions (also Human Development and Family Studles 347 and Biology and Socioty 347)
Spring. 3 credits.
PSYCH 326 Evolution of Human Behavior Fall. 4 credits.
PSYCH 425 Cognitive Neurascience Fall. 3 or 4 credits.
R SOC 408 Muman Fertility in Developing Nations
Spring. 3 credits.
R SOC 438 Social Demography Fall. 3 credits.

Human Evolution and Ecology
ANTHR 101 Introduction to Anthropology: Biological Perspectives on the Evolution of Humankind
Fall. 3 credits.
ANTHR 203 Early People: The Archaeologlcal and Fossil Record (also Archaeology 203)
Spring. 3 credits.
ANTHR 390 Primate Behavior and Ecology Spring. 4 credits.

ANTHR 391 The Evolution of the Human Life Cycle
Spring. 3 credits.
ANTHR 490 Primates and Evolution Spring. 4 credits.
BIO G 207 Evolution (also History 287, and Science and Technology Studies 287)
Fall or summer. 3 credits.
BIO ES 261 Ecology and the Environment Fall or summer. 4 credits.

## BIO ES 272 Functional Ecology of Vertebrates Spring. 4 credits.

B10 ES 275 Human Biology and Evolution (also Anthropology 275 and Nutritlonal Sclences 275)
Fall. 3 credits.
BIO ES 278 Evolutionary Biology Fall or spring. 3 or 4 credits
BIO ES 371 Human Paleontology (also Anthropology 371) Fall. 4 credits.
BIO ES 461 Population and Evolutionary Ecology Spring. 4 credits.
BIO ES 464 Macroevolution Spring. 4 credits.
BIO ES 470 Ecological Genetlcs (also Entomology 470) Spring. 4 credits.

BIO ES 471 Mammalogy Fall. 4 credits.
BIO GD 481 Population Genetles Fall. 4 credits.
BIO GD 482 Human Genetics and Society Fall. 3 credits.
BIO GD 484 Molecular Evolution Spring. 3 credits.
BIO ES 673 Human Evolution: Concepts, Mistory and Theory (also Anthropology 673)
Fall. 3 credits.
BeSOC 447 History of Biology-Evolution (also History 447) Fall. 4 credits.

MSS 330 Ecology and Epidemiology of Health Spring. 3 credits.
Ns 306 Nutritional Problems of Developing Nations
Fall. 3 credits.
PSYCH 326 Evolution of Muman Behavior Fall. 4 credits.
R SOC 201 Population Dynamics Spring. 3 credits.
VET MI 431 Medical Parasitology Fall. 2 credits.
VETCS 664 Introduction to Epidemiology Fall. 3 credits.

## Independent Major Program

L. Abel, director, 55 Goldwin Smith Hall, 255-3386.
The Independent Major Program is described in the introductory section of Arts and Sciences.

IM 351 Independent Study
Fall or spring. $1-4$ credits. Prerequisite: permission of the program office.
IM 499 Honors Research Fall or spring. 1-8 credits; a maximum of 8 credits may be earned for honors research. Prerequisite: permission of program director. Each participant must submit a brief proposal approved by the honors committee.

## Intensive English Program

## 305 Morrill Hall

J. M. Mancusi, director; E. J. Beukenkamp, R. L. Feldman, K. Golkowska, M. Johns, M. T. Lovell, S. Yates

This noncredit, nondegree program provides full-time intensive English language instruction as well as academic, social, and cultural orientation to the United States and its institutions. The aim of the program is for participants to acquire proficiency in the language in order to pursue goals in English for academic, business, professional, or personal purposes.
Programs are offered both fall and spring semesters and in the six-week summer session (from late June to early August). Participants receive a minimum of 20 hours of classroom instruction weekly in speaking, listening, reading, writing, and grammar, which are taught at all levels from low intermediate through very-high advanced. Applicants must be at least 17 years of age, hold the equivalent of a high school diploma, and have had some previous study of English.
Students who have gained full admission to or who are already registered in degree-granting programs at Cornell should consult the section "Modern Languages" for information regarding courses in English for Academic Purposes (series ENGLF).

The Intensive English Program is administered by the Department of Modern Languages, Cornell University, Morrill Hall, Ithaca, New York 14853-4701, U.S.A. Information and application materials are available directly from the program by writing to the above address, calling $607 / 255-4863$, or faxing 607/255-7491. Internet e-mail is CUIEP@comell.edu. Web page is http:// dml.cornell.edu/languages/IEP/cuiep.html.

## International Relations Concentration

## Matthew Evangelista, director

Integral to international relations is a focus on global issues and processes and an understanding of their impact on particular countries or geographic regions. Cornell's several undergraduate colleges and many departments offer courses that provide a strong grounding in the field as well as an opportunity to study more than 60 languages.
The concentration in international relations provides a curricular structure for undergradu-
ate students with an interest in international law, economics, agriculture, trade, banking, organizations, and government service, and in cross-cultural affairs or education. Students can major in just about anything and in addition "concentrate" in international relations. They can major in a field that the concentration in international relations closely complements (for example, history, government, economics, or anthropology) or they can major in some very different subject, including the sciences, and use the concentration to develop a separate expertise. Some students design an independent major in some aspect of international relations or comparative social or cultural studies.

## Course Requirements:

These requirements are designed to expose students to a broad range of perspectives in international relations while allowing them to tailor their course selections to specific interests. Courses throughout the university are grouped into four subject areas:

1) International Economics and Development; 2) World Politics and Foreign Policy; 3) Transnational Processes and Policies; and 4) Cultural Studies. Within these four subject areas, courses are also identified as "core" or "elective." Students must complete seven courses selected from the four groups according to one of two strategies. Option A emphasizes the politics and economics of international relations. Option B puts greater stress on culture. In choosing either option, students should ensure that they acquire familiarity with more than one geographic region or country.
Option A:

- One core course from Groups 1,2, and 4
- One elective from Groups $1,2,3$, and 4


## Option B:

- One core course from Groups 1, 2, and 4
- One elective from either Group 1 or Group 2
- One elective from Group 3 and Group 4, and one additional elective from Group 3 or Group 4
Students should take note that many of the core courses have prerequisites. The list of electives here is representative but not complete. Many other courses throughout the university can qualify as electives for the IR Concentration.


## Course Llst Fall 1997

(For Course List Spring 1998, contact IRC program in fall of 1997)
Group 1: International Economics and Development

| Core: | Econ 361 | International Trade Theory |
| :---: | :---: | :---: |
| Electives: | Econ 469 | The Economy of China |
|  | Econ 475 | Economic Problems of India |
|  | Govt 322 | Political Economy of Capitalist Developmen |
|  | Govt 388 | International Political Economy |
|  | Govt 400 | US Political Economy in Global Perspective |
|  | ILRIC 333 | Western Europe, US, and Japan |

ILRIC 339 Political Economy of Mexico
Soc 583 Market Transition in Eastern Europe
Group 2: World Politics and Foreign Policy

Core:
Electives: Govt 332 Modern European Politics
Govt 346 Modern Japanese Politics
Govt 347 Government and Politics of China
Govt 392 International Relations of Middle East
Govt 393 Intro to Peace Studies
Govt 400 The US in Asia
Hist 191 Intro to Modern Asian History
Hist 218 Russian Imperial Foreign Policy
Hist 295 Colonial Latin America
Hist 313 US Foreign Relations, 1750-1912
Hist 383 Europe in 20th Century, 1900-1945
Hist 414 Motivations of US Foreign Policy
Hist 489 Modern Japanese History
Nes 294 Modern History of Near East

Group 3: Transnational Processes and Policies
(NO CORE)
Electives: Govt 294 Global Thinking
Govt 491 Ethical Issues in International Relations
Hist 250 Technology in Western Society
Intag 300 Perspectives in International Agricultural and Rural Development
Ntres 400 International Environmental Issues

Group 4: Cultural Studies
Core: Anthr 200 Cultural Diversity and Contemporary Issues
Anthr 321 Sex and Gender in Cross-Cultural Perspective
Anthr 460 Culture and International Order

Electives:
Anthr 303 Asians in the Americas
Anthr 345 Japanese Society
AS\&RC 191 Africa the Continent and Its People
AS\&RC 290 The Sociology of African-American Experience
Govt 454 The Herodotean Moment
Hist 281 Science in Western Civilization
Hist 476 Social and Cultural History of Contemporary Europe

| Nes 197 | Modern History of <br> Near Eastern Civiliza- <br> tion |
| :--- | :--- |
| Nes 393 | Religion and Politics <br> Middle East |
| R Soc 301 | Theories of Society <br> Soc 310Sociology of War and <br> Peace |

## Language Requirement

IR Concentrators are expected to complete additional language study beyond the College of Arts and Sciences degree requirement. This study can be accomplished in one of two ways:

1) Two years of one foreign language (proficiency plus one course)
2) Two languages at proficiency

## Study Abroad

IR Concentrators are strongly encouraged to study abroad to bring a practical dimension to their expertise in international issues. Those who choose this option will find the requirements for the concentration highly compatible with study abroad.
All courses used to fulfill the concentration requirements must be taken for a letter grade. Transcripts will reflect successful completion of the requirements for the concentration. In addition, students will receive a special certificate signed by the faculty coordinator of the international relations concentration. Students interested in pursuing the concentration should discuss it with their faculty adviser. To enroll and for further information, contact Christoph Kunkel, Administrative Coordinator, IRC, at the Mario Einaudi Center for International Studies, 170 Uris Hall (255-8943/272-1417/cmk5@cornell.edu) or contact the director, Prof. Mathew Evangelistra (Government), (255-8672/
mae10@comell.edu).

## Center for International Studies

See Interdisciplinary Centers, Programs, and Studies.

## Program of Jewish Studies

D. I. Owen, director (Ancient Near Eastern and Biblical History and Archaeology), L. Adelson (German-Jewish Literature and Culture), C. Baker (Judaism and Christianity in Late Antiquity), R. Brann (Judeo-Arabic Studies), D. Brenner (German-Jewish Literature and Culture), V. Caron (Modern French and European-Jewish History), M. Diesing (Yiddish Language and Linguistics), N. Furman (French Holocaust Literature), P. Hyams (Medieval Jewish History), D. LaCapra (Holocaust Studies), M. Litvak (Modern History of the Middle East), D. Polachek (Holocaust Studies), R. Polenberg (American-Jewish History), J. Porte (AmericanJewish Writers), D. S. Powers (Arabic and Islamic Studies), G. Rendsburg (Biblical and Semitic Studies), N. Scharf (Hebrew Language), D. Schwarz (Anglo-Jewish Literature), G. Shapiro (Russian-Jewish Literature), S. Shoer (Hebrew Language), M. Steinberg (German-Jewish History and Culture),
Y. Szekely (Judaica Bibliography), J. Zorn (Biblical Archeaology)
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, the interests of which 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.
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 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.

## Courses Oftered

## JWST 105-106 Elementary Modern

Hebrew I and II (also NES 101-102)
105 fall; 106 spring. 6 credits. S. Shoer. For description, see NES 101-102.

## JWST 197 Introduction to Near Eastern Civilization (also NES 197 and <br> RELST 197) ©

Fall. 3 credits. D. Owen.
For description, see NES 197.

## JWST 201-202 Intermediate Modern

Hebrew I and II (also NES 201-202)
201 fall; 202 spring. 4 credits. N. Scharf. For description, see NES 201-202.
JWST 223 Introduction to the Bible (also NES 223 and RELST 223) 융
Spring. 3 credits. C. Baker.
For description, see NES 223.

## JWST 239 Cultural History of the

 Jews of Spain (also COMP LIT 239, NES 239, RELST 239 andSPAN LIT 239) \#
Fall. 3 credits. R. Brann.
For description, see NES 239.
JWST 248 Introduction to Classical Jewish History (also RELST 248 and NES 248) ©
Fall. 3 credits. Staff.
For description, see NES 248.
JWST 252 Modern European Jewish HIstory 1798-1948 (also HIST 291)
Spring. 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 18 th 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 18 th-century Enlightenment to the postWorld War II era. Topics will include Jewish responses to emancipation, including assimilation and new varieties of religious accommodation; the development of modern anti-Semitism; the rise of Zionism and the creation of the state of Israel; the modernization of Eastem European Jewry; the impact of mass immigration; and the Nazi era.

## JWST 254 Anti-Semitism and the Crisis of Modernity: From the Enlightenment to the Holocaust (also HIST 235)

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 anti-Semitism illuminates the underside of European history, allowing us to see how anti-Jewish intolerance and prejudice became embedded in the world views of significant sectors of the European population, culminating in the Holocaust. Topics will include the Christian roots of anti-Semitism and the extent to which modern anti-Semitism marks a break with the medieval past; the politicization of anti-Semitism by both Left and Right; the role of anti-Semitism in socioeconomic conflicts linked to the rise of capitalism; Jewish responses to anti-Semitism; anti-
Semitism in the Nazi and Fascist revolutions; and contemporary interpretations of antiSemitism.

## JWST 263 Introduction to Biblical

 History and Archeology (also RELST 264, ARKEO 263 and NES 263) "Fall. 3 credits. J. Zom.
For description, see NES 263.
JWST 294 Modern History of the Near East: Changing Politics, Society, and Ideas (also GOVT 358 and NES 294)
Fall. 4 credits. Fulfills the college distribution requirement in history or the social sciences. M. Litvak.
For description, see NES 294.
JWST 301-302 Advanced Modern
Hebrew I and II (also NES 301-302) 힝
301 fall; 302 spring. 4 credits. N. Scharf. For description, see NES 301-302.
JWST 339 Muslims, Christlans and Jews in Islamic Spain: Literature and Society (also NES 339/639, COMP LIT 334, RELST 334, SPAN LIT 339/699) © \#
Spring. 4 credits. R. Brann. For description, see NES 339.
JWST 344 The History of Early Christianity (also NES 324, CLASS 344 and RELST 325)
Fall. 4 credits. C. Baker.
For description, see NES 344.
JWST 400 Seminar in Advanced Hebrew (also NES 400)
Fall and spring. 4 credits. Enrollment
limited to 15 students. N. Scharf.
For description, see NES 400.

JWST 442 German Jowish Culture: From the Enlightenment to the Present (also GER STDS 442 and S HUM 442)
Spring. 3 credits. D. Brenner.
For description, see German Studies 442
JWST 451 Representing The Holocaust, Then and Now (also GER STDS 450 and S HUM 450)
Fall. 3 credits. D. Brenner.
For description, see German Studies 450.

## JWST 452 France and lits Jews (also

 FR LIT 483/681)Spring. 4 credits. N. Furman.
For description, see French Literature 483

## JWST 491-492 Independent Study-

 UndergraduateFall and spring. Variable credit. Staff.
JWST 499 Independent Study-Honors
Fall and spring. Variable credit. Staff.

## JWST 615 Jews in German Culture Since

 1945 (also GER STDS 615)Spring. 4 credits. L. Adelson.
For description, see German Studies 615.

## Courses not offered 1997-98.

JWST 227 Introduction to the Prophets (also NES 227 and RELST 227) \#
JWST 228/628 Genesis (also Near Eastern Studies 228 and 628 and Religious Studies 228) @ \#
JWST 242 Jewish Literature and Thought in the Rabbinic Period (also NES 242, RELST 242 and CLASS 243) \#
JWST 243 Classics of Hebrew Literature, a Survey: The Hebrew Literary Tradition (also Comparative Literature 231 and NES 231)
JWST 244 Introduction to Ancient Judaism (also NES 244 and RELST 244) \#
JWST 245 Introduction to Modern Jewish History (also NES 249) \#
JWST 247 Introduction to Jewish Art and Archaeology from the Hellenistic to the Rabbinic Period (also CLASS 249, NES 247 RELST 247, ARKEO 247) \#
JWST 250 Response to the Holocaust
JWST 251 The Holocaust: The Destruction of European Jewry
JWST 261 Ancient Seafaring (also ARKEO 275 and NES 261) © \#
JWST 264 Agriculture and Society in the Ancient Near East (also Near Eastern Studies 264) 웅

JWST 274 Jewish Civilization in Eastern Europe 1814-1939 (also RUSSL 274)
JWST 283 The Lyrics of Love and Death: Medieval Hebrew Poetry in Translation (also Comparative Literature 333 and NES 233) \# \#

JWST 293 Judaism, Christianity and Islam in Comparative Perspective (also NES 293)
JWST 322 Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel (also Near Eastern Studies 322)
JWST 340 Topics in Religion: Religious Symbols in Near Eastern Late Antiquity (also NES 320 and RELST 340) \#
JWST 342 Jewish Mysticism (also RELST 344 and NES 344) \#
JWST 345 Letter, Novel, Dictionary: The Making of National Language (also COMP LIT 345 and NES 343) \#
JWST 346 Seminar in 19th-Century Jewish Intellectual History (also NES 347 and RELST 346)
JWST 347 Gender and Judaism (WOMNS 347, RELST 343, NES 345)

JWST 348 Varieties of Judaism in the GraecoRoman World (also Near Eastern Studies 348 and Religious Studies 348) © 茾
JWST 350 The Jews of the Territory of the Soviet Union from 1881 to the Present (also RUS LIT 355)
JWST 352 The Transiormation of European Jewry
JWST 361 Interconnections in the Eastern Mediterranean World in Antiquity (also Near Eastern Studies 361) \# \#
JWST 362 The History and Archaeology of Ancient Syria (also ARKEO 362/662 and NES 362/662) @ \#
JWST 366 The History and Archaeology of the Ancient Near East (also Archaeology 310 and Near Eastern Studies 366) \# \#
JWST 402 Seminar in Hebrew Literature and Poetics (also Near Eastern Studies 402)
JWST 420 Readings in Biblical Hebrew Prose (also NES 420, RELST 420) © \#
JWST 421 Readings in Biblical Hebrew Poetry (also NES 421, RELST 423) \#
JWST 428 Medieval Hebrew Biblical Exegesis (also NES 428, NES 624, and RELST 428)
JWST 435-436 Aramic I \& II (also NES 435-436) 영 \#
JWST 440 The Form of the Jews (also COMP LIT 480, ENG 420 and NES 440) \#
JWST 450 Undergraduate Seminar in Recent American History (also HIST 440)
JWST 478 Jewish-American Writing (also ENGL 479 and AMER STD 479)
JWST 610 Paul Celan and the Shoah (also German Studies 640 and COMP LIT 640)
JWST 620 Readings in Medieval Hebrew Poetry and Prose (also NES 620)
JWST 627 The Song of Songs (also Near Eastern Studies 627)

## John S. Knight Writing Program

The director of the John S. Knight Writing Program is Jonathan Monroe, associate professor in the Department of Comparative Literature and George Elliott Reed Professor of Writing and Rhetoric. Katherine Gottschalk, senior lecturer in the Department of English, is the Walter C. Teagle Director of Freshman Writing Seminars. The program's offices are in 159 Goldwin Smith Hall, 255-4061.
M. Gilliland (Writing Workshop), K. Hjortshoj (Writing Workshop), B. LeGendre (Writing Workshop), J. Martin (Writing Workshop), J. Pierpont (Writing Workshop), E. Shapiro, (Writing Workshop).
The John S. Knight Writing Program helps to coordinate the teaching of writing for undergraduates in six of the university's schools and colleges (the School of Industrial and Labor Relations 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 freshmen and upperclass students, tutorial writing classes, and seminars in the teaching of writing. More than thirty academic departments and programs participate in the program.

## Advanced Writing Seminars

For upperclass students, the program collaborates with the Department of English in offering English 288-89, "Expository Writing." This course helps students write with more confidence and skill in all disciplines, while provoking inquiry into particular areas of
study, forms or uses of writing, or topics intimately related to the written medium. Students may choose among a variety of sections focusing on such themes as "Writing about the Social World," "Writing in the Humanities," "Issues and Audiences," "Understanding the News," and "The Languages of Science."

## Freshman Writing Seminars

For freshmen the program offers the freshman 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, with a maximum of seventeen students, and adherence to a program-wide set of guidelines:

- Seminars require at least six-and at most twelve-formal writing assignments on different topics, totaling a minimum of thirty pages. (Some of the 30 -page total may include major drafts.)
- A minimum of two of the required essays (see above) are developed through several stages of revised drafts under the instructor's guidance so that the revisions stand as substantially improved essays.
- All seminars spend ample classroom time on work directly related to writing.
- Reading assignments in the course subject are kept under 75 pages per week to permit regular, concentrated work on writing.
- All students meet in at least two individual conferences with the instructor.
Offerings change from semester to semester. Each term's freshman writing seminars are described in a brochure available from college registrars.
To ensure that students will enjoy the benefits of small writing classes, freshman writing seminars are limited to no more than seventeen students. Instead of pre-enrolling in their writing courses, students request placement in one of five writing seminars by filling out ballots available from their college registrars. Over ninety percent receive one of their top three choices. In the fall, students may change their writing seminars at the Freshman Writing Seminar Exchange; and in the spring, students may change their writing seminars at the University Course Exchange. Changes can also be made at special Freshman Writing Seminar add/drop sessions held during the first two weeks of each semester.
The colleges and the school served by the program accept freshman writing seminars in fulfillment of their individual graduation requirements in categories referred to variously as "freshman writing," "oral and written expression," and the like. The program 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 freshman writing seminars. Architecture majors, however, need only one. Hotel students fulfill their require-
ment through Hotel Administration 165, which should be taken with Hotel Administration 265 during the first two semesters at Cornell. Agriculture and Life Sciences students can take freshman writing seminars or choose from among a variety of other courses to fulfill their requirement.
All students who score " 4 " or " 5 " on the Princeton Advanced Placement Examination in English receive three credits. Such credits are awarded automatically; no application to the John S. Knight Writing Program or the Department of English is necessary. How these credits may be applied to freshman writing or other distribution requirements depends on the student's college and score. All students who score " 5, " except Architecture majors, may apply their three credits towards the writing requirements of their college. Of students who score " 4 ," only Agriculture and Life Sciences students and Industrial and Labor Relations students may apply their three 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 freshman 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 freshman writing seminars: English 270, 271, or 272.
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 freshman writing seminars, students should demonstrate that they have done a reasonably equivalent amount of writing in a formal course. (It is not sufficient to write, for example, one thirty 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 freshman writing seminar to satisfy part of their writing requirement. The John S. Knight Writing Program must approve all such petitions in advance.
For information about the requirements for freshman writing seminars and descriptions of seminar offerings, consult the John S. Knight Writing Program brochure, available from college registrars in August for the fall term and in late October for the spring term.


## Teaching Writing

Each summer and fall, the program offers instruction in the teaching of writing to new staff members in the freshman writing seminars and other interested instructors. Teaching Writing I, offered in the summer, is primarily a course for graduate students; the same course is offered in the fall as Teaching Writing II. 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.

## Writing Workshop

The John S. Knight Writing Program offers An Introduction to Writing in the University for freshmen (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.
Writing 137 and 138 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 with problems in essay writing. The director is Joe Martin, senior lecturer in the Writing Workshop. The workshop offices are in 174 Rockefeller Hall, 255-6349.

## The Walk-In Service

Through the Walk-In Service, the Writing Workshop offers tutoring assistance in writing to any student who needs help with a writing project. The Walk-In Service has tutors available during the academic year in 174 Rockefeller and north- and west-campus residential areas. The director is Mary Gilliland. For information contact the Writing Workshop, 174 Rockefeller Hall, 255-6349.

## WRIT 137-138, 134 An Introduction to Writing in the University

137 , fall; 138 , spring; 134 , summer. 3 credits each term. Each section limited to 12 students in the fall and spring, 6 students in the summer. S-U grades only. Prerequisite: permission of instructor. This writing seminar is designed for students who need more focused attention to order to master the expectations of academic orriting. The course emphasizes the analytic and argumentative writing and critical reading essential for university-level work. With small classes and with weekly student/teacher conferences, each section is shaped to respond to the needs of students in that particular class.
WRIT 139-239 Speclal Topics In Writing Spring. 139, undergraduate students only; 239 , graduate students only. 3 credits. S-U grades only. Cannot fulfill any writing or distribution requirements. Prerequisite: permission of instructor.
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 come to 174 Rockefeller for more information.

## Latin American Studies

## 190 Uris Hall

D. Castillo, director; M. J. Dudley, associate director; L. Benería, R. Blake, D. Block,
C. Castillo-Chāvez, M. L. Cook,
D. Cruz de Jēsus, T. Davis, E. Dozier,
B. Deutsch-Lynch, G. Fields, M. A. Garcés, W. Goldsmith, J. Haas, J.-P. Habicht,
J. Henderson, T. Holloway, Z. Iguina,
B. J. Isbell, S. Jackson, T. Jordan, J. Kronik, S. Kyle, D. R. Lee, A. Monegal, L. Moratô,
J. Oliveira, J. Piedra, A. Power, E. Rodríguez,
J. Routier-Pucci, D. Sanjur, V. Santiago,
H. Schamis, R. Sierra, J. M. Stycos, J. M. Suñer, J. Tittler, H. Velez, L. Williams

The Latin American Studies Program encourages and coordinates faculty and student interests in Latin America. A variety of special lectures, films, and seminars supplement the regular course offerings. Graduate students may pursue a minor in Latin American Studies, while majoring in the field of their choice.

## Undergraduate Concentration

Undergraduate students may fulfill a Latin American Studies Concentration by completing a minimum of 15 credits in Latin American studies courses combined with language proficiency in Quechua, Spanish, or Portuguese. Latin American courses are offered in the College of Agriculture and Life Sciences; the College of Architecture, Art, and Planning; College of Arts and Sciences, College of Human Ecology; and the School of Industrial and Labor Relations.

For further information and a current course listing, students should contact the program office at 255-3345 or 190 Uris Hall.

## Latino Studies Program

## 434 Rockefeller Hall

The Latino Studies Program is an inderdisciplinary academic program that focuses on the contributions, concerns, and welfare of those persons of Latino origin who reside in the United States. It includes support for historical, linguistic, literary, social, economic, and political studies of this diverse group of Americans. To this end the program objectives are (1) to expand the available course curriculum by providing both undergraduate and graduate courses pertaining to Latino subject matters; (2) to enlarge the size of the Latino faculty at Cornell through permanent appointments and visiting appointments; and (3) to enhance the Latino academic environment on campus through support of such activities as lectures, conferences, seminars, exhibits, and research activities.

## Undergraduate Concentration

The program's undergraduate concentration affords students an opportunity to develop a multidisciplinary approach to the study of Latinos in the United States. To complete an undergraduate concentration in Latino Studies, students must earn at least 15 credits including LSP 201/SOC 265: Latinos in the United States (offered each spring semester), and at least four other courses from the course list. Students should make an attempt to achieve breadth and depth in the concentration and should include courses at the 300 and 400 level. Students pursuing the concentration must meet with the LSP Advisor and file an application with the Latino Studies Program office.

