

College of Arts and Sciences

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 Lynne S. Abel, associate dean
 Geoffrey V. Chester, associate dean
 Urban J. DeWinter, associate dean and director of admissions
 Jack W. Lowe, director of finance and administration
 Lloyd Carter-Leavitt, director of development

College of Arts and Sciences Calendar Supplement

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

	Fall	Spring
Deadline for submitting independent major requests (first meeting). Go to 159 Goldwin Smith Hall for further information.	Sept. 10	Feb. 2
Last day for adding courses without petition.	Sept. 22	Feb. 11
Last day for dropping courses without \$10 fee.	Sept. 22	Feb. 11
Last day to petition to accelerate to graduate at the end of the current term.	Sept. 22	Feb. 11
Last day for changing grade option (S-U).	Sept. 22	Feb. 11
Deadline for submitting independent major requests (second meeting).	Oct. 18	March 14
Last day for requesting leave of absence or withdrawal for the current term.	Oct. 27	March 18
Last day for dropping courses without petition.	Oct. 27	March 18
Deadline for requesting permission to study in absentia the following term.	Nov. 1	April 1
Advanced course enrollment for the following term.	Nov. 1-12	April 11-22
Deadline for applying to the College Scholar Program.		May
Deadline for requesting internal transfer to the College of Arts and Sciences for the following term.	Dec. 1	May 15

Program of Study

The College of Arts and Sciences at Cornell is a traditional liberal arts college. It is composed of those departments that teach and study the humanities, the basic sciences, the social sciences, and the expressive arts. It is also a college within a university, and this wider community provides strength and diversity not available in an isolated undergraduate institution. Students may draw upon the knowledge and facilities of the professional colleges to

supplement their studies. Finally, the college is a graduate school and research center attracting faculty whose active involvement in writing and research requires first-rate academic facilities, and whose energetic participation in undergraduate teaching brings to their students the most current ideas in modern scholarship. It is this combination of functions that gives the college its distinctive character.

The variety and richness of the curriculum is extraordinary; there is no course that all students must take, and there are several hundred from which they may choose. Yet the faculty believe that there should be a recognizable pattern to each student's education.

That pattern includes familiarity with several different modes of thought that are reflected in the natural sciences, the social sciences, and in those achievements of intellect and imagination that are the focus of the humanities and the expressive arts.

In addition to these general areas of knowledge, students study foreign languages, acquire effective writing 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

- Minimum number of courses:** 34 courses.
- Freshman Seminar:** Two courses.
- Foreign language:** Qualification in two languages, or proficiency in one (zero to five courses, depending on placement).
- Distribution:** An approved sequence of courses (6 credits) in each of the four groups listed below:

Group 1	a. Biological sciences b. Physical sciences
Group 2	a. Social sciences b. History
Group 3	a. Humanities b. Expressive arts
Group 4	a. Mathematics and computer science b. A course sequence in one of the subdivisions above that has not been used to satisfy group 1, 2, or 3. See p. 91.
- Major.**
- Electives:** Four or five courses (or 15 credits) in courses not used to fulfill other requirements.
- Credits:** A total of 120 credits, of which 100 must be taken in the College of Arts and Sciences.
- Residence:** Eight full-time terms, unless a student can successfully complete the other requirements in fewer than eight terms and is allowed to accelerate graduation.
- Physical education:** Completion of the University requirement. See p. 21.

Ordinarily, a student may not use the same course to fulfill more than one college requirement. See page 92.

Minimum Requirement for Courses and Credit

Students who are first admitted to the College of Arts and Sciences in the fall of 1980 or thereafter must complete at least thirty-four courses to graduate, that is, four to five courses a semester. Most courses are assigned 3 or 4 credits. Some are assigned 2 credits and count as one-half courses toward the thirty-four. When single-credit courses form a part of a series (certain offerings in mathematics, biology, and music, for instance) they can be aggregated to count as one-half course. Students must also complete 120 credits, 100 of which must be from courses taken in the College of Arts and Sciences, to earn the Bachelor of Arts degree. Credits earned from advanced placement examinations, courses approved for study in absentia, and courses taken in

other divisions or institutions that are certified by the major adviser as part of a student's major may be counted towards the 100 credits required within the college.

Freshman Seminars

Each semester of their freshman year in the college, students choose a Freshman Seminar from among more than fifty courses offered by over a dozen different departments in the humanities, social sciences, and expressive arts. These courses all share one major purpose: to offer the student practice in writing English prose. They also ensure that all beginning students may have the benefits afforded by a small class.

Language Requirement

The following departments teach foreign languages or literature or both in the College of Arts and Sciences: African Studies and Research Center, Asian Studies, Classics, German Literature, Modern Languages and Linguistics, Near Eastern Studies, Romance Studies, and Russian Literature.

There are two ways of satisfying the language requirement:

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

Proficiency

Proficiency is attained by passing a specified, one-semester, 200-level course (or by equivalent achievement, to be determined by examination; see below under Advanced Standing Credit).

Qualification

Qualification may be attained in any of the following four ways.

- 1) Three years of high school study in any one language gives qualification in that language. Note, however, that this route to qualification does not guarantee entrance into a 200-level course. The student who wants to continue in this language must be placed by examination.
- 2) Passing the requisite course: 102 or 123 in languages taught by the Department of Modern Languages and Linguistics; NES 102 or 122 in Hebrew; NES 112 in Arabic; Classics 103 or 104 in Greek; Classics 106, 107, or 108 in Latin.
- 3) A score of 560 or better on the College Placement Test (CPT).
- 4) Placement in a 200-level course by special examination (in cases where no CPT is available).

A student may submit a 560 CPT score at the end of a course numbered 122, thus attaining *qualification* without taking 123. This procedure is optional; the student with a score of 560 or better may want to take 123 in order to be better prepared for the 200-level courses.

Speakers of languages other than English may get credit for their bilingual ability. Their English achievement is measured by the Test of English as a Foreign Language (TOEFL), a requirement for matriculation; their performance in one other language learned outside the academic environment is measured by examination, and evidence for abilities in reading and writing, as well as speaking, is required. A maximum of 6 advanced placement credits are granted to students who demonstrate *proficiency* equivalent to course work at the 200 level or above at Cornell.

Language Course Placement and Credit

Students who have had two or more years of high school study in a language cannot register in any course in that language without being placed by examination. Nor can transfer students register without examination, even though they may have been given credit for language work elsewhere.

The type of examination depends upon the language course and the level of achievement:

- 1) French, German, Italian, Latin 105, Russian, and Spanish courses: CPT. Entering students who have not taken the CPT in high school and who want to continue their language study have to take the CPT at Cornell during orientation week. Students may retake this examination at Cornell if they have studied the language a year or more since last taking the test. In order to do this, students must register with the Academic and Career Counseling services, 203 Barnes Hall, and pay a fee of \$5.
- 2) Latin (all courses except 105): departmental examination.
- 3) Hebrew: departmental examination.
- 4) Other languages: special examinations; see professor in charge.
- 5) High achievement (students with a CPT score of 650 or better in French, German, Hebrew, Italian, Russian, and Spanish): the Cornell Advanced Standing Examination (CASE).

A student with high achievement scores should take the Cornell Advanced Standing Examination (CASE); even if the student does not want to do any further work in the language, the CASE may provide proficiency status for the language requirement, and it may provide up to 6 hours of advanced standing credit. Students who do not have high achievement scores are eligible for the courses listed in the charts below, depending on their scores. For other languages, or for special problems, see the professor in charge.

French

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
450-559	123	
560-649	203	200 211 201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

German

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
450-559	123	
560-649	203	201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

Italian

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
450-559	123	
560-649	203	201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

Russian

CPT Reading Score	Language Courses	Literature Courses
Below 450	101 121	
450-559	102 123	
560-649	203	201
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

Spanish

CPT Reading Score	Language Courses	Literature Courses
Below 450	121	
450-559	123	
560-649	203	201 212
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)	

Latin

CPT Reading Score	Course Number
Below 450	105
450-649	Placement by examination
650 and above	Apply for the Cornell Advanced Standing Examination (CASE)

Hebrew

Placement by departmental examination.

Advanced Standing Credit

Advanced standing credit may be entered on a student's record as follows:

Credit may be granted for high school work for the equivalent of language courses numbered 203, 204. The amount of credit is based on performance on one or more of the following examinations:

- a) CEEB Advanced Placement Examination.
 - French, Spanish, and German:* A score of 4 or 5 yields 3 credits on the French, Spanish, or German language examinations and literature examinations.
 - Hebrew:* Up to 6 credits may be granted depending on the student's score on the departmental examination.
 - Latin:* Students should consult the Department of Classics, 120A Goldwin Smith Hall. Students may be tentatively placed in a 300-level Latin course if they achieve a score of 4 or 5 on the CEEB Advanced Placement Examination, but they must also take the department's own placement examination during orientation week. A student who is permitted to register in a 300-level course will be given 6 advanced standing credits.
 - Greek:* For information concerning advanced placement, students should consult the chairman of the Department of Classics, 120A Goldwin Smith Hall.
- b) Cornell Advanced Standing Examination (CASE). To be eligible for this examination the student must have achieved a score of 650 on the CPT. For details on registration, see Language Course Placement and Credit, above. The maximum amount of credit is 6 hours.
- c) Special examinations are given for languages where no CPT exists.

Distribution Requirement

The purpose of the distribution requirement is to acquaint students with a broad range of subject matter in the liberal arts and to provide them with the opportunity to explore new areas. To this end, subjects are divided into four groups. Each of the first three groups has two subdivisions.

Group 1

- a. Physical sciences
- b. Biological sciences

Group 2

- a. Social sciences
- b. History

Group 3

- a. Humanities
- b. Expressive arts

Group 4

- a. Mathematics and computer science
- b. One of the subdivisions not used in fulfillment of groups 1, 2, or 3.

In each of groups 1, 2, and 3, students must take a sequence of two courses (6 or more credits) approved by the department in one subject chosen from either subdivision. For group 4, students are strongly urged to take two courses in mathematics. Those who choose not to satisfy the group 4

requirement with mathematics must choose two courses in one subject from an unused subdivision in group 1, 2, or 3. For example, a student who fulfills group 1 with biology, group 2 with psychology, and group 3 with theatre arts could then complete group 4 with a sequence of two courses from the list below in the physical sciences, history, or the humanities.

Courses fulfilling the distribution requirement must be taken in the College of Arts and Sciences; however, students may petition to take Architecture 141-142, History of Architecture I and II, in the Department of Architecture of the College of Architecture, Art, and Planning to fulfill the requirement in expressive arts. Here is a complete list of the courses that fulfill distribution requirements.

Group 1: Physical or Biological Sciences

a. Physical Sciences

Astronomy: 101 or 111 plus 102 or 112; or Astronomy 102 or 112 plus Astronomy 332. Astronomy 103-104, identical to Astronomy 101-102 except for the omission of the laboratories, cannot be used to satisfy the distribution requirement.
Chemistry: 103, 207, or 215 followed by 104, 208, or 216.
Geological Sciences: 101-102.
Physics: Any two sequential courses such as 101-102 or 207-208; or any two general-education courses from the group 201-205.

b. Biological Sciences

A two-semester introductory biology sequence selected from Biological Sciences 109-110, or 105-106, or 101-103 plus 102-104. Advanced placement in biology with a score of 4 or 5 (6 or 8 credits, respectively) also satisfies the distribution requirement in biological sciences.

Group 2: Social Sciences or History

a) Social Sciences

Africana Studies: Any two of 171, 172, 190, 231, 290, 301, 302, 344, 345, 346, 351, 352, 410, 420, 460, 484, 485, 495, 550.
Anthropology: Any two courses in the Department of Anthropology, or Archaeology 100 and any anthropology course listed under archaeology. Courses cross-referenced but not taught by members of the department do not satisfy the distribution requirement.
Archaeology: Archaeology 100 and any one of the following: Anthropology 116, 150, 203, 250, 309, 317, 333, 352, 354, 355, 356, 358, 401, 435, 456, 494, 633, 664, 666, 667.
Economics: 101-102 or a combination of one of these courses and any course for which it is a prerequisite if the course is taught by a member of the Department of Economics.
Government: Any two of 111, 131, 161, and 181; or any one of these courses followed by a 300-level course in the same area.
Linguistics: 101-102 or 111-112, or a combination of Linguistics 101 and any course for which 101 is a prerequisite.
Psychology: Any two courses in psychology with the exception of Psychology 123, 322, 324, 326, 350, 361, 396, 422, 425, 471, 472, 473, 476, and 491.

Sociology: Any two courses in sociology. Students without background are advised to choose courses at the 100 or 200 level.
Women's Studies: Any two of 238, 244, 277, 321, 353, 422, 671, 685, plus courses that have been taken previously, with the department's approval.

b. History

Africana Studies: Any two of 203, 204, 231, 283, 344, 350, 360, 361, 370, 381, 405, 460, 475, 483, 490.
History: Any two courses in the Department of History.
Near Eastern Studies: Any two NES history courses at the 200 or 300 level that form a reasonable sequence or combination.
Women's Studies: Any two of 227, 238, 326, 363, 426, 626, 627, plus courses that have been taken previously, with the department's approval.

Group 3: Humanities or Expressive Arts**a. Humanities**

Africana Studies: Any two of 219, 422, 431, 432, 465, 492

Archaeology: Archaeology 100 and any of the following: Archaeology 275, 281, 310, 311; Classics 200, 206, 220, 221, 232, 233, 309, 320, 321, 329, 629, 630; Near Eastern Studies 243, 261, 263, 363, 366, 367, 469.