## Resource Center

The Latino Studies Program Resource Center in 432 Rockefeller Hall serves Cornell students, faculty, staff, and the wider local community. The Resource Center holds print and media material pertinent to U.S. Latino issues and also provides a meeting space for more than 25 Latino student organizations.

## Courses

LSP 201/SOC 265 Latinos In the United States
Spring. 4 credits variable.
LSP 202/SPAND 200 Spanish for Billinguals
Fall and spring. 3 credits.
LSP/SPANL 210 Introduction to Latino Studies
4 credits variable.
LSP/RSOC 220 Sociology of Health and Ethnic Minorities
Fall. 3 credits.
LSP/ANTHRO 221 Anthropological Representation: Ethnographies on Latino Culture
3 credits.
LSP/ENGL/SPANL 241 Introduction to Chicano/a Poetry and Politics 3 credits.

LSP/ENGL 242-SPANL 244 Chicanos and Film: Re-Presentations of La Raza 3 credits.

LSP/ENGL/SPANL/COML 243 Poetry and Politics in the Americas 4 credits.

LSP/SPANL 246 Contemporary Narratives by Latina Writers Spring. 3 credits.
LSP/SPAND 366 Spanish in the United States
4 credits.
LSP/ANTHRO 377 The United States 4 credits.

LSP/ENGL 393 Survey In U.S. Latina/o Literature
Spring. 4 credits.
LSP/SPANL 396 Modern Latino Prose Fiction
LSP/ENGL 442 Testimonial Narratives: U.S. Latinos at War

4 credits.
LSP 420/421 Independent Study
Permission of instructor. 2-4 credits
variable.
LSP/ANTHRO 660 Latino Languages, Ideology, and Practice
4 credits.
LSP/ENGL 696 Writing Resistance: U.S. Minority and Third World Prisoner Discourses

## Law and Society

P. R. Hyams, director, 119 Stimson Hall, 255-8515, prh3@cornell.edu, R. Breiger (sociology), C. Carmichael (comparative literature), D. A. Dunning (psychology), G. Hay (economics), P. Hyams (history), S. Jasanoff (science and technology studies), M. Katzenstein (govemment), R. Miller (philosophy), M. B. Norton (history), R. Polenberg (history), D. Powers (Near Eastern studies), J. Rabkin (government), A. Rutten (government)

The Law and Society Program offers an interdisciplinary concentration for undergraduates who are interested in the law from the perspectives of the social sciences and the
humanities: anthropology, comparative literature, economics, government, history, philosophy, psychology, science and technology studies, and sociology. In addition, undergraduates in the College of Arts and Sciences can major in law and society through the Independent Major Program. Students who wish to graduate with a concentration in law and society should consult the director of the program or one of the advisers listed above to plan a coherent program of study. Admission to the concentration has to be approved by the director of the program. Such a program should ordinarily include at least four courses from the following list. Particular attention is drawn to GOVT 313 and PSYCH 265, which past students have often taken. Other courses may be substituted with the approval of the adviser. Inquiries can be directed to: Mary Newhart, Administrative Assistant, 119 Stimson Hall, 255-8515, mjn30cornell.edu.

AM ST 336 Capitalism and Society in Developing American, 1607-1877 (also HIST 336)

AS\&RC 280 Racism In American Society (also HIST 280)
ANTHR 328 Conflict, Dispute Resolution, and Law in Cultural Context
ASIAN 338 Democracy and War (also HIST 338)

BRSOC 406 Biotechnology and Law Ialso S\&TS 406)
B\&SOC 407 Law, Science, and Public Values (also GOVT 407 and S8TS 407)

COM L 326 Christianity and Judaism (also RELS 326) \#

COM L 328 Literature of the Old Testament (also RELS 328) \# \#

ECON 304 Economics and the Law
ECON 335 Public Finance and Resource Allocation
ECON 336 Public Finance: Resource Allocatlon and Fiscal Policy
GOVT 111 Introduction to Political Theary
GOVT 260 Social and Political Theory (also PHIL 242)
GOVT 294 Global Thinking (also PHIL 294)

GOVT 313 The Nature, Functions, and Limits of Law
GOVT 324 Legal Reasoning and Legal Adaptation
GOVT 327 Civil Liberties in the United States
GOVT 328 Constitutional Politics: The United States Supreme Court
GOVT 364 The Selfish Individual and the Modern World
GOVT 389 International Law
GOVT 407 Law, Science, and Publlc Values (also B\&SOC 407 and S\&TS 407)
GOVT 410 Legislatures, Courts and Public Policy

GOVT 428-429 Government and Public Policy: An Introduction to Analysis and Criticlem

GOVT 462 Modern Political Philosophy (also PHIL 346)
GOVT 466 Feminism and Gender Discrimination (also WOMNS 466)
GOVT 469 Limiting War (also PHIL 369)
GOVT 474 Community, Nation, and Morallty (also PHIL 446)
GOVT 489 International Law and Regime Development

HIST 318 American Constitutional Development
HIST 336 Capitalism and Society in Developing America, 1607-1877 (also AM ST 336)
HIST 338 Democracy and War (also ASIAN 338)

HIST 368 Marriage and Sexuality in Medieval Europe (also WOMNS 368) \#

HIST 436 Conflict Resolution in Medieval Europe
HIST 437-657 Sexuality, Society, and the State in the Near East (also NES 456-657 and WOMNS 455-655) 웅
HIST 440 Undergraduate Seminar in Recent American History
HIST 457-657 Women, Men, and the Law in Muslim Court (also NES 459-655, RELST 459 and WOMNS 458\}

NES 456-657 Sexuality, Society and the State in the Near East (also HIST 437-657 and WOMNS 455-655) 륭

NES 459-655 Women, Men, and the Law in Muslim Court (also HIST 457-657, RELST 459 and WOMNS 459)

PHIL 241 Ethics
PHIL 242 Social and Political Theory (by petition for breadth requirement) (also GOVT 260)
PHIL 294 Clobal Thinking (also GOVT 294)

PHIL 319 Philosophy of Marx \#
PHIL 346 Modern Political Philosophy (also GOVT 462)
PHIL 369 Llmiting War (also GOVT 469)
PHIL 444 Contemporary Legal Thought
PHIL 446 Topics in Social and Political Phllosophy (also GOVT 474)

PSYCH 265 Psychology and Law
RELST 326 Christlanity and Judaism (also COM L 326)
RELST 328 Literature of the OId Testament (also COM L 328)
RELST 459 Women, Men, and the Law in Musilm Court (also HIST 457-657, NES 459-655 and WOMNS 458)
S\&TS 406 Biotechnology and Law lalso B\&SOC 406)

S\&TS 407 Law, Sclence, and Public Values (also GOVT 407 and B\&50C 407)

SOC 310 Soclology of War and Peace
SOC 354 Law and the Social Order
WOMNS 368 Marrlage and Sexuality in Medieval Europe (also HIST 368)

WOMNS 455/655 Sexuality, Soclety, and the State In the Near East (also NES 456/657 and HIST 437-657)
WOMNS 458 Women, Men, and the Law In Muslim Court (also HIST 457-657, NES 459-655 and RELST 459)
WOMNS 466 Feminism and Gender Discriminatlon (also GOVT 466)

ARME 320 Business Law I
CE\&H 365 Economics of Consumer Law and Protection

CRP 380 Environmental Politics
CRP 451-551 Environmental Law
HSS 280 Racism In American Soclety (also AS\&RC 280)
ILRCB 607 Values in Law, Economics, and Industrial Relations
NTRES 401 Environmental and Natural Resources Pollcles

## Leshian, Bisexual and Gay Studies

S. Bem, director; B. Anderson, B. Ballaro, A. Berger, J. Borneman, B. Correll, J. Culler, I. DeVault, N. Furman, J. E. Gainor, E. Hanson, I. V. Hull, M. Jacobus, K. Jones, M. Katzenstein, K. March, B. Martin,
S. McConnell-Ginet, T. Murray, M. B. Norton, J. Piedra, R. Savin-Williams, R. Schneider, A. M. Smith, A. Villarejo, R. Weil

The field of Lesbian, Bisexual and Gay Studies is devoted to the interdisciplinary study of the social construction of sexuality. LBG Studies is founded on the premise that the social organization of sexuality is best studied from the perspectives offered by those positions that have been excluded from established cultural norms.
In addition to offering a graduate minor, the field of LBG Studies now offers an undergraduate concentration, which is administered under the auspices of the Women's Studies Program and which consists of four courses from the list below. Although most of the courses in LBG Studies (including those on men) will probably fall within the umbrella of the Women's Studies Program and hence be crosslisted with it, not all of the courses in Women's Studies are sufficiently focused enough on the social construction of sexuality per se to be part of the LBG Studies concentration. In order to qualify for the concentration, courses must devote a significant portion of their time to sexuality and to questioning the cultural and historical institution of exclusive heterosexuality. Students selecting their four courses from the LBG Studies subset must identify their concentration as either LBG Studies or Women's Studies; they cannot double-count their credits and thereby use the same courses for both concentrations.
Students interested in the LBG Studies concentration should contact the Lesbian, Bisexual and Gay Studies Office in 379 Uris Hall.

## Courses

ANTHR 200 Cultural Diverslly and
Contemporary lssues
Fall. 3 credits. J. Borneman.
For description, see ANTHR 200.
ANTHR 321 Sex and Gender in Cross-Cultural Perspective (also WOMNS 321)
Fall. 4 credits. Staff.
For description, see WOMNS 321.
ENGL 355 Decadence (also WOMNS 355)
Fall. 4 credits. E. Hanson.
For description, see WOMNS 355.
[ENGL 377 Gay Fictlon (also wOMNS 376)
4 credits. Not offered 1997-98.
E. Hanson.]

ENGL 401-601 Sexual Child (also 5 HUM 418)
Spring. 4 credits. E. Hanson.
For description, see S HUM 418.
[ENGL 424 Studies in Renaissance Lyric 4 credits. Not offered 1997-98. B. Correll.]
[ENGL 654 Queer Theory (also WOMNS 654)
4 credits. Not offered 1997-98.
E. Hanson.]
[ENGL 655 Decadence (also WOMNS 656/COM L 655)
4 credits. Not offered 1997-98.
E. Hanson.]

ENGL 703 Theorizing Film: Race, Nation and Psychoanalysis (also FRLIT 695)
Fall. 4 credits. T. Murray.
For description, see ENGL 703.

## [FRLIT 493 French Feminisms (also WOMNS 493)

4 credits. Next offered fall 1998.
N. Furman.]

GERST 413 The Women Around Freud (also WOMNS 413)
4 credits. Not offered 1997-98. B. Martin.]

## [GOVT 362 Polltics of Sexuality (also

 WOMNS 262)4 credits. Not offered 1997-98.
A. M. Smith.]

GOVT 467 Radical Democratic Feminlsms (also WOMNS 468)
Fall. 4 credits. A. M. Smith.
For description, see GOVT 467.
HDFS 284 Introduction to Sexual Minorltles (also WOMNS 285)
Fall. 3 credits. R. Savin-Williams.
For description, see HDFS 284.
HDFS 464 Sexual Minorities and Human Development (also WOMNS 467)
Spring. 3 credits. R. Savin-Williams.
For description, see HDFS 464.
HDFS 475 Clinical and Developmental Perspectives on HIV and AIDS
Spring. 3 credits. R. Savin-Williams.
For description, see HDFS 475.
[HIST 377 Gender and Early Modern Europe (also WOMNS 377)
4 credits. Not offered 1997-98. R. Weil.]
LING 244 Language and Gender (also WOMNS 244)
Spring. 4 credits. S. McConnell-Ginet. For description, see LING 244.

PSYCH 277 Soclal Construction of Conder (also WOMNS 277)
Fall. 3 credits. S. Bem.
For description, see WOMNS 277.
PSYCH 450/650 Lenses of Gender (also WOMNS 450/650)
Spring. 4 credits. S. Bem.
For description, see WOMNS 450/650.

## S HUM 412 Theory, Pathology,

Treatment (also GERST 411)
Fall. 4 credits. B. Martin and C. Miller.
For description, see S HUM 412.
SPAN L 384 Literature and Revolution Spring. 4 credits. J. Piedra.
[SPAN L 400 Maricoteoria/Queer Theory 4 credits. Not offered 1997-98. J. Piedra.]
THETR 336 American Drama and Theatre (also ENGL 336)
Spring. 4 credits. J. E. Gainor.
For description, see THETR 336.
THETR 339 Theories and Techniques of 20th-Century Western Theatre
Fall. 4 credits. R. Schneider.
For description, see THETR 339.
[THETR 436 The Female Dramatic Tradition (also WOMNS 433)
4 credits. Next offered in 2-3 years. J. E. Gainor.]

THETR 637 Theatre and Postmodernity: Appropriatlon, Adaptation and Simulation
Spring. 4 credits. R. Schneider.
For description, see THETR 637.
WOMNS 210 Introduction to Feminist Theory
Fall. 4 credits. A. Villarejo.
For description, see WOMNS 210.
[WOMNS 465 Feminist Theory/Lesbian Theory (also GERST 465 and COM L 465)
4 credits. Not offered 1997-98. B. Martin.]

## [WOMNS 621 Lesbian, Gay, Blsexual

 Studies (also GERST 621)4 credits. Not offered 1997-98. B. Martin.]

## Medieval Studies

Paul Hyams, acting director; B. B. Adams,
F. M. Ahl, C. M. Arroyo, R. Brann,
K. W. Brazell, E. W. Browne, R. G. Calkins,
A. M. Colby-Hall, R. T. Farrell, A. S. Galloway,
A. B. Groos, W. E. Harbert, T. D. Hill,
J. H. Jasanoff, J. J. John, C. V. Kaske,
W. J. Kennedy, S. MacDonald, M. Migiel,
J. M. Najemy, C. A. Peterson, J. R. Piggot,
D. S. Powers, D. M. Randel, S. Senderovich,
D. Shanzer, W. Wetherbee

Undergraduates interested in Medieval Studies have an opportunity to take courses in the following areas of instruction: medieval Hebrew, Arabic, and Latin; Old English, Middle English, Old Irish, and Middle Welsh; Old Occitan (Provençal) and Old French; medieval Spanish and Italian; Old Saxon, Old High German, Middle High German, Gothic, and Old Norse; Old Russian and Old Church Slavonic; comparative literature; medieval archaeology, art, and architecture; medieval history; Latin paleography; medieval philosophy; musicology; comparative Slavic linguistics, comparative Romance linguistics, and comparative Germanic linguistics.

Undergraduates who want to undertake an independent major or a concentration in Medieval Studies should consult the director of the program, 259 Goldwin Smith Hall, 255-8545, medievalst0cornell.edu.

Information for prospective graduate students is contained in the catalog of the Graduate School, in a brochure on Medieval Studies available from the field coordinator, and at Comell's site on the World Wide Web: http:// www.arts.comell.edu/medieval.

## Graduate Seminars

Courses in various aspects of medieval studies are offered each year in numerous cooperating departments, including Asian Studies, Classics, Comparative Literature, English, German Studies, History, History of Art, Linguistics, Music, Near Eastem Studies, Philosophy, Romance Studies, Russian Literature and by the Society for the Humanities. An up-to-date listing of courses and their descriptions is available at the Medieval Studies office, 259 Goldwin Smith Hall.

## Modern European Studies Concentration

## Susan Tarrow, coordinator

Students from any college may choose an undergraduate concentration in Modern European Studies to complement any major in any college. The purpose of the concentration is to provide a coherent structure for students with an interest in interdisciplinary study in the field of European studies.

The concentration has three tracks: European politics, economics and society; modern European history; and European culture. The requirements for the concentration are:

1) Competence in at least one modern European language, Romance, Germanic or Slavic (i.e., completion of a 300 -level course or equivalent with a grade of at least B-, or demonstration of an advanced level of competence in an oral proficiency interview test where available).
2) Completion of at least one course in each of the three areas listed below:
a) European Politics, Society and Economics

Anthr 350 Anthropology of Europe
Econ 367 Comparative Economic Systems: East and West
Econ 370 Socialist Economies in Transition
Govt 325 Eastern European Politics
Govt 332 Western European Politics
Govt 333 Government and Politics of the Former Soviet Union
Govt 342 The New Europe
Govt 350 Comparative Revolutions
Soc 366 Transitions from State Socialism
Soc 410 Comparative Societal Analysis
b) Modern European History

Hist 253 Russian History Since 1800

Hist 283 Europe in the Technological Age
Hist 290 Twentieth-Century Russia and the Soviet Union
Hist 353 Nineteenth-Century European Intellectual History \#
Hist 354 Twentieth-Century European Intellectual History
Hist 362 European Cultural History 1815-1870 \#
Hist 363 European Cultural History 1870-1945
Hist 383 Europe 1900-1945
Hist 384 Europe 1945-68
Hist 385 Europe in the TwentiethCentury 1968-1992
c) Humanities

Any general course dealing with modern Europe (19th and 20th centuries) in one of the following departments: Comparative Literature, English, German Studies, History of Art, Music, Philosophy, Romance Studies, Theatre Arts. Examples of such courses include:
ArtH 260 Introduction to Art History: The Modern Era
ArtH 361 The Social History of Nineteenth-Century European Painting
ArtH 362 Impressionism and Society
COML 202 Great Books
COML 364 The European Novel
Music 108 Bach to Debussy \#
Music 274 Opera \#
Music 383 Music of the Nineteenth Century \#
Phil 212 Modern Philosophy \#
Thetr 241 Introduction to Western Theatre II \#
Thetr 322 Russian Drama and Theatre
Under certain conditions, it may be possible to substitute other courses for those listed above.
3) Three additional courses in any of the three areas.
a) Courses in European and comparative politics, anthropology, sociology, women's studies, and related courses in the School of Hotel Administration, the College of Agriculture and Life Sciences, and the School of Industrial and Labor Relations.
b) Courses in modern European history (post-1789).
c) Courses in (post-1789) English and European literatures, comparative literature, semiotics, fine arts, architecture, music, philosophy, film and theatre arts, and women's studies. Only two courses may be used to satisfy requirements for both the major and the concentration. Courses satisfying the breadth and distribution requirements in the College of Arts and Sciences, however, maybe applied to the concentration. Students completing a research project under the European Summer Research Program will receive
a special commendation. All concentrators are encouraged to participate in the Language House Program, and to spend a semester or more in a program of study in Europe. Courses taken abroad may be applied to the concentration if they are approved for Comell credit.
Undergraduates in the College of Arts and Sciences can major in European Studies through the Independent Major or College Scholar programs.

Departmental advisers include: J. Borneman (Anthropology); C. Otto (Architecture); L. Abel (College Scholars, Independent Majors); S. Christopherson (CRP); G. Fields (Economics); D. Schwarz (English); I. Ezergailis (German Studies); J. Pontusson (Government); J. Weiss (History); M. Suner (Linguistics); C. Rosen (Modern Languages); N. Zaslaw (Music); S. Tarrow (Romance Studies); G. Gibian (Russian Literature); D. Stark (Sociology); D. Bathrick (Theatre Arts)
For a list of relevant courses and seminars, and any further information, contact Susan Tarrow, coordinator of the Modern European Studies Concentration, at the Institute for European Studies, 120 Uris Hall (telephone 255-7592).

## Religious Studies

J. M. Law, director; C. M. Arroyo, C. Baker, K. Barzman, P. Becker, J. Bishop, R. Brann, R. G. Calkins, C. M. Carmichael, K. Clinton, J. Fajans, D. Fredericksen, A. Gade, J. W. Gair, D. Gold, S. Greene, J. S. Henderson, T. D. Hill, D. Holmberg, P. R. Hyams, J. J. John, C. V. Kaske, W. J. Kennedy, A. T. Kirsch, J. Maas, S. MacDonald, D. Mankin, K. S. March, C. Minkowski, R. L. Moore, E. Ondrako, D. I. Owen, L. Peirce, J. R. Piggott, D. S. Powers, D. M. Randel, G. Rendsburg, J. S. Rusten, P. S. Sangren, S. Saraydar, D. R. Shanzer, M. Washington (emeritus: N. Kretzmann)

The program in Religious Studies is designed to meet the needs of three classes of students: those seeking interesting courses on religious topics as free electives or to fulfill distribution requirements; those desiring a more systematic exposure to the study of religion as a major component of their liberal arts experience; and those planning to pursue advanced academic work in religious studies or allied disciplines or subdisciplines (e.g., history of religions, anthropology, religion and literature, religion and psychology, ethics, or theology, as well as certain geographical area studies). To all these students the program offers an opportunity to acquire a fuller understanding and appreciation of one of the most fundamental aspects of human thought and behavior.

## The Major in Religious Studies

To graduate as a major in Religious Studies a student must (1) complete with letter grades the program's two core courses, Religious Studies 101 ("Understanding the Religions of the World") and Religious Studies 449 ("History and Methods of the Academic Study of Religion"); and (2) complete with letter grades eight additional courses approved for the major, at least four of them at the 300 level or above. The following specifications of this second requirement are designed to promote breadth (2a) and depth (2b) of study.
(2a) At least four of a major's eight additional courses are to be selected to ensure some familiarity with two or more different religions, religious traditions, or religious phenomena. These courses may be at the introductory or advanced levels. For example, "Introduction to Asian Religions" (Asian Studies 250) might lead a student to take "The Religious Traditions of India" (Asian Studies 351), and then to combine these with the two Greek religion courses, "Greek Religion and Mystery Cults" (Classics 237) and "Greek and Roman Mystery Cults and Early Christianity" (Classics 333). Or a student might take four unrelated courses such as "Introduction to the Bible" (Near Eastern Studies/Jewish Studies 223), "Religion and Reason" (Philosophy 263), "Myth, Ritual, and Symbol" (Anthropology 320), and "Islamic History: 1258-1914" (Near Eastern Studies 258) to gain a sense of the range of intellectual activity associated with the academic study of religious traditions and religious practices.
(2b) At least two of these eight additional courses are to be selected to ensure depth of coverage in one religion or one group of closely related religions, religious traditions, or religious phenomena. In the first illustrative case described above, the student might combine "The Religious Traditions of India" with "Indian Meditation Texts" (Asian Studies 460 ) or "Classical Indian Philosophical Systems" (Asian Studies/Classics 395) to acquire a measure of specialist strength in the religions of India. Alternatively, that student might combine "Introduction to Asian Religions" with one or more courses dealing with Buddhism, such as "Indian Buddhism" (Asian Studies 354) or "Japanese Buddhism" (Asian Studies 359), to develop an appropriate depth along a different dimension.
No more than one of the courses chosen to meet requirement 2a may be used to satisfy requirement 2 b .

To engage in the kind of focused study envisioned under 2 b , a student will be expected to attain proficiency in a language other than English to gain access to relevant sources, primary or secondary. For example, a knowledge of Greek or Latin might be required for the study of Christianity (as well as Greek or Roman religions); of Hebrew or Aramaic for Judaism; of Arabic for Islam; of Sanskrit or Hindi for Hinduism; of Pali or Chinese or Japanese for Buddhism. Religious phenomena like shamanism or totemism, though less firmly rooted in literary traditions, have generated substantial bodies of
important scholarship in French and German, and an undergraduate major concentrating in this area of Religious Studies should be equipped to make independent use of such material. Courses used to satisfy this foreignlanguage proficiency requirement may not be applied to the course requirements described under 2 a and 2 b .
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, 259 Goldwin Smith Hall.
Given the multidisciplinary character of the program in Religious Studies, it is especially important for a prospective major to select a faculty adviser early on. A current list of advisers is available from the program director. Once an adviser has been selected, a student is expected to prepare a brief
statement outlining his or her intended course of major study (including study of an appropriate foreign language) and to file it with the program director for review by the faculty committee responsible for overseeing the program.

## The Major with Honors in Religious Studies

To be eligible for honors in Religious Studies, a student must maintain a GPA of 30 overall and 33 in courses other than language courses used to satisfy requirements for the major. In addition, he or she must enroll in Religious Studies 490 or 491 (Directed Study) and Religious Studies 495 (Honors Thesis), usually in the fall and spring of the senior year, respectively. Each course carries four credits but only the first may be counted as one of the eight additional courses required for the major. Religious Studies 490, 491, and 495 are supervised by cooperating faculty members assigned to individual honors students or small groups of honors students to help them complete substantial independent projects. These projects will be evaluated by the Religious Studies Honors Committee, which is responsible for awarding honors and determining the degree of honors awarded.

## Courses Approved for the Major Sponsored by Religious Studies

[RELST 101 Understanding the Religions of the World ©
Fall. 3 credits. Required of Religious
Studies majors. Not offered 1997-98.
J. M. Law.

This course provides an introduction to the academic study of religion through a survey of the major religious traditions of the world. In each tradition covered, we study the different formulations of religious experience, expression, knowledge, and (where relevant) salvation, the dynamics of tradition formation and canon development, and the presentation of ideals for human-divine relationship. While the lectures in the course are presented by the professor, guest speakers representing each of the major traditions will highlight the category of "experience." Students will read primary and secondary sources pertaining to the traditions covered in class, and complete a semester-long project involving hands-on research and field study on a given religious tradition.]

## RELST 111 Bibllcal Law Ialso

## Comparative Literature 111)

Spring. 3 credits. C. Carmichael
For description, see COM L 111.
RELST 130 The Search for the Historical Jesus (also Near Eastem Studies 130) © "
Summer. 3 credits. S. Saraydar. Who was Jesus? What did he really say and do? In this course we are concemed with the ways in which scholars approach these questions and the often startling answers they obtain. We examine the social, political, economic and religious environments in which Jesus operated to provide a context for critical readings of the gospels and other early Christian texts. We then reconstruct the essential features of the original Jesus movement, which we compare and contrast with Cynic philosophy, the Greco-Roman gender system, the beliefs and practices of the early Church, and the social patterns and religious philosophies of small-scale societies.

## RELST 131 Elementary Pali (also

 Pall 131)Fall. 3 credits. J. Gair.
For description, see Modem Languages, PALI 131.

RELST 150 Introduction to Amerlcan Religion (also Sociology 150)
Fall. 3 credits. P. Becker.
For description, see SOC 150.
RELST 197 Introduction to Near Eastern Civilization (also Near Eastern Studies 197, Jewish Studies 197) \#
Fall. 3 credits. D. Owen.
For description, see NES 197.