Asian Studies: Any two courses numbered 200 or above that form a reasonable sequence.

Classics: (a) any two courses in Greek beginning with 201 or in Latin beginning with 205 that form a reasonable sequence; or (b) any two of the following: Classics 100, 109, 118, 119, 120, 121, 150, 200, 206, 211, 220, 221, 222, 224, 225, 226, 232, 233, 236, 237, 238, 270, 300, 304, 309, 319, 320, 321, 322, 323, 326, 331, 332, 333, 336, 337, 339, 340, 345, 358, 360, 365, 366, 368, 426, 428, 430, 610, 629, 630.

Comparative Literature: Any two of the 200- or 300-level courses in comparative literature. 400-level courses may be used with the permission of the instructor.

English: Any two courses in English at the 200 level or above, except English 496. If students have used English courses to satisfy the expressive arts requirement, they should not take courses numbered in the 80s (e.g., 281, 382) to satisfy the humanities requirement.

French Literature: Any two courses from 200, 201, 202, 222, or 300-level literature courses.

German Literature: Any two courses at the 200 level or above.

Italian Literature: Any two of 201-202, or any 300-level literature courses.

Near Eastern Studies: Any two NES civilization or literature courses at the 200 or 300 level that form a reasonable sequence or combination.

Philosophy: Any two courses with the following exceptions: (1) Philosophy 100, if used to satisfy the Freshman Seminar requirement; (2) a combination of two courses in logic, such as 131, 231, 331, 431, 432, and 436.

Russian Literature: Any two courses at the 200 level or above.

Spanish Literature: Two of 201, 315, 316, 317, or any other 300-level literature courses.

Women's Studies: Any two of 248, 249, 251, 399, 451, 467, 478, 479, 483, plus courses that have been taken previously, with the department's approval.

b. Expressive Arts

Africana Studies: Any two of 137, 138, 285, 303, 465.

Archaeology: Archaeology 100 and any one of the following: History of Art 220, 221, 320, 321, 322, 323, 325, 327, or 330.

English: Any two of the courses at the 200 level or above that are numbered in the 80s (e.g., 281, 382).

History of Art: Any two courses at the 200 level or above, or Archaeology 100 and one of the History of Art courses listed under Archaeology.

Music: 6 credits in music, except Music 122. A maximum of 4 credits in Music 321-322 and a maximum of 3 credits in Music 331 through 338 and 441 through 450 may be used to satisfy this requirement.

Theatre Arts: Any two of the 3- or 4-credit courses at the 200 level or above.

Women's Studies: Any two of 248, 249, 399, 451, 478, 479, 483, plus past courses, with the department's approval.

Group 4: Mathematics or an Unused Subdivision**a. Mathematics and Computer Science**

Any 6 credits in Mathematics, but not including more than one course from 100, 105, 107, 403. Computer Science 100, 101, or 211 may be used for three of these credits. The mathematics distribution requirement is also satisfied by a score of 3 on the CEEB calculus BC examination. Mathematics 109 and ALS 115 (College of Agriculture and Life Sciences) do not satisfy the requirement.

b. An unused subdivision

A sequence of courses in any one of the subdivisions in groups 1-3 that has not been used to fill that group's requirement.

The Major

In their last two years, students devote roughly one-half their time acquiring depth and competence in a major subject. The choice of major is not intended to be a lifetime's occupation, although it may become that. By selecting one field of interest, students can do advanced work and focus the full extent of their imaginative and intellectual capacities on something they care about.

Students must be accepted by departments as majors before registering for courses for the junior year. Most departments and programs specify certain prerequisites for admission to the major; see the departmental listings on the following pages. A department may refuse to accept or continue as a major any student whose performance does not meet departmental standards. Some majors require courses in related subjects outside the department or outside the college; required courses taken outside the college are considered to be part of the 100 credits required in the College of Arts and Sciences for graduation. Majors are offered by each of the departments except the Department of Astronomy. There are also majors in Africana studies, American studies, archaeology, biology and society, dance, German area studies, Russian and Soviet studies, and social relations. Some students wish 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.

Electives

Of the thirty-four courses, or 120 credits, required for graduation, about half are free electives. Students must complete four or five courses or 15 credits in courses that are offered outside the major and are not used to fill another requirement. Electives taken in other divisions of the University may be used to gain practical training or specialized knowledge.

Courses and College 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, provided that the major department agrees.
- 2) A one-semester course in foreign literature that is acceptable for achieving proficiency in that language may also be used as a partial fulfillment of the distribution requirement in the humanities.
- 3) Students whose native language is not English who take English 211-212 may fulfill both the Freshman Seminar requirement and the humanities or expressive arts distribution requirement by taking two Freshman Seminars offered in English, history, history of art, Classics, philosophy, romance studies, Russian literature, German literature, or comparative literature.

Courses used to fulfill college requirements may be taken for S-U grades.

Residence

Normally students spend eight full-time semesters in residence. However, students who have advanced placement credit or summer school credit or who have taken additional courses in order to accelerate may graduate in six or seven terms if they satisfy all the requirements for graduation and have earned grades of C or better in at least 100 of the 120 credits. Students are normally expected to earn at least 90 credits during their terms of residence at Cornell.

Transfer students must spend a minimum of four regular semesters, excluding summer school, in residence at Cornell, earning at least 60 credits during that time.

Ninth term. Students may spend a ninth term in residence by notifying the Records and Scheduling Office, 142 Goldwin Smith Hall. Students receiving financial aid should discuss funding with an adviser in the Office of Financial Aid.

Physical Education

See University Requirements for Graduation, p. 21. The college does not count physical education credit toward the 120 credits required for graduation.

Special Academic Options**Degree Programs**

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

Independent Major Program

The Independent Major Program allows students to design their own majors if they wish to pursue an interest that cannot be met within an established major. Proposals for an independent major must be supported by a faculty adviser and are assessed by a board of faculty members. Board members consider whether the plan is equivalent in coherence, breadth, and depth to a departmental major, whether it is well-suited to the student's academic preparation, and whether it provides a liberal education. Independent majors substitute for established majors, but students must still satisfy all the other usual requirements for the baccalaureate degree. Students should contact the director of the Independent Major Program, Office of Special Programs, 134 Goldwin Smith Hall, for further information. Deadlines for submitting independent major proposals are Sept. 10, Oct. 18, Feb. 2, and Mar. 14 in the second semester of the sophomore year.

Honors. Candidates for honors must have a cumulative average of 3.0, no grade below B in courses for the major, and a cumulative average of 3.5 for courses in the major. During their senior year, candidates for honors must complete a thesis or honors project. Interested students should confer with the director of the Independent Major Program before the start of the senior year.

College Scholar Program

The College Scholar Program frees no more than forty students in each freshman class from the usual college requirements for a degree and allows them to design their own academic programs. It is meant to serve students whose interests and talents do not easily fit into the usual departmental majors, 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 two 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) and, unless they receive special permission to accelerate, eight full terms in the College of Arts and Sciences. They must complete the physical education requirement. Beginning with the class of 1982 each College Scholar must complete a senior project. They are not required to complete or fulfill the distribution requirement, but members of the College Scholar Advisory Board believe that the spirit of the requirement is a good one.

Each applicant to the College Scholar Program is asked to write an essay, which is due in May of the freshman year. Students should contact the Office of Special Programs, 134 Goldwin Smith Hall, for further information.

Honors. Candidates for honors must maintain a 3.5 average in all courses and must complete two college scholar seminars. Nonscientists should complete one seminar in some aspect of science, and scientists at least one in the humanities or social sciences. During the senior year, candidates for honors must complete a thesis or honors project. Students interested in the honors program should confer with the director of the College Scholar Program before the start of the senior year.

Double Majors

A student may complete a double major by fulfilling the major requirements in any two departments of the college.

Dual Degree Program

Especially able students may earn both a Bachelor of Arts degree from the College of Arts and Sciences and either (1) a Bachelor of Science degree from the College of Engineering, (2) a Bachelor of Fine Arts degree from the Department of Art in the College of Architecture, Art, and Planning, or (3) a Bachelor of Science degree in urban and regional studies from the Department of City and Regional Planning in the College of Architecture, Art, and Planning. The dual degree program ordinarily takes five years to complete. Students enter one of these colleges or the College of Arts and Sciences as freshmen and begin the dual degree program in the second or, in some cases, the third year. For further information contact Assistant Dean Rosenberg, 134 Goldwin Smith Hall (telephone: 256-5004).

Double Registration

Double registration in the College of Arts and Sciences and with the Cornell Law School, Cornell Medical College, or SUNY Upstate Medical Center is possible. A few exceptionally well prepared students who have earned 105 credits before the start of the senior year and have been accepted by one of the above-named 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 registering in the college and in one of the medical colleges listed above receive the Bachelor of Arts degree after their first year of medical studies and the Doctor of Medicine degree after the remaining three years of medical college are completed.

Special Interest Options

The following options do not alter the College's requirements but enable students to pursue special interests within the usual program. Independent course work is involved in independent study and in the Undergraduate Research Program; premedical and prelaw counseling help students make appropriate use of the regular curriculum.

Independent Study

Independent study affords students the opportunity to pursue special interests not treated in regularly scheduled courses. A faculty member, who becomes the student's adviser for the course, must approve the student's program of study and agree to provide continuing supervision of the work. In one semester students may earn up to 6 credits with one instructor or 8 credits with more than one instructor.

Undergraduate Research Program

Students interested in participating in a faculty member's research and earning credit for the work should consult the bulletin board opposite the Office of Special Programs, 134 Goldwin Smith Hall, for a list of research projects available in the physical and biological sciences, social sciences, and the humanities. The Undergraduate Research Program has a modest budget to provide equipment and computer time for some projects.

Intensive Language Study

More than forty languages are taught in the College of Arts and Sciences, and some of them are available 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 Department of Modern Languages and Linguistics and the departments that specialize in literary and cultural study: the Departments of Asian Studies, German Literature, Near Eastern Studies, Romance Studies, and Russian Literature. Semi-intensive courses afford students the option of accelerating the development of language skills.

FALCON Program (Full-Year Asian Language Concentration).

FALCON allows students who are interested in the Far East to study Chinese, Japanese, or Vietnamese exclusively for one year, gaining proficiency in the language and familiarity with the culture. Cornell is the first university in the United States to set up a regular student exchange program with the People's Republic of China. 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.

Prelaw Study

Law schools neither require nor prefer any particular program of study; they do seek students with sound training in the liberal arts. The important thing is for a student to plan a program in which he or she is interested and will do well. Beyond that, students are advised to take courses that will develop the powers of precise, analytical thinking and proficiency in writing and speaking.

The college offers a concentration in law and society. Many prelaw students complete four courses in this program because it interests them, not because it helps them get into law school.

Students who are interested in law should consult Assistant Dean Watson, 134 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 medical research. Such training has a profound effect upon 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 a particular major; they do, however, require particular undergraduate courses. Students who are interested in medical careers are urged to visit the college's Academic Advising Center and the Health Careers Office at the Career Center for help in planning their undergraduate program.

Off-Campus Programs

Study in Absentia

Many students find it appropriate to their majors or to their overall academic programs to study abroad for one or two semesters or to study at an American institution that offers programs not available at Cornell. When it makes academic sense, the college encourages its students to study in absentia and grants credit towards the degree for work satisfactorily completed. Approximately seventy students study in absentia every year. Although Cornell does not sponsor any programs abroad, the Career Center maintains up-to-date information on hundreds of programs all over the world. Before planning a program for study in absentia, students should consult Assistant Dean Beatrice Rosenberg in the Academic Advising Center, 134 Goldwin Smith Hall. Advisers in the college will help students find the program most appropriate to their academic goals.

A request to study in absentia must have the support of the faculty adviser, and each course must be approved by the appropriate department chairperson or, in some departments, the director of undergraduate studies. Credits earned in absentia may count as part of the 100 credits required within the College of Arts and Sciences if the field of study is represented in the college but the particular courses or program are not. Normally transfer students will not be allowed to study in absentia.

When plans are final, the student should submit an outline of the course of study and the signatures of the faculty adviser and the appropriate chairpersons to Assistant Dean Rosenberg, 134 Goldwin Smith Hall. When these conditions are met, in absentia status will be approved on condition that the student is in good academic standing the semester prior to in absentia study. The University charges \$15 for each semester of study in absentia.

Off-Campus Residential Programs

A number of residential programs allow students to concentrate on one subject, under the instruction of Cornell faculty and other specialists in that field of study. These programs provide an opportunity to be involved in a shared academic adventure, in situations that demand discipline, hard work, cooperation, and tolerance. For students who have keen interest in the subject, the experience is an exciting, challenging component of a liberal education.

Summer residential programs in archaeology.

During the summer months students may participate in one of the Cornell-sponsored archaeological projects in New York State, the Mediterranean region, Central America, or South America. Each project includes lectures that afford a broader understanding of the culture. The Mediterranean excavations encompass the early Bronze Age through the Roman period. The Aegean dendrochronology project will furnish scientists and archaeologists with an exceptionally accurate dating technique. Students should contact the Department of Archaeology for information about the sites in the western hemisphere, and the Departments of Classics and Near Eastern Studies for those in the Mediterranean region.