## RELST 201 Issues in Catholic Thought

 Spring. 3 credits. E. Ondrako.This course will explore fundamental dynamics for the development of Catholic Christian thought from the New Testament to the present. The students will investigate the historical and rational grounds of Catholic thought in the ideas of several thinkers from the Eastern and Western traditions, such as John Chrysostom, Augustine, Thomas Aquinas, Bonaventure, J. H. Newman, K. Rahner, Y. Congar, Paul VI and John Paul II. The course will include the main lines of thought from Vatican II. Since each historical era uncovers what it thinks to be new evidence and proposes new questions, the student will be expected to master the principal lines of thought from the past and critically utilize these arguments as they bear upon the contemporary era. The format will be lectures and discussion.
[RELST 202 The Greek Now Testament (also Classics 202, Near Eastern Studies 220) \#
Spring. 3 credits. Not offered 1997-98.]
RELST 213 Introduction to the Qur'an (also Near Eastem Studies 213) " Spring. 3 credits. A. Gade
For description, see NES 213.
[RELST 214 Philosophical Issues in Christian Thought (also Phllosophy 214)
Spring. 4 credits. Not offered 1997-98.]
RELST 223 Introduction to the Blble (also Near Eastern Studies 223, Jewish Studles 223) 융
Spring. 3 credits. C. Baker.
For description, see NES 223.
[RELST 227 Introduction to the Prophets (also Near Eastern Studies 227, Jewlsh Studles 227)
Fall. 3 credits. Not offered 1997-98.
G. Rendsburg.]

RELST 228 Genesis (also Near Eastern Studies 228/628, Jewish Studies 228) 훙
Spring. 3 credits. Prerequisite: knowledge of Hebrew. G. Rendsburg.
For description, see NES 228.
RELST 230 Monuments of Medieval Art (also History of Art 230) \#
Spring. 4 credits. R. G. Calkins.
For description, see ART H 230.
RELST 231 The Quest for the HIstorical Jesus (also Near Eastern Studies 230)
Spring. 3 credits. C. Baker
For description, see NES 230.
[RELST 234 Arabs and Jews: Cultures in Confluence (also Near Eastern Studles 234, Jewlsh Studles 234, Comparative LIterature 234) © Fall. 3 credits. Not offered 1997-98 R. Brann.]
[RELST 237 Greek Religion and Mystery Cults (also Classics 237) "
3 credits. Not offered 1997-98.
K. Clinton.]

RELST 239 Cultural History of Jews of Spain (also Near Eastern Studies 239, Jewish Studies 239, Spanish Literature 239)
Fall. 3 credits. R. Brann.
For description, see NES 239
[RELST 244 Introduction to Anclent Judalsm (also Near Eastern Studies 244, Jewish Studles 244) ©
Spring. 3 credits. Not offered 1997-98.
G. Rendsburg.]

RELST 248 Introduction to Classical Jewlsh History (also Near Eastern Studles 248, Jewlsh Studies 248) (6)
Fall. 3 credits. C. Baker.
For description, see NES 248.
[RELST 249 Rellglon and Amerlcan Life (also Sociology 250)
Fall. 3 credits. Not offered 1997-98
P. Becker.]
[RELST 250 Introduction to Asian Religions (also Asian Studies 250) 륭
Spring. 3 credits. Not offered 1997-98 J. M. Law.]

RELST 251 Black Religious Traditions from Slavery to Freedom (also History 251, American Studles 251)
Spring. 4 credits. M. Washington.
For description, see HIST 251
RELST 252 Introduction to Islam: Rellglon, Politics, and Soclety (also Near Eastem Studlea 251) 훙
Spring. 3 credits. A. Gade.
For description, see NES 251.
RELST 257 Islamic Mistory 600-1258 (also Mear Eastern Studies 257, History 254) ©
Fall. 3 credits. D. Powers.
For description, see NES 257.
[RELST 258 History of the Near East: 1250-1914 (also Near Eastern Studies 258, History 248) \# \#
Fall. 3 credits. Not offered 1997-98 L. Peirce.]

RELST 262 Religion and Reason (also Philosophy 263)
Spring. 4 credits. S. MacDonald.
For description, see PHIL 263.
RELST 263 The Earlier Middle Ages (also History 263) \#
Fall. 4 credits. J. J. John.
For description, see HIST 263.
RELST 264 Introduction to Blblical History and Archaeology (also Near Eastern Studies 263, Jewlsh Studies 263, Archaeology 263) © \#
Fall. 3 credits. J. Zorn.
For description, see NES 263.
[RELST 315 Medieval Philosophy (also Phillosophy 315) \#
Spring. 4 credits. Not offered 1997-98. S. MacDonald.]

RELST 320 Myth, Ritual and Symbol (also Anthropology 320) ©
Spring. 3 or 4 credits. J. Fajans.
For description, see ANTHR 320
RELST 322 Magic, Myth, Sclence and Religion (also Anthropology 322) © Fall. 4 credits. A. T. Kirsch.
For description, see ANTHR 322.
RELST 325 The History of Early Chriatianity (also Near Eastern Studies 324, Jewish Studies 344) \#
Fall. 4 credits. C. Baker.
For description, see NES 324.
RELST 328 Literature of the Old Testament (also Comparative Literature 328) \#
Fall. 4 credits. C. Carmichael.
For description, see COM L 328.
[RELST 333 Greek and Roman Mystery Cults and Early Christlanity (also Classlics 333, Archaeology 333) *
Spring. 4 credits. Not offered 1997-98. K. Clinton.]

RELST 334 Muslims, Christlans and Jews in Islamic Spain: Literature and Society (also Near Eastern Studles 339/639, Jewish Studies 339, Comparative Lliteraiture 334, Spanish Literature 339/639) © \#
Spring. 4 credits. R. Brann.
For description, see NES 339.
[RELST 337 The Medieval Illuminated Book (also History of Art 336) \#
Fall. 4 credits. Not offered 1997-98.
R. G. Calkins.]
[RELST 342 Flemish Painting (also History of Art 341) \#
Fall. 4 credits. Not offered 1997-98 R. G. Calkins.]
[RELST 343 Gender and Judaism (also Near Eastern Studies 345, Jewlsh Studies 347)
Spring. 4 credits. Not offered 1997-98.]
[RELST 344 Seminar on Jewish Mysticlsm (also Near Eastern Studles 344) \#
Fall. 4 credits. Not offered 1997-98.]
RELST 345 Intellectual and Cultural Life of 19th Century Americans (also Mlstory 345, American Studies 345] \#
Fall. 4 credits. R. L. Moore
For description, see HIST 345.
[RELST 346 Seminar on 19th-Century Jewlsh Intellectual History (also Near Eastern Studies 347, Jewlsh Studles 346)
Spring. 4 credits. Not offered 1997-98.]
[RELST 349 Tantric Traditions (also Asian Studies 347) 앙
Fall. 4 credits. Not offered 1997-98.
D. Gold.]

RELST 350 Introduction to Islamic Law (also Near Eastern Studies 351/651, History 372/652) ©
Fall. 4 credits. D. Powers.
For description, see NES 351

RELST 351 The Religlous Traditlons of Indla (also Aslan Studies 351) * Spring. 4 credits. D. Gold.
For description, see ASIAN 351.
RELST 352 Art as Spectacle: The Italian Baroque (also History of Art 355) \#
Fall. 4 credits. K. Barzman.
For description, see ART H 355.
RELST 354 Indian Buddhism (also Asian Studies 354) \# \#
Fall. 4 credits. C. Minkowski
For description, see ASIAN 354.
[RELST 355 Japanese Religions (also Aslan Studies 355) 상
Fall. 4 credits. Not offered 1997-98.
J. M. Law.]
[RELST 359 Japanese Buddhism (also Asian Studies 359)
Spring. 4 credits. Not offered 1997-98. J. M. Law.]

RELST 360 Religion and Images across the Early Modern World (also HIstory of Art 358)
Spring. 4 credits. K. Barzman.
For description, see ART H 358.
RELST 382 The Culture of the Renaissance II (also Comparative Literature 362, English 325, History 364, History of Art 351, Music 390) "
Fall. 4 credits. W. J. Kennedy and
C. V. Kaske.

For description, see COM L 362.
RELST 365 Medieval Culture, 400-1150 (also History 365) "
Fall. 4 credits. Prerequisite: Religious
Studies 263 or permission of instructor.
J. J. John.

For description, see HIST 365
[RELST 368 Marrlage and Sexuallty in Medleval Europe (also History 368, Women's Studies 368) "
Spring. 4 credits. Not offered 1997-98. P. Hyams.]

RELST 393 Rellgion and Polltics in the Middle East (also Near Eastern Studles 393)
Fall. 4 credits. M. Litvak.
For description, see NES 393.
[RELST 395 Classical Indian Phllosophical Systems (also Asian Studles 395, Classics 395) © ${ }^{*}$
Fall. 4 credits. Prerequisite: some background in philosophy or in classical culture. Not offered 1997-98.
C. Minkowski.]

RELST 410 Latin Philosophical Texts (also Philosophy 410) "
Fall and spring. Variable credit. Prerequisite: knowledge of Latin and permission of instructor. S. MacDonald.
For description, see PHIL 410.
[RELST 418 Seminar in Islamic History: Muhammad and the Rise of Islam (also Near Eastern Studies 418/618, History 460/660) ©
Fall. 4 credits. Prerequisite: Religious Studies 257 or 258 , or permission of instructor. Not offered 1997-98. D. Powers.]
[RELST 420 Readings in Biblical Hebrew Prose (also Near Eastern Studies 420, Jewlsh Studies 420) © \#
Fall. 4 credits. Not offered 1997-98.
G. Rendsburg.]
[RELST 421 Religious Reflections on the Muman Body (also Asian Studles 421)
Spring. 4 credits. Not offered 1997-98 J. M. Law.]
[RELST 423 Readings in Biblical Hebrew Poetry (also Near Eastern Studies 421, Jewish Studles 421) \#
Spring. 4 credits. Not offered 1997-98. G. Rendsburg.]
[RELST 428 Medieval Hebrew Biblical Exegesis (also Near Eastern Studies 428) ©
Fall. 4 credits. Not offered 1997-98. R. Brann.]

RELST 429 Readings in the New Testament (also Comparative Literature 429, Near Eastern Studies 429, English 429) \#
Fall. 4 credits. J. Bishop.
For description, see COM L 429.
[RELST 441 Mahayana Buddhism (also Asian Studies 441)
Spring. 4 credits. Not offered 1997-98. J. M. Law.]

RELST 442 Religion and Politics in American History (also History 442)
Fall. 4 credits. R. L. Moore.
For description, see HIST 442.
RELST 443 Religion and Ritual In Chinese Society and Culture (also Anthropology 443) \#
Fall. 4 credits. S. Sangren.
For description, see ANTHR 443.
RELST 449 History and Methods of the Academic Study of Religion (also Asian Studies 449) \#
Spring. 4 credits. Required of Religious Studies majors. D. Gold.
For description, see ASIAN 449.
RELST 451 Seminar In Islamic Mistory 600-750 (also Near Eastern Studies 451/650, Mistory 461/650) 륭
Spring. 4 credits. D. Powers.
For description, see NES 451.
RELST 459 Women, Men and the Law in Muslim Court (also Near Eastern Studies 459/655, Women's Studles 458, History 457/657) \# (앙
Fall. 4 credits. L. Peirce.
For description, see NES 459
[RELST 476 Seminar in the Cinema II (also Theatre Arts 476)
Spring. 4 credits. Not offered 1997-98.
D. Fredericksen]

RELST 490-491 Directed Study 490, fall; 491, spring. $2-4$ credits each term. Staff.

RELST 495 Senior Honors Essay Fall or spring. 8 credits. Staff.
RELST 531 Problems in Medieval Art and Architecture (also History of Art 531) \#
Spring. 4 credits. R. G. Calkins.
For description, see ART H 531.

RELST 580 Problems in Asian Art (also History of Art 580)
Fall. 4 credits. K. McGowan.
For description, see ART H 580.

## Courses Approved for the Major Sponsored by Other Units

Additional courses offered by cooperating departments may also be approved for the major in Religious Studies. For details see the program director, Jane Marie Law, 259 Goldwin Smith Hall.

## Russian and East European Studies Major

J. Bomeman (Anthropology); G. J. Staller (Economics); S. Beck (Field and International Studies Program); I. Ezergailis, D. Bathrick (German Studies); V. Bunce, M. Evangelista, S. Tarrow (Government); P. Holquist, W. M. Pintner (History); U. Bronfenbrenner (emeritus, Human Development and Family Studies); P. Carden, G. Gibian, N. Pollak, S. Senderovich, G. Shapiro (Russian Literature); W. Browne, S. Paperno (Slavic linguistics); D. Stark (Sociology)
The major in Russian and East European studies has the following requirements:

1) Proficiency in Russian or an East European language with one additional advanced ( 300 -level) language or literature course, OR qualification in an East European language and qualification in another language useful for research in the area.*
*These requirements, in the case of some languages, may require study abroad or coursework completed at another institution.
2) At least one course relating to Russia or Eastern Europe, at the 200 level or above, in four of the following five departments: Government, Economics, History, Russian Literature and Sociology. Appropriate courses offered in other departments may be substituted for one of the above courses with the consent of the major adviser.
3) At least three additional courses at the 300 level or above, all from one of the following three departments: Government, History (within the History Department courses may be at the 250 level or above), or Russian Literature. One of the three courses must be at the 400 level or above. The three courses must be approved by the major adviser in the department of concentration.
To apply for the major, students are directed to the Institute for European Studies (Slavic and East European Studies Program), 120 Uris Hall. Students should designate an adviser in the department where his or her work will be concentrated. Students are encouraged to study abroad and should discuss their plans with their advisers. For questions concerning the major or the Honors Program, students should consult with their major adviser or inquire at the Institute for European Studies.

## Honors Program in Russian and East European Studies

I. Students entering the Russian and East European Studies Major Honors Program must have a cumulative average of at least

3-0, no grade below a B in courses connected with the major, and a cumulative average inside the major of at least 3.5. Students will form a special honors committee consisting of their major adviser and two other faculty members not necessarily from the Russian and East European area.
II. Honors candidates must complete an honors thesis project during the senior year. The topic should be developed and approved in consultation with their major adviser. Part of the research should include sources in Russian or an Eastern European language.
III. Students may earn a total of eight credits for the courses in the honors program and should register for the appropriate number in the department of their major adviser.
IV. Ordinarily, in the first term of the senior year, students who meet the prerequisites will do independent research and reading in a particular area under supervision of their major adviser.
V. In the second term of the senior year students will complete the honors project by a date set by the Slavic and East European Studies Program. Students should keep their committee members informed as their work progresses. Students will meet together with their whole honors committee to discuss the draft of the thesis or project and make recommendations for revision. When the project is completed, the committee will decide whether the project deserves honors, and, if so, after reviewing their academic record, will recommend students for a Bachelor of Arts cum laude, magna cum laude, or summa cum laude. The committee will also assign a grade for the honors research course.

## Courses

[COM L 337 Modem and Contemporary Theatre (also Theatre Arts 335)
Spring. 4 credits. Not offered 1997-98.]
COM L 367 The Russian Novel (also Russian Literature 367) \#
Fall. 4 credits.
[COM L 381 Marxist Cultural Theory (alsa German Literature 381 and Government 372)
4 credits. Not offered 1997-98.]
COM L 385 Reading Nabokov (also Russian Literature 385 and English 379)
Fall. 4 credits. Limited to 25.
[COM L 389 Modern Literature in Poland, Czechoslovakla, Hungary, and Yugoslavia (also Russian Literature 389)
Fall. 4 credits. Not offered 1997-98.]
COM L 425 The Jew's Body (also Comparatlve Literature 625, German Studles 422/622 and Jewlsh Studies 422/622)
Spring. 4 credits. Readings will be primarily in English, though knowledge of another language (such as Hebrew and Yiddish or languages of the European Diaspora, such as German, Italian, French, Russian, Polish, etc.) could be helpful in certain contexts.
[COM L 690 Marxlsm and Contemporary Theory
4 credits. Not offered 1997-98.]
[CZECH 131-132 Elementary Czech Not offered 1997-98.]
[CZECH 133-134 ContInuing Czech Not offered 1997-98.]
[ECON 329 Eastern Europe Today: Economics, Government, Culture (also Government 326 and Russian Literature 329)
Fall. 4 credits. Not offered 1997-98.]
ECON 368 The Economies of Central Europe and of the Former Soviet Unlon: from Central Planning to Markets
Fall or spring. 4 credits.
ECON 367 Comparatlve Economle Systems: East and West
Fall or spring. 4 credits.
ECON 370 Sociallist Economies in Transition
Fall or spring.
ECON 381 Economics of Participation and Workers' Management
Fall or spring. 4 credits.
ECON 382 The Practice and Implementation of Self-Management Fall or spring. 4 credits.
ECON 681 Economics of Participation and Self-Management
Fall or spring. 4 credits
ECON 682 Seminar on Economics of Participation and Labor-Managed Syatoms
Fall or spring. 4 credits.
[GERST 376 Contemporary Soviet Latvian Literature
Fall. 4 credits. Taught in Latvian. Not offered 1997-98.]
[OERST 377 Baltic Literature
Fall. 4 credits. Not offered 1997-98.]
[CERST 381 Marxist Cultural Theory (also Comparative Literature 381 and Government 372)
4 credits. Not offered 1997-98.]
[GOVT 100.8 Power and Polltics: The Now Eastern Europe
4 credits. Not offered 1997-98.]
GOVT 231 Introduction to Comparative Government and Politles
Spring, 4 credits.
[GOVT 325 Government and Polltics of Eastem Europe
4 credits. Not offered 1997-98.]
[GOVT 328 Eastern Europe Today: Economlcs, Government, Culture 4 credits. Not offered 1997-98.)
[GOVT 330 The Soviet Union: Politics, Economics, and Culture
Not offered 1997-98.]
[GOVT 333 Government and Polltics of the Former Sovlet Unlon
Fall. 4 credits. Not offered 1997-98.]
[GOVT 337 Marxism, Communlsm and Revolution
4 credits. Not offered 1997-98.]
GOVT 342 The New Europe
Spring. 4 credits.

0OVT 350 Comparative Revolutions Spring. 4 credits.
[OOVT 359 Soviet Foreign Policy 4 credits. Not offered 1997-98.]
[OOVT 376 Rethinking Marx 4 credits. Not offered 1997-98.]

GOVT 394 Comparative Forelgn Pollcy Spring. 4 credits.
[COVT 397 The United States and Russia 4 credits. Not offered 1997-98.]
[COVT 399 International Relations in the Former Sovlet Union
Fall. 4 credits. Not offered 1997-98.]
[OOVT 400.3 Post-Communism and Ethnic Mobillzation
4 credits. Not offered 1997-98.]
[OOVT 446 Comparative Communism 4 credits. Not offered 1997-98.]
[COVT 481 Forelgn Policy of the U.S.S.R. 4 credits. Not offered 1997-98.]
[GOVT 486 International Security: Soviet Securlty Policy 4 credits. Not offered 1997-98.]

GOVT 491 Confllct, Cooperation, and Norm: Ethnical Issues In Intemational Affairs Fall. 4 credits.
[GOVT 637 Peasantry, State, and Revolutionary Socialism
4 credits. Not offered 1997-98.]
[GOVT 639 Palltics of the Soviet Union Fall. 4 credits. Not offered 1997-98.]
[GOVT 642 The Future of European Securlty
4 credits. Not offered 1997-98.]
[GOVT 657 Comparative Democratization 4 credits. Not offered 1997-98.]

GOVT 660 Social Movements, Collectlve Action, and Reform Fall. 4 credits.
[GOVT 669 Modern Social Theory I 4 credits. Not offered 1997-98.]

GOVT 670 Modern Soclal Theory II Spring. 4 credits

HIST 218 The Russian Milltary Effort and Forelgn Pollcy \# Fall. 3 credits.
[HIST 242 Europe Since 1789 \# 4 credits. Not offered 1997-98.]

HIST 252 Russian History to 1800 \# Fall. 4 credits.

HIST 253 Russian HIstory Since 1800 \# Spring. 4 credits.

HIST 290 Twentieth-Century Russia and the Soviet Union
Spring. 4 credits.
[HIST 352 The End of the AustroHungarian Monarchy, 1848-1919 4 credits. Not offered 1997-98.]

HIST 383 Europe 1900-1945 Fall. 4 credits.
[HIST 384 Europe, 1945-1968 Fall. 4 credits. Not offered 1997-98.]

HIST 385 Europe In the 20th Century: 1968-1990
Spring. 4 credits.
[HIST 415 The United States and Russia, 1780-1914 \#
4 credits. Not offered 1997-98.]
[HIST 464 Russian Social Mistory \# Spring. 4 credits. Not offered 1997-98.]
[HIST 485 The Historical Origin of the Post-Soviet Sucessor States Spring. 4 credits. Not offered 1997-98.]
HIST 490 Social and Cultural History of the Russian Intelligentsia Spring. 4 credits.
HIST 677 Seminar in Russian History Fall. 4 credits.

HIST 678 Seminar in European Political History
Spring. 4 credits.
〔HUNGR 131-132 Elementary Hungarlan 3 credits. Not offered 1997-98.]
[ILRIC 331 Comparative Industrlal Relations Systems: Non-Western Countries
3 credits. Not offered 1997-98.]
[ILRCB 606 Theorles of Industrial Relations Systems
3 credits. Not offered 1997-98.]
NBA 583 Market Transitions in Eastern Europe
Fall. 3 credits.
POLSH 131-132 Elementary Polish 131, fall; 132, spring. 3 credits each term.
[POLSH 133-134 Continuing Pollsh 133, fall; 134, spring. 3 credits each term.]
[ROMAN 131-132 Elementary Romanian 131, fall; 134, spring. 3 credits. Not offered 1997-98.]
[ROMAN 133-134 Continuing Romanian 133 , fall; 134 , spring. 3 credits. Not offered 1997-98.]

RUSSA 103-104 Conversation Practice 103 , fall; 104 , spring. 2 credits each term.
RUSSL 103 Freshman Writing Seminar: Classics of Russian Thought and Literature Fall or spring. 3 credits.

RUSSL 104 Freshman Writing Seminar: Nineteenth-Century Russian Literary Masterpieces
Fall or spring. 3 credits.
RUSSL 105 Freshman Writing Seminar: Twentieth-Century Russian Literary Masterpieces
Fall. 3 credits.
[RUSSL 108 Freshman Writing Seminar Fall or spring. 3 credits. Not offered 1997-98.]

RUSSL 109 Russian Science Fiction Spring. 3 credits.

RUSSA 121-122 Elementary Russian 121 , fall or summer; 122 , spring or summer. 4 credits each term.

RUSSA 123 Continuing Russian Fall. 4 credits.

RUSSL 201-202 Readings in Russian Literature \#
201, fall; 202, spring. G. Shapiro. 3 credits each term.

## RUSSA 203-204 Intermediate

Composition and Conversation
203, fall, spring, or summer; 204, spring.
3 credits each term.
RUSSA 205-206 Reading Russian Press 205, fall; 206, spring. 2 credits each term.
RUSSA 207-208 Russian Phonetics for Beginners
207, fall; 208, spring. 2 credits
RUSSL 207 Themes from Russian Culture I \#
Not offered 1997-98.]
[RUSSL 208 Themes from Russian Culture II
Spring. 3 credits. Not offered 1997-98.]
[RUSSA 301-302 Advanced Russian Grammar and Reading]

RUSSA 303-304 Advanced Composition and Conversation
303, fall; 304, spring. 4 credits each term.
RUSSA 305-306 Directed Individual Study
305 , fall; 306 , spring. 2 credits each term.
RUSSA 309-310 Advanced Reading 309 , fall; 310 , spring. 4 credits.
[RUSSL 331 Introduction to Russian Poetry "
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 332 Russian Drama and Theatre (also Theatre Arts 332)
Fall. 4 credits. Not offered 1997-98.1
[RUSSL 333 Twentieth-Century Poetry Spring. 4 credits. Not offered 1997-98.]
[RUSSL 334 The Russian Short Story \# Fall. 4 credits. Not offered 1997-98.]
[RUSSL 335 Gogol \# Spring. 4 credits. Not offered 1997-98.J
[RUSSL 350 Education and the Western Literary Tradition (also Comparative Literature 350 and College Scholar 350) \#
Spring. 4 credits. Not offered 1997-98]
RUSSL 367 The Russian Novel \# Fall. 4 credits.
RUSSL 368 Russian Literature From 1917 to the Present
Fall. 4 credits.
[RUSSL 369 Dostoevsky " 4 credits. Not offered 1997-98.]
[RUSSL 371 Literature of the Third Wave Spring. 4 credits. Not offered 1997-98.]
[RUSSL 373 Chekhov in the Context of Contemporary European Literature and Art (also Comparatlve Literature 395) 曾
Fall. 4 credits. Not offered 1997-98.J
[RUSSL 375 Literature of the Soviet Period 1917-1945
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 376 Literature of the Soviet Period 1945-1985
Spring. 4 credits. Not offered 1997-98.J

RUSSL 379 The Russian Connection \# Spring. 4 credits.
[RUSSL 380 Soviet Dissident Literature Fall. 4 credits. Not offered 1997-98.]

RUSSL 385 Reading Nabokov (also CompL 385 and English 379) Spring. 4 credits. Not offered 1997-98.]
[RUSSL 388 Ideas and Form In Novels of Social Inquiry (also Comparative Literature 388)
4 credits. Not offered 1997-98.]
[RUSSL 389 Contemporary Literature in Central and East Europe (also Comparative Llterature 389)
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 390 The Power of Nationalism: Expressions of National Feelings in Polltics, LItorature, History, and the Arts (also Comparative Literature 390)
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 393 Honors Essay Tutorial Fall and spring. 8 credits. Not offered 1997-98.
Must be taken in two consecutive semesters in the senior year. Credit for the first semester will be awarded upon completion of the second semester. For information, please see the Director of Undergraduate Studies.]
[RUSSL 400 ReadIng the Great Tradition \#
Fall. 4 credits. Not offered 1997-98.]
[RUSSA 401-402 History of the Russian Language
401, fall; 402 , spring. 4 credits each term. Not offered 1997-98.]
Russa 403-[404] Linguistic Structure of Russian
403 , fall; [ 404, spring]. 4 credits. 404 Not offered 1997-98.
[RUSSA 407-408 Russian Phonetics 407, fall; 408 , spring. Not offered 1997-98.]

RUSSA 409 Teaching Russian as a Foreign Language
Fall or spring. 1 credit.
[RUSSL 409 Russian Stylistics
Fall. 4 credits. Not offered 1997-98.]
RUSSA 413-414 Advanced Conversation and Stylistics
413, fall; 414, spring. 2 credits each term.
[RUSSL 415 Postsymbolist Russian Poetry
4 credits. Not offered 1997-98.]
RUSSL 430 Practice in Translation Spring. 4 credits.
[RUSSL 431 Contemporary Russian Prose
Spring. 4 credits. Not offered 1997-98.]
[RUSSL 432 Pushkin \# Spring. 4 credits. Not offered 1997-98.]
RUSSL 445 Batiushkov and Pasternak Fall. 4 credits.
RUSSL 460 Short Works of Tolstoy and Dostoevsky
Spring. 4 credits.
RUSSL 491 Reading Course: Russian Literature in the Origlnal Language Fall or spring. 1 credit.

RUSSL 492 Supervised Reading in Russian Literature
Fall or spring. $1-4$ credits each term.
[RUSSL 498 Russian Symbolism 4 credits. Not offered 1997-98.]
[RUSSL 499 Research Modernism 4 credits. Not offered 1997-98.]

【RUSSL 600 Proseminar: Research Methodology In Russian Literature
Fall. 4 credits. Not offered 1997-98.]
[RUSSA 601 Old Church Slavonic Fall. 4 credits. Not offered 1997-98.]
[RUSSA 602 Old Russian Texts Spring. 4 credits. Not offered 1997-98.]
[RUSSL 603 Graduate Seminar: Neglected Masterpleces of Short Russian Prose
Spring. 4 credits. Not offered 1997-98.]
RUSSL 611 Supervised ReadIng and Research
Fall or spring. $2-4$ credits.
[RUSSL 617 Russian Stylistics I Not offered 1997-98.]
[RUSSL 618 Russlan Styllstics II Not offered 1997-98.J
[RUSSL 619 Seventeenth-Century Russian Literature
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 620 Twentioth-Century Russian Poetry
Spring. 4 credits, Not offered 1997-98.]
[RUSSL 621 Old Russian Literature Spring. 4 credits. Not offered 1997-98.]
[RUSSL 622 Elghteenth-Century Russian Literature
Spring. 4 credits. Not offered 1997-98.]
[RUSSL 623 Early Nineteenth-Century Literature
Not offered 1997-98.]
RUSSL 624 Russian Romanticism Spring. 4 credits.
[RUSSL 625 Russian Reallsm Fall. 4 credits. Also open to advanced undergraduates with permission of instructor. Not offered 1997-98.]
[RUSSL 626 The Tradition of Russian Poetry
Spring. 4 credits. Not offered 1997-98.]
[RUSSL 630 Gogol 4 credits. Taught in Russian. Not offered 1997-98.]
[RUSSL 632 Russian Drama and Literature (also Theatre Arts 622) Fall. 4 credits. Not offered 1997-98]

RUSSA 633-634 Russian for Russian Specialists
633, fall; 634 , spring. 4 credits each term.
[RUSSL 635 Modern Russian Literary Criticism
Spring. 4 credits. Not offered 1997-98.]
RUSSL 641 Bakhtin Spring. 4 credits.
[RUSSL 650 Russian Intellectual History 4 credits. Not offered 1997-98.]

## RUSSA 651-652 Comparative Slavic

 Lingulstics651, fall; 652 , spring. 4 credits each term.
[RUSSL 669 Seminar: Dostoevsky Fall. 4 credits. Not offered 1997-98.J

RUSSL 671 Seminar in Russian Literature
Spring. 4 credits.
[RUSSL 672 Seminar In TwentlethCentury Russian Literature
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 673 The Russian Nabokov Fall. 4 credits. Not offered 1997-98. Also open to advanced undergraduates.]
[RUSSL 674 Solzhenitsyn and Literature of the Gulag
Fall. 4 credits. Not offered 1997-98.]
RUSSL 675 Russian Llterature, 1917-1945
Fall. 4 credits. Not offered 1997-98.]
[RUSSL 676 Russian LIterature, 1945-Present
Spring. 4 credits. Not offered 1997-98.]
[RUSSL 698 Russian Symbolism 4 credits. Not offered 1997-98.]
[RUSSL 699 Russian Modernism 4 credits. Not offered 1997-98.]
[SEBCR 131-132 Elementary SerboCroatlan
131, fall; 132, spring. 3 credits each term. Not offered 1997-98.]

SEBCR 133-134 ContInuing SerboCroatian
133, fall; 134, spring. 3 credits each term.
SOC 230 Knowledge and Power 3 credits.
[SOC 360 State and Soclety In Comparative Perspectlve 3 credits. Not offered 1997-98.]
[SOC 365 Comparatlve Perspectives on Soclalist Socletles and Economics 4 credits. Not offered 1997-98.]
[SOC 366 Transitlons From State Socialism Spring. 4 credits. Not offered 1997-98.]

SOC 510 Comparative Societal Analysis Fall. 4 credits.
SOC 583 Transitions to Market Economles in Eastern Europe (also Management NBA 583) Spring. 4 credits.
[THETR 322 Russian Drama and Theatre (also Russian Literature 332)
4 credits. Not offered 1997-98.]
[THETR 335 Modern and Contemporary Theatre (also Comparative Literature 337)
Spring. 4 credits. Not offered 1997-98.]
THETR 378 Russian Flims of the 1920s and French Films of the 1960s Spring. 4 credits.
[THETR 662 Russian Drama and Theatre |also Russian Literature 632)
4 credits. Not offered 1997-98.]
[UKRAN 131-132 Elementary Ukrainian 131, fall; 132, spring. 3 credits each term. Not offered 1997-98.]

## Society for the Humanities

Dominick LaCapra. Director
Fellows for 1997-98
Teresa Brennan (The New School of Social Research)

Tom Conley (Harvard University)
Jonathan Elmer (University of Indiana at Bloomington)
Bruce Fink (Duquesne University)
Marià Antonia Garcees (Cornell University)
Max Hernandez (Institute of Psychoanalysis, Lima, Peru)

Ellis Hanson (Comell University)
Mary Jacobus (Comell University)
Biddy Martin (Cornell University)
Tim Murray (Cornell University)
Petar Ramadanovic (University of Virginia, Charlottesville)
Herman Rapaport (Wayne State University) Anette Schwarz (Yale University) Mark Seltzer (Cornell University)
Suzanne Stewart (Cornell University) Lindsey Stonebridge (University of East Anglia)
The Society annually awards fellowships for research in the humanities. The Fellows offer, in line with their research, informal seminars intended to be exploratory or interdisciplinary. These seminars are open to graduate students, suitably qualified undergraduates, and interested auditors. Students who want credit for a seminar should formally register in their own college. Persons other than those officially enrolled may attend as visitors with permission of the Fellow. The theme for 1997-98 is Why Trauma, Why Psychoanalysis.

## S HUM 402 Psychoanalysis and History

Fall. 3 credits. Limited to 15 students
T. Brennan.

What difference does psychoanalysis make to history? There are two schools of contemporary thought, both stemming from Lacan. One sees an ahistorical kernel as ineradicable from the psyche, whatever the social relations. The other sees a progressive deterioration in history, a downward slide; this theory resonates with the Frankfurt school and also draws on Heidegger. These approaches are not absolutely incompatible, but they bring the quesion of the limits of history into sharp focus. One way of exploring the compatiblities is to give Lacan's concept of the "empty kernel: a content," which brings the figure of the mother back into history. This will also be explored in this course, using sources ranging from Augustine to Melanie Klein.

## S HUM 403 Rhetorlcs of Affect and Event

 in Early AmerlcaSpring. 3 credits. Limited to 15 students. J. Elmer.

In early national America, a variety of discourses linked the presentation of emotion, passion, or affect generally with certain ideal events: the reception of grace, for instance, or the moment of seduction, or the ever-
postponed extinction of the Native American. What logics join affect and event in modernity? We will match certain important

American writings from the period between 1740 and 1830 with texts of social theory concerned with temporality and communication in modernity, as well as psychoanalytic descriptions of trauma, anxiety and identity.
S HUM 404 Trauma and Captivity from Cervantes to García Mảrquez (also Spanish Literature 404)
Fall. 4 credits. Limited to 15 students. Limited to graduate students and qualified undergraduates. M.A. Garcès.
The psychoanalytical notion of trauma comes to the fore in the narratives of Cervantes through the repetitive reenactment of his ordeal as a captive of Maghrebi corsairs in Algiers. Our seminar will survey the effects of captivity in Cervantes, from his famous "Captive's Tale," in Don Quijote 1 , to the stories of human bondage and delusions explored by his novellas. No other age resembles more the early modern Mediterranean world, described by Cervantes, than the twentieth-century with its random imprisonments and assassinations for dissenting political view. Paying particular attention to the erotico-political connections surfacing in these fictions, we will compare Cervantes' approach with contemporary texts and films that deal with torture and kidnapping in Latin America. Selections include works by
Cervantes, Dorfman, García Märquez, Säbato, and Luisa Valenzuela. Theoretical readings on trauma and torture may be drawn from texts by Caruth, Foucault, Graciano, Felman, and Scarry, among others. The course will be conducted in English. Special arrangements will be made for students wishing to read the texts in Spanish.

## S HUM 405 Freud and Since: Trauma and the Object (also English 424/624)

Fall. 4 credits. Limited to 15 students. M. Jacobus.

Freud's and Klein's writings redefine trauma as the loss of the object. We will explore the implications of this redefinition for the evolution of psychoanalytic theory in England and France, asking the question: how does psychoanalysis as a theory of object relations help us to understand the nature of trauma?

## S HUM 406 Trauma and Momory

Fall. 3 credits. Limited to 15 students.

## P. Ramadanovic.

In this seminar we will try to bring together significant philosophical concepts of memory (Plato, Aristotle, St. Augustine, Nietzsche) and Freud's analysis of trauma in order to provide an understanding of traumatic memory that includes both perspectives. With Derrida we will also inquire into the epistemological, ontological, and ethical aspects of the question of memory.
5 HUM 408 Literature and the Uncanny (German Studies 408)
Fall. 3 credits. Limited to 15 students. A. Schwarz.

An analysis of the relationship between literature and uncanny phenomena such as ghosts, doubles, and automatons. Discussion of varying figurations and effects of the "uncanny" on narrative and social structures in texts ranging from the late 18th to the early 20th century. Special focus on questions of spatiality, sociality, gender, trauma, and communities. Authors include: Freud, Heidegger, Benjamin, Hoffmann, Goethe, Tieck, Hawthorne, Keller, Hofmannsthal, Kafka, Rilke. Readings and discussion in English.

## S HUM 409 The Pathological Public

 Sphere (also English 457/657)Fall. 4 credits. Limited to 15 students. Limited to graduate students and seniors with permission of instructor. Seniors must submit a $2-3$ page statement on related or preparatory courses taken and reasons for choosing seminar. Deliver to room 212 A.D. White House by 8/28/97. M. Seltzer.

An interdisciplinary examination of the shifting understandings of the social and collective conditions of the subject, from the later nineteenth century to the present. More exactly, an account of the ways in which spectacles of public violence and pathology have come to provide one of the most powerful ways of keeping visible the possibility of the shared social spaces of the public sphere itself, albeit a way of conserving that possibility in markedly negative or aversive form. What this amounts to is the formation of what might be called the pathological public sphere. Readings will include literary, sociological, and psychological accounts of "the crowd," "mass culture," and the "public sphere." Names in psychological theory will include Freud, Group Psychology and the Analysis of the Ego, Laplanche, Life and Death in Psychoanalysis, Zizek, For They Know Not What They Do: Enjoyment as a Political Factor, and BorchJacobsen, The Freudian Subject, in anthropological/sociological work, Canetti, Crowds and Power, Theweleite, Male Fantasies, Habermas, The Structural Transformation of the Public Sphere; and in literary/visual arts, novels (among others, Thompson, Krabbe, Harris), and films including Pandora's Box, The Vanishing, True Romance.

## S HUM 410 Polltics and Trauma: From Revolution to Transgression <br> Fall. 3 credits. Limited to 15 students.

 S. Stewart.How does the nineteenth-century opposition of reform and revolution get rewritten through the twentieth century as the opposition of patriarchy and transgression? This seminar will trace the psychoanalytic theory of the (male) democratic subject through this transformation. We will begin with Freud, especially his cultural writings on his founding myth of democratic subjectivity as the killing of the primal father. Freud's work, as well as his feminist critics, will comprise the largest part of the course. Subsequent readings will include the theorists of German Social Democracy, Benjamin, Schmitt, Lacan, Bersani, and Felman.

## S HUM 412 Theory, Pathology, Treatment (also German Studies 411)

Fall. 4 credits. Limited to 15 students. B. Martin and C. Miller. In keeping with the Society of the Humanities theme, "Why Trauma, Why Psychoanalysis," this course is designed to examine not only psychoanalytical theories but alternative approaches to the conceptualization of "trauma," "childhood," and intervention. The course will be team-taught. Biddy Martin, professor of German studies, will explore the constructions of "trauma," childhood," and "play" in the history of psychoanalytic work on children. Carol Maxwell Miller, a clinical psychologist, will discuss the effects and treatment of trauma from several current theoretical perspectives and provide an overview of ongoing research. It is our
purpose to use different disciplinary bases to open up serious questions about uses of psychoanalysis in the humanities and dismissals of psychoanalysis in social sciences.

## S HUM 486 Hospitality In 20th Century

 (also Romance Studies 486)Fall. 3 credits. E. Kaufman.
S HUM 450 Representing The Holocaust Then and Now (also German Studles 450 and Jewish Studles 451)
Fall. 3 credit. Limited to 20 students. D. Brenner.

## S HUM 415 Cartographical Writing in

 Early Modern FranceSpring. 3 credits. Limited to 15 students. T. Conley.
"The unknown inspires fear." Thus Paul Zumthor sums up the "edenising" and "demonising" effects left by oceanic travel and the Turkish menace on Christendom after 1500 (La mesure du monde: 253). This class will study how the growth of cartography is tied to shifts in the affective experience of space in poetry, literature and painting from 1450 to 1700 . Readings of primary texts, from the incunabula to the triumph of mapping in the reign of Louis XIV, will be juxtaposed to historical and theoretical work on the relation of extension and subjectivity: the traumatic effect of an expanding world is countered by strategies of mensuration and representation that lead to state reason. Texts of the early modern canon will be studied concurrently with cartographical forms. Included will be works in the Humanist and Baroque canon and cartographical materials that range from mappaemundi to city-views and early modem atlases.
S HUM 416 Seminar on Jacques Lacan Spring. 3 credits. Limited to 15 students. B. Fink.

This course provides a broad overview of Lacan's work, taking up his general approach to theory as well as his basic concepts: imaginary, symbolic, real; subject, object $a$, Other; need, demand, love, desire, jouissance; alienation and separation; the "traversing" of fantasy; the phallus, castration, and
"sexuation;" neurosis, psychosis, and perversion; and so on. No knowledge of French or previous study of Lacan required.

## S HUM 417 Maladies of the Soul: Don Quijote and the Modem Novel (also Spanlsh Literature 417)

Spring. 4 credits. Limited to 15 students. Limited to graduate students and upper division students. M.A. Garcés.
Most of us have heard that Cervantes wrote "the first great novel of world literature," as Lukâcs hailed it; or even the first modern work of literature" as Foucault noted. In fact, Foucault believed that Cervantes's discovery of the arbitrary relation of words and things ushered in the modern age. A precursor in many ways, Cervantes's great novel begins out of an erosion of belief in the authority of the written world, an approach that colors our post-modem habits of thought. Our seminar will undertake an interdisciplinary reading of Don Quijote, using theoretical, sociohistorical, psychoanalytical, and feminist perspectives on the novel. Particular attention will be paid to the question of dreams and delusions as processes that parallel the creative process itself, and to the problem of desire, so central to Cervantes. The class will be conducted in English.

## S HUM 418 The Sexual Child (also

 English 401/601)Spring. 4 credits. Limited to 15 students. E. Hanson.

With respect to children, Americans today have what we might call a pedophilic imagination. The sexual child, as an emblem of trauma, has become the focus of moral panics from every point on the political spectrum-panics about cultural phenomena as various as child pornography, single motherhood, the Roman Catholic priesthood, access to the Internet, and gay studies curricula. But what is a child? What does it mean to love or desire a child? How might we construe child sexuality beyond the dominant, largely Freudian paradigm of Trauma? Who promotes the idea of child sexuality and why? How has it been constructed through narrative and visual imagery? This course offers a political, historical, and rhetorical analysis of the language of trauma that has developed around the sexual child in the past century. Readings for the course will include theoretical texts on child sexuality, trauma, and the debate over "false memory" (Sigmund Freud, James Kincaid, Judith Lewis Herman, Frederick Crews); we will also do close readings of literary and visual texts, from Lewis Carroll's Alice books to Stanley Kubrick's film The Shining and Sally Mann's erotic photographs of children.

SHUM 419 The Trauma of the Conquest Spring. 3 credits. Limited to 15 students. Some knowledge of psychoanalysis is required. M. Hernandez. All sorts of consequences, factual and ideological, seem to derive from the traumatic westernization of the Andean world. The application of psychoanalysis to the understanding of the trauma of the conquest of the Incas may allow for new narratives of the event and a deeper comprehension of its consequences. The seminar also offers a chance to review the psychoanalytic concept of trauma and the value of its application.

## S HUM 420 Objects, Lost and Found

 (also English 420/620)Spring. 4 credits. Limited to 15 students. M. Jacobus.

Psychanalysis has spoken to literature from its inception. Approaching literary and aesthetic questions by way of the legacy of Freud and Klein, we will ask how criticism can engage productively with central concepts in British and Continental object relations theory. We will focus on the reading of specific literary "objects."

## S HUM 421 Electronic Art, Cultural Memory, Baroque Theory (also Engllsh 434/634)

Spring. 4 credits. Limited to 15 students. Students should have a confident grasp of electronic art and/or early modern culture. T. Murray.

The course will analyze the "interface" between recent projects in video and the electronic arts (from installation to the World Wide Web) and the traumatic memory of early modern culture. How should we read the attraction and resistance of electronic art to early modern precedents of utopia, colonialism, passion, light, and space? Is it coincidental that so many video and electronic artists have turned their attention to consider the traumatic consequences of the new early modern technologies of printing, science, art, and colonialism? Does the tum to the

Baroque shed light on our own society's ambivalent response to electronic art and its digital machineries developed in an uncertain age of rapid societal transformation, erosion of identity and national boundaries, suspicion of the passions, and panic caused by epidemic and natural catastrophe? We will consider video and electronic artists such as Juan Downey, Thierry Kuntzel, Esther Parada, Gary Hill, Peter Greenaway, Derek Jarman, Keith Piper, Bill Viola, Valie Export, Francesc Torres, Tony Oursler, Lynne Hershman, and Steve Fagin. The seminar also will consider essays on visuality and the Baroque by such writers as Gilles Deleuze, Julia Kristeva, Raymond Bellour, Louis Marin, Rosalind Krauss, Mieke Bal, Christine Buci-Glucksmann,
D. N. Rodowick.

S HUM 422 The Age of Anxlety
Spring. 3 credits. Limited to 15 students. General knowledge of psychoanalytic and/ or critical theory recommended.
L. Stonebridge.

Where there is historical trauma, there is also anxiety. This interdisciplinary seminar explores the writing of anxiety in the work of psychoanalysts (including Freud, Klein and Bion), writers, artists and social policy makers during World War Two. Is it possible to construct a history of anxiety? Or does anxiety tell us something about how we read history itself?

S HUM 423 Who Owns the Transference? Spring. 3 credits. Limited to 15 students. H. Rapaport.

## S HUM 489 Polltics and Silence (also Romance Studles 489)

Spring. 3 credits. E. Kaufman.

## S HUM 444 German Jewish Culture: From the Enlightenment to the Present (also German Studies 442 and Jowish Studles 442)

Spring. 3 credits. Limited to 20 students. D. Brenner

## South Asia Program

S. Feldman, director; A. Basu, K. Basu, D. Bor, C. Fairbanks, S. Feldman, J. Gair, D. Gold,
D. Henderson, R. Herring, D. Holmberg,
J. Jasanoff, S. Jasanoff, M. Katzenstein,
V. Kayastha, K. A. R. Kennedy, S. Kuruvilla,
B. Lust, B. G. MacDougall, M. Majumdar,
K. March, C. Minkowski, S. Mohanty,
V. Munasinghe, A. Nussbaum, S. Oja,
P. Olpadwala, B. Perlus, T. Poleman,
S. Subramanian, D. Sudan, N. Uphoff,
M. Walter

The South Asia Program coordinates research, teaching, and special campus events relating to Bangladesh, India, Pakistan, Nepal, and Sri Lanka. The program faculty includes members from a variety of disciplines, including agricultural economics, agricultural engineering, anthropology, architecture, art, city and regional planning, communication, comparative religion, ecology and systematics, economics, English, government, history history of art, human ecology, industrial and labor relations, international agriculture, linguistics, literature, rural sociology, and science, technology, and society. Undergraduates with a special interest in the region may major in Asian studies with a South Asia concentration, or complete a South Asia concentration with any other major. Graduate students may pursue the M.A. degree in Asian

Studies with a concentration in South Asia. Languages offered are Bengali, Hindi, Nepali, Sinhala, Urdu, Sanskrit, and Pali. Foreign Language Area Studies Fellowships are available to Cornell graduate students who are U.S. citizens. Comell is a class A member of the American Institute of Indian Studies (AIIS), and undergraduates as well as graduate students are eligible for AIIS intensive language program fellowships in India. For courses available in South Asian studies and details on the major, see the Department of Asian Studies listing in this volume.
Students who want further information on courses and research opportunities should direct questions to the program office, 170 Uris Hall

## Southeast Asia Program

J. U. Wolff, director; B. R. Anderson,
W. B. Bailey, R. Barker, T. Chaloemtiarana, A. C. Cohn, G. Diffloth, P. Gellert
M. F. Hatch, N. Jagacinski, A. T. Kirsch,
J. M. Krier, K. McGowan, S. J. O'Connor, A. Riedy, T. Shiraishi, J. T. Siegel,
K. W. Taylor, E. Thorbecke, L. Williams, D. K. Wyatt

Southeast Asia studies at Cornell is included within the framework of the Department of Asian Studies. Nineteen full-time core faculty members in the colleges of Arts and Sciences, Business and Public Administration, and Agriculture and Life Sciences participate in an interdisciplinary program of teaching and research on the history, culture, and societies of the region stretching from Burma through the Philippines. An additional 18 lecturers and other faculty provide language and area instruction on Southeast Asia. Courses are offered in such fields as agricultural economics, anthropology, Asian studies, economics, finance, government, history, history of art, linguistics, music, and rural sociology Instruction is also offered in a wide variety of Southeast Asian languages: Burmese, Cambodian, Cebuano (Bisayan), Indonesian, Javanese, Tagalog, Thai, and Vietnamese, for which Foreign Language Area Studies Fellowships are available to U.S. citizens. Intensive instruction in Indonesian is offered in the Full-Year Asian Language Concentration (FALCON) which covers the beginning and intermediate levels. An intensive advanced Indonesian language program is held from June through August in Indonesia each summer. The formal program of study at Cornell is enriched by a diverse range of extracurricular activities, including an informal weekly brown bag seminar and concerts of the Gamelan Ensemble. The
George McT. Kahin Center for Advanced Research on Southeast Asia is also the site for public lectures and other activities related to this area. The John M. Echols Collection on Southeast Asia, in Kroch Library, is the most comprehensive collection on this subject in America
Undergraduates may major in Asian studies with a focus on Southeast Asia and its languages, or they may elect to take a concentration in Southeast Asia studies by completing 18 credits of course work. Students interested in exploring these opportunities should consult the director, Southeast Asia Program, 180 Uris Hall.

## Statistical Science Department

The university-wide Department of Statistical Science coordinates undergraduate and graduate study in statistics and probability. A list of suitable courses can be found in the section, "Interdisciplinary Centers, Programs, and Studies," in the front of this catalog.

## Women's Studies Program

S. Samuels, director; J. E. Gainor, director of undergraduate studies; D. Castillo, director of graduate studies; L. Abel, K. Abrams,
A. Adams, N. Assié-Lumumba, K. Barzman,
P. Becker, S. Bem, L. Beneria, A. Berger,
J. Bernstock, L. Bogel, Laura Brown,

Lois Brown, J. Brumberg, B. Correll,
I. DeVault, J. Farley, S. Feldman, J. Fortune, N. Furman, J. Ginsburg, S. Greene, E. Hanson, N. Hirschmann, M. Hite, D. Holmberg, P. Hyams, B. J. Isbell, M. Jacobus, J. Jennings, K. Jones, M. Katzenstein, C. Lazzaro, K. March C. A. Martin, S. McConnell-Ginet, D. Mermin M. Migiel, M. B. Norton, S. Orlov, L. Peirce M. Rossiter, S. Sangren, R. Savin-Williams, K. Shanley, A. M. Smith, A. Villerajo,
M. Washington, R. Weil, J. Whiting, S. Wong

## Introduction to the Program

Women's Studies is an interdisciplinary program that seeks to deepen understanding of women's lives, culture, and history, in all their complex multiplicities. Transformative as well as additive, women's studies challenges us to re-examine much of what we think we already know by providing an intellectualand critical-feminist framework through which to view the many interconnections among gender, knowledge, and power. Thus, central to the curriculum in women's studies are such overarching notions as these:
(a) that definitions of gender-including those that privilege exclusive hetero-sexuality-are not natural or universal but are instead social constructions that vary across time and place, serve political ends, and have ideological underpinnings;
(b) that systems of gender inequality interact with other social inequalities, including those of class, race, ethnicity, sexual preference, and Western vs. non-Western cultures; and
(c) that even the most current knowledge derived from the humanities, social sciences, and natural sciences is not as impartial, objective, or neutral as has traditionally been thought but instead emerges out of particular historical and political contexts.

Although all Women's Studies courses except writing seminars count toward the major, they do not all satisfy distribution requirements or count toward the total hours required in Arts and Sciences; if a course is not cross-listed with another Arts and Sciences department, be sure to check with college offices about whether it will satisfy distribution or our requirements for Arts and Sciences.

## Program Offerings

The Women's Studies Program offers an undergraduate major, an undergraduate concentration, and a graduate minor. Undergraduate students in the College of Arts
and Sciences who want to major in women's studies can apply directly to the program.
Undergraduate students in other colleges at Comell will need to work out special arrangements and should speak to the Director of Undergraduate Studies (DUS) in Women's Studies.