Marine Science. Shoals Marine Laboratory is a seasonal field station designed to introduce undergraduates to the marine sciences. The laboratory is located on Appledore Island, six miles off the Maine and New Hampshire coasts. Contact the Division of Biological Sciences for further information.

Cornell-in-Washington. The Cornell-in-Washington program enables a limited number of advanced students to study questions of public policy and to do supervised research during a term of residence in the capital. Students choose among several seminars taught by distinguished Cornell professors. They become familiar with the various sources of information and develop research techniques. The program also offers a unique internship program. Students who wish to serve an internship in a federal agency or congressional office take part in a public policy seminar. They define and carry out individual research projects that explore the connections between abstract policy issues and the day-to-day activities of the office. Potential internships are arranged through, and approved by, the Cornell-in-Washington program. Students are admitted to the Cornell in Washington program by the Department of Government. For further information, see p. 8 or inquire at 134 McGraw Hall.

Fieldwork

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 term paper or several short ones as well as practical experience. All proposals for fieldwork must be presented to the Academic Records Committee for approval. A maximum of 15 credits in fieldwork may be earned. For further information contact Assistant Dean Unsworth, 134 Goldwin Smith Hall.

Registration and Course Scheduling

Registration with the University

All students must register with the University at the beginning of each semester. Registration materials are available at a time and place announced each term by the Office of the University Registrar.

Enrollment into Courses in the College of Arts and Sciences

College registrar: Margery Clausen, 142 Goldwin Smith Hall.

New Students

The Academic Advising Center will inform incoming freshmen and transfer students about procedures for scheduling courses at briefings during orientation week.

Continuing Students

Continuing students are expected to select and schedule courses in advance during the previous term. Students who fail to sign into courses during the designated period must wait until the beginning of the semester and may have difficulty securing places in the courses they desire. Students may schedule up to 18 credits during the advance scheduling period. Information and materials will be available in the Records and Scheduling Office, 142 Goldwin Smith Hall. Before signing into courses, students should make appointments with their faculty advisers to plan their programs. Student advisers will also assist students. Any student is welcome to discuss programs and plans with an assistant dean in the Academic Advising Center, 134 Goldwin Smith Hall. The Records and Scheduling Office issues a supplement showing last-minute changes in courses; the supplements of other divisions of the University are also available for reference in the Records and Scheduling Office. In the fall, continuing students receive their course schedules at University registration. They also receive a copy of their Permanent Record Card, which shows the courses taken, grades received, graduation requirements fulfilled, and academic actions. Copies of Permanent Record Cards are not official transcripts.

Limits on Course Enrollment

Students must take an average of four or five courses (15 credits) each semester in order to graduate in eight terms. At a minimum, students must carry three or four courses (12 credits); if for compelling personal or academic reasons students must carry fewer than 12 credits, they should consult the faculty adviser and file a petition with the Committee on Academic Records. Completion of fewer than 12 credits without permission results in unsatisfactory academic standing. First-term freshmen may not register for more than 18 credits; other students may register for more than 18 credits a term only if their previous term's average was a B or higher and if their faculty advisers approve. No more than 22 credits may be taken in a regular semester.

Any student who is not officially enrolled in a schedule of courses by the end of the third week of classes risks being withdrawn from the college.

Special Registration Options

Signatures on forms. Students must have petitions (to add or drop a course, study in absentia, etc.) signed by their faculty advisers to ensure that real advising has taken place. Forgery on forms will be handled as an infringement of academic integrity.

Acceleration

Some students are able to earn the Bachelor of Arts degree in six or seven terms. In many cases these students have entered with substantial advanced placement credit. Students may also earn more than 15 credits a term. Acceleration plans must be approved by the student's major adviser, department chairperson, and the college. Students who accelerate must earn grades of C or better in 100 credits of course work.

Ideally, acceleration plans should be worked out at the time students choose majors at the end of the sophomore year. Acceleration petitions may be obtained in the Records and Scheduling Office, 142 Goldwin Smith Hall.

Adding and Dropping Courses

After advance course enrollment, students may not add or drop courses until the new term begins. All program changes must be approved by the course instructor (or by the person designated by the appropriate department) and by the faculty adviser. During the first three weeks of the semester, course changes may be made without fees. In order to make changes, the student picks up add/drop forms in the Records and Scheduling Office. After the third week of classes, courses may be added only under unusual circumstances. After the eighth week, courses may be dropped only if there are extraordinary and unforeseen circumstances. For each course change approved after the third week there is a \$10 fee. Students must obtain the approval of the course instructor and their faculty adviser on the petition and turn it in to the Academic Advising Center, 134 Goldwin Smith Hall. 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. A notation of "W" will appear on the transcript for any course dropped after the eighth week.

Leaves of Absence

Many students have found it useful to take time off from college to think about their goals and progress, or just to take a break from studying. Students in good standing who take a leave 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* have no conditions concerning the right to reenter the college except for the five-year limit. Readmission is automatic if a written request is made one month before the beginning of the term in which the student wishes to return.
- 2) *Medical leaves* are granted by the college only upon recommendation by a physician from Gannett Health Center. Such leaves are granted for an unspecified length of time (up to five years) with the understanding that the student may return at the beginning of any term after the medical condition in question has been corrected. In some cases students must satisfy the Gannett Health Center that the condition has been corrected before they may return.
- 3) *Conditional leaves* may be granted if the student is not in good standing, or, in unusual circumstances, after the eighth week of the term. Normally students may not return from conditional leaves for at least two terms.
- 4) *Required leaves:* The Academic Records Committee may require a leave of absence if a student is in academic difficulty. See Academic Actions, p. 95.

Any student who wishes to take a leave of absence should consult a member of the Academic Advising Center staff. If a student takes a leave before the end of the term, no courses taken that term will be shown on the student's record. Upon readmission, the student's graduation date will be recalculated according to the numbers of terms completed, the number of acceptable credits earned towards the degree, and the requirements for graduation. *If a student takes courses elsewhere while on leave, the earned credits may be accepted as part of the 20 out-of-college credits of the 120 credits needed for graduation.*

Withdrawals

A withdrawal is a voluntary severance of connection with the University. If a student wishes to withdraw after registering for the term, the withdrawal must be requested before the beginning of the eighth week of classes. A notation of "W" will appear on the transcript for any course dropped after the eighth week. Upon withdrawal it is assumed that the student will not wish to reregister in the college. Students who seek readmission after withdrawing from the college appeal to the Academic Records Committee. *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 is attractive for many students whose intellectual interests change. Students who wish to transfer from one college or school at Cornell to another should discuss their eligibility with a counselor at the new school or college.

In some cases the student who wishes to transfer into the College of Arts and Sciences may transfer directly. In other cases the student may be referred to the Division of Unclassified Students to be considered for admission to the college. During the term immediately preceding transfer into the College of Arts and Sciences, a student should complete at least 12 credits of courses in the College of Arts and Sciences with superior grades 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 upon consideration of the student's entire record at Cornell and the high school record, not just the work of one term. Interested students should see an adviser in the Academic Advising Center, 134 Goldwin Smith Hall.

Part-Time Study and Pro Rata Tuition

The college ordinarily expects its students to be full-time students. Except in the case of Ithaca residents who are twenty-three years of age or older, part-time attendance is permitted only in unusual circumstances.

In certain circumstances seniors who are completing their final term in the college may be allowed to register for fewer than 12 credits and pay pro rata tuition. The guidelines for granting this permission are adhered to strictly.

Guidelines for part-time study:

- 1) A student who has completed all degree requirements by the end of the seventh term may receive permission to study part time during the eighth term.
- 2) A student who has completed all degree requirements in seven terms but is majoring in a department that requires candidates for honors to complete the thesis in the eighth term may be permitted to register for fewer than 12 credits.
- 3) A student who has received permission to accelerate who has been forced to drop a course (for reasons beyond his or her control) and has not been able to complete the course work on schedule may be able to complete the requirements as a part-time student.
- 4) A student who is pursuing honors work and must complete extensive research away from the

campus, which precludes registering for additional courses, may be allowed to register for fewer than 12 credits.

Students who are allowed to register for part-time study in 1982-83 pay \$256.25 per credit plus the full administrative and student service fees of \$900. Students who fail to meet graduation requirements in eight semesters may petition the college to enroll in the Division of Extramural Courses.

Additional Information about Courses and Credit

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, but students must arrange for making up examinations or other work. When students will be absent because of religious holidays, they must discuss arrangements for making up their work with their instructors. Students who have to miss an examination should be sure to contact the professor.

Transferring credit. The college evaluates credit received from either another school or college at Cornell University or from another accredited institution of collegiate rank to determine the number of courses the student may apply towards the Bachelor of Arts degree. Tentative credit evaluations are normally provided to external transfers at the time of the notification of their admission. (For information about language course placement and credit see p. 90-91). No more than 60 transfer credits or sixteen courses, including no more than 20 credits in courses not commonly given by the College of Arts and Sciences, may be applied toward the degree. Transfer students must successfully complete at least sixteen courses or 60 credits at Cornell; they must be in residence for four terms, not counting Summer Session.

Advanced placement credit. See page 10.

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 in advance by the chairperson of the appropriate Cornell department. The college Records and Scheduling Office, 144 Goldwin Smith Hall, can supply forms and information. Credit earned in summer courses other than those at Cornell will not count toward the 100 credits required in the college unless the student's major adviser certifies that it is part of the major. Transcripts should be sent to the Records and Scheduling Office, 144 Goldwin Smith Hall.

Entering students who wish to receive credit toward the degree for courses completed in a summer session at Cornell or elsewhere should have transcripts sent to the Office of Records and Scheduling, 144 Goldwin Smith Hall, during the summer before matriculation.

Student-initiated courses. The college allows students to initiate proposals for new courses or modes of instruction that are not currently offered in the college or elsewhere in the University. If the proposed course falls within the jurisdiction of a particular department, students should seek the advice of a faculty member in the department or the department chairperson. For further information consult the Office of Special Programs, 159 Goldwin Smith Hall.

Noncredit courses. The college does not grant credit for all courses offered by the University. Courses in remedial or developmental reading (for instance, HE 100), writing, and mathematics; physical education; typing, shorthand; and most military training courses are among those for which credit is not given.

Auditing. There is no formal arrangement for auditing courses by undergraduates. Those who wish to sit in on a class ask permission of the course instructor.

Repeating courses. Students may repeat courses. If the instructor certifies that the course content has been changed, credit may be granted a second time. If the content has not been changed, the course may be repeated to obtain a better grade, but the original grade remains on the transcript and the course is repeated for 0 credit.

Students who plan to repeat a course should notify the Records and Scheduling Office, 144 Goldwin Smith Hall.

Academic Standing

Students are in good 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.

Honors

Dean's List

Students must earn letter grades for at least 12 credits to qualify for Dean's List. The requirements vary according to the number of credits a student has taken during the term. Students who take only 12 credits must earn all A's. Students who take 13 or 14 credits must earn A's in at least 10 credits and B's in the rest. Students who take 15 or more credits in the term must earn A's in at least 8 credits and usually A's or B's in the rest. Students who have grades of C or C+ must have an equal number of A's beyond the minimum of 8 to balance the C's.

Students who have received a grade of U (not including a U in physical education) or a grade of C- or lower are not qualified for the Dean's List.

Incomplete grades. Grades of *Incomplete* do not count towards qualification for the Dean's List. Students whose grades, excluding the *Incomplete*, qualify for the Dean's List will be added to the list retroactively when the *Incomplete* is made up, provided that they are not disqualified by the grade for the completed course.

Two-term honors programs. When students are in honors programs that require S or R grades at the end of the first semester, their final grades will be considered the appropriate grade for the first semester as well as the second semester. If they then qualify for the Dean's List they will be added retroactively.

Grades that do not enter into computation. A grade of S does not enter into the calculation, and a course graded S may not count as part of the credits for which letter grades are required. Courses for which students of the College of Arts and Sciences may not earn credit are disregarded in the calculation of the Dean's List. See the section on Noncredit Courses, above.

Bachelor of Arts with Honors

Almost all departments offer honors programs for students who have demonstrated exceptional ability in the discipline and who seek an opportunity to explore branches of their subject not represented in the regular curriculum or to gain experience in original investigation. 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 the degree by their major department, the Independent Major Program, or the College Scholar Program.

Bachelor of Arts with Distinction

The degree of Bachelor of Arts with distinction in all subjects will be conferred upon students who, in addition to having completed the requirements for the degree of Bachelor of Arts, have:

- 1) completed at least 60 credits while registered in regular sessions in the College of Arts and Sciences;
- 2) received a grade of B- or better in at least three-fourths of the total number of credits taken while registered in the college;
- 3) received grades of A- or better for at least one-half of the total number of credits taken while registered in the college;
- 4) received a grade below C- in no more than one course;
- 5) received no failing grade;
- 6) maintained good standing in each of their last four terms; and
- 7) have no *incompletes* remaining on their records.

Failure to Maintain Good Standing

Students are not in good standing if they complete fewer than 12 credits; if they have more than one D or any F or U grades; if they have not made satisfactory overall progress in grades or credits (whether due to failures or *incompletes*) or in the requirements of the college or the major. Such students may be considered for academic action by the Committee on Academic Records, the Committee of Deans, or one of the deans of the college.

Academic Actions

Warning. Any student who fails to maintain good standing may be warned. The warning may be given informally by a committee of assistant deans in the college or it may be given formally by the faculty's Committee on Academic Records. A warning is posted on a student's Permanent Record Card, but is not reported to the University registrar and does not appear on official transcripts.

Final warning. Students whose work is so seriously deficient that they risk being required to leave may be placed on final warning by the Committee on Academic Records. A final warning is posted on the student's Permanent Record Card, 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. In some cases the students will be required to furnish 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 of Absence" is posted on the student's Permanent Record Card in the college; the University registrar is notified, and "Leave of Absence" and the date will appear on the student's transcript.

May not reregister. The Committee on Academic Records may stipulate that a student may not reregister in the college on the basis 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. "May not Reregister" is posted on the student's Permanent Record Card; the University registrar is notified, and "May not Reregister in the College of Arts and Sciences" and the date will appear on the official 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 evidence to present.

Grades

Letter Grades

See Grading Guidelines, p. 21.

S-U Grades

The S-U option allows students to explore unfamiliar subject areas without being under pressure to receive high grades. It is not meant to reduce the amount of work a student completes in a course. Students may elect within the first three weeks of the term to receive a grade of S (satisfactory) or U (unsatisfactory) instead of one of the letter grades (A+ through F), provided that the instructor is willing to assign such grades. A grade of S is equivalent to a grade of C- or higher; a grade of U is equivalent to any grade below C-. 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.

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 and language 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 the S-U grade option may be elected, but within the 120 credits required for the degree, a minimum of 80 credits must be in courses for which a letter grade was given.

To elect the S-U option, students fill in the proper space on the optical scan forms during course enrollment. To change the grading option at the beginning of the term, students obtain a course change form from the Records and Scheduling Office, 142 Goldwin Smith Hall, fill the form out to indicate the grade option change, and have it signed by the course instructor and their faculty adviser. The form must be returned to the Records and Scheduling Office within the first three weeks of the term. *No change in the grading option can be made after the first three weeks of the term.* Any senior planning to take a course for an S-U grade in the last semester should consult with Assistant Dean Lawrence Watson.

Incomplete Grades

A grade of *incomplete* signifies that a course was not completed before the end of the term for reasons beyond the student's control and acceptable to the instructor. Students must have substantial 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 will state what work must be completed, when it must be completed, and the grade he or she will award if the work is not completed by that date. A course will be *incomplete* until the instructor changes it, and can remain as an *incomplete* permanently. Unless the instructor stipulates otherwise, students will be allowed one term plus one summer to make up the work. When a final grade is recorded, it is recorded alongside the *incomplete*, so the notation of the *incomplete* remains on the student's record permanently.

R Grades

R designates two-semester or year-long courses. The R is recorded on the student's Permanent Record Card at the end of the first term. The grade recorded at the end of the second term shows the student's level of performance in the course for the entire year. The total credits that will be earned for the whole course are listed each term.

Grade Reports

Grade reports for the fall term are included in spring term registration materials; grade reports for the spring term are mailed to students at their home addresses.

The college does not compute term grade-point averages, cumulative averages, or class rank.

Advising

The following advisers and offices are here to provide information on college procedures and regulations, academic advising, or counseling.

Faculty Advisers

Faculty advisers help students design programs of study and advise students about ways to achieve their academic goals. Faculty members volunteer to act as advisers to new students in the college; advisers and advisees meet during orientation week to plan the student's program. Students are encouraged to see their advisers again early in the term, before it is too late to drop courses and before signing into courses for the following term, to discuss their academic program and to become better acquainted. Academic difficulties may frequently be solved or avoided if students and advisers recognize problems early.

Advisers must approve each semester's program and any course changes. Students who would like to petition for an exception to college rules should discuss the matter with their advisers; the adviser must review and sign the petition before it may be acted upon.

Advisers may also help students with study or personal problems or direct them to other offices on campus where help is available.

Student Advisers

Each new student is also assigned a student adviser who can provide information about the college's requirements, courses, and instructors, and about life at Cornell.

Major Advisers

After acceptance into a major program, students are assigned a major adviser, a faculty member in the major department, with whom they make many of their most important decisions at Cornell. The adviser must approve the student's course of study and eventually certify the completion of the major. The major adviser should be consulted by the student about all academic plans, including such aspects as 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 Advising Center

Glenn Altschuler, assistant dean, freshmen
Beatrice G. Rosenberg, assistant dean, sophomores
Margaret C. Unsworth, assistant dean, juniors
Lawrence Watson, assistant dean, seniors
Janice F. Turner, assistant dean for minority affairs

The Academic Advising Center, 134 Goldwin Smith Hall, serves as a resource for faculty and student advisers and for students themselves. The center's advisers are available to help students define their academic and career goals and to help with specifics such as study abroad programs, field work, etc., and they welcome all questions relating to the college. Handicapped students may see Assistant Dean Lawrence Watson.

Courses and Departments

Special Programs and Areas of Concentration

The college offers a number of special and interdisciplinary programs that are described following the departmental program descriptions. Students may devise an independent major with the aid of any of these programs or develop an informal minor field. (Informal minors are not listed on the student's official record.)

General Education Courses

The faculty of the College of Arts and Sciences has established a Board of General Education, responsible for creating and maintaining a program of courses for nonspecialists. Such courses are free from the need to present the elements of an entire subject as a basis for more specialized study. They can therefore be deeper and more challenging than conventional introductions, as concerned with the general ability to write and think as they are with substantive content. Besides such courses for nonspecialists, the board also seeks courses that require a relatively advanced acquaintance with a particular field, but not in the interest of further specialization. The aim of such advanced general education courses is to raise, for an informed audience, questions about the history of a field, about its methodological or philosophical presuppositions, or about its relation to other fields of knowledge.

Twice a year, at advance course enrollment, the board distributes to students and faculty in the college a set of descriptions of courses and departmental programs. These have been recommended by departments or faculty members and are considered by the board to be particularly suitable as introductory or advanced general education courses. Almost any course in the University can serve eminently well as a general education course for some student. The purpose of the board's booklet is to call attention to some of the new and existing courses or programs in the College of Arts and Sciences whose primary focus is on general education. The booklet is not intended to be used as a substitute for the full catalog in planning electives, but rather as a guide to some of the more striking possibilities to be found in that document.

Akkadian

See Department of Near Eastern Studies, p.166.

American Studies

S. C. Strout, chairman and director of undergraduate studies (110 Rockefeller Hall, 256-4611);
M. J. Colacurcio, R. L. Moore, R. Polenber, F. Somkin

The Major

The major in American studies is basically a program of coordinated study in the history and literature of the United States. It is not a "double major." The prerequisites are minimal: one course in British or American history at the 100 or 200 level and one course in British or American literature at the 200 level. The major itself is structured and demanding, and students who expect to become American studies majors should apply to the chairman to arrange for a major adviser.

In consultation with their advisers, American studies majors elect 32 credits (or eight courses) of work in the history and literature of all three large periods into which an account of the nation's development can be divided, defined for the purposes of the program as colonial, nineteenth century, and twentieth century. In order to gain both depth and breadth, they select as an area of concentration either a single period (or the connections between two of the periods) and take either 16 credits in one period and 8 credits in each of the other two, or 12 credits in each of the two periods whose connections constitute the focus of the study and 8 credits in the third. In addition, they take one of the specially designated interdisciplinary 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 may divide the work between history and literature in whatever proportion serves their interests, provided that they take no more than two-thirds of their courses in any one department.

Beyond the basic requirements in American history and American literature, 12 credits above the elementary level are required in allied subjects. Eight credits of work are in the history or literature, or both, of another related culture; and 4 credits are in American thought, society, or culture studies from the perspective of another discipline such as anthropology, economics, government, history of art, and sociology. (This last 4-credit requirement may be satisfied outside the college.)

Courses in American history that will satisfy the 32-credit requirement described in the second paragraph 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. 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 (a) either write an honors essay for American Studies 493, Honors Essay Tutorial, or submit to the American Studies Committee three term papers written for courses in the major, and (b) take an oral examination in the declared area of special interest.

Anthropology

A. T. Kirsch, chairman; P. S. Sangren, director of undergraduate studies (205 McGraw Hall, 256-5137); R. Ascher, J. A. Boon, V. R. Dyson-Hudson, C. J. Greenhouse, D. J. Greenwood, J. S. Henderson, D. H. Holmberg, B. J. Isbell, L. C. Jackson, B. Lambert, T. F. Lynch, C. Morris, J. T. Siegel, R. J. Smith

Anthropology grew out of curiosity about the ways past and present human societies have differed and have been similar. As a craft, anthropology has developed and borrowed many strategies to approach these differences and uniformities. Some are archaeological, concerned with cultures long gone or destroyed by the spread of empires. Others are sociocultural, dealing with recent and contemporary rural and urban societies in all areas of the world through a variety of social scientific and humanistic techniques. Still others are biological and evolutionary, stressing human evolution and biological uniformity and diversity. In-depth field studies, excavations, laboratory analysis, the interpretation of symbol systems, and varieties of comparative methodologies are all part of anthropology.

Five introductory courses offer choices among the different strategies for doing anthropology. Four (112, 113, 114, and 116) explore major strategies for doing anthropology, lessons learned so far, and questions still pending. Nature and Culture (Anthropology 111)

focuses on the fundamental questions raised by all these approaches to anthropology—the issues that form the core of our concerns as anthropologists. The other departmental offerings deepen and broaden this basic knowledge. All anthropology courses with numbers below 500 are open to all students, unless otherwise stated in the course description.

The Major

The student who majors in anthropology must:

- 1) Take Anthropology 111 and one additional course at the 100 level, preferably during the freshman or sophomore year (Freshman Seminars in anthropology do not fulfill this requirement).
- 2) Take anthropology 300, The Discipline of Anthropology, no later than the fall term of the junior year.
- 3) Take at least one course in each of four of the following five categories: Category III, Archaeological Courses; Category IV, Biological and Ecological Anthropology; Category V, Sociocultural Anthropology; Category VI, Theory and History of Anthropology; and Category VII, a course that focuses on some world area.
- 4) Develop one or more areas of specialization within the discipline in consultation with his or her faculty adviser. Examples of such specializations include sociocultural anthropology, anthropological archaeology, theory and history, area studies, and biological and ecological anthropology. Students interested in any of these specializations must consult with the director of undergraduate studies, who will refer them to an appropriate academic adviser. When appropriate, special provisions for meeting major requirements may be arranged with the adviser's approval.
- 5) Take a total of 32 credits of course work, in addition to Anthropology 300, beyond the introductory level. Up to 12 credits of course work in cognate disciplines (see Category VIII) related to the student's specialization may be accepted for the major with the permission of the faculty adviser.

Honors. Anthropology majors interested in the honors program should consult the director of undergraduate studies before the beginning of their senior year and apply for admission to the program. Candidates for the degree of Bachelor of Arts with honors in anthropology must complete a thesis in the spring term of the senior year. Students may enroll in Anthropology 491 or 492, Honors Thesis, after obtaining the consent of the Honors Committee. The decision to award honors and in what degree is based on the quality of the thesis and the student's overall record.

Facilities

The anthropology laboratory contains a small statistical and reference library as well as basic drafting and photographic equipment.

Special Programs

Specialized, individual study programs are offered in Anthropology 497-498, Topics in Anthropology, open to a limited number of juniors and seniors who have obtained consent of the instructor. Undergraduates should also note that most 600-level courses are open to them if consent of the instructor is obtained.

The Department of Anthropology holds colloquia throughout the academic year. Faculty members from Cornell and other universities participate in discussions of current research and problems in anthropology. Students are encouraged to attend.

I. Introductory Courses (Including Freshman Seminars)

- 111 Nature and Culture** Spring. 3 credits (4 by arrangement with instructor).
M W F 9:05. D. J. Greenwood.

Anthropology arose as a novel attempt to address fundamental questions about humanity: Who are we? Where do we come from? Where are we going? Though it does not provide privileged answers to these questions, it approaches them through a unique combination of methods and a spirit of comparative inquiry. Informed by the long view gotten from the study of human evolution and culture history, and the comparative view arising from the study of contemporary human biological and cultural diversity and uniformity, anthropology aspires to examine the relationships between the physical/biological and symbolic/moral worlds in which we live. This course examines a variety of past and current attempts to explain the relationships between nature and culture in human life.

- 112 Social Anthropology** Spring. 3 credits (4 by arrangement with instructor).

M W F 10:10. C. J. Greenhouse.
Among the ways they study human life, anthropologists examine social institutions in terms of their relationship to culture. Social anthropology is the study of social relationships and the ideas about existence implicit in them. In the course, we consider institutions—family, government, economics, religion, and so on—as contexts that define and are defined by social interactions. We explore the world's cultural diversity, as well as the question of what cultural differences mean. Most of the readings are firsthand accounts by ethnographers; films and discussions supplement the lectures.

- 113 The Comparison of Cultures** Fall. 3 credits (4 by arrangement with instructor).

T R 10:10-11:25. D. H. Holmberg.
An introduction to cultural anthropology through ethnographies, or the descriptive accounts of anthropologists. Through readings and lectures students acquaint themselves with a number of cultures from several parts of the world. The cultures range in form from those of small-scale tribal societies to those of state societies. Throughout the course we attempt to make sense of exotic cultures in their own terms. Attention is focused on variation in cultural forms 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.

- 114 Humankind: The Biological Background** Spring. 3 credits (4 by arrangement with instructor).