## The Undergraduate Major

The questions posed by feminist inquiry cannot be answered from within any single discipline or even from a simple combination of two or more disciplines. For that reason, the women's studies major provides students with a basic groundwork in the interdisciplinary field of women's studies and then requires each student to construct an advanced and individually tailored program of study on a topic, in a discipline, or in a combination of disciplines of special interest to the student alone.
Rather than specifying a particular sequence of required courses for each and every srudent, the women's studies major gives students a starting point in women's studies, an active advisory structure to help them shape a curriculum, and an ongoing impetus to reflection about their entire program of undergraduate study.
In designing their major, students should keep in mind that there are not many graduate programs offering a degree in women's studies itself. Accordingly, undergraduates wishing to major in women's studies should talk at length with a faculty member about how to design a program of study that will best qualify them for entry into either a job or a postgraduate degree program when they leave Cornell. To give one example of what needs to be considered in designing a major: Undergraduates who might want to do graduate study within a discipline will need to develop a certain level of disciplinary specialization at the undergraduate level. This can be done either by supplementing the women's studies major with a carefully selected cluster of courses in that discipline or by pursuing a double major.

## Requirements for a Women's Studles Major

1. Prerequisite courses: Before applying to the major, the student must complete any two Women's Studies courses with a grade of B - or better. Some suggested entry-level courses for 1997-98 include: $206,210,234,244,263,269,273,277$, and 285 . These courses would count both as prerequisites and as part of the women's studies major. Freshman writing seminars, in contrast, would count as prerequisite courses but not as part of the major.
2. Required course work:
a. A minimum of 36 credits in women's studies is required for the major. No course in which the student has eamed less than a C-can count toward these 36 credits. Although there is no single women's studies course that is required of all students, every major must complete a program of study that is both graduated in difficulty and interdisciplinary in scope-a program, in other words, that reflects both the breadth and the depth of women's studies scholarship. This program of study must be developed in consultation with the student's adviser in
women's studies and must include advanced seminars at the 300 level or above.
b. Students may count up to three courses outside women's studies toward the major if those courses are approved by the student's women's studies adviser as constituting a meaningful component of the student's women's studies curriculum. To facilitate the coordination of a women's studies major with other majors in the college, students may also count toward the major up to three women's studies courses that are simultaneously being counted toward a second major.
3. The Honors Program: To graduate with honors, the major in women's studies must complete a senior thesis under the supervision of a women's studies faculty member and defend that thesis orally before an honors committee. To be eligible for honors, students must have at least a cumulative grade point average of 3.0 in all coursework and a 3.3 average in all courses applying to their women's studies major. Students interested in the Honors Program should consult the Director of Undergraduate Studies (DUS) late in the spring semester of their junior year or very early in the fall semester of their senior year. For more information about the Honors Program, see WOMNS 400 and the "Guidelines For a Senior Honors Thesis" available in the Women's Studies Program office.

## The Women's Studies Concentration

Undergraduate students in any college at Cornell can concentrate in Women's Studies in conjunction with a major defined elsewhere in the university. The concentration consists of four courses in Women's Studies completed with a grade of C - or above, no more than two of which can come from a single discipline and none of which should overlap with the major. Freshman writing seminars cannot be included within the four required courses. Students wishing to concentrate in Women's Studies should see the DUS.

## The LBG Concentration

Women's Studies serves as home to the Lesbian, Bisexual, and Gay Studies Program, which offers an undergraduate concentration as well as a graduate minor. The LBG undergraduate concentration consists of four courses. The Women's Studies courses that may be used to fulfill the LBG concentration are $210,262,277,321,355,376,377,413,433$, $450 / 650,465,493,621,654$, and 656 . For a complete listing of all courses that will fulfill this concentration please see the LBG Sudies portion of this catalog.

## I. Freshman Writing Semlnars womNS 104 FWS: Whose Famllies? Whose Values? (also History 105)

Spring. 3 credits. M. B. Norton. Today the term "family values" appears frequently in the media. Traditional family values are being destroyed, commentators claim, by (take your pick): divorce, abortion, the gay-lesbian rights movement, wageearning mothers, teenage out-of-wedlock births, violence and sex on television and in the movies, rap music, you name it...the list seems endless. This seminar will first identify and analyze contemporary texts discussing the
seeming decline in "family values." It will then read and analyze historical works. Finally, students will explore the experience of their own families by examining documents and/or interviewing relatives, primarily parents and grandparents. The aim is to place "common knowledge" into concrete historical and personal contexts, and to familiarize students with the process of rigorous analysis.

## WOMNS 105 Feminine and Mascullne

Ideals in Japanese Culture (also Aslan Studles 105)
Fall and spring. 3 credits. Staff. In its long history, Japanese culture has developed a large number of role modelsthe aristocrat, poet-priest, warrior, entertainer, "salary man," and "education mama"-and idealized them in its literature and art. Using these ideals as its subject matter, the seminar will give students practice in reading texts closely, analyzing ideas, and writing various types of papers. Through studying Japanese concepts of femininity and masculinity, the students will not only explore a new culture but will also gain new perspectives on their own culures.

## WOMNS 106 FWS: Women and Writing

 (also English 105)Fall and spring. 3 credits. Staff. What is a woman? How does she confront her personal experience? Does she play a special role in history, in our definition of society, or in our understanding of language and literature? This course will explore the relationship between women and writing. We will discuss writings by and about women, debate our attitudes toward feminism, and analyze the relevance of these questions to our own written work. Individual sections will emphasize different aspects of the relation between women and writing. Which section to choose would depend on your own interest in exploring how women appear in private or autobiographical writings, historical contexts, and/or literary works. Further information on specific sections is available in the freshman writing seminar office. Textual overlap is kept to a minimum so that students can take more than one Women and Writing seminar during their time at Comell.

## WOMNS 107 FWS: Women Llving on the

 Edge (also Society for the Humanitles 106)Fall. 3 credits. S. Orlov.
This seminar about women confronting state power and terror in Soviet Russia, Nazi Europe, and the American South during slavery and segregation will focus on how they have portrayed themselves, or have been portrayed, in fiction, nonfiction, poetry, and film. We will analyze these portrayals from rhetorical, moral, and historical perspectives, paying special attention to tradeoffs between factual content and emotive power and to questions about heroism and betrayal. Our writing will mostly be analytic. Materials will include a report smuggled out of a Soviet labor camp by women political prisoners in the '70s; Anne Frank's Diary and restimonies by Holocaust survivors; Harriet Jacobs's Life of a Slave Girl Written by Herself, Bette Davis's film Watch on the Rbine, and our interview with a Russian dissident.

## WOMNS 109 FWS: Gendered Imaginations in African History and Literature (also History 109)

Fall. 3 credits. S. Greene.
In this course, we will explore and write about the many worlds of African history,
culture, and society throughout texts composed by African oral historians and contemporary African fiction writers. Texts include the oral tradition, SUNDIATA, and the historical novel, SHAKA, as well as writings by Chinua Achebe, Buchi Emecheta, and Flora
Novapa, who use their novels to engage in an intense debate about the role that women and men play and continue to play in the societies in which they live.

## WOMNS 167 FWS: Mascullnity In LIght of Feminlam (also

 Anthropology 167)Fall. 3 credits. R. Philen
What is masculinity? What is male domination, and what is its relationship with masculinity? What are the possibilities for reforming or even radically transforming the gendered power relations of male domination, and what would the impact be upon masculinity? This course examines both what masculinity and male domination are and how they might be transformed through an exploration of anthropological literature on masculinity cross-culturally and feminist critiques of masculinity and male domination.

## WOMNS 178 FWS: Desire (also

 English 178)Fall. 3 credits E. Hanson.
In this course we will discuss some of the literary methods of articulating "these pleasures which we lightly call physical," to borrow a phrase from Colette. We will begin with the theory that sexual desire has a history, even a literary history, and we will examine some of its most influential modes: Platonic, Christian, romantic, decadent, psychoanalytic, and feminist. Because this is a course in lesbian and gay studies, we will focus on homosexuality almost every week, but we will also discuss hysteria, mysticism, masochism, gender-bending, pornography, cybersex, and other literary pleasures. Texts for the course will be drawn from a variety of genres and historical periods-from Plato's erotic dialogues to Freud's case study of Dora to Gayle Rubin's queer manifesto, "Thinking Sex." In short writing assignments, we will experiment with different expository styles to expand and complicate our vocabulary for discussing sexual desire.

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WOMNS 190 FWS: When a Olrly Clrl
    Meets a Manly Man: Gonder & Tales
    of Love (also Theatre, FIIm, and
    Dance 190)
    Fall. }3\mathrm{ credits. T. Rhys
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Romantic love remains one of the most persistent themes of popular entertainment. In this course we examine selected plays and films that depict men and women in the search for love, and explore questions of "masculinity" and "femininity" as they are represented in the popular culture.

## II. Courses

WOMNS 206 Gender and Soclety (also Rural Sociology 206)
Spring. 3 credits. Staff
This course analyzes the evolution and diversity of socially constructed gender hierarchies, in the United States and Internationally. The maintenance of gender inequalities in societal institutions, such as the family, the economy, politics, and religion, will be explored. A range of sociological theories and disciplinary perspectives are considered, including biological, psychological and psychoanalytic perspectives. Course
objectives will be achieved through lectures, readings, films, class discussions, and personal experiences

## WOMNS 210 Introduction to Feminlat Theory

Fall. 4 credits. A. Villarejo
This course introduces students to critical approaches in feminist scholarship to the cultural, socioeconomic, and political situation(s) of women. Particular attention will be paid to the conceptual challenges and dangers posed by attempts to study women without taking account of relations between race, class, and gender in ideological and social formations. Readings will draw on work in various disciplines and will include literary texts and visual images.
[WOMNS 214 Blologlcal Basis of Sox Differences (also Blological Sclences 214 and Blology and Socioty 214)
3 credits. Prerequisite: one year introductory biology. Limited to non-biology majors and freshman, sophomore; and junior biology majors; senior biology majors may register only with permission of the instructor. Offered alternate years. Not offered 1997-98. Next offered fall 1998-99. J. Fortune.]

## WOMNS 227 Men and Women in Modern

 America (also History 227)4 credits. Limited to 20 students. Permission of instructor required. Intended for sophomores. Not offered 1997-98. Next offered 1998-99. M. B. Norton.]

## WOMNS 234 Gender In Early Modern Europe (also Hlstory 234) \#

Spring. 4 credits. Sophomore seminar. Enrollment limited to 20 students. R. Weil. An inquiry into how masculinity and femininity were defined in early modern Europe. Questions to be explored include What purpose did gender distinctions serve in this particular society? To what extent were men and women able to shape and redefine the meaning of their gender? How was their ability to do so affected by such events as the Reformation and the French Revolution?

## [WOMNS 238 The Mistorical

 Development of Women as Professionals, 1800-Present (also Human Development and Famlly Studles 258, Amorican Studles 258, and Hlstory 238) \#Spring. 3 credits. Limited to 180 students. Not offered 1997-98. J. Brumberg.]
[WONNS 243 Inside-Out: The American Everyday Interlor (also Design and Envlronmental Analysis 243)
Spring. 3 credits. Not offered 1997-98.
Next offered spring 1998-99. J. Jennings.]

## NOMNS 244 Language Use and Gender

 Relatlons (also Lingulstics 244)Spring. 4 credits. S. McConnell-Ginet This course explores connections between language (use) and gender/sex systems, addressing such questions as the following. How do sex and gender affect the ways we speak, the ways we interpret and evaluate speech? How do sociocultural differences in women's and men's roles affect their language use, their relation to language change? What is meant by sexist language? How does conversation structure the social worlds of women and men? Readings draw from work in linguistics, anthropology, philosophy,
psychology, literature, and general women's studies and feminist theory.

## WOMNS 249 Feminism and Phllosophy

 (also Philosophy 249)Fall. 4 credits. J. Whiting.
An historical introduction, using literary as well as philosophical texts, to views about the nature of women and their position in society-from the ancient debate (between Plato and Aristotle) about whether men and women are by nature suited to different activities, to contemporary debates between "sameness" and "difference" feminists. Texts will include Aeschylus, Plato, Aristotle, Rousseau, Wollstonecraft, Engels, and various twentieth-century authors (such as Virginia Woolf, Carol Gilligan, Catherine MacKinnon, and Sarah Hoagland).

## WOMNS 251 Twentleth-Century Women

 Novelists (also Engilsh 251)4 credits. Not offered 1997-98.
S. Samuels.]

WOMNS 263 Interpreting Melodrama and the Woman's Film (also English 263) Spring. 4 credits. Students must be free to attend regular screenings of films and videos. Lab fee $\$ 25.00$. Priority given to Women's Studies and English majors. Limited to 20 students. L. Bogel. With some attention to melodrama's roots in nineteenth-century fiction and theatre and in twentieth-century women's fiction and popular Freudianism, we will work to define Hollywood's melodrama as both a genre and a way of viewing the world. Psychoanalytic and feminist analyses of melodrama will help us pose larger questions about gender and culture, about gendered spectatorship, about the relation of these films to American culture, about Hollywood's changing constructions of "woman," the "maternal," and the "feminine," and questions about desire, pleasure, fantasy, and ideology in relation to the melodramatic heroine. Required weekly, evening screenings of such films as Stella Dallas, Now, Voyager, Mildred Pierce, The Women, Imitation of Life, and Gaslight and Picnic. Regular critical readings, frequent viewing questions, two longer essays, no exam.

## [WOMNS 269 Introduction to Feminlst Polltlcal Thought (also Government 369)

Spring. 4 credits. Not offered 1997-98. N. Hirschmann.

This course will provide a general introduction to feminist political thought, surveying various current issues and methodologies. The course will combine analysis of women in western political thought and the relationship of feminism to the discipline of political science; readings by contemporary feminist theorists; and consideration of what theory can contribute to practical issues such as battering, pornography, prostitution, racism, sexuality, and sexual harassment.]

## WOMNS 273 Women in Amerlcan Society, Past and Present (also History 273) \#

Spring. 4 credits. M. B. Norton A survey of women's experiences in America from the seventeenth-century to the present. Among the topics to be discussed are women's familial roles, the changing nature of household work, racial and ethnic differences in women's experiences, the women's rights movement, employment of women outside the home, and contemporary feminism.

WOMNS 277 Social Construction of Gender (also Psychology 277)
Fall. 3 credits. Limited to 240 students S. Bem.

Psychology/Women's Studies 277 is an interdisciplinary course that addresses two broad questions: 1) how an individual's gender and sexuality are constructed; and 2) how hidden assumptions or "lenses embedded in our social institutions, cultural discourses, and individual psyches perpetuate male power and oppress women and sexual minorities. Three lenses in particular are emphasized: androcentrism, gender polarization, and biological essentialism. A fundamental assumption of the course is that social science has worried too much about difference per se and too little about how even our most neutral-looking institutions invisibly transform difference into disadvantage. Although some attention is given to biological perspectives, the course emphasizes the cultural and psychological processes whereby the historically contingent comes to appear as the natural. Among some of the many topics discussed are the importance of looking at biology in context, the parental "instinct," androcentrism in law, sexual orientation cross-culturally, androgyny, the intersections of gender and race, sexual harassment, egalitarian relationships, genderliberated child-rearing, and homophobia.
[WOMNS 279 Lesblan Personae (also Engllsh 279)
3 credits. Not offered 1997-98.
E. Hanson.]

WOMNS 285 Introduction to Sexual Minoritles (also HDFS 284)
Fall. 3 credits. Prerequisite: One social science course. Sections TBA.
R. Savin-Williams.

This course introduces students to theories, empirical scholarship, public policies, and current controversies with lesbian, gay, bisexual, transgender, sexual questioning, and other sexual minority populations. The major focus is on gay, lesbian, and bisexual development, lifestyles, and communities with additional emphasis on ethnic, racial, gender, and class issues. Requirements include reaction papers to the readings.

## [WOMNS 305 Emotion, Gender, and Culture (also Anthropology 305) 4 credits. Not offered 1997-98. <br> B. J. Isbell.]

WOMNS 307 African-American Women In Slavery and Freedom (also History 303 and Africana Studies 307) " Spring. 4 credits. M. Washington. Historical exploration of African-American women from a sociopolitical perspective. Topics include women in Africa, slavery and freedom, sexuality, labor, the family, gender cross-racially that begins with the African background and ends at 1900.
WOMNS 321 Sex and Gender In CrossCultural Perspectlve (also Anthropology 321) 숭
Fall. 4 credits. Staff.
An introduction to the study of sex roles cross-culturally and to anthropological theories of sex and gender. The course examines the relative positioning of the sexes in social, political, economic, ideological, cultural, and biological aspects of culture; we emphasize the diversity in gender and prospects for change around the world. In addition to lectures and films or videos,
participants will work in small discussion sections (maximum enrollment of eight) to prepare several practical field exercises, short papers and critical assessments of other course materials.

## [WOMNS 341 Ethical Theory (also Philosophy 341)

4 credits. Not offered 1997-98. Next offered spring 1998-99. K. Jones.]
[WOMns 344 Male and Female In Chinese Soclety and Culture (also Anthropology 344) \# ©
4 credits. Not offered 1997-98.
S. P. Sangren.]
[WOMNS 348 The Female Literary Tradition: Wollstonecraft to Woolf (also English 348)
4 credits. Not offered 1997-98.
M. Jacobus.]

## [WOMNS 349 Readings In Feminlat

 Literary Theory (also English 349)4 credits. Not offered 1997-98. M. Hite.]

## [WOMNS 353 Feminism: State and

 Public Pollcy (also Government 353)4 credits. Not offered 1997-98.
M. Katzenstein.]

## WOMNS 355 Decadence (also

 Engllsh 355)Fall. 4 credits. E. Hanson.
"My existence is a scandal," Oscar Wilde once wrote, summing up in an epigram the effect of his carefully cultivated style of perversity and paradox. Through their valorization of aestheticism and all that was considered artificial, unnatural, or morbid, the so-called "decadent" writers of the latenineteenth century sought to free the pleasures of beauty and sexual desire from their more conventional ethical moorings. Although we will focus on Oscar Wilde, we will also read works by Charles Baudelaire, Paul Verlaine, J.-K. Huysmans, Renée Vivien, Leopold von Sacher-Masoch, Walter Pater, A.C. Swinburne, and Lionel Johnson. We will also consider historical, theoretical, and early medical texts on sexuality. Because this is a course in lesbian and gay studies, we will focus primarily on the various ways that decadence became a powerful trope for the articulation of homosexuality and other proscribed sexual pleasures. Topics for discussion will include homophobia and sexual encoding, androgyny and sexual inversion, sodomy and satanism, lesbianism and vampirism, cultural and linguistic degeneration, hysteria and paranoia, masochism and mysticism, chastity and sublimation, Catholicism and Hellenism, and dandyism and camp.
[WOMNS 357 American Familles In Historical Perspective (also History 359, Amerlcan Studies 359 and Human Development and Family Studies 359)
3 credits. Prerequisite: Human Development and Family Studies 150 or one 200level social science or history course Students in endowed units must register for Women's Studies 357 or History 359 or American Studies 359. Not offered 199798. Next offered 1998-99. J. Brumberg.]
[WOMNS 358 20th-Century Experimental Flction by Women (also Enlgish 358) 4 credits. Not offered 1997-98. M. Hite.]

## WOMNS 362 Global Perspectives

 on Gender 랑Spring. 4 credits. N. Assie-Lumumba. The course will examine how forms of gender inequality have been shaped by international forces and structured by differences in national histories. The class will be taught by a rotating set of two faculty members from different departments. Contingent on the particular faculty directing the course, the class will consider such issues as cross-cultural perspectives on gender; the history of work and family life in different societies; the gendered division of labor in local, national, and international economies; the impact of colonialism; the organized efforts of women to define gender relations; the role of the state in constructing an engendered economy and polity.
WOMNS 363 Representations of Women in Anclent Greece and Rome (also Classics 363 and History 367) "
Spring. 4 credits. J. Ginsburg, L. Abel. The task of this course is to analyze ancient Greek and Roman representations of women-some famous, some infamous, some nameless-within their historical and cultural contexts and the assumptions that underlie these representations. Using literary, historical, legal, and artistic sources (in translation) and examining the historiographical and methodological problems the use of such evidence poses, the class will assess the changing social conditions that relate to the roles, status, and images of women in antiquity. Among the topics considered are: myth and ideology, women's role in the family and society, views of the female body and female sexuality, the place of women in creative art.

## WOMNS 366 Women at Work (also

 Industrial and Labor Relatlons: Human Resources 366)Spring. 3 or 4 credits. J. Farley.
Various aspects of female occupational roles in twentieth-century United States. Historical, social, and legal factors that influence women's choice of careers, work socialization and training, and subsequent labor-market experience are considered. Working women's entry-level jobs, opportunities for advancement, and income are compared to men's.
[WOMNS 368 Marriage and Sexuallty in
the MIddle Ages (also History 368 the MIddle Ages (also History 368 and Religlous Studies 368) "
4 credits. Not offered 1997-98. Next offered 1998-99. 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.]
[WOMNS 370 19th-Century Novel (also English 3701 *
4 credits. Not offered 1997-98
E. Hanson.]

WOMNS 374 Nineteenth-Century American Women Writers (also English 374 and American Studies 374) \#
Spring. 4 credits. L. Brown.
In this cross-cultural examination of nine-teenth-century American women writers, we will contrast a variety of nineteenth-century works of fiction, political/feminist manifestos, and slave narratives. We will investigate the ways in which these writers used their texts to construct culturally valuable and authentic selves. We will also consider tensions between "sentimental" idealism and political pragmatism, passionless femininity, and autonomy. Readings will include Louisa May Alcott's Bebind a Mask, Anna Julia Cooper's A Voice from the South, Frances Harper's Iola LeRoy, Harriet Beecher Stowe's The Ministers' Wooing, and Harriet Wilson's Our Nig.

## [WOMNS 376 Gay Fiction (also

 English 377)4 credits. Not offered 1997-98 E. Hanson.]

WOMNS 380 Gender, Ideology, and Culture (also Sociology 380) Spring. 4 credits. P. Becker.
'This course will explore representations of women in popular culture, including images, narratives, and religious practices. We will examine the relationship between popular culture and ideology, and look at how women "read" popular culture. The aim of the course is to enable students to think critically and analyze the effects of ideological representations of difference on personal identity construction, status, and power relationships Readings are drawn mostly from sociology of culture and cultural studies; most texts deal with popular culture and gender in the 19th and 20th century Unitied States
wOMNS 381 19th Century French Women Writers (also French Literature 381) \#
Fall. 4 credits. Course conducted in French. A. Berger
While situating the works read within their specific historical and literary context, this course will attempt to address two sets of questions: 1) How does the inscription of literature as a Public Institution within a phallocentric cultural order affect women authors' status and writing strategies? 2) To what extent and at what levels does being a women inform or shape the text produced? In what ways is literary writing concerned with sexual difference? Writers will include Mme de Staël, George Sand, M. DesbordesValmore, Flora Tristan, and Rachilde.

## WOMNS 384 History of Women and

 Unions (also Industrial \& Labor Relatlons 384)Spring. 4 credits. I. DeVault.
This course will explore women's participation in the U.S. labor movement in the nineteenth and twentieth centuries. The class will cover issues such as women workers' relations with male-dominated union movements, the role of cross-class alliances of women in organizing women workers, interactions with radical parties and organizations, problems faced by women union leaders and activists, racial and ethnic differences in organizing, and the impact of societal stereotypes and expectations.

WOMNS 400 Senior Honors Thesis
Fall and spring. 2-4 credits. For Women's Studies seniors only. Permission of Women's Studies faculty member required. Student must carry a GPA of 3.0 in all subjects and a 3.3 in Women's Studies. Staff.
Both the form of theses, and the nature and extent of contact between student and adviser, will depend on mutual agreement between the two. In one common scenario, the student will write an essay of approximately 50 pages in length, drafted and revised in a series of carefully planned stages over the course of two semesters, with an outline expected on approximately Sept. 15th and a draft of the first chapter on approximately November 15 th. An " $R$ " grade will be assigned at the end of the fall semester and a letter grade on completion of the project at the end of the spring semester.

## WOMNS 404 Women Artists (also History of Art 466) "

Fall. 4 credits. J. Bernstock.
This seminar will be devoted to a study of the work of women artists from antiquity to the present. The works of the most important women artists from each period will be studied in relation to the changing roles of women in society. Readings by feminist critics are a major part of the course.
[WOMNS 406 The Culture of Lives (also Anthropology 406) ©
4 credits. Not offered 1997-98. K. March.]
[WOMNS 409/609 Misogyny and Its Readers (also Italian 409/609 and Comparative Literature 449/649)
4 credits. Not offered 1997-98. Next offered fall 1998-99. M. Migiel.]
[WOMNS 426 Undergraduate Seminar in Early American History (also History 426)
4 credits. Not offered 1997-98.
M. B. Norton.]
[WOMNS 427 Shakespeare: Gender, Sexuality, Cultural Polltics (also English 427) \#
4 credits. Not offered 1997-98
B. Correll.]
[WOMNS 431 Scenes of Female Enlightenment (also English 431) * ©
4 credits. Not offered 1997-98
M. Jacobus.]
[WOMNS 433 The Female Dramatic Tradition (also Theatre Arts 436) 4 credits. Not offered 1997-98. Offered every 3 years. J. E. Gainor.]

WOMNS 438 Female Adolescence in Mistorical Perspective, 1815-1960 (also Human Development and Family Studles 417 and History 458) * Spring. 3 credits. J. Brumberg The changing nature of female adolescence in the United States is explored using nineteenthcentury primary sources available in the Department of Manuscripts and University Archives. Olin Library multidisciplinary readings and discussions are designed to uncover the nature of women's childhood, patterns of authority within the family, cultural attitudes toward sexuality, female friendships, courtship patterns, and rites of passage into adulthood.
[WOMNS 442 Feminist Politics and Pollcles in the United States and Western Europe (also Covernment 442)
4 credits. Not offered 1997-98.
M. Katzenstein/U. Liebert.]

WOMNS 444 Hlstorlcal Issues of Gender and Science (also Sclence and Technology Studles 444)
Fall. 4 credits. M. Rossiter
This course is a one-semester survey of women's role in science and engineering from antiquity to the 1990 's with special emphasis on the United States in the 20th century Readings will include biographies and autobiographies of prominent women scientists, educational writings, and other primary sources as well as recent historical and sociological studies. By the end of the semester we should have attained a broad view of the problems that have faced women entering science and engineering in the past and those that still remain. There are no formal prerequisites for the course, although some knowledge of women's history and the history of science would be helpful. The course welcomes the participation of students from scientific and non-scientific backgrounds alike.
[WOMNS 445 Nineteenth-Century Women Novelists (also English 445) \# 4 credits. Not offered 1997-98.
D. Mermin.]
[WOMNS 447 Reading Freud; Gender, Race, and Psychoanalysls (also German Studles 447 and Comparatlve Liferature 447)
4 credits. Not offered 1997-98. B. Martin.]
WOMNS 448/648 Boccaccio: Gender, Power, and the Medleval Text (also Itallan Literature 445/645 and Comparative Literature 456) *
Fall. 4 credits. M. Migiel.
A study of the discourses about reading and sexual difference in Boccaccio's Decameron. We will devote special attention to two questions: (1) What does it mean to carry out a feminist reading of a male-authored text? (2) How do the narrators of the Decameron rework earlier discourses about reading and sexual difference found in literary, historical, and philosophical material drawn from Italian, Old French, and Latin sources? All readings will be done in English translation; students who command the pertinent foreign languages may read texts in the original. An extra hour-long discussion section will be organized for students who read and speak Italian.
mOMNS 450/650 The Lenses of Gender (also Psychology 450/650)
Spring. 4 credits. Permission of instructor required. Limited to 15 seniors and graduate students. No preregistration; interested students should attend the first
class. Graduate students sign up for
Women's Studies/Psychology 650. S. Bem This seminar analyzes the ideological, institutional, and psychological mechanisms that are responsible for the social reproduction of male power in Western-and especially American-culture. It is interdisciplinary, covering material from biology, history, anthropology, law, sociology, psychology, psychiatry, philosophy, and feminist theory. As much as the central focus of the seminar is on gender, it does not analyze gender in isolation, but looks also at
its intersections with race and (especially) sexuality. Students must write a final exam, a term paper, plus weekly commentaries on the readings

## WOMNS 451 Women In Italian Renalssance Art (also Art History 450)

Spring. 4 credits. Prerequisite: permission of instructor. C. Lazzaro.
This seminar examines representations of the Madonna and Child from the fourteenth and fifteenth centuries, the narrative scenes painted on marriage chests and other domestic furniture, biblical and historical heroines such as Judith and Lucretia, portraits of patrician women and courtesans, and violence to women in a political context. It will investigate the contemporary ideas about motherhood, beauty, sexuality, social presentation, and gender roles in society that inform these representations. We will discuss the existing critical frameworks for interpreting them in feminist art history and theory (particularly in Renaissance studies). We will be concerned especially with how visual images are encoded with meaning, what kind of relationship can be established with their historical context, and how they convey social constructs and ideology.

## WOMNS 458 Women, Men and the Law In Muslim Courts (also Near Eastern Studles 459) ;

Fall. 4 credits. Prerequisite: Previous course within Islamic Studies helpful but not essential. L. Pierce.
This course examines relations between women and men by focusing on the manner in which an 16th-century community in the Muslim Middle East functioned through its court. By analyzing actual court cases, we will explore issues such as marriage and divorce, property rights, sexuality and its regulation, access to communal and domestic space and the control of knowledge. We will be particularly interested in the question of whether normative codes of law (religious, state) were compatible with the individual's sense of moral worth and self interest; hence we will also be concerned with relations between the individual and the community, and between the community and the state. Previous course work in Islamic studies is helpful but not essential.

## WOMNS 459 Education in Afrlca and the Dlaspora (also Africana 459) C

Fall. 4 credits. N. Assié-Lumumba This course deals with theories and concepts of planned change for social development and their application to educational innovations geared to promoting equal opportunity based on gender, race, and class in Africa and the African Diaspora. The first part of the course will be concerned with the stages of innovations from their inception to their implementation, resistance, diffusion and impact of different social categories. the second part of the course will deal with concrete cases of educational innovations such as the creation of educational institutions and change in curriculum development and medium of instruction. Historical and contemporary cases of educational innovations will be presented and analyzed. The case studies include the development of Africana Studies as a discipline, the creation and expansion of historically black institutions such as Lincoln University in Pennsylvania, Tuskegee Institute in Alabama, Spelman College in Georgia, and the Westside Preparatory School in Chicago.

The African Cases to be studied include education for self-reliance in Tanzania, African languages as a medium of instruction in Nigeria and Mali, and television as a medium of instruction in Côte d'Ivoire. Gender will be a main focus in the analysis of the agents and beneficiaries of the innovations.

## WOMNS 461 Feminist Eplstomology (also Philosophy 461)

Fall. 4 credits. K. Jones
Many feminists recognize that the concepts of reason and objectivity have served the ideological function of maintaining oppressive social structures by, among other things, delegitimizing knowledge claims on the part of the oppressed. At the same time, radical critiques of reason and objectivity threaten to be self-undermining, casting into doubt the status of the critique itself. The course begins with this problem. We also examine feminist work on the social construction of gender and the role that "experience" has played in discussions of whether women are a social group.
[WOMNS 464 Gender and Politics In the Roman World (also Classlcs 463 and Hlstory 463)
4 credits. Not offered 1997. Next offered fall 1998-99. J. Ginsburg.]
[WOMNS 465 Feminist Theory/Lesblan Theory
4 credits. Not offered 1997-98
C. A. Martin.]

WOMNS 468 Feminism and Gender Dlscrimination (also Government 466 and Law 648)
Fall. 4 credits. K. Abrams.
This course will introduce students to the major schools of feminist legal theory, including equality theory, difference theory, dominance theory, and anti-essentialism. It will then use these theories as a framework for examining several areas in which the law has attempted to address gender-specific injuries. These will include the workplace (sexual harassment, regulation of fertility, work/family conflict), and violence against women (rape, spousal abuse, pornography). The course will emphasize analysis and critique of present political and legal responses and formulation of alternative responses. Some previous exposure to legal materials (case law, statutes) is useful but not required.
WOMNS 467 Sexual Minoritles and Human Development |also HDFS 464)
Fall. 3 credits. Limited to 15 students.
Permission of instructor required.
R. Savin-Williams.

The first half of the course covers topics of a fairly general nature regarding theoretical, research, and applied issues on sexual minorities. In the second half of the course, students determine the content through their selection of particular topics that interest them. The success of the course depends on students feeling personally engaged and committed to the course content. Because of the multidisciplinary nature of the course, it is hoped that students from a variety of
backgrounds in disciplines, gender, sexual orientation, ethnicity, race, class, and religious affiliation will feel comfortable in the course.

## WOMNS 468 Radical Democratic

 Feminisms (also Government 467)Fall. 4 credits. A. M. Smith.
Radical democratic feminisms is an advanced feminist theory seminar. We will focus on contemporary political discourses that are influenced by socialist feminism, radical democratic pluralism, critical race theory and radical anti-racist and anti-heterosexist multiculturalism. The reading list will include works by Sheila Rowbotham, Joan Scott,
Michele Barrett, Lynne Segal, Zillah Eisenstein, Frances Fox Piven, Barbara Ehrenreich, Jacqui Alexander, Chandra Talpade Mohanty, Judith Butler, Julia Epstein, Anne McClintock, Angela Davis, Alice Echols, Dangerous Bedfellows, Lisa Duggan, Nan Hunter, Amy Gluckman and Betsy Reed, Elizabeth Grosz, Elspeth Probyn, Katha Pollitt, Renata Salecl,
Patricia J. Williams, Ellen Willis, Gayatri Spivak, Jeffrey Escoffier, Barbara Epstein and bell hooks. Students should have completed at least one course in feminist theory and at least one course in social theory or political theory before taking this course.

## WOMNS 471 American Indian Women's

 Literature (also English 471)Fall. 4 credits. K. Shanley.
Through a variety of genres-fiction, poetry, the nonfictional essay, and autobiography-as well as media other than writing, we will explore what it means and has meant to be an indigenous woman in North America. Although our focus will be on American Indian women in the United States, we will touch on the experiences of Canadian Native women. Beginning with early tribal histories as expressed in "as-told-to autobiographies," we will look at the way Indian women fit in their respective cultures, their roles in circumstances of their lives. The most famous Indian women-women such as Pocahontas and Sacajawea-have earned their places in American mainstream culture based on heroism enacted primarily to benefit nonIndians. How historically accurate are such portrayals and how representative are such women of other Native women? These and many other questions will guide us throughout the term. In addition to works about/by historical figures, we will read works by wellknown contemporary writers such as Leslie Silko, Louise Erdrich, Beth Brant, Joy Harjo, and others. The student's grade will be based on two formal papers and a number of informal writing assignments and reports. Background in American Indian history is not required.
[WOMNS 475 Studles in the Twentleth Contury (also English 475)
4 credits. Not offered 1997-98. M. Hite.]
WONNS 478 Family and Society In Africa (also Africana 478)
Fall. 4 credits. N. Assiè-Lumumba. The family as a social institution is structured according to socioeconomic, historical, political, and cultural specificities. In this course, the topics to be discussed will include the concepts of nuclear and extended family, the place and role of different age-groups and generations in the family, marriage and related issues, such as dowry, divorce, parenthood, childrearing, sex roles, and class differences. The course will also deal with the impact of industrialization and of westernization on the structure of the family in Third World countries. Examples will be drawn from urban and rural communities in industrial western and agrarian/non-western societies.
[WOMNS 479 Women and Gender Issues in Africa (also Africana 479) © 4 credits. Limited to 20 students. Not offered 1997-98. N. Assié-Lumumba.]
[WOMNS 481 Latin American Women Writers (also Spanish 492 and Comparative Literature 482) © 4 credits. Taught in English. Not offered 1997-98. Next offered spring 1998-99. D. Castillo.

This course will provide a sampler of novels and short stories by and about Latin American women. We will look at the question of selfconstruction and issues such as the social and political concerns involved in a specifically Latin American feminine identity. All works will be read in translation (Romance Studies students should read originals of the works from the Spanish). Authors may include writers like Luisa Valenzuela (Argentina) and Rigoberta Menchú (Guatemala), Helena Parente Cunha and Clarice Lispector (Brazil), Helena María Viramontes and Gloria Anzaldủa (U.S.A.), and Simone Schwarz-Bart (Guadalupe).]

## [WOMNS 486 Women's Poetry (also English 486)

Offered every three years. Not offered 1997-98. D. Mermin.]
[wOMNS 490 English Honors Seminar: Mary Wollstonecraft and Mary Shelly (also English 491) ©
4 credits. Not offered 1997-98
M. Jacobus.]
[WOMNS 491 Women's Studles Seminar (also English 491) 항
4 credits. Not offered 1997-98.
D. Mermin.]
[WOMNS 493 French Feminisms (also French 493)
4 credits. Not offered 1997-98. Next offered fall 1998-99. A. Berger.
This course will examine the political, theoretical, and literary concerns of contemporary French writers who have addressed "la question de la femme/la question du feminin." Readings will include representative texts by Simone de Beauvoir, Monique Wittig, Julia Kristeva, Jacques Lacan, Luce Irigaray, Jacques Derrida, and Hẻlène Cixous. Taught in English.]

## WOMNS 499 Directed Study

Fall or spring. Variable credit. Prerequisites: one course in women's studies and permission of a faculty member of the Women's Studies Program Board. Staff.
[WOMNS 530 Womanist Writing in Africa and the Carlbbean (also Africana 530)
4 credits. Not offered 1997-98.
A. Adams.]
[WOMNS 600 Special Topics in Feminist Theory: An Interdisciplinary Graduate Course in Women's Studles 4 credits. This course is open to graduate students and undergraduate seniors who have obtained permission of instructor. Not offered 1997-98. Next offered fall 1998-99. Staff.
The purpose of this course is to expose graduate students to interdisciplinary approaches in Women's Studies and feminist theory to a variety of topics or questions. While many of our graduate courses train students in highly specialized areas of feminist theory, this course aims to teach students how
to find common intellectual ground around a single topic from interdisciplinary perspectives without sacrificing the complexity of any disciplinary approach. The course is designed for graduate minors in Women's Studies and students with a specialized interest in feminist theory. Although it is not required, the course is strongly recommended for students obtaining a graduate minor in Women's Studies.]
WOMNS 608 African-American Women (also History 608)
Spring. 4 credits. M. Washington. A reading and discussion topics seminar focusing on the experiences of AfricanAmerican women in nineteenth-century America, including the Caribbean. Topics include women in labor, abolitionism, women's rights, sexuality and race relations, education and racial uplift, black women's literature, marriage and family
[WOMNS 613 The Polltical Economy of Gender and Work (also City and Reglonal Planning 613)
3 credits. Not offered 1997-98.
L. Beneria.]
[WOMNS 614 Gender and International Development (also Clty and Regional Planning 614)
3 credits. Not offered 1997-98.
L. Beneria.]

## [WOMNS 624 Seventeenth-Century

 Women Writers (also English 624) 4 credits. Not offered 1997-98. B. Correll.][WOMNS 626 Graduate Seminar in the Mistory of American Women (also History 626)
4 credits. Limited to graduate students. Not offered 1997-98. M. B. Norton.]
[WOMNS 631 Gender and Culture (also Anthropology 621)
4 credits. Not offered 1997-98. K. March.]
[WOMNS 636 Comparative History of Women and Work (also Industrial and Labor Relations 636)
4 credits. Disc/sem. Not offered 1997-98.
Next offered spring 1998-99. I. DeVault.]

## [WOMNS 640 Feminism and

 Enlightenment: Women Writers of the 1790s (also English 640)Not offered 1997-98. M. Jacobus.]
[WOMNS 654 Queer Theory (also English 654)
4 credits. Not offered 1997-98. E. Hanson.]
[WOMNS 656 Decadence (also English 655 and Comparative Literature 655) 4 credits. Not offered 1997-98. E. Hanson.]

## [WOMNS 660 Gender in Nineteenth-

 Century America (also English 661) 4 credits. Not offered 1997-98. S. Samuels.]
## womNs 670 Feminist Political Theory

 (Graduate Seminar) (also Government 671)Spring. 4 credits. Open to undergraduates who have taken GOV/WS 463 or other courses in feminist theory and who have the permission of the instructor. N. Hirschmann.

This graduate seminar will examine contemporary feminist theory from the perspective of
political theory. We will study the work of feminist theorists who work specifically within the discipline of political science, as well as the specifically political dimensions of work not generally considered political theory. Though particular readings and topics will change from year to year in response to the most recent literature, in general the course will focus on questions of epistemology and methodology as a way to explore a variety of issues of relevance to feminism as an academic, intellectual, and political enterprise.
[WOMNS 671 Feminist Methods (also Rural Sociology 671)
4 credits. Not offered 1997-98. Next
offered fall 1999-2000. S. Feldman.]
WOMNS 685 Reconstructing the Era: Nineteenth-Century African American Women's Literature and Soclety (also English 685)
Fall. 4 credits. L. Brown
In this course we will explore the expressions of postbellum ideology, women's culture, and family politics that influenced nineteenthcentury African American women's literature. Our discussions of the texts and their social and intellectual impact will be grounded in intensive historical research. While reading such books as Emma Dunham Kelly's Four Girls at Cottage City, Susie King Taylor's Civil War Memoir, A. E. Johnson's The Hazeley Family, and Frances Harper's recently discovered novellas Minni's Sacrifice and Trial and Triumph, students will refine their nineteenth-century research skills. In addition to working with federal census data, pension rolls, town histories, and lesser-known African American newspapers and periodicals, students will conduct extensive genealogical searches in order to reconstruct the worlds of the nineteenth-century novels we are reading. Contemporary analyses of the nineteenthcentury literary tradition, biographies, and examples of methodological approaches by critics such as Claudia Tate, Frances Smith Foster, Hazel Carby, Elizabeth Ammons, Melba Boyd, and Ann duCille will complement the primary materials. For S-U, research log, 1-2 in-class presentations and write-ups; for letter, requirements for $\mathrm{S} / \mathrm{U}$ and term paper.

## WOMNS 692 Hispanic Feminisms (also Romance Studies 690)

Fall. 4 credits. Taught in Spanish.
D. Castillo.

This seminar is designed to explore the interrelationship of feminist literary theory and the narrative production of the Hispanic world. In this inquiry, we will be developing feminist critical methodologies (based on readings of essays by thinkers such as Castellanos and Glantz) and defining strategies or possibilities for feminist criticism(s). Finally, we will study the ways in which feminist analyses of literature alter our readings of texts by men (Isaacs, Cotãzar, Onetti, García Lorca) as well as by women (Pardo Bazãn, Tusquets, Valenzuela, Garro), and how they change our conception of criticism and the task of the critic.

## WOMNS 699 Topics in Women's Studies

Fall or spring. Variable credits. 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 Women's Studies who has agreed to supervise the course work.

## [WOMNS 733 Literary AntI-Feminism

 (also English 733)4 credits. Not offered 1997-98. L. Brown.]

## FACULTY ROSTER

Abrams, Meyer H., Ph.D., Harvard U. Class of 1916 Professor of English Emeritus, English Abruna, Hector D., Ph.D., U. of North Carolina at Chapel Hill. Emile M. Chamot Professor of Chemistry, Chemistry
Adams, Anne, Ph.D., U. of Michigan. Assoc. Prof., Africana Studies and Research Center
Adams, Barry B., Ph.D., U. of North Carolina. Prof., English
Adelson, Leslie A., Ph.D., Washington U. Prof., German Studies
Ahl, Frederick M., Ph.D., U. of Texas at Austin. Prof., Classics
Albrecht, Andreas C., Ph.D., U. of Washington. Prof., Chemistry
Alexander, James P., Ph.D., U. of Chicago. Assoc. Prof., Physics/LNST
Allmendinger, Richard W., Ph.D., Stanford U. Prof., Geological Sciences/INSTOC*
Altschuler, Glenn C., Ph.D., Comell U. Prof., American Studies
Ambegaokar, Vinay, Ph.D., Camegie Inst. of Technology. Prof., Physics/LASSP*
Ammons, Archie R., B.S., Wake Forest Coll. Goldwin Smith Professor of Poetry, English
Anderson, Benedict R., Ph.D., Comell U. Aaron L. Binenkorb Professor of International Studies, Govemment
Apter, Emily S., Ph.D., Princeton U. Prof., Comparative Literature
Archer, Richard J., M.A., U. of Missouri at Kansas City. Assoc. Prof., Theatre, Film and Dance
Argyres, Philip C., Ph.D., Princeton U. Asst. Prof., Physics/LNST
Arroyo, Ciriaco M., Ph.D., U. of Munich (Germany). Emerson Hinchliff Professor of Spanish Literature, Romance Studies/ Comparative Literature
Ascher, Robert, Ph.D., U. of California at Los Angeles. Prof., Anthropology
Ashcroft, Neil W., Ph.D., Cambridge U. (England). Horace White Professor of Physics, Physics/LASSP*
Assiè-Lumumba, N'Dri, Ph D., U. of Chicago. Asst. Prof., Africana Studies/Women's Studies
Austin, William W., Ph.D., Harvard U. Given Foundation Professor of Musicology Emeritus, Music
Baird, Barbara, Ph.D., Cornell U. Prof., Chemistry
Barazangi, Muawia, Ph.D., Columbia U. Senior Scientist, Geological Sciences/ INSTOC
Barbasch, Dan, Ph.D., U. of Illinois. Prof., Mathematics
Barzman, Karen-edis, Ph.D., Johns Hopkins U. Asst. Prof., History of Art
Bassett, William A., Ph.D., Columbia U. Prof., Geological Sciences
Basu, Kaushik, Ph.D., London School of Economics (England). Prof., Economics
Bathrick, David, Ph.D., U. of Chicago. Prof., German Studies/Theatre, Film and Dance
Bauer, Simon H., Ph.D., U. of Chicago. Prof. Emeritus, Chemistry
Baugh, Daniel A., Ph.D., Cambridge U. (England). Prof., History
Becker, Penny E., Ph.D., U. of Chicago. Asst. Prof., Sociology
Begley, Tadhg P., Ph.D., California Inst. of Technology. Assoc. Prof., Chemistry
Bekerie, Ayele, Ph.D., Temple U. Asst. Prof., Africana Studies and Research Center
Bem, Daryl J., Ph.D., U. of Michigan. Prof., Psychology

Bem, Sandra L., Ph.D., U. of Michigan. Prof., Psychology/Women's Studies
Beneria, Lourdes, Ph.D., Columbia U. Prof., City and Regional Planning/Women's Studies
Bensel, Richard, Ph.D., Comell U. Prof., Government
Bereaud, Jacques, Doctorat d'Univ., U. of Lille (France). Prof., Romance Studies
Berger, Anne, Ph.D., Paris VII (France). Assoc. Prof., Romance Studies
Berkelman, Karl, Ph.D., Comell U. Goldwin Smith Professor of Physics, Physics/LNS
Bernal, Martin G., Ph.D., Cambridge U. (England). Prof., Govemment/Near Eastem Studies
Bernstock, Judith, Ph.D., Columbia U. Assoc. Prof., History of Art
Bestor, Theodore C., Ph.D., Stanford U. Assoc. Prof., Anthropology
Bethe, Hans, Ph.D., U. of Munich (Germany). John Wendell Anderson Professor of Physics Emeritus, Physics
Biggerstaff, Knight, Ph.D., Harvard U. Prof. Emeritus, History
Billera, Louis J., Ph.D., City U. of New York. Prof., Mathematics/Operations Research and Industrial Engineering
Bilson, Malcolm, D.M.A., U. of Illinois. Frederic J. Whiton Professor of Music, Music
Bird, John M., Ph.D., Rensselaer Polytechnic Inst. Prof., Geological Sciences
Birman, Kenneth P., Ph.D., U. of Califomia at Berkeley. Prof., Computer Science
Bishop, Jonathan P., Ph.D., Harvard U. Prof., English
Blackall, Jean F., Ph.D., Harvard U. Prof. Emerita, English
Bloom, Arthur L., Ph.D., Yale U. Prof. Emeritus, Geological Sciences/INSTOC*
Blume, Lawrence E., Ph D., U. of California at Berkeley. Prof., Economics
Blumin, Stuart M., Ph.D., U. of Pennsylvania. Prof., History
Bodenschatz, Eberhard, Ph.D., U. of Bayreuth (Germany). Asst. Prof., Physics/LASSP*
Bodman, Nicholas C., Ph.D., Yale U. Prof. Emeritus, Modern Languages and Linguistics
Bogel, Fredric V., Ph.D., Yale U. Prof., English
Bomeman, John W., Ph.D., Harvard U. Assoc. Prof., Anthropology
Borstelmann, Thomas, Ph.D., Duke U. Assoc. Prof., History
Bowers, John S., Ph.D., Massachusetts Inst. of Technology. Prof., Linguistics
Bowman, Kenneth, Ph.D., U. of California at Los Angeles. Asst. Prof., Africana Studies/ Theatre Ars
Boyd, Richard N., Ph.D., Massachusetts Inst. of Technology. Prof., Philosophy/Science and Technology Studies
Bramble, James H., Ph.D., U. of Maryland. Prof. Emeritus, Mathematics
Brann, Ross, Ph.D., New York U. Prof., Judeo-Arabic Studies, Near Eastern Studies
Brazell, Karen W., Ph.D., Columbia U. Prof., Japanese Literature (Asian Studies)
Breiger, Ronald L., Ph.D., Harvard U. Goldwin Smith Professor of Sociology, Sociology
Brittain, Charles, D. Phil., Oxford U. (England). Asst. Prof., Classics
Bronfenbrenner, Urie, Ph.D., U. of Michigan, Jacob Gould Schurman Professor Emeritus, Human Ecology/Psychology
Brown, Kenneth S., Ph.D., Massachusetts Inst. of Technology. Prof., Mathematics
Brown, Larry D., Ph.D., Cornell U. Prof., Geological Sciences/INSTOC\#
Brown, Laura, Ph.D., U. of Califomia at Berkeley. Prof., English
Brown, Lois, Ph.D., Boston College. Asst. Prof., English

Brown, Theodore M., Ph.D., U. of Utrecht (Netherlands). Prof. Emeritus, History of Art
Browne, E. Wayles III, Ph.D., U. of Zagreb (Yugoslavia). Assoc. Prof., Linguistics
Brumberg, Joan Jacobs, Ph.D., U. of Virginia. Prof., Human Development and Family Studies/Women's Studies
Buck-Morss, Susan F., Ph.D., Georgetown U. Prof., Government
Bullock, Robert, Ph.D., U. of Califomia at Berkeley. Asst. Prof., Government
Bunce, Valerie, Ph.D., U. of Michigan. Prof., Government
Burlitch, James M., Ph.D., Massachusetts Inst. of Technology. Prof., Chemistry
Burns, Joseph A., Ph.D., Comell U. Irving Porter Church Professor of Engineering, Astronomy/Theoretical and Applied Mechanics/CRSR
Caldwell, Steven B., Ph.D., Comell U. Assoc. Prof., Sociology
Calkins, Robert G., Ph.D., Harvard U. Prof., History of Art
Campbell, Donald B., Ph.D., Cornell U. Prof., Astronomy/NAIC $\ddagger$
Caputi, Anthony F., Ph.D., Cornell U. Prof., Emeritus, English/Comparative Literature
Carden, Patricia J., Ph.D., Columbia U. Prof., Russian Literature
Cardie, Claire, Ph.D., U. Mass. Asst. Prof., Computer Science
Carmichael, Calum M., LL.D., Glasgow U. (Scotland). Prof., Comparative Literarure/ Biblical Studies
Caron, Vicki, Ph.D., Columbia U. Assoc. Prof., Thomas \& Diann Mann Chair in Modem Jewish Studies, History/Jewish Studies Program
Carpenter, Barry K., Ph.D., U. College, London (England). Prof., Chemistry
Carroll, Noel, Ph.D. U. of Illinois. Assoc. Prof., Theatre Arts/Philosophy
Carstens, Vicki, Ph.D., U. of California at Los Angeles. Asst. Prof., Linguistics
Cassel, David G., Ph.D., Princeton U. Prof., Physics/LNST
Castillo, Debra, Ph.D., U. of Wisconsin at Milwaukee. Prof., Romance Studies/ Comparative Literature
Cathles, Lawrence M. III, Ph.D., Princeton U. Prof., Geological Sciences
Chase, Cynthia, Ph.D., Yale U. Prof., English
Chase, Stephen U., Ph.D., U. of Chicago. Prof., Mathematics
Chen, Zhen-Qing, Ph.D., Washington U. Asst. Prof., Mathematics
Chemoff, David F., Ph.D., U. of California at Berkeley. Assoc. Prof., Astronomy/CRSR
Chester Geoffrey V., Ph.D. King's Coll. London (England). Prof. Emeritus, Physics/ LASSP*
Christensen, Thomas. Ph.D., Columbia U. Asst. Prof., Government
Cisne, John L., Ph.D., U. of Chicago. Prof., Geological Sciences/INSTOC\#
Clardy, Jon C., Ph.D., Harvard U. Horace White Professor of Chemistry, Chemistry
Clark, M. Gardner, Ph.D., Harvard U. Prof., Industrial and Labor Relations/Economics
Clinton, Kevin M., Ph.D., Johns Hopkins U. Prof., Classics
Coates, Geoffrey, Ph.D., Stanford U. Asst. Prof., Chemistry
Cochran, Sherman G., Ph.D., Yale U. Prof., History
Cohen, Marshall M., Ph D., U. of Michigan. Prof., Mathematics
Cohen, Walter I., Ph.D., U. of California at Berkeley. Prof., Comparative Literature
Cohn, Abigail, Ph.D., U. of California at Los Angeles. Assoc. Prof., Linguistics
Colby-Hall, Alice M., Ph.D., Columbia U. Prof., Romance Studies