M W F 11:15. R. Dyson-Hudson.
Anthropological inquiries about human origins, biocultural diversity, and behavior require an understanding of the causes and effects of evolution. This survey of biological anthropology examines controversies about human origins and antiquity, human adaptations to past environments, sociobiology, biological variability in ancient and modern populations, and the basis for the evolution of diversity of cultural behaviors. Lectures are supplemented with films, laboratory and discussion sections, and guest lecturers.

- [116 Ancient Societies** Fall. 3 credits (4 by arrangement with instructor). Not offered 1982-83.]

- [121 Encounters with Other Cultures** Fall. 3 credits. Freshman Seminar. Not offered 1982-83.]

- 130 Apes and Languages** Spring. 3 credits. Freshman Seminar.

W 7:30-9:30 p.m. B. J. Isbell.
Extraordinary claims have been made about the language capacities of chimpanzees and gorillas. Are the apes talking? How does the sign language that has been taught to apes compare with natural spoken language of human beings? A selection of popular and scholarly books and articles will be examined in order to better understand the key issues in the debate over the language capacities of apes.

[142 Rites of Passage Spring. 3 credits. Freshman Seminar. Not offered 1982-83.]

[150 The Discovery of America Spring. 3 credits. Freshman Seminar. Not offered 1982-83.]

205 Ethnographic Films Spring. 2 credits. M 7:30-9 p.m. B. J. Isbell.

Human cultural and social variability is explored through a series of ethnographic films, and readings and lectures relating to these films. The films are chosen to show peoples living in a variety of ecological situations and at different levels of social complexity in various parts of the world (i.e., Africa, Asia, Australia, the Americas). Readings and lectures will use the concepts and theories of cultural anthropology to interpret the significance of the different modes of life shown in the films.

II. Courses Intended Primarily for Majors

300 The Discipline of Anthropology Fall. 4 credits. Limited to and required of anthropology majors, who must take this course no later than the fall term of the junior year.

M W F 3:35. P. S. Sangren with the anthropology faculty.

The course is an overview of the field of anthropology; it provides a systematic treatment of the discipline, the concepts that are used, the persistent questions that are asked, the specializations within the field, and the shared goals and differing viewpoints. The course is intended to help majors plan their course work.

491 Honors Thesis Fall. 4 credits. Prerequisite: consent of the Honors Committee. Intended for majors graduating in midyear.

Hours to be arranged. Staff. Independent work under the close guidance of a faculty member selected by the student.

492 Honors Thesis Spring. 4 credits. Prerequisite: consent of the Honors Committee.

Hours to be arranged. Staff. Independent work under the close guidance of a faculty member selected by the student.

495 Social Relations Seminar (also Sociology 497) Spring. 4 credits. Limited to seniors majoring in social relations.

Hours to be arranged. Staff.

497-498 Topics in Anthropology 497, fall; 498, spring. Credit to be arranged.

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.

III. Archaeological Courses

See also courses listed under Archaeology.

203 Early People: Human Cultural and Biological Evolution (also Archaeology 203) Fall. 3 credits.

T R 1:25; 50-minute sec to be arranged.

T. P. Volman.

This course surveys the archaeological and fossil record of human evolution. Contributions by researchers from a variety of scientific disciplines are highlighted, as well as the discoveries, personalities, and controversies that have enlivened the study of human evolution for more than a century. Interpretations of the development of human capabilities, behaviors, and lifeways are critically evaluated, with consideration also of the scientific and social contexts in which hypotheses about the human career and human "nature" have been devised, promoted, debated, and tested.

[250 The Earliest Civilizations Fall. 4 credits. Not offered 1982-83.]

[352 Interpretation of the Archaeological Record Spring. 4 credits. Not offered 1982-83.]

354 The Peopling of America Fall. 4 credits. M W F 9:05. T. F. Lynch.

Prehistoric discovery of the New World, beginning with American Indian origins in Asia and ending with the largely unrecorded European medieval contact with North America. Major topics include crossing the Bering land bridge, big game hunting and extinctions, postglacial adaptations to changing environments, diversified subsistence in the eastern woodlands, agricultural civilizations of the Midwest and Southwest, and Eskimo and Norse exploration and settlement across the Arctic and North Atlantic.

355 Archaeology of Mexico and Central America Spring. 4 credits.

M W F 9:05. J. S. Henderson.

A consideration of the origins, development, and spread of the Olmec, Maya, Aztec, and other native civilizations of Mexico and Central America. Prehistoric cultural developments from the emergence of settled farming life, through the rise of states, to the European conquest of the Aztecs will be emphasized.

[356 The Archaeology of South America Spring. 4 credits. Not offered 1982-83.]

358 Archaeological Research Methods (also Archaeology 358) Spring. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged (off campus). T. F. Lynch. Techniques of archaeological survey, excavation, and analysis, and their theoretical foundations. A wide variety of methods and problems will be considered, with emphasis on situations encountered in South America.

361 Field Archaeology in South America (also Archaeology 361) Spring. 10 credits. Prerequisite: permission of instructor.

Hours to be arranged (off campus). T. F. Lynch. Participation in archaeological survey, excavation, and laboratory work in the borderlands of southern Peru and northern Chile. This practical training session is part of a collaborative program with the Pontificia Universidad Catolica del Peru and the Universidad de Chile. Research will focus on definition of prehistoric patterns of economic complementarity, as found among the indigenous peoples of the Western Valleys, outlying Tiwanaku settlements, and the puna homeland. Training in diverse archaeological field methods will be emphasized as students take part in various aspects of a regional research project.

[435 Investigation of Andean Institutions: Archaeological Strategies Spring. 4 credits. Not offered 1982-83.]

[493 Seminar in Archaeology: The Maya Fall. 4 credits. Not offered 1982-83.]

494 Seminar in Archaeology: The Aztecs Spring. 4 credits.

T 12:20-2:15. J. S. Henderson.

A detailed consideration of Aztec history and society. Emphasis is on the historical roots of the Aztec empire.

IV. Biological and Ecological Anthropology

[221 Human Biology: Variation and Adaptations of Contemporary Populations Fall. 4 credits. Not offered 1982-83.]

375 Ecology and Human Adaptation Fall. 4 credits.

T R 8-9:30. R. Dyson-Hudson.

An analysis of human interactions with the physical, biological, and social environment, based on the principles of general ecology. Changes over time in

human interactions with the environment will be discussed, as well as differences in adaptive strategies of contemporary human groups living in similar and different environments.

476 Human Behavior: A Sociobiological Perspective Fall. 4 credits. Limited to juniors and seniors.

T R 2:30-4. R. Dyson-Hudson.

An attempt to look at human social behavior as possible adaptive responses to past and present environments. General categories of behavior discussed will include aggression, territoriality, dominance and hierarchy, bonding, and sex-role differences.

V. Sociocultural Anthropology

301 Biology and Society I: The Biocultural Perspective (also Biological Sciences 301 and Biology and Society 301) Fall. 3 credits (4 by arrangement with instructor). Prerequisite: one year of introductory biology. This is part of the two-semester core course for the biology and society major and is also open to other students who have fulfilled the necessary prerequisites.

M W F 9:05. D. J. Greenwood.

Viewing human biology, behavior, and institutions as the ongoing products of the interactions between human biological evolution and cultural change, this course documents these interactions with reference to the following topics: the evolution of the capacity for culture; human groups and institutions; language, meaning, and cultural "realities"; and major models of human nature and human institutions.

[305 Psychological Anthropology Fall. 4 credits. Not offered 1982-83.]

[313 Urban Anthropology Spring. 4 credits. Not offered 1982-83.]

314 Applied Anthropology Fall. 4 credits.

T R 10:10-11; 50-minute sec to be arranged.

M. L. Barnett.

What anthropology knows or suspects about some general processes of cultural change, and the application of these insights to practical and ethical problems faced in the planning, conduct, and evaluation of programs of intervention and change.

320 Meaning across Cultures Spring. 4 credits. T R 10:10-11:25. J. A. Boon.

Are societies machines, therapies, religions, dramas, stories, texts, games, aesthetic forms, structural codes? We assess such possibilities in anthropological views of different cultures: from cosmologies and ceremonies of tribal systems, to expressive genres of archaic hierarchies, to differentiated arts and sports of nation states. Principles of language and culture, symbolic interpretation, and structuralism are introduced.

321 The Anthropology of Women and Gender (also Women's Studies 321) Fall. 4 credits.

M W F 2:30. K. S. March, D. H. Holmberg.

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.

[322 Comparative Religious Systems Spring. 4 credits. Not offered 1982-83.]

323 Kinship and Social Organization Spring. 4 credits.

M W F 11:15. 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.

[325 Images of Exotics] Spring. 4 credits. Not offered 1982-83.]

326 Economic Anthropology Fall. 4 credits.
M W F 10:10. P. S. Sangren.

Economic anthropology is the study of the organization of production, distribution, and associated values in radically different primitive and peasant societies. The course introduces the major competing stances—formalist (neoclassical), substantivist, and Marxist—that have developed frameworks for analysis of exotic economic systems. Other topics include the integration of local communities with larger economic systems, the articulation of capitalist and noncapitalist modes of production, and a critique of theories of economic development from an anthropological perspective.

328 Law and Culture Fall. 4 credits.
M W F 11:15. C. J. Greenhouse.

A cross-cultural examination of interpersonal dispute settlement. Specific questions focus on social structures and ideologies of conflict, modes of dispute processing, remedial choice making, the nature of rules, access to justice, and law as a form of social knowledge. Readings consist primarily of recent monographs, and discussions will stress the relationship of legal ideas to their cultural matrix.

329 Politics and Culture Spring. 4 credits.
M W F 1:25. C. J. Greenhouse.

A cross-cultural examination of large-scale conflict and conflict resolution. We focus on power: its genesis, articulations, and functions in specific cultural contexts. Specific considerations include the politics of knowledge, the concept of self-interest, social organization (e.g., kinship), ethnicity, group decision making, and rhetoric.

422 Special Problems in the Anthropology of Women and Gender (also Women's Studies 422 and Biology and Society 406) Spring. 4 credits.
R 2:30-4:25. K. S. March.

Each year this seminar focuses on a particular area of concern within the anthropology of women, building on work done in Anthropology 321. The topic for spring 1983 will be gender symbolism. Primary attention will be directed to the meaningfulness of gender cross-culturally, simultaneously drawing on theories of symbolism in anthropology and exploring how the study of sex and gender can inform these theories.

424 Myth, Ritual, and Sign Fall. 4 credits.
T R 10:10-11:25. J. T. Siegel.

We will treat myth, ritual, and sign in their theoretical and practical dimensions, looking at them in the views of various social theorists and as described by ethnographers.

427 The Anthropology of Everyday Life Fall. 4 credits.
R 2:30-4:25. J. T. Siegel.

By looking closely at details of behavior in America and in places with radically different traditions, one can come to understand their cultural underpinnings. We will look at such diverse topics as mourning and the implications of not mourning; at fashion; the presentation of commodities; and the implications of printing and televising news. Readings will include Western social theorists and ethnographic reports.

451 Anthropological Boundaries Fall. 4 credits.
Enrollment limited to 15. S-U grades only.
R 2:30-4:25. R. Ascher.

A search for connections between the creative arts and anthropology. Works by anthropologists, native artists, and Western artists who sense a kinship with anthropological questions are included. The novel, cinema, and poetry receive attention, as do photography, dance, music, theatre, sculpture, and imaginary fiction. About half the course draws upon native North America. The rest is divided between Africa, Europe, and the contemporary United States. *Henderson the Rain King*, *Threepenny Opera*, and

two movies about Navajos—one by commercial filmmakers and the other by Navajos—are examples of readings, listening, and viewings. The course concludes with discussion of Buber's anthropological essay *What is Man?* and Durrell's novel *Nunquam*.

452 Portraits, Profiles, and Life Histories Spring. 4 credits. Enrollment limited. S-U grades strongly recommended.

R 2:30-4:25. R. Ascher.
The goal is the creation, by each student, of a portrait, profile, or life history of one other person. Ideally, that other person should differ from oneself in background and age, or in other significant ways. Freedom is granted—and experimentation is encouraged—in the form of observation, recording, and presentation. As a point of departure, a study is made of books such as *Group Portrait with Lady* and *A Fortunate Man*. Portraits on film include *Sam and Betty Tells Her Story*. The photography of Arbus, the sculpture of Giacometti, and the painting of Katz are examined critically. The second half of the semester is devoted to one-hour critiques of the work of each student.

453 Constructions and Visualizations Fall. 4 credits. Enrollment limited. S-U grades only.
T 2:30-4:25. R. Ascher.

The expression of anthropological ideas through original three-dimensional constructions, tapes, drawings, graphics, video, painting, film, and related media. Writing can be combined with visual expressions as, for example, in concrete poetry or photographic essays. Projects must conform to three general guidelines: (1) concern with the human condition; (2) prior knowledge of the medium chosen; and (3) the project must be one that can be developed throughout the course and benefit from its particular setting. Anthropology is introduced through readings such as Carpenter's *If Wittgenstein Had Been an Eskimo* and Tutulua's *The Palm-Wine Drunkard*: The first half of the course consists of readings and short exercises; project summaries occupy the second half.

454 The Anthropologist's America: Expository and Creative Writing Spring. 4 credits. Enrollment limited to 12. Prerequisite: four credits in anthropology or permission of the instructor.

T 2:30-4:25. R. Ascher.
The anthropologist, having experienced the culture of others, views America with new eyes. This vision is presented in readings that range from the expository book to the creative short story. Included are works by nonanthropologists who contribute to our understanding by reason of insight, or writing style, or both. For example, we read Kafka's *Amerika*. People in the seminar write about things, processes, and scenes outside of their ordinary experiences. One might, for example, observe and describe the rituals of a religion other than his or her own. A significant portion of the seminar is given over to discussions of what people in the seminar have written.