Cole, Stephen R., B.A., U. of Indiana. Assoc. Prof., Theater, Film and Dance
Coleman, John E., Ph.D., U. of Cincinnati. Prof., Classics
Coleman, Thomas F., Ph.D., U. of Waterloo. Prof., Computer Science
Collins, Christopher T., Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Linguistics Collum, David B., Ph.D., Columbia U. Prof., Chemistry
Conlin, Mike, Ph.D., U. of Wisconsin. Asst. Prof., Economics
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Constable, Robert L., Ph.D., U. of Wisconsin. Prof., Computer Science
Cooke, W. Donald, Ph.D., U. of Pennsylvania. Prof. Emeritus, Chemistry
Cooper, Barbara H., Ph.D., California Inst. of Technology. Prof., Physics/LASSP*
Cordes, James M., Ph.D., U. of California at San Diego. Prof., Astronomy/NAIC $\ddagger$
Correll, Barbara, Ph.D., U. of Wisconsin. Assoc. Prof., English
Corson, Dale R., Ph.D., U. of California at Berkeley. Prof. Emeritus, Physics
Cotts, Robert M., Ph.D., U. of California at Berkeley. Prof. Emeritus, Physics/LASSP*
Cowden, Jonathan, Ph.D., Yale U. Asst. Prof., Government
Culler, Jonathan D., D. of Phil., Oxford U (England). Class of 1916 Professor English/Comparative Literature
Cutting, James E., Ph.D., Yale U. Prof., Psychology
Dannhauser, Werner J., Ph.D., U. of Chicago Prof. Emeritus, Government
Darlington, Richard B., Ph.D., U. of Minnesota Prof., Psychology
Davis, H. Floyd, Ph.D., U. of California at Berkeley. Asst. Prof., Chemistry
Davis, Tom E., Ph.D., Johns Hopkins U. Prof., Economics
Dear, Peter, Ph.D., Princeton U. Assoc. Prof., History/Science and Technology Studies
de Bary, Brett, Ph.D., Harvard U. Prof., Asian Studies/Comparative Literature
Deinert, Herbert, Ph.D., Yale U'. Prof., German Studies
Dennis, Michael A., Ph.D., Johns Hopkins U. Asst. Prof., Science and Technology Studies
Dennis, R. Keith, Ph.D., Rice U. Prof., Mathematics
Derry, Louis A., Ph.D., Harvard U. Asst. Prof., Geological Sciences
DeVoogd, Timothy J., Ph.D., U. of Illinois. Assoc. Prof., Psychology
Diaconis, Persi, Ph.D., Harvard U. David Duncan Professor of Physical Sciences, Mathematics/Operations Research and Industrial Engineering
Diesing, Molly, Ph.D., U. of Massachusetts at Amherst. Assoc. Prof., Linguistics
Diffloth, Gerard, Ph.D., U. of California at Los Angeles. Prof., Modern Languages
DiSalvo, Francis J. Jr., Ph.D., Stanford U. John A. Newman Professor of Physical Science, Chemistry
Dotson, Arch T., Ph.D., Harvard U. Prof., Government
Dotson, Esther G., Ph.D., New York U. Prof Emeritus, History of Art
Drell, Persis, Ph.D., U. of California at Berkeley. Assoc. Prof., Physics/LNST
Dugan, Gerald F., Ph.D., Columbia U. Prof., Physics/LNST
Dunning, David, Ph.D., Stanford U. Assoc. Prof., Psychology
Durrett, Richard T., Ph.D, Stanford U. Prof., Mathematics
Dynkin, Eugene B., Dr. of Sci., Moscow U. (USSR). Abram R. Bullis Professor of Mathematics, Mathematics
Earle, Clifford J., Ph.D., Harvard U. Prof., Mathematics

Easley, David, Ph.D., Northwestern U. Prof., Economics
Eddy, Donald D., Ph.D., U. of Chicago. Prof., English
Edmondson, Locksley G., Ph D., Queens U. (Canada). Prof., Africana Studies and Research Center
Ehrenberg, Ronald, Ph.D., Northwestern U. Prof. Industrial and Labor Relations/ Economics
Elias, Robert, Ph.D., U of Pennsylvania. Goldwin Smith Professor of English Literature and American Studies, Emeritus, English
Elledge, Scott B., Ph.D., Cornell U Goldwin Smith Professor of English Literature Emeritus, English
Elser, Veit, Ph.D., U. of California at Berkeley. Assoc. Prof., Physics/LASSP*
Escobar, José F., Ph.D., U. of California at Berkeley. Prof., Mathematics
Esman, Milton J., Ph.D., Princeton U. John S. Knight Professor of International Studies, Emeritus, Government
Evangelista, Matthew, Ph.D., Cornell U. Prof., Government
Ezergailis, Inta M., Ph.D., Cornell U. Prof., German Studies
Ezra, Gregory S., Ph.D., Oxford U. (England). Prof., Chemistry
Fajans, Jane, Ph.D., Stanford U. Assoc. Prof., Anthropology
Farrell, Robert T., Ph.D., Fordham U. Prof., English/Medieval Studies/Archaeology
Farrell, Roger H., Ph.D., U. of Illinois. Prof., Mathematics
Fay, Robert C., Ph.D., U. of Illinois. Prof., Chemistry
Feldshuh, David, Ph.D., U. of Minnesota. Prof., Theatre, Film and Dance
Field, David J., Ph.D., U. of Pennsylvania. Assoc. Prof., Psychology
Fine, Gail J., Ph.D., Harvard U. Prof., Philosophy
Finlay, Barbara L., Ph.D., Massachusetts Inst. of Technology. Prof., Psychology
Fitchen, Douglas B., Ph.D., U. of Illinois. Prof., Physics/LASSP*
Flanagan, Eanna E., Ph.D., U. of Chicago. Asst. Prof., Physics/LNST
Fortune, Joanne E., Ph.D., Cornell U. Assoc. Prof., Physiology/Women's Studies
Foster, Harold F., Ph.D., CUNY Graduate Center. Prof., History of Art/Comparative Literature
Fox, Edward W., Ph.D., Harvard U. Prof. Emeritus, History
Franck, Carl P., Ph.D., Princeton U. Assoc. Prof., Physics/LASSP*
Frank, Robert H., Ph.D., U. of California at Berkeley. Goldwin Smith Professor of Economics, Economics/Ethics and Public Policy
Fréchet, Jean M. J., Ph.D., SUNY Syracuse and Syracuse U. Peter J. W. Debye Professor of Chemistry, Chemistry
Fredericksen, Donald L., Ph.D., U. of Iowa. Assoc. Prof., Theatre, Film and Dance
Freed, Jack H., Ph.D., Columbia U. Prof., Chemistry
Fried, Debra, Ph.D., Yale U. Assoc. Prof., English
Furman, Nelly, Ph.D., Columbia U. Prof., Romance Studies
Gainor, Ellen J., Ph.D., Princeton U. Assoc. Prof., Theatre, Film and Dance
Gair, James W., Ph.D., Comell U. Prof., Modern Languages
Galik, Richard S., Ph.D., Comell U. Prof., Physics/LNST
Galloway, Andrew, Ph.D., U. of California at Berkeley. Assoc. Prof., English
Ganem, Bruce, Ph.D., Columbia U. Franz and Elisabeth Roessler Professor of Chemistry, Chemistry

Garcès, Maria Antonia, Ph.D., Johns Hopkins U. Asst. Prof., Romance Studies

Gates, Paul W., Ph.D., Harvard U. John Stambaugh Professor of History Emeritus, History
Gibbons, Lawrence K., Ph.D., U. of Chicago. Asst. Prof., Physics/LNSTI
Gibian, George, Ph.D., Harvard U. Goldwin Smith Professsor of Russian Literature, Russian Literature/Comparative Literature
Gibson, Eleanor J., Ph.D, Yale U
Susan Linn Sage Professor of Psychology Emeritus, Psychology
Gierasch, Peter J., Ph.D., Harvard U. Prof., Astronomy/CRSR $\dagger$
Gilbert, Roger S., Ph.D., Yale U. Assoc. Prof., English
Gilgen, Peter, Ph.D., Stanford U. Asst. Prof. German Studies
Gilovich, Thomas, Ph.D., Stanford U. Prof., Psychology
Ginet, Carl A., Ph.D., Cornell U. Prof. Philosophy
Ginsburg, Judith R., Ph.D., U. of California at Berkeley. Assoc. Prof., Classics
Giovanelli, Riccardo, Ph D., Indiana U. Prof., Astronomy/NAIC $\ddagger$
Gittelman, Bernard, Ph.D., Massachusetts Inst. of Technology. Prof., Physics/LNST
Godfrey, Michael, Ph.D., U. of Toronto. Asst. Prof., Computer Science
Goetz, Kent, M.F.A., U. of Wisconsin at Madison. Asst. Prof., Theatre, Film and Dance
Gold, Daniel, Ph.D., U. of Chicago Divinity School. Assoc. Prof., Asian Studies
Gold, Thomas, Ph.D., Cambridge U. (England). John L. Wetherill Professor of Astronomy Emeritus, Astronomy/CRSR $\dagger$
Goldsby, Jacqueline, Ph.D., Yale U. Asst. Prof., English
Goldsmith, Paul F., Ph.D., U. of California at Berkeley. Prof., Astronomy/NAIC $\ddagger$
Gottried, Kurt, Ph.D., Massachusetts Inst. of Technology. Prof., Physics/LNST
Greenberg, Mitchell, Ph.D., U. of California at Berkeley. Prof., Romance Studies
Greene, Brian R., Ph.D., Oxford U. Assoc. Prof., Physics/LNSG
Greene, Charles H., Ph.D., U. of Washington. Assoc. Prof., Geological Sciences/CFE
Greene, Sandra E., Ph.D., Northwestern U. Assoc. Prof., History
Greenwood, Davydd J., Ph.D., U. of Pittsburgh. Goldwin Smith Professor of Anthropology, Anthropology
Greisen, Kenneth I., Ph.D., Cornell U. Prof Emeritus, Physics
Gries, David J., Ph.D., Technische Hoch., München (Germany). William L. Lewis Professor of Engineering, Computer Science
Grimes, Joseph E., Ph.D., Cornell U. Prof. Emeritus, Modern Languages and Linguistics Groos, Arthur, Ph.D., Comell U. Prof., German Studies/Medieval Studies
Gross, Leonard, Ph.D., U. of Chicago. Prof., Mathematics
Gross, Mark, Ph.D., U. of California at Berkeley. Asst. Prof., Mathematics
Grossvogel, Anita V., Ph.D., Cornell U. Assoc. Prof. Emeritus, Romance Studies
Grossvogel, David I., Ph.D., Columbia U. Goldwin Smith Professor of Comparative Literature and Romance Studies, Romance Studies/Comparative Literature
Gruner, Sol M., Ph.D., Princeton U. Prof., Physics/LASSP*
Guckenheimer, John, Ph.D., U. of California at Berkeley. Prof., Mathematics
Gunn, Edward M., Jr., Ph.D., Columbia U Prof., Asian Studies
Hagfors, Tor, Ph.D., U. of Oslo (Norway). Prof. Emeritus, Astronomy/Engineering/ NAIC $\ddagger$

Hall, Robert A. Jr., Litt. D., U. of Rome (Italy). Prof. Emeritus, Modern Languages and Linguistics
Halpern, Bruce P., Ph.D., Brown U.
Susan Linn Sage Professor of Psychology,
Psychology/Biological Sciences
Halpern, Joseph Y., Ph.D., Harvard U. Prof., Computer Science
Hammes, Gordon G., Ph.D., U. of Wisconsin. Horace White Prof. Emeritus, Chemistry and Biochemistry
Han, Shin-Kap, Ph.D., Columbia U. Asst. Prof., Sociology
Hand, Louis N., Ph.D., Stanford U. Prof., Physics/LNST
Hanson, Ellis, Ph.D., Princeton U. Asst. Prof., English
Harbert, Wayne E., Ph.D., U. of Illinois. Prof., Linguistics
Harris, Robert L., Ph.D., Northwestern U.
Assoc. Prof., Africana Studies and Research Center
Harris-Warrick, Rebecca, D.M.A., Stanford U. Assoc. Prof., Music
Hartill, Donald L., Ph.D., California Inst. of Technology. Prof., Physics/LNST
Hartman, Paul L., Ph.D., Comell U. Prof. Emeritus, Physics/Applied and Engineering Physics/LASSP*
Hartmanis, Juris, Ph.D., California Inst. of Technology. Walter R. Read Professor of Engineering, Computer Science
Harwit, Martin O., Ph.D, Massachusetts Inst. of Technology. Prof. Emeritus, Astronomy/ CRSR $\dagger$
Hassan, Salah, Ph.D., U. of Pennsylvania. Asst. Prof., Africana Studies and Research Center
Hatch, Martin, Ph.D., Cornell U. Assoc. Prof., Music
Hatcher, Allen, Ph.D., Stanford U. Prof., Mathematics
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Hayes, Donald P., Ph.D., U. of Washington. Prof., Sociology
Haynes, Martha P., Ph.D., Indiana U. Prof., Astronomy/NAIC $\ddagger$
Henderson, David W., Ph.D., U. of Wisconsin. Prof., Mathematics
Henderson, John S., Ph.D., Yale U. Prof., Anthropology
Henley, Christopher L., Ph.D., Harvard U. Assoc. Prof., Physics/LASSP*
Herrin, W. Lamar, Ph.D., U. of Cincinnati. Prof., English
Herring, Ronald, Ph.D., U. of Wisconsin at Madison. Prof., Government
Herter, Terry L., Ph.D., U. of Rochester. Assoc. Prof., Astronomy/CRSR $\dagger$
Hester, Karlton, Ph.D., City U. of New York. Asst. Prof., Music
Hildebrand, George H., Ph.D., Cornell U Maxwell M. Upson Professor of Economics and Industrial Relations Emeritus, Economics/Industrial and Labor Relations
Hilgartner, Stephen, Ph.D., Comell U. Asst. Prof., Science and Technology Studies
Hill, Thomas D., Ph.D., Cornell U. Prof., English/Medieval Studies
Hines, Melissa A., Ph.D., Stanford U. Asst. Prof., Chemistry
Hirschmann, Nancy, Ph.D., Johns Hopkins U. Assoc. Prof., Government
Hite, Molly, Ph.D., U. of Washington. Prof., English
Ho, Wilson, Ph.D., U. of Pennsylvania. Prof., Physics/LASSP*
Hockett, Charles F., Ph.D., Yale U. Prof. Emeritus, Modern Languages and Linguistics/Anthropology
Hodes, Harold, Ph.D., Harvard U. Assoc. Prof., Philosophy
Hoffmann, Roald, Ph.D., Harvard U. Frank H. T. Rhodes Professor of Chemistry, Chemistry

Hohendahl, Peter U., Ph.D., Hamburg U. (Germany). Jacob Gould Schurman Professor of German Literature, German Studies/Comparative Literature
Holcomb, Donald F., Ph.D., U. of Illinois. Prof. Emeritus, Physics/LASSP*
Holdheim, W. Wolfgang, Ph.D., Yale U. Frederic J. Whiton Professor of Liberal Studies, Emeritus, Comparative Literature/ Romance Studies
Holloway, Thomas H., Ph.D., U. of Wisconsin. Prof., History
Holmberg, David H., Ph.D., Cornell U. Prof., Anthropology/Women's Studies
Holquist, Peter, Ph.D., Columbia U. Asst. Prof., History
Hong, Yongmiao, Ph.D., U. of California at San Diego. Asst. Prof, Economics
Hopcroft, John E., Ph.D., Stanford U. Joseph C. Ford Professor of Computer Science, Computer Science
Houck, James R., Ph.D., Comell U. Kenneth A. Wallace Professor of Astronomy, Astronomy/CRSR $\dagger$
Houston, Paul L., Ph.D., Massachusetts Inst. of Technology. Prof., Chemistry
Hsu, John T. H., D. Music, New England Conservatory of Music. Old Dominion Foundation Professor of Humanities and Music, Music
Hubbard, John H., Doctorat d'Etat, U. de Paris (France). Prof., Mathematics
Hughes, Robert E., Ph.D., Comell U. Prof. Emeritus, Chemistry
Hull, Isabel V., Ph.D., Yale U. Prof., History
Husa, Karel, Diploma, Paris Conservatory (France). Kappa Alpha Professor of Music, Emeritus, Music
Huttenlocher, Daniel P., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Computer Science
Hwang, J. T. Gene, Ph.D., Purdue U. Prof., Mathematics
Hyams, Paul R., D. Phil., Oxford U. (England). Assoc. Prof., History
Irwin, Terence H., Ph.D., Princeton U. Susan Linn Sage Professor of Philosophy, Philosophy
Isacks, Bryan L., Ph.D., Columbia U. William and Katherine Snee Professor of Geological Sciences, Geological Sciences/ INSTOC *
Isard, Walter, Ph.D., Harvard U. Prof, Emeritus, Economics
Isbell, Billie J., Ph.D., U. of Illinois. Assoc. Prof., Anthropology
Isen, Alice M., Ph.D., Stanford U. Prof., Johnson Graduate School of Management/ Psychology
Jacobus, Mary L., D. Phil, Oxford U. (England). John Wendell Anderson Professor of English, English/Women's Studies
Janowitz, Phyllis, M.F.A., U. of Massachusetts. Prof., English
Jasanoff, Jay H., Ph.D., Harvard U.
Jacob Gould Schurman Professor of Linguistics, Linguistics
Jasanoff, Sheila, Ph.D., J.D., Harvard U. Prof., Science and Technology Studies
Jeyifo, Biodun, Ph.D, New York U. Prof., English
John, James J., Ph.D., U. of Notre Dame. Professor of Paleography and Medieval History, History
Johnston, Robert E., Ph.D., Rockefeller U. Prof., Psychology
Jones, Karen, Ph.D., Cornell U. Asst. Prof., Philosophy
Jones, Robert B. Jr., Ph.D., U. of California at Berkeley. Prof. Emeritus, Modern
Languages and Linguistics
Jongman, Allard, Ph.D., Brown U. Asst. Prof., Modern Languages
Jordan, Teresa E., Ph.D., Stanford U. Prof., Geological Sciences/INSTOC\#

Jorden, Eleanor H., Ph.D., Yale U.
Mary Donlon Alger Professor of Linguistics Emerita, Modern Languages and Linguistics
Kahin, George McT., Ph.D., Johns Hopkins U. Aaron L. Binenkorb Professor of International Studies Emeritus, Government
Kahn, Alfred E., Ph.D., Yale U.
Robert Julius Thome Professor of Political Economy Emeritus, Economics
Kahn, Peter J., Ph.D., Princeton U. Prof., Mathematics
Kalos, Malvin H., Ph.D., U. of Illinois. Prof., Physics/LASSP*
Kammen, Michael G., Ph.D., Harvard U. Newton C. Farr Professor of American History and Culture, History
Kanazawa, Satoshi, Ph.D., U. of Arizona. Asst. Prof., Sociology
Kaplan, Steven L., Ph.D., Yale U. Goldwin Smith Professor of History, History
Karig, Daniel E., Ph D., U. of California at San Diego. Prof. Emeritus, Geological Sciences
Kaske, Carol V., Ph.D., Johns Hopkins U. Prof., English
Katzenstein, Mary F., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Government
Katzenstein, Peter J., Ph.D., Harvard U. Walter S. Carpenter, Jr., Professor of International Studies, Government
Kay, Robert W., Ph.D., Columbia U. Prof., Geological Sciences/INSTOC*
Kay, Suzanne M., Ph.D., Brown U. Assoc. Prof., Geological Sciences/INSTOC\#
Keil, Frank C., Ph.D., U. of Pennsylvania. William R. Kenan, Jr., Professor of Psychology, Psychology
Kelley, E. Wood, Ph.D., Indiana U. Assoc. Prof., Government
Kellock, Judith, M. M., Boston U. Assoc. Prof., Music
Kennedy, William J., Ph.D., Yale U. Prof., Comparative Literarure
Keshav, S., Ph.D., U. of California at Berkeley. Assoc. Prof., Computer Science
Kesten, Harry, Ph.D., Comell U. Prof., Mathematics
Khurana, Beena, Ph.D., U. of California at Berkeley. Asst. Prof., Psychology
Kiefer, Nicholas M., Ph.D., Princeton U. Henry Scarborough Professor of Social Science, Economics
Kinoshita, Toichiro, Ph.D., Tokyo U. (Japan). Goldwin Smith Professor of Physics Emeritus, Physics/LNST
Kirkwood, Gordon M., Ph.D., Johns Hopkins U. Frederick J. Whiton Professor of Classics Emeritus, Classics
Kirsch, A. Thomas, Ph.D., Harvard U. Prof., Anthropology
Kirshner, Jonathan, Ph.D., Princeton U. Asst. Prof., Goverment
Klein, Richard J., Ph.D., Yale U. Prof., Romance Studies
Kleinberg, Jonathan, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Computer Science
Koschmann, J. Victor, Ph.D., U. of Chicago. Prof., History
Kozen, Dexter, Ph.D., Cornell U. Joseph N. Pew Professor of Engineering/ Computer Science
Kramnick, Isaac, Ph.D., Harvard U. Richard J. Schwarz Professor of Government, Government
Kretzmann, Norman, Ph.D., Johns Hopkins U. Susan Linn Sage Professor of Philosophy Emeritus, Philosophy
Krier, Jennifer M., Ph.D., Harvard U. Asst. Prof., Anthropology/Southeast Asian Studies
Kronik, John W., Ph.D., U. of Wisconsin. Prof., Romance Studies
Krumhansl, Carol L., Ph.D., Stanford U. Prof., Psychology

Krumhansl, James A., Ph.D., Cornell U. Horace White Professor of Physics Emeritus, Physics/LASSP*
Kufner, Herbert L., Ph.D., Cornell U. Prof. Emeritus, Modern Languages and Linguistics
Kuniholm, Peter I., Ph.D., U. of Pennsylvania. Prof., History of Art
LaCapra, Dominick C., Ph.D., Harvard U. Bryce and Edith M. Bowman Professor in Humanistic Studies, History
LaFeber, Walter F., Ph.D., U. of Wisconsin. Marie Underhill Noll Professor of American History, History
Lai, Dong, Ph.D., Cornell U. Asst. Prof., Astronomy
Lambert, Bernd, Ph.D., U. of California at Berkeley. Prof., Anthropology
Lambert, William W., Ph.D., Harvard U. Prof. Emeritus, Psychology/Sociology/Anthropology
Landon, Mark, Ph.D., U. of California at Berkeley. Asst. Prof., Classics
Lantolf, James P., Ph.D., Pennsylvania State U. Prof., Modern Languages
Law, Jane Marie, Ph.D., U. of Chicago. Asst. Prof., Asian Studies
Lawler, Margaret, M. A., San Jose State Coll. Assoc. Prof. Emerita, Theatre Arts
Lazzaro, Claudia, Ph.D., Princeton U. Prof., History of Att
Leavitt, Thomas W., Ph.D., Harvard U. Prof. Emeritus, History of Art
LeClair, Andrē R., Ph.D., Harvard U. Assoc. Prof., Physics/LNSTI
Lee, David M., Ph.D., Yale U. James Gilbert White Distinguished Professor in the Physical Sciences, Physics/LASSP*
Lee, Lee C., Ph.D., Ohio State U. Assoc. Prof. Human Development and Family Studies/ Asian American Studies Program
Leed, Richard L., Ph.D., Cornell U. Prof. Emeritus, Modern Languages and Linguistics
Legros, Patrick A., Ph.D., California Inst. of Technology. Asst. Prof., Economics
Lepage, G. Peter, Ph.D., Stanford U. Prof., Physics/LNSGI
Levitsky, David A., Ph.D., Rutgers U. Prof., Nutritional Sciences/Psychology
Levitt, Bruce, Ph.D., U. of Michigan. Prof., Theatre, Film and Dance
Levy, Charles S., Ph.D., Cornell U. Prof., English
Lewis, Philip E., Ph.D, Yale U. Prof., Romance Studies
Littauer, Raphael M., Ph.D., Cambridge U. (England). Prof., Physics/LNS $\$$
Livesay, G. Roger, Ph.D., U. of Illinois. Prof. Emeritus, Mathematics
Long, Franklin A., Ph.D., U. of California at Berkeley. Henry R. Luce Professor of Science and Society Emeritus, Chemistry/ Science, Technology, and Sociery
Long, Kathleen P., Ph.D., Yale U. Assoc. Prof., Romance Studies
Loring, Roger F., Ph.D., Stanford U. Assoc. Prof, Chemistry
Lowi, Theodore J., Ph.D., Yale U. John L. Senior Professor of American Institutions, Government
Lurie, Alison, A. B., Radcliffe Coll. Frederic J. Whiton Professor of American Literature, English
Lyons, Thomas, Ph.D., Comell U. Assoc. Prof., Economics
Maas, James B., Ph.D., Cornell U. Prof., Psychology
Macy, Michael W., Ph.D., Harvard U. Prof., Sociology
McCall, Dan E., Ph.D., Columbia U. Prof., English
McClane, Kenneth A., M.F.A., Cornell U. W.E.B. DuBois Professor of Literature, English
McClelland, Peter D., Ph.D., Harvard U. Prof., Economics

McConkey, James R., Ph.D., State U. of Iowa. Prof. Emeritus, English
McConnell-Ginet, Sally, Ph.D., U. of Rochester. Prof., Linguistics
McCoy, William John Jr., Ph.D., Cornell U. Prof. Emeritus, Modern Languages and Linguistics
McCoy, Maureen, M.F.A., U. of Iowa. Assoc. Prof., English
McDaniel, Boyce D., Ph.D., Cornell U. Floyd R. Newman Professor of Nuclear Studies Emeritus, Physics/LNSGI
McDermott, Rose, Ph_D., Stanford U. Asst. Prof., Government
McGowan, Kaja, Ph.D., Cornell U. Asst. Prof., History of Art
MacDonald, June Fessenden, Ph.D., Tufts U. Assoc. Prof., Science and Technology Studies/Biochemistry
MacDonald, Scott, Ph.D., Cornell U. Prof., Philosophy
McGinnis, Robert, Ph.D., Northwestern U. Prof. Emeritus, Sociology
McLafferty, Fred W., Ph.D., Cornell U. Peter J. W. Debye Professor of Chemistry Emeritus, Chemistry
McMillin, H. Scott, Ph.D., Stanford U. Prof., English
McMurry, John E., Ph.D., Columbia U. Prof., Chemistry
Majumdar, Mukul K., Ph.D., U. of California at Berkeley. H. T. Warshow and Robert Irving Warshow Professor of Economics, Economics
Mankin, David P., Ph.D., U. of Virginia. Assoc. Prof., Classics
March, Kathryn S., Ph.D., Comell U. Assoc. Prof., Anthropology/Women's Studies
Marcus, Phillip L., Ph.D., Harvard U. Prof. Emeritus, English
Martin, Biddy, Ph.D., U. of Wisconsin at Madison. Prof., German Studies/Women's Studies
Masson, Robert T., Ph.D., U. of California at Berkeley. Prof., Economics
Mazrui, Ali A., Ph.D., Oxford U. (England). Senior Scholar, Africana Research and Studies Center and A. D. White Professor-at-Large Emeritus
Mebane, Walter, Ph.D., Yale U. Assoc. Prof., Government
Mei, Tsu-Lin, Ph.D., Yale U. Hu Shih Prof. of Chinese Literature and Philosophy, Asian Studies
Meinwald, Jerrold, Ph.D., Harvard U. Goldwin Smith Professor of Chemistry, Chemistry
Meixner, Laura L., Ph.D., Ohio State U. Assoc. Prof., History of Art
Melas, Natalie A., Ph.D., U. of California at Berkeley. Asst. Prof., Comparative Literature
Mermin, Dorothy M., Ph.D., Harvard U. Prof., English
Mermin, N. David, Ph.D., Harvard U. Horace White Professor of Physics, Physics/ LASSP*
Messing, Gordon M., Ph.D., Harvard U. Prof. Emeritus, Classics/Modern Languages and Linguistics
Migiel, Marilyn, Ph.D., Yale U. Assoc. Prof., Romance Studies
Miller, Richard W., Ph.D., Harvard U. Prof., Philosophy/Science and Technology Studies
Miller, William T., Ph.D., Duke U. Prof. Emeritus, Chemistry
Minkowski, Christopher, Ph.D., Harvard U. Assoc. Prof., Asian Studies
Mitchell, Janet, Ph.D., Northwestern U. Asst. Prof., Economics
Mitra, Tapan, Ph.D., U. of Rochester. Prof., Economics
Moen, Phyllis, Ph.D, U. of Minnesota. Assoc. Prof., Human Ecology and Sociology
Mohanty, Satya P., Ph.D., U. of Illinois. Assoc.

Monosoff-Pancaldo, Sonya, Artists Diploma, Julliard School of Music. Prof. Emeritus, Music
Monroe, Jonathan B., Ph.D., U. of Oregon. Prof., Comparative Literature
Moore, R. Laurence, Ph.D., Yale U. Prof., History
Morgan, Robert R., M.F.A., U. of North Carolina. Kappa Alpha' Prof. of English, English
Morgenroth, Joyce, M.A., Johns Hopkins U.
Assoc. Prof., Theatre, Film and Dance
Morley, Michael D., Ph.D., U. of Chicago. Prof., Mathematics
Morrisett, Greg, Ph.D., Carnegie Mellon U. Asst. Prof., Computer Science
Morrison, George H., Ph.D, Princeton U. Prof. Emeritus, Chemistry
Munasinghe, Viranjini P., Ph.D., Johns Hopkins U. Asst. Prof., Anthropology/Asian American Studies
Murray, Edward, Ph.D., Yale Univ. Assoc. Prof., Music
Murray, Timothy, Ph. D., Johns Hopkins U. Prof., English
Najemy, John M., Ph.D., Harvard U. Prof., History
Nee, Victor, Ph.D., Harvard U. Goldwin Smith Professor of Sociology, Sociology
Neisser, Ulric, Ph.D., Harvard U. Prof., Psychology
Nelson, Frederick E., Ph.D., U. of Michigan. Assoc. Prof., Geological Sciences
Nerode, Anil, Ph.D., U. of Chicago. Goldwin Smith Professor of Mathematics, Mathematics
Ngate, Jonathan, Ph.D., U. of Washington. Assoc. Prof., Romance Studies
Nicholson, Philip, Ph.D., California Inst. of Technology. Prof., Astronomy/CRSR $\dagger$
Norton, Mary Beth, Ph.D., Harvard U.
Mary Donlon Alger Professor of American History, History
Nussbaum, Alan, Ph.D., Harvard U. Assoc. Prof., Classics/Linguistics
O'Connor, Stanley J., Ph.D., Cornell U. Prof. Emeritus, History of Art
O'Donoghue, Ted, Ph.D., U. of California at Berkeley. Asst. Prof., Economics
Ohadike, Don, Ph.D., U. of Jos (Nigeria). Assoc. Prof., Africana Studies and Research Center
Okihiro, Gary, Ph.D., U. of California at Los Angeles. Prof., History/Asian American Studies Program
Olguin, Ben V., Ph.D., Stanford U. Asst. Prof., English
Oliver, Jack E., Ph.D., Columbia U. Irving Porter Church Professor Emeritus of Engineering/Geological Sciences/INSTOC\#
Olum, Paul, Ph.D., Harvard U. Prof. Emeritus, Mathematics
Orear, Jay, Ph.D., U. of Chicago. Prof. Emeritus, Physics/LNSG
Owen, David I., Ph.D., Brandeis U. Prof., Ancient Near Eastern and Biblical History and Archaeology, Near Eastern Studies
Owren, Michael J., Ph.D., Indiana U. Asst. Prof., Psychology
Palmer, Robert M., M.M., Eastman School of Music. Given Foundation Professor of Music Composition Emeritus, Music
Parker, A. Reeve, Ph.D., Harvard U. Prof., English
Parpia, Jeevak M., Ph.D., Cornell U. Prof., Physics/LASSP*
Parrish, Stephen M., Ph.D., Harvard U. Goldwin Smith Professor of English Emeritus, English
Patterson, J. Ritchie, Ph.D., U. of Chicago. Asst. Prof., Physics/LNSGI
Payne, Lawrence E., Ph.D., lowa State U. Prof. Emeritus, Mathematics
Peirce, Leslie, Ph.D., Princeton U. Assoc. Prof., Ottoman and Islamic History, Near Eastern Studies

Pelliccia, Hayden, Ph.D., Yale U. Assoc. Prof. Classics
Peraino, Judith A., Ph.D., U. of California at Berkeley. Asst. Prof., Music
Peterson, Charles A., Ph.D., U. of Washington. Prof., History
Piedra, Jose, Ph.D., Yale U. Assoc. Prof., Romance Studies
Piggott, Joan R., Ph.D., Stanford University. Assoc. Prof., History
Pinch, Trevor J., Ph.D., U. of Bath (England). Assoc. Prof., Science and Technology Studies
Pingali, Keshav K., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Computer Science
Pintner, Walter M., Ph.D., Harvard U. Prof., History
Plane, Robert A., Ph.D., U. of Chicago. Prof. Emeritus, Chemistry
Platek, Richard, Ph.D., Stanford U. Assoc. Prof., Mathematics
Pohl, Robert O., Doktor, U. Erlangen
(Germany). Prof., Physics/LASSP*
Polenberg, Richard, Ph.D., Columbia U. Goldwin Smith Professor of American History, History
Pollak, Nancy, Ph.D., Yale U. Assoc. Prof., Russian Literature
Pontusson, Jonas, Ph.D., U. of California at Berkeley. Assoc. Prof., Government
Porte, Joel, Ph.D., Harvard U. Ernest I. White Professor of American Studies and Humane Letters, English/Comparative Literature
Possen, Uri M., Ph.D., Yale U. Prof., Economics
Power, Alison G., Ph.D., U. of Washington. Assoc. Prof., Science and Technology Studies/Ecology and Systematics
Powers, David S., Ph.D., Princeton U. Prof., Arabic and Islamic Studies, Near Eastern Studies
Provine, William B., Ph.D., U. of Chicago. Prof., History/Biological Sciences
Pucci, Pietro, Ph.D., U. of Pisa (Italy). Goldwin Smith Professor of Classics, Classics
Rabkin, Jeremy A., Ph.D., Harvard U. Assoc. Prof., Government
Radzinowicz, Mary A., Ph.D., Columbia U. Jacob Gould Schurman Professor of English Emerita, English
Ralph, Daniel C., Ph.D., Comell U. Asst. Prof., Physics/LASSP*
Ramage, Andrew, Ph.D., Harvard U. Prof., History of Art
Randel, Don M., Ph.D., Princeton U. Given Foundation Professor of Musicology, Music Rawlings III, Hunter R., Ph.D., Princeton U. Prof., Classics
Regan, Dennis T., Ph.D., Stanford U. Assoc. Prof., Psychology
Regan, Elizabeth Adkins, Ph.D., U, of Pennsylvania. Prof., Psychology/Biological Sciences
Rendsburg, Gary, Ph.D., New York U. Prof., Biblical and Semitic Studies, Near Eastern Studies
Reppy, John D., Ph.D., Yale U. John L. Wetherill Professor of Physics, Physics/LASSP*
Reppy, Judith, Ph.D. Comell U. Prof., Science and Technology Studies
Resina, Joan Ramon, Ph.D., U. of California at Berkeley. Assoc. Prof., Romance Studies
Rhodes, Frank H. T., Ph.D. , U. of Birmingham (England). Prof., Geological Sciences
Richards, Annette, Ph.D., Stanford U. Asst Prof., Music
Richardson, Robert C., Ph.D., Duke U. F. R. Newman Professor of Physics, Physics/LASSP*
Rogers, Joseph T., Ph.D., U. of Rochester. Asst. Prof., Physics/LNST
Rosen, Bernard C., Ph.D., Cornell U. Prof. Emeritus, Sociology

Rosen, Carol G., Ph.D., Harvard U. Prof., Modern Languages
Rosen, David, Ph D., U. of California at Berkeley. Prof., Music
Rosenberg, Alex, Ph.D., U. of Chicago. Prof. Emeritus, Mathematics
Rosenberg, Edgar, Ph.D., Stanford U. Prof., English/Comparative Literature
Rothaus, Oscar S., Ph.D., Princeton U. Prof., Mathematics
Rossiter, Margaret, Ph.D., Yale U. Marie Underhill Noll Professor of the History of Science, Science and Technology Studies
Rubin, David L., Ph.D., U. of Michigan. Assoc. Prof., Physics/LNSG
Rubinfeld, Ronitt A., Ph.D., U. of California at Berkeley. Asst. Prof., Computer Science
Rush, Myron, Ph D., U. of Chicago. Prof., Government
Rusten, Jeffrey S., Ph.D., Harvard U. Prof., Classics
Rutten, Andrew, Ph.D., Washington U. Asst Prof., Government
Saccamano, Neil, Ph.D., Johns Hopkins U. Assoc. Prof., English
Sakai, Naoki, Ph.D., U. of Chicago. Assoc. Prof., Asian Studies
Saloff-Coste, Laurent, Ph.D., U. Paris VI. Prof., Mathematics
Salpeter, Edwin E., Ph.D., Birmingham U. (England). James Gilbert White Distinguished Professor in the Physical Sciences, Physics/LNST/Astronomy/CRSR $\dagger$
Salvatore, Nicholas, Ph.D., U. of California at Berkeley. Prof., Industrial and Labor Relations/American Studies
Samuels, Shirley, Ph.D., U. of California at Berkeley. Assoc. Prof., English/Women's Studies
Sanders, Elizabeth, Ph.D., Cornell U. Prof., Government
Sangren, P. Steven, Ph.D., Stanford U. Assoc. Prof., Anthropology
Santiago-Irizarry, Vilma, Ph.D., New York U. Asst. Prof., Anthropology and Hispanic American Studies
Sawyer, Paul L., Ph.D., Columbia U. Prof., English
Scatterday, Mark D., D.M.A., Eastman Schl. of Music. Assoc. Prof., Music
Schamis, Hector, Ph.D., Columbia U. Asst. Prof., Government
Schatz, Alfred H., Ph.D., New York U. Prof., Mathematics
Scheraga, Harold A., Ph.D., Duke U. George W. and Grace L. Todd Professor of Chemistry Emeritus, Chemistry
Schneider, Fred B., Ph.D., SUNY at Stony Brook. Prof., Computer Science
Schneider, Rebecca, Ph.D., New York U. Asst. Prof., Theatre, Film and Dance
Schuler, Richard E., Ph.D., Brown U. Prof., Economics/Engineering
Schwarz, Anette, Ph.D., Johns Hopkins U. Assoc. Prof., German Studies
Schwarz, Daniel R., Ph.D., Brown U. Prof., English
Seltzer, Mark, Ph.D., U. of California at Berkeley. Prof., English
Sen, Shankar, Ph.D., Harvard U. Prof, Mathematics
Senderovich, Savely, Ph.D., New York U. Prof., Russian Literature
Seshadri, Praveen, Ph.D., U. of Wisconsin. Asst. Prof., Computer Science
Sethna, James P., Ph.D., Princeton U. Prof., Physics/LASSP*
Seznec, Alain, D.E.S., U. of Paris-Sorbonne (France). Prof., Romance Studies
Shanley, Kathryn, Ph.D., U. of Michigan. Assoc. Prof., English
Shanzer, Danuta, D.Phil., Oxford U. (England). Prof., Classics
Shapiro, Gavriel, Ph.D., U. of Illinois at Urbana. Assoc. Prof., Russian Literature

Shaw, Harry E., Ph.D., U. of California at Berkeley. Prof., English
Shefter, Martin A., Ph.D., Harvard U. Prof., Government
Shell, Karl, Ph.D. Stanford U. Robert Julius Thorne Professor of Economics, Economics
Shirai, Yasuhiro, Ph.D., U. of California at Los Angeles. Asst. Prof., Modern Languages
Shiraishi, Takashi, Ph.D., Cornell U. Prof., History
Shoemaker, Sydney S., Ph.D., Comell U. Susan Linn Sage Professor of Philosophy, Philosophy
Shore, Richard A., Ph.D., Massachusetts Inst. of Technology. Prof., Mathematics
Shue, Henry, Ph.D., Princeton U. Wyn and William Y. Hutchinson Prof. of Ethics and Public Life
Shue, Vivienne B., Ph.D., Harvard U. Prof., Govemment
Siegel, James T., Ph.D., U. of California at Berkeley. Prof., Anthropology
Siegel, Sandra F., Ph.D., U. of Chicago. Prof., English
Sierra, Roberto, M. M., London U. (England). Assoc. Prof., Music
Sievers, Albert J. III, Ph.D., U. of California at Berkeley. Edward L. Nichols Professor, Physics/LASSP*
Siggia, Eric D., Ph.D., Harvard U. Prof., Physics/ LASSP*
Silbey, Joel H., Ph.D., U. of Iowa. President White Professor of History, History
Silsbee, Robert H., Ph.D., Harvard U. Prof. Emeritus, Physics/ LASSP*
Silverman, Albert, Ph.D., U. of California at Berkeley. Prof. Emeritus, Physics/LNST
Sjamaar, Reyer, Ph.D., Rijksuniversiteit te Utrecht (The Netherlands). Asst. Prof., Mathematics
Small, Meredith F., Ph.D., U. of California at Davis. Asst. Prof., Anthropology
Smillie, John, Ph.D., U. of Chicago. Prof., Mathematics
Smith, Anna Marie, Ph.D., U. of Essex (England). Asst. Prof., Government
Smith, Brian, Ph.D., U. of California at Berkeley. Asst. Prof., Computer Science
Smith, Bruce, Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Economics
Smith, Robert J., Ph.D., Cornell U. Goldwin Smith Professor of Anthropology Emeritus, Anthropology
Sogah, Dotsevi Y., Ph.D., U. of California at Los Angeles. Prof., Chemistry
Sokol, Thomas A., M.A., George Peabody Coll. Prof. Emeritus, Music
Solâ, Donald F., Ph.D., Cornell U. Prof. Emeritus, Modern Languages and Linguistics
Somkin, Fred, Ph.D., Comell U. Prof. Emeritus, History
Speh, Birgit, Ph.D., Massachusetts Inst. of Technology. Prof., Mathematics
Spillers, Hortense, Ph.D., Brandeis U. Prof., English
Spivey-Knowlton, Michael, Ph.D., U. of Rochester. Asst. Prof., Psychology
Squyres, Steven W., Ph.D., Cornell U. Prof., Astronomy/CRSR $\dagger$
Stacey, Gordon J., Ph.D., Cornell U. Asst. Prof., Astronomy/CRSR $\dagger$
Staller, George J., Ph.D., Cornell U. Prof., Economics
Stanley, Jason, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Philosophy
Stein, Peter C., Ph.D., Massachusetts Inst. of Technology. Prof., Physics/LNS9
Steinberg, Michael P., Ph.D. , U. of Chicago. Assoc. Prof., History
Stillman, Michael E., Ph.D., Harvard U. Assoc. Prof., Mathematics
Stith, Marice W., M.A., Ohio State U. Prof., Emeritus, Music
Strang, David, Ph.D., Stanford U. Assoc. Prof., Sociology

Strauss, Barry S., Ph.D., Yale U. Prof., History/Classics
Strichartz, Robert S., Ph.D., Princeton U. Prof., Mathematics
Strout, S. Cushing, Jr., Ph.D., Harvard U. Ernest I. White Professor of American Studies and Humane Letters, Emeritus, English
Stucky, Steven, D.M.A., Cornell U. Prof., Music
Sturgeon, Nicholas L., Ph.D., Princeton U Prof., Philosophy
Stycos, Joseph M., Ph.D., Columbia U. Prof., Rural Sociology/Sociology
Subramanian, Shankar, Ph.D., U. of California at Berkeley. Asst. Prof., Economics
Suner, Margarita A., Ph.D., Indiana U. Prof., Linguistics
Sweedler, Moss E., Ph.D., Massachusetts Inst. of Technology. Prof., Mathematics
Szabo, Zoltan, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Philosophy
Talman, Richard M., Ph.D., California Inst. of Technology. Prof., Physics/LNS
Tao, Hongyin, Ph.D., U. of California at Santa Barbara. Asst. Prof., Modern Languages
Tardos, Evá, Ph.D., Eötvös U. (Hungary). Assoc. Prof., Computer Science
Tarrow, Sidney G., Ph.D., U. of California at Berkeley. Maxwell M. Upson Professor of Government, Government
Taylor, Keith W., Ph.D., U. of Michigan. Assoc. Prof., Asian Studies
Teitelbaum, Tim, Ph.D., Carnegie-Mellon U. Assoc. Prof., Computer Science
Telhami, Shibley, Ph.D., U. of California at Berkeley. Assoc. Prof., Government/Near Eastern Studies
Terzian, Yervant, Ph.D., Indiana U. James A. Weeks Professor of Physical Sciences, Astronomy/NAIC $\ddagger$
Teskey, Gordon L., Ph.D., U. of Toronto, Canada. Prof., English
Teukolsky, Saul A., Ph.D., California Inst. of Technology. Prof., Physics/LNST/ Astronomy
Thorbecke, Erik, Ph D., U. of California at Berkeley. H. Edward Babcock Professor of Economics and Food Economics, Nutritional Sciences/Economics
Thorne, Robert E., Ph.D., U. of Illinois. Assoc. Prof., Physics/LASSP*
Tiemey, Brian, Ph.D., Pembroke College of Cambridge U. (England).
Bryce and Edith M. Bowman Professor in Humanistic Studies Emeritus, History
Tigner, Maury, Ph.D., Cornell U.
Hans Bethe Prof. of Physics, Emeritus, Physics/LNSC
Tittler, Jonathan P., Ph.D., Cornell U. Prof., Romance Studies
Toueg, Sam, Ph.D., Princeton. Prof., Computer Science
Travers, William B., Ph.D., Princeton U. Prof., Geological Sciences
Tucker, Scott M.M., New England Conservatory. Asst. Prof., Music
Turcote, Donald L., Ph.D., California Inst. of Technology. Maxwell M. Upson Professor of Engineering, Geological Sciences/ INSTOC*
Turner, James E., Ph.D., Union Graduate School at Antioch College. Prof,, Africana Studies and Research Center
Tye, Sze-hoi Henry, Ph.D., Massachusetts Inst of Technology. Prof., Physics/LNS 9
Uphoff, Norman T., Ph.D., U. of California at Berkeley. Prof., Government
Usher, David A., Ph.D., Cambridge U. (England). Assoc. Prof., Chemistry
Usner, Daniel H., Jr., Ph D., Duke U. Prof. History
Vallois, Marie-Claire, Ph.D., U. of Nice (France). Assoc. Prof., Romance Studies

Vanek, Jaroslav, Ph.D., Massachusetts Inst. of Technology. Carl Marks Professor of International Studies Emeritus, Economics
Van Coetsem, Frans, Ph.D. U. of Leuven (Belgium). Prof. Emeritus, Modern Languages and Linguistics
Van Loan, Charles F., Ph.D., U. of Michigan Prof., Computer Science
Vaughn, Stephanie, M.F.A., U. of lowa. Prof. English
Vavasis, Stephen, Ph.D., Stanford U. Assoc. Prof., Computer Science
Veracierto, Marcelo, Ph.D., U. of Minnesota Asst. Prof., Economics
Veverka, Joseph F., Ph.D., Harvard U. Prof., Astronomy/CRSR $\dagger$
Villarejo, Amy, Ph.D., U. of Pittsburgh. Asst. Prof., Theatre, Film and Dance
Viramontes, Helena M., M.F.A., U. of California at Irvine. Asst. Prof., English
Vogelsang, Tim, Ph.D., Princeton U. Asst Prof. Economics
Vogtmann, Karen L., Ph.D., U. of California at Berkeley. Prof., Mathematics
Volman, Thomas P., Ph.D., U. of Chicago Assoc. Prof., Anthropology
vonEicken, Thorsten, Ph.D., U. of California at Berkeley. Asst. Prof., Computer Science
Wahlbin, Lars B., Ph.D., U. of Göteborg (Sweden). Prof., Mathematics
Waite, Geoffrey C. W., Ph.D., Princeton U. Assoc. Prof., German Studies
Walker, Henry A., Ph.D., Stanford U. Prof., Sociology
Wan, Henry Y., Jr., Ph.D., Massachusetts Inst of Technology. Prof., Economics
Washington, Margaret, Ph.D., U. of California at Davis. Assoc. Prof., History
Wasserman, Ira M., Ph.D., Harvard U. Prof., Astronomy/CRSR $\dagger$
Waugh, Linda R., Ph.D., Indiana U. Prof. Modem Languages/Comparative Literarure/ Romance Studies
Way, Christopher, Ph.D., Stanford U. Asst. Prof., Government
Webster, James, Ph.D., Princeton U. Goldwin Smith Professor of Music, Music
Weil, Rachel, Ph.D., Princeton U. Asst. Prof., History
Weiss, John H., Ph.D., Harvard U. Assoc. Prof., History
West, James E., Ph.D., Louisiana State U Prof., Mathematics
Wetherbee, Winthrop, Ph.D., U. of California at Berkeley. Avalon Professor of English and Medieval Studies, English/Medieval Studies/Comparative Literature
White, William M., Ph.D., U. of Rhode Island Prof., Geological Sciences
Whiting, Jennifer, Ph.D., Cornell U. Assoc. Prof., Philosophy
Whitman, John B., Ph.D., Harvard U. Assoc Prof., Linguistics
Widom, Benjamin, Ph.D., Comell U. Goldwin Smith Professor of Chemistry, Chemistry
Wilcox, Charles F., Jr., Ph.D., U. of California at Los Angeles. Prof., Chemistry
Williams, L. Pearce, Ph.D., Cornell U. John Stambaugh Professor of the History of Science Emeritus, Science and Technology Studies
Williams, Robin M., Jr., Ph.D., Harvard U. Henry Scarborough Professor of Social Sciences Emeritus, Sociology
Wilson, Robert R., Ph.D. , U. of California at Berkeley. Prof. Emeritus, Physics
Wilson, Ron, B.G.S., Wichita State U. Assoc. Prof., Theatre, Film and Dance
Wolczanski, Peter T., Ph.D., California Inst. of Technology. George W. and Grace L. Todd Professor of Chemistry, Chemistry
Wolff, John U., Ph.D., Yale U. Prof., Modern Languages
Wolters, Oliver W., Ph.D., U. of London (England). Goldwin Smith Professor of Southeast Asian History Emeritus, History

Wong, Shelley, Ph.D., U. of California at Berkeley. Asst. Prof., English
Wyatt, David K., Ph.D., Cornell U. John Stambaugh Professor of History, History
Yan, Tung-Mow, Ph.D., Harvard U. Prof. Physics/LNST
Yearsley, David G., Ph.D., Stanford U. Asst. Prof., Music
Young, Martie W., Ph.D., Harvard U. Prof., History of Art
Zabih, Raman, Ph.D., Stanford U. Asst. Prof., Computer Science
Zaslaw, Neal A., Ph.D., Columbia U. Herbert Gussman Professor of Music, Music
Zax, David B., Ph.D., U. of California at Berkeley. Asst. Prof., Chemistry
Zec, Draga, Ph.D., Stanford U. Assoc. Prof. Linguistics
Zucchi, Alessandro, Ph.D., U. of Massachusetts at Amherst. Asst. Prof., Linguistics
${ }^{*}$ Laboratory of Atomic and Solid State Physics
$\dagger$ Center for Radiophysics and Space Research
$\ddagger$ National Astronomy and Ionosphere Center.
GLaboratory of Nuclear Studies
\#Institute for the Study of the Continents


[^0]:    "See the list of courses with overlapping content at the end of the introduction.

[^1]:    *See the list of courses with overlapping
    content at the end of the introduction.

[^2]:    *See the list of courses with overlapping content at the end of the introduction.

[^3]:    -See the list of courses with overlapping content at the end of the introduction.