VI. Theory and History of Anthropology

306 Ethnographic Description Spring. 4 credits.
T R 10:10-11:25. J. T. Siegel.

Anthropology as a discipline depends more on the establishment of its object than on the reinterpretation of central ideas. The topic of this course is the establishment of differences in ethnographic description. How is it that ethnographers determine the characteristics of the populations they study without either assimilating them to what is already known or making them so foreign as to be meaningless? Careful readings of ethnographies will be balanced by students' own exercises in description.

412 Contemporary Anthropological Theory Fall. 4 credits.
M W F 11:15. B. Lambert.

A survey of the assumptions social anthropologists make concerning the nature of society and culture, and the explanations they have proposed for regularities in social behavior, values, and belief systems. Among the approaches considered are processual analysis, the use of the concept of transaction, the historical method, ethnohistory, and structuralism.

[413 History of Anthropology in the United States] Fall. 4 credits. Not offered 1982-83.]

417 Structuralism Spring. 4 credits.
T 2:30-4:25. J. A. Boon.

A study of the corpus of Claude Levi-Strauss and a reading of diverse structuralist texts that raise general issues in philosophy, criticism, and the comparative method. An effort is made to assess the place of structuralism in the history of ideas.

[420 Development of Anthropological Thought] Spring. 4 credits. Not offered 1982-83.]

[425 Ritual Structures and Cultural Pluralism] Fall. 4 credits. Not offered 1982-83.]

VII. Area Courses

230 Cultures of Native North America Fall. 4 credits.

M W F 1:25. 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 world view. 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.

331 The United States Fall. 4 credits.
M W F 9:05. C. J. Greenhouse.

How do Americans define their own culture? The course examines attitudes about work, success, the marketplace, social control and the political process in relation to central images of American identity: freedom, equality, and individualism. This is a discussion seminar that is designed to include the students' own observations as an integral part of the course in the form of field assignments. Readings combine contemporary American ethnography, with forays into popular social analysis and commentaries by foreign travelers.

[333 Ethnology of the Andean Region] Fall. 4 credits. Not offered 1982-83.]

[334 Ethnology of Island Southeast Asia] Spring. 4 credits. Not offered 1982-83.]

335 Ethnology of Mainland Southeast Asia Fall. 4 credits.

T R 10:10-11:25. A. T. Kirsch.
A survey of the peoples and cultures of mainland Southeast Asia from prehistoric to contemporary times.

[336 Ethnology of Oceania] Fall. 4 credits. Not offered 1982-83.]

342 Culture and Society in South Asia Fall. 4 credits.

M W F 10:10. D. H. Holmberg.
This course is a general introduction to Hindu, Buddhist, tribal, and Islamic societies of South Asia, with particular attention to India, Sri Lanka, Nepal, and the Himalayan kingdoms. Through ethnographic, historical, and literary accounts, features of South Asian cultures and societies will be considered in contrast and dynamic communication. The course proceeds descriptively, working through myriad social, ritual, and mythic expressions, toward an understanding of variability in South Asian cultures and of comparative ethnology.

343 Religion, Family, and Community in China Spring. 4 credits.

M W F 10:10. P. S. Sangren.

The course provides anthropological perspectives on family and kinship, religion and values, economy and polity, and social organization in China. Both traditional society and culture and transformations in the People's Republic of China are considered. A major goal of the course is to provide a deeper understanding of the social and cultural fabric of the world's largest and longest-lived civilization.

[345 Japanese Society Fall. 4 credits. Not offered 1982-83.]**[432 Indians of Mexico and Central America** Spring. 4 credits. Not offered 1982-83.]**[433 Andean Thought and Culture** Spring. 4 credits. Not offered 1982-83.]**[456 Mesoamerican Thought and Culture** Fall 4 credits. Not offered 1982-83.]**VIII. Related Courses in Other Departments****Introduction to Archaeology (Archaeology 100)****Popular Archaeology (Archaeology 107)****Astroastronomy (Archaeology 109)****Indian Lifeways of Ancient North America (Archaeology 111)****Method and Theory in Stone Age Archaeology (Archaeology 317)****Human Palaeontology (Biological Sciences 371)****Ethnobotany (Botany 246)****Human Growth and Development: Biological and Behavioral Perspectives (Nutritional Sciences and Human Development and Family Studies 347)****Cross-Cultural Psychology (Sociology 384 and Psychology 384)****IX. Graduate Seminars**

600-level courses are open to undergraduates who have fulfilled the prerequisites or by consent of the instructor.

Southeast Asia Seminar: Vietnam (Asian Studies 601)**Southeast Asia Seminar: Thailand (Asian Studies 602)****Contemporary Sociological Theories of Development (Rural Sociology 606)****607-608 Special Problems in Anthropology** 607, fall; 608, spring. Credit to be arranged. Hours to be arranged. Staff.**610 Myth and Mythology (also Classics 610)** Spring. 4 credits.

R 2:30-4:25. J. T. Siegel, P. Pucci.

An analysis of the metaphysical and social facets of "myth"; the origin of discourse and the discourse of origins. We will consider major schools of interpretation of myth and myth in ethnographic context.

[611 Principles of Social Anthropological Theory Spring. 4 credits. Not offered 1982-83.]**612 History of Anthropological Thought** Spring. 4 credits.

W 1:30-3:30. A. T. Kirsch.

Readings in original sources of importance to the development of anthropological thought.

Methods of Assessing Child Growth (Nutritional Sciences 612)**[619 Anthropological Approaches to the Study of Buddhism in Asia** Fall. 4 credits. Not offered 1982-83.]**626 Problems in Economic Anthropology** Spring. 4 credits. Prerequisite: Anthropology 326 or permission of instructor.

M 2:30-4:30. P. S. Sangren.

This course is designed to consider in detail problems of theory and method in economic anthropology. Among the topics discussed are theories of value and exchange, articulation of modes of production, and regional analysis. Particular attention is paid to developing productive linkages between general theories of economy and society, and participants' specific research interests.

[627 Law in the Context of Culture Spring. 4 credits. Not offered 1982-83.]**[628 Political Anthropology: Culture and Revolution in Indonesia (also Government 647)** Spring. 4 credits. Not offered 1982-83.]**[630 Andean Systems of Production** Spring. 4 credits. Not offered 1982-83.]**Anthropometric Assessment (Nutritional Sciences 630)****[632 Andean Symbolism** Spring. 4 credits. Not offered 1982-83.]**[633 Andean Research** Fall and spring. 4 credits. Not offered 1982-83.]**634-635 Southeast Asia: Readings in Special Problems** 634, fall; 635, spring. Credit to be arranged.

Hours to be arranged. A. T. Kirsch, J. T. Siegel.

[638 Regional Systems and Local Communities Spring. 4 credits. Not offered 1982-83.]**[645 Japanese Ethnology** Spring. 4 credits. Not offered 1982-83.]**[651 Anthropological Boundaries: Graduate** Spring. 4 credits. Not offered 1982-83.]**[653 Constructions and Visualizations: Graduate** Fall. 4 credits. Not offered 1982-83.]**[663 Problems in Archaeology: Agricultural Origins** Spring. 4 credits. Not offered 1982-83.]**664 Problems in Archaeology: Early Man in America** Fall. 4 credits. Prerequisite: Anthropology 354 or permission of instructor.

T 2:30-4:25. T. F. Lynch.

The subject will be considered in historical perspective, as it has been dealt with by archaeologists, geologists, and paleoecologists. Emphasis will be on contextual analysis and environmental adaptations rather than chronology, and topics will be drawn from both North and South American archaeology.

[666 The Discovery of America Fall. 4 credits. Not offered 1982-83.]**[667 Origins of Mesoamerican Civilization** Spring. 4 credits. Not offered 1982-83.]**677 Topics in Ecological Anthropology: Food Production and Social Organization** Spring. 4 credits.

W 2:30-4:25. R. Dyson-Hudson.

The adaptive relations between specific groups of foragers and agriculturalists, and the food-producing sectors of their habitat will be analyzed. The relation between variables of human social organization such as settlement size, kinship relations, social

stratification, and spatial organization, and features of the environment will be examined through reading current articles and monographs.

Introduction to Ethnomusicology (Music 680)**[681 Topics in Biomedical Anthropology** Spring. 4 credits. Not offered 1982-83.]**901-902 Field Research** 901, fall; 902, spring. Credit to be arranged.

Hours to be arranged. Staff.

Arabic and Aramaic

See Department of Near Eastern Studies, p. 166.

Archaeology

J. S. Henderson (anthropology), director; A. H. Bernstein (history), A. L. Bloom (geological sciences), R. G. Calkins (history of art), K. M. Clinton (Classics), J. E. Coleman (Classics), R. T. Farrell (English), P. I. Kuniholm (Classics), T. F. Lynch (anthropology), C. Morris (anthropology), J. V. Murra (anthropology), G. W. Olson (agronomy), D. I. Owen (Near Eastern studies), A. Ramage (history of art), B. S. Strauss (history), T. P. Volman (archaeology), J. M. Weinstein (Classics)

Archaeology at Cornell is conceived as an interdisciplinary field. Cornell is one of the few universities in the United States to offer a separate major in archaeology and to maintain a faculty position for this purpose. The program is administered with the help and cooperation of the faculty members involved in archaeology in several departments. This group helps to coordinate course offerings and to find opportunities for fieldwork, professional positions, or graduate study.

The Major

The basic introductory course for both majors and nonmajors is Archaeology 100. Those with a fairly serious interest in the field, particularly prospective majors, are encouraged to take the optional one-hour section, Archaeology 101. This course covers the broadest range of archaeology in terms of area and time, and deals with method as well as results. Since the major draws upon the teaching and research interests of faculty from many departments in order to present a broad view of the archaeological process, a student interested in the archaeology major should discuss his or her 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.

As prerequisites to the major, a student must complete Archaeology 100 and another introductory archaeology course with grades of C or better. Once admitted to the major, the student must take an additional 30 credits in courses from the archaeology list, chosen in consultation with the major adviser. These courses should provide exposure to a broad range of archaeologically known cultures and the methods of revealing and interpreting them. They must be distributed as follows:

- 1) At least 20 credits at the 300 level or above
- 2) At least 6 credits in each of the categories below:
 - a) Theory and interdisciplinary approaches
 - b) Old World archaeology
 - c) New World archaeology

Beyond these 30 credits, a student must elect at least 6 credits in related subjects outside the major, such as computer science, statistics, ethnology and history of appropriate areas, draftsmanship, photography, surveying and map making, interpretation of aerial photographs, paleogeography, and epigraphy.

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 Cornell and other approved institutions.

The Concentration

Only students in other Cornell schools and colleges may elect a concentration in archaeology; they are eligible for Hirsch Scholarships in support of fieldwork. To concentrate in archaeology, the student must complete Archaeology 100 with a grade of C or better and at least four advanced courses in archaeology, distributed among the three groups stipulated in (2) in the description of the major, above.

Introductory Courses

100 Introduction to Archaeology Spring, 3 credits.

M W F 1:25. T. P. Volman.

A broad introduction to archaeology—the study of material remains to answer questions about the human past. The history, methods, and theory of archaeology are presented, followed by a survey of the archaeological record from human origins, through the development of food production, to the rise and spread of civilizations. Contributions by researchers from a wide variety of disciplines are stressed.

101 Introduction to Archaeology, Section

Spring, 1 credit. Optional section to be taken concurrently with Archaeology 100. Prospective archaeology majors are expected to participate in this section, although it is open to all interested students.

R 12:20–1:10. T. P. Volman.

A series of practical and special topics. The section includes exposure to archaeological materials, an introduction to mapping and recording, special lectures by Cornell faculty and outside visitors, and visits to campus research facilities to gain familiarity with such techniques as tree-ring dating and soils analysis.

107 Popular Archaeology Fall and spring, 3 credits. Freshman Seminar.

Fall: M W F 1:25. M. Anders. Spring: T R 2:30–3:45. T. P. Volman.

Examines the scientific basis for controversial interpretations of prehistory that have gained wide public acceptance. Readings include both popular and scholarly works. Careful and critical analysis of archaeological evidence is emphasized.

[108 The Origins and Diversity of the Family in Antiquity Not offered 1982–83.]

109 Archaeoastronomy Fall and spring, 3 credits. Freshman Seminar.

M W F 2:30. Staff.

Ancient peoples perceived and recorded celestial phenomena in their monuments, calendars, religions, and myths. It is clear that astronomical imagery has been an important component of human thought, and it is possible that asterisms and celestial cycles dominated cosmological thinking until relatively recently. We survey the character of ancient astronomical knowledge manifested in the archaeological record. We shall also consider the extent to which sky lore of the past is embedded in time reckoning, language, and astrology of the present day.

300 Individual Study in Archaeology and Related Fields Fall and spring. Credit to be arranged. Prerequisite: Archaeology 100 or permission of instructor.

Hours to be arranged. Staff. Students pursue topics of particular interest with the guidance of a faculty member.

Theory and Interdisciplinary Approaches

Ancient Societies (Anthropology 116)

203 Early People: Human Cultural and Biological Evolution (Also Anthropology 203) Fall, 3 credits.

T R 1:25–2:15; plus occasional demonstrations, R 12:20. T. P. Volman.

Survey of the archaeological and fossil record of human evolution. Contributions by researchers from a variety of scientific disciplines are highlighted, as well as the discoveries, personalities, and controversies that have enlivened the study of human evolution for more than a century. Interpretations of the development of human capabilities, behaviors, and lifeways are critically evaluated, with consideration also of the scientific and social contexts in which hypotheses about the human career and human nature have been devised, promoted, debated, and tested.

[The Earliest Civilizations (Anthropology 250) Not offered 1982–83.]

[281 History of Archaeology Not offered 1982–83.]

Dendrochronology of the Aegean (Classics 309) Fall.

317 Method and Theory in Stone Age Archaeology Fall, 4 credits.

T R 10:10–11:25. T. P. Volman.

An introduction to the kinds of information Stone Age archaeologists try to extract from the prehistoric record, current theoretical orientations, and the wide variety of methods available to multidisciplinary archaeological research. Case studies are used to demonstrate excavation procedures, research design, and the potential of the long Stone Age record for providing insights into sociocultural behaviors, as well as information on techno-economic developments.

Geomorphology (Geological Sciences 345)

[Interpretation of the Archaeological Record (Anthropology 352) Not offered 1982–83.]

358 Archaeological Research Methods (also Anthropology 358) Spring.

[401 Evolution of Prehistoric Technology Not offered 1982–83.]

[Ceramics (History of Art 423) Not offered 1982–83.]

[Investigation of Andean Institutions: Archaeological Strategies (Anthropology 435) Not offered 1982–83.]

Seminar in Archaeology: The Maya (Anthropology 493) Fall.

Seminar in Archaeology: The Aztecs (Anthropology 494) Spring.

[Architectural Problems in Archaeological Fieldwork (Architecture 540) Not offered 1982–83.]

[Problems in Archaeology: Agricultural Origins (Anthropology 663) Not offered 1982–83.]

Problems in Archaeology: Early Man in America (Anthropology 664) Fall.

Old World Archaeology

Freshman Seminar in Archaeology (Classics 121) Fall and spring.

[Mediterranean Archaeology (Classics 200 and Near Eastern Studies 262) Not offered 1982–83.]

[Rise of Classical Greece (Classics 206) Not offered 1982–83.]

Introduction to Classical Archaeology (Classics 220 and History of Art 220) Fall.

[Minoan-Mycenaean Art and Archaeology (Classics 221 and History of Art 221) Not offered 1982–83.]

Archaeology in Action I (Classics 232) Fall.

Archaeology in Action II (Classics 233) Spring.

[309 Archaeology of Africa: From Human Origins to Iron Age States. Not offered 1982–83.]

[Greek Architecture (Classics 328) Not offered 1982–83.]

The History and Archaeology of Ancient Israel (Near Eastern Studies 243) Spring.

[Introduction to Art History: Art of Egypt and Mesopotamia (Near Eastern Studies 248 and History of Art 211) Not offered 1982–83.]

[275 Ancient Seafaring (also Near Eastern Studies 261) Not offered 1982–83.]

[Archaeology of Classical Greece (Classics 320 and History of Art 320) Not offered 1982–83.]

[Archaeology of Cyprus (Classics 321 and History of Art 321) Not offered 1982–83.]

Arts of the Roman Empire (History of Art 322)

[Painting in the Greek and Roman World (History of Art 323) Not offered 1982–83.]

[Greek Vase Painting (History of Art 325) Not offered 1982–83.]

Greek and Roman Coins (History of Art 327)

[Greek Sculpture (Classics 329 and History of Art 329) Not offered 1982–83.]

[Art in Pompeii: Origins and Echoes (History of Art 330) Not offered 1982–83.]

[History and Archaeology of Ebla (Near Eastern Studies 362 and Archaeology 362) Not offered 1982–83.]

History and Archaeology of Ancient Egypt (Near Eastern Studies 367)

[The Vikings (English 601) Not offered 1982–83.]

[Seminar in Aegean Archaeology (Classics 629) Not offered 1982–83.]

[Seminar in Aegean Archaeology (Classics 630) Not offered 1982–83.]

New World Archaeology

111 Indian Lifeways of Ancient North America 3 credits. Freshman Seminar. Fall.

T R 10:10. S. Saraydar.

There is much that the archaeological record can tell us about the diverse cultural adaptations made by the Indians who explored and settled the North American continent long before the arrival of the first

Europeans. The traces left by these ancient Americans are critically evaluated and then used to create realistic vignettes of prehistoric lifeways in which sensuous and intellectual perspectives are combined.

The Peopling of America (Anthropology 354) Fall.

Archaeology of Mexico and Central America (Anthropology 355) Spring.

The Archaeology of South America (Anthropology 356) Spring.

Field Archaeology in South America (Anthropology 361 and Archaeology 361)

[Mesoamerican Thought and Culture (Anthropology 456) Not offered 1982-83.]

[Andean Systems of Production (Anthropology 630) Not offered 1982-83.]

Seminar in Andean Symbolism (Anthropology 632) Not offered 1982-83.]

[Seminar in Andean Research (Anthropology 633) Not offered 1982-83.]

Problems in Archaeology: Early Man in America (Anthropology 664) Fall.

Related Courses for Archaeology Majors

Plane Surveying (Agricultural Engineering 221)

Nature and Properties of Soils (Agronomy 200)

Identification, Appraisal, and Geography of Soils (Agronomy 301)

Geography and Appraisal of Soils of the Tropics (Agronomy 401)

Morphology, Genesis, and Classification of Soils (Agronomy 603)

[The Discovery of America (Anthropology 150) Not offered 1982-83.]

Ethnology of the Andean Region (Anthropology 333)

[Ethnology of Oceania (Anthropology 336) Not offered 1982-83.]

[Indians of Mexico and Central America (Anthropology 432) Not offered 1982-83.]

[Andean Thought and Culture (Anthropology 433) Not offered 1982-83.]

[Discovery of America (Anthropology 666) Not offered 1982-83.]

Introductory Photography (Architecture 251)

Second-Year Photography (Architecture 351)

Color Photography (Architecture 350 and Art 262)

Surveying for Archaeologists (Architecture 541)

[Case Studies in Preservation Planning (Architecture 544) Not offered 1982-83.]

Documentation for Preservation Planning (Architecture 546)

The Greek Experience (Classics 211) Fall.

The Roman Experience (Classics 212) Spring.

[The Individual and Society in Classical Athens (Classics 222) Not offered 1982-83.]

Greek and Roman Mystery Religions (Classics 237) Spring.

Computer Science 100, 101, 102, 104, and 211 may be of interest to some students (see the departmental listing for information about sequences and combinations).

Image Analysis I: Landforms (Engineering 613)

Scientific Illustration (Floriculture 417)

Introductory Geological Science (Geological Sciences 101) Fall or spring.

[Earth Science (Geological Sciences 103) Not offered 1982-83.]

[Earth Science Laboratory (Geological Sciences 105) Not offered 1982-83.]

Structural Geology and Sedimentation (Geological Sciences 325)

Sedimentology and Stratigraphy (Geological Sciences 376)

Glacial and Quaternary Geology (Geological Sciences 642)

Ancient Greece from Homer to Alexander (History 265) Fall.

The Greek City from Alexander to Augustus, 323 B.C.-A.D. 14 (History 373)

Indochina and the Archipelago to the Fourteenth Century (History 395) Fall.

The Tragedy of Classical Athens (History 452) Fall.

[The Crisis of the Greek City-State (History 453) Not offered 1982-83.]

[The Roman Revolution (History 461) Not offered 1982-83.]

Introductory Statistics for the Social Sciences (Industrial and Labor Relations 510)

Hittite (Linguistics 621-622)

Elementary Statistics (Mathematics 372)

Statistics (Mathematics 472-473)

Elementary Akkadian (Near Eastern Studies 333-334)

Intermediate Akkadian (Near Eastern Studies 335)

[Folklore in the Ancient Near East (Near Eastern Studies 336) Not offered 1982-83.]

[Roots of Greek Civilization (Near Eastern Studies 346) Not offered 1982-83.]

Independent Study: Ancient Israel (Near Eastern Studies 449)

[History and Culture of Ancient Mesopotamia (Near Eastern Studies 363) Not offered 1982-83.]

Asian Studies

Chairperson and director of undergraduate studies (388 Rockefeller Hall, 256-5095); B. R. Anderson, D. E. Ashford, R. Barker, M. L. Barnett, M. G. Bernal, R. Birnbaum, J. A. Boon, K. Brazell, S. Cochran, J. Cole, R. D. Colle, E. W. Coward, Jr., M. B. deBary, E. C. Erickson, J. W. Gair, M. D. Glock, A. G. Grapard, A. B. Griswold, E. M. Gunn, M. Hatch, D. Holmberg, F. E. Huffman, R. B. Jones, E. H. Jordan, G. McT. Kahin, M. Katzenstein, G. B. Kelley, K. A. R. Kennedy, A. T. Kirsch, V. Koschmann, L. C. Lee, D. R. McCann, J. McCoy, R. D. MacDougall, K. March, T. L. Mei, G. M. Messing, J. Nickum, S. J. O'Connor, T. J. Pempel, C. A. Peterson, C. Ross, P. S. Sangren, J. T. Siegel, R. J. Smith, J. U. Wolff, W. O. Wolters, 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 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.

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 300 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.

Honors. To be eligible for honors in Asian Studies, a student must have a cumulative grade average of B+ in all Asian studies courses and must successfully complete an honors essay during the senior year. Students who wish to be considered for honors should apply to the director of undergraduate studies during the second 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 and Japan must also complete Asian Studies 611. 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.

Concentration in Southeast Asia Studies

A candidate for the Bachelor of Arts or Bachelor of Science degree at Cornell may take a concentration in Southeast Asia studies by completing 15 credits of course work, including a history course and three

courses or seminars at the intermediate or advanced level, two of which may be Southeast Asian language courses. 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 and to take advantage of summer intensive language training.

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, contact the FALCON Program Office, Department of Modern Languages and Linguistics, 203 Morrill Hall.

Freshman Seminars

[101 Women and Social Transitions in the Twentieth Century] Spring, 3 credits. Not offered 1982-83.
B. deBary.]

[103 Revolutions and Social Values in Modern Chinese Literature] Spring, 3 credits. Not offered 1982-83.
E. M. Gunn.]

[104 Three Ways of Thought] Fall, 3 credits.
M W 2:30-4. T. L. Mei and staff. Not offered 1982-83.]

[105 Feminine and Masculine Ideals in Japanese Culture (also Women's Studies 105)] Not offered 1982-83.
K. Brazell.]

110 People and Nature in East Asia Fall, 3 credits.
Hours to be arranged. J. Nickum and staff. Students explore their own ideas of self, society, and nature in the light of East Asian (primarily Chinese and Japanese) human experience. Major perspectives from both east and west will be presented in readings and lectures spanning the fields of the natural environment, history, philosophy, literature, society, economic development, and prospects for the future. A number of brief analytical papers and essays will provide a vehicle for students to develop and express their ideas.

Related Freshman Seminars in Other Departments

[History 192 Japan and the West] 3 credits. Not offered 1982-83.
V. Koschmann.]

History of Art 106 Art in a Landscape: The Traditional Arts of Southeast Asia Spring, 3 credits.
S. J. O'Connor.

General Education Courses

211 Introduction to Japan Fall, 3 or 4 credits.
M W 11:15; disc, F 11:15, 1:25, or 2:30. K. Brazell and staff.
An interdisciplinary introduction to Japanese culture, especially designed for students not majoring in Asian studies. The first part of the course focuses on traditional aspects of Japanese culture, which are still important today, while the second part analyzes contemporary society from a variety of perspectives. Guest lecturers from five or six departments speak on their areas of expertise.

212 Introduction to China Spring, 3 or 4 credits.
T R 1:25; disc to be arranged. E. M. Gunn and staff.

An interdisciplinary introduction to Chinese culture especially designed for students not majoring in Asian studies.

Asia—Literature and Religion Courses

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

250 Dimensions of Religious Experience in Asia Fall, 3 credits.

T R 10:10-11:25. R. Birnbaum.
A systematic approach to major themes of various Asian religious traditions within the context of human experience: sacred time and space; ritual behavior; pilgrimage; saints, sages, and other ideal types; views of death; relationships to the divine; meditation; art and Asian religions; etc.

307 Asian Dance and Dance Drama (also Theatre Arts 307) Fall or spring, 3 credits. *Section 1: Indian Dance.* Fall, 3 credits. [*Section 2: Japanese Noh Theater* Not offered 1982-83. *Section 3: Japanese Dance* Not offered 1982-83.]
M W F 10:10. D. Sudan.

Historical background and performance technique of East Indian dance. The particular dance technique that will be taught will be Odissi, which is related to Bharata Natyam, one of the four classical dance forms of India. The M W classes will be Odissi movement technique. The F class will be lecture, film, and discussion based on reading assignments and papers prepared by students. The M W classes may be taken without the F class, in which case physical education credit may be earned, but not academic credit. Students who attend all three classes and do all work may earn both physical education credit and 3 units of academic credit.

310 Readings in Korean Literature Spring, 3 credits.

Hours to be arranged. D. R. McCann.
A survey of works of literature most notably exemplifying the Korean cultural identity. Premodern works will include *The Song of Ch'oyong*, *The Story of Ch'unhyang*, and selected *kasa* and *sijo* poems. Modern works will also include both poetry and fiction. A principal theme to be considered will be the nature of the Korean past and present, and of the individual writer's relationship to them.

313 The Japanese Film Spring, 3 credits.

One optional film viewing M 4:30; one required viewing W 4:30; lecture, W 7:30 p.m. Discussion sections: R 9:05, or F 11:15 or 12:20. B. deBary.
After an introduction to methods of film analysis, the course presents a sequence of ten films by noted Japanese directors. The aim of the course is twofold: to enhance appreciation of film as an art form and to use the formal analysis of the films to yield insights into Japanese society and culture. Particular attention is given to areas in which Japanese film, influenced by traditional arts and aesthetic principles, has resisted Hollywood editing codes.

351 Early Buddhism Fall, 4 credits.

T R 2:30-3:45. R. Birnbaum.
Principles, practices, and goals of Indian Buddhism from Sakyamuni to the rise and establishment of early Mahayana movements. The first part of the course will focus on the life and teachings of Sakyamuni and the practices of early monastic Buddhism, as seen from scriptural and archaeological sources. The second part of the course will concentrate on the spread of Buddhism throughout India, with attention to the role of Central Asian borderlands in the introduction of new concepts and the rise of new religious movements. The influence of Buddhism on Indian culture—including art and architecture, literature, medicine, and statecraft—will also be studied. Two guided papers and a final exam.

352 Mahayana Buddhism Spring, 4 credits. No prerequisites; Asian Studies 250 or Asian Studies 351 strongly recommended.

T R 2:30-3:45. R. Birnbaum.
Principles, practices, and goals of later Buddhism in the northern Buddhist countries of China, Japan, and Tibet. Special focus on the transmission of Buddhism to these countries, its confrontation with native religious traditions, and the resulting adaptations and transformations. Important scriptures, tenets of major schools, lives of eminent teachers. Influence of Buddhism on Far Eastern culture (art, music, literature, etc.). Two guided papers and a final exam.

[355 Japanese Religions] Fall, 4 credits. Not offered 1982-83.]

357 Chinese Religions Spring, 4 credits.

T R 10:10-11:45. R. Birnbaum.
A systematic survey of Chinese religious concepts and practices from the neolithic period to the twentieth century. Using historical and phenomenological approaches, the principle traditions of Confucianism, Taoism, and Buddhism, as well as folk religious practices, will be explored. Classical texts and scriptures in translation, lives of exemplary masters, interrelationships of religion and culture (including art and music, city planning, medicine, statecraft, etc.)

[371 Chinese Philosophical Literature] 4 credits. Not offered 1982-83.]

[372 Chinese Poetry] Spring, 4 credits. Not offered 1982-83.
T. L. Mei.]

373 Twentieth-Century Chinese Literature Fall, 4 credits.

T R 1:25, disc to be arranged. E. M. Gunn.
A survey of the principle works in English translation, the course introduces fiction, drama, essay, 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. One session each week will be devoted to discussion.

374 Chinese Narrative Literature Spring, 4 credits.

Hours to be arranged. E. M. 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.

[375 Japanese Poetry and Drama] Fall, 4 credits. Not offered 1982-83.
K. Brazell.]

376 Narrativity in Modern Japanese Fiction Spring, 4 credits.

M F 1:25-3:30. B. deBary.
The course will trace the development of the modern Japanese novel from its antecedents in the seventeenth century *gesaku* (light fiction) genre. Critical writings of Tudorov, Ian Watt, Barthes, and others will be studied in an attempt to assess both the usefulness and limitations of Western theories of narrativity with reference to Japanese texts.

377 Japanese Narrative Literature Fall, 4 credits.
M W 2:30-3:45. K. Brazell.

The major narratives from the *Tale of Genji* to Saikaku are studied in translation.

[379 Southeast Asian Literature in Translation] Not offered 1982-83.]

381-382 War as Myth and History in Postwar Japan (The Frederick G. Marcham Seminar; also History 381-382). 381, fall; 382 spring, 4 credits each term.

Fall: T R 1:25-2:15. Spring: irregular class meetings; students will pursue independent work in consultation with the instructors, and the class will meet for special events and presentations by class members. B. deBary, J. V. Koschmann.

How is the war story told in postwar Japan? The course will examine persisting manifestations of the war memory in contemporary Japanese cultural life, with emphasis on ways in which the story of World War II has been retold, reinterpreted, and given new symbolic and factual significance in light of changing historical circumstances. Class discussion will focus on the interpretation of texts, ranging from political thought and history to fiction, film, and poetry.

386 Folk Literature of East Asia Fall. 4 credits.
M 4-5:30. D. McCann, J. McCoy.

A survey of the folk literature of China, Japan, and Korea, with the context of a general consideration of genre and of the nature of the relationship between folk literature and the literary arts.

400 The Japanese Noh Theatre and Modern Dramatists (also Comparative Literature 400) Spring. 4 credits.

M W 2:30-3:45 K. Brazell.
Several weeks will be spent studying the literary, performance, and aesthetic aspects of the noh theatre. Emphasis will be on noh as a performance system, a total theatre in which music, dance, text, costume, and props all interact to create the total effect. Then attention will turn to modern theatre 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.

For complete descriptions of courses numbered 600 and above, consult the graduate faculty representative.

601 Southeast Asia Seminar: Vietnam Fall. 4 credits.

Hours to be arranged. G. McT. Kahin.
Contact the Southeast Asia Program, 120 Uris Hall, 256-2378 for further information.

602 Southeast Asia Seminar: Thailand Spring 4 credits.

Hours to be arranged. A. T. Kirsch.
Contact the Southeast Asia Program, 120 Uris Hall, 256-2378 for further information.

604 Southeast Asia Seminar (also International Agriculture 601 Philippine Agricultural Development)

611 Chinese and Japanese Bibliography and Methodology Fall. 1 credit. Prerequisite: permission of the instructor. Required of honors students and master of arts candidates.

Sec 1 (Chinese): hours to be arranged, sec 2 (Japanese): hours to be arranged. J. Cole.

650 Seminar on Asian Religions Spring. 2-4 credits. Prerequisite: permission of the instructor.

Hours to be arranged. R. Birnbaum.
Topic is announced annually.

676 Southeast Asia Research Training Seminar

See the Southeast Asia Program, 120 Uris Hall, for more information.

701-702 Seminar in East Asian Literature 701, fall; 702, spring. 1-4 credits.

Hours to be arranged. Staff.

Asia—General Courses

401 Asian Studies Honors Course Fall. 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.

402 Asian Studies Honors: Senior Essay Fall or spring. 4 credits. Prerequisite: admission to the honors program. The student, under faculty direction, prepares an honors essay.

403-404 Asian Studies Supervised Reading Fall, spring, or both. Credit to be arranged. Prerequisite: permission of instructor. Open to majors and other qualified students.

Intensive reading under the direction of a member of the staff.

For complete descriptions of courses numbered 600 or above, consult the graduate faculty representative.

605-606 Master of Arts Seminar in East Asian Studies 605, fall; 606, spring. 2-4 credits.

Hours to be arranged. Staff.

703-704 Directed Research 703, fall or spring; 704, fall or spring. Credit to be arranged.

Staff.

Related Courses in Other Departments

Economics of Agricultural Development (Agricultural Economics 464)

Food, Population, and Employment (Agricultural Economics 660)

Communication in the Developing Nations (Communication Arts 624)

Seminar on Agricultural Development in Southeast Asia (International Agriculture 601)

Applications of Sociology to Development Programs (Rural Sociology 751)

Architecture in Its Cultural Context (Architecture 667-668)

The courses listed above will count as College of Arts and Sciences credit only for Asian studies majors.

[Urban Anthropology (Anthropology 313) Not offered 1982-83.]

Meaning across Cultures (Anthropology 320)

[Images of Exotics (Anthropology 325) Not offered 1982-83.]

[Anthropological Approaches to the Study of Buddhism in Asia (Anthropology 619) Not offered 1982-83.]

[Government and Politics of Southeast Asia (Government 344) Not offered 1982-83.]

Politics in Contemporary Japan (Government 346)

[Politics of Industrial Societies (Government 348) Not offered 1982-83.]

Political Role of the Military (Government 349)

Comparative Revolutions (Government 350)

The United States and Asia (Government 387)

Field Seminar in International Relations (Government 606)

Graduate Seminar in Political Economy of Change: Rural Development in the World (Government 648)

Seminar in International Relations of Asia (Government 687)

Introduction to Asian Civilizations: Origins to 1600 (History 190)

Introduction to Asian Civilizations in the Modern Period (History 191)

Introduction to Art History: Asian Traditions (History of Art 280)

[Buddhist Art in Asia (History of Art 381) Not offered 1982-83.]

[Studies in Indian and Southeast Asian Art (History of Art 386) Not offered 1982-83.]

Ceramic Art of Asia (History of Art 482)

[Problems in Asian Art (History of Art 580) Not offered 1982-83.]

China—Area Courses

390 The Economies of China Fall. 4 credits.
M W 2:30-3:45. J. Nickum.

Focusing on the economy of the People's Republic of China but with reference to the experiences of Taiwan, Hong Kong, and Singapore, this course investigates current economic problems and prospects in light of the major issues of China's economic history and previous and current economic institutions and policies. Seminar format.

411 A Documentary Study of Contemporary China Spring. 4 credits.

Hours to be arranged. J. Nickum.
An intensive analysis of the development of doctrine, institutions, and policies in the People's Republic of China through study of many of the principal documents. The basic course will use English language translations, with an additional section for credit for those who wish to read the original Chinese.

Economic Anthropology (Anthropology 326)

Religion, Family, and Community in China (Anthropology 343)

Modern Chinese Society (Anthropology 344)

Chinese Government and Politics (Government 347)

Comparative Revolutions (Government 350)

The Foreign Policy of China (Government 390)

[Readings on the Great Cultural Revolution (Government 447) Not offered 1982-83.]

[Chinese Political Readings (Government 448) Not offered 1982-83.]

[Capitalism and Communism: Chinese and Japanese Patterns of Development (Government 462) Not offered 1982-83.]

[Politics of China (Government 645) Not offered 1982-83.]

[Readings from Mao Ze Dong (Government 651) Not offered 1982-83.]

China and the West before Imperialism (History 193)

[Chinese Views of Themselves (History 194) Not offered 1982-83.]

Early Warfare, East and West (History 360)

[Art and Society in Modern China (History 390) Not offered 1982-83.]

History of China up to Modern Times (History 393)

History of China in Modern Times (History 394)

[Undergraduate Seminar in Medieval Chinese History (History 492) Not offered 1982-83.]

Self and Society in Late Imperial and Twentieth-Century China (History 493)

Chinese Historiography and Source Materials (History 691)

Problems in Modern Chinese History (History 693-694)

[Seminar in Medieval Chinese History (History 791) Not offered 1982-83.]

Seminar in Modern Chinese History (History 793-794)

Introduction to the Arts of China (History of Art 380)

[The Arts of Early China (History of Art 383) Not offered 1982-83.]

[Chinese Painting (History of Art 385) Not offered 1982-83.]

[The Arts in Modern China (History of Art 481) Not offered 1982-83.]

[Chinese Art of the Tang Dynasty (History of Art 483) Not offered 1982-83.]

[Studies in Chinese Painting (History of Art 486) Not offered 1982-83.]

Other courses dealing extensively with China are Anthropology 205 and 322; Government 347, 348, 350, 387, 446, 606, and 645; History 190 and 191; History of Art 280, 381, 482, and 580; and Architecture 667-668.

China—Language Courses

Basic Course (Chinese 101-102)

Cantonese Basic Course (Chinese 111-112)

Intermediate Chinese I (Chinese 201-202)

Intermediate Cantonese (Chinese 211-212)

Intermediate Chinese (Chinese 301)

Intermediate Chinese III (Chinese 302)

Chinese Conversation—Intermediate (Chinese 303-304)

Intermediate Cantonese II (Chinese 311-312)

FALCON (full-time course, Chinese 161-162)

History of the Chinese Language (Chinese 401)

[Linguistic Structure of Chinese: Phonology and Morphology (Chinese 403) Not offered 1982-83.]

[Linguistic Structure of Chinese: Syntax (Chinese 404) Not offered 1982-83.]

Chinese Dialects (Chinese 405)

Chinese Dialect Seminar (Chinese 607)

China—Literature Courses

Introduction to Classical Chinese (Chinese 213-214)

[Chinese Philosophical Texts (Chinese 313) Not offered 1982-83.]

Classical Narrative Texts (Chinese 314)

T'ang and Sung Poetry (Chinese 420)

Readings in Modern Chinese Literature (Chinese 411-412)

Directed Study (Chinese 421-422)

[Readings in Literary Criticism (Chinese 424) Not offered 1982-83.]

Readings in Folk Literature (Chinese 430)

[Seminar in Chinese Poetry and Poetics (Chinese 603) Not offered 1982-83.]

Seminar in Folk Literature (Chinese 609)

Advanced Directed Reading (Chinese 621-622)

Japan—Area Courses

391 The Japanese Economy Spring, 4 credits. Hours to be arranged. J. Nickum.

The history, institutions, current status, and future prospects of the world's third largest economy. Topics covered include the economic geography of Japan; premodern (shogunate) economic development; modernization, expansion, war, and occupation economies; the dual economy; government-business relations; industrial organization; and foreign trade. Seminar format. No prerequisites.

[Japanese Society (Anthropology 345) Not offered 1982-83.]

[Japanese Ethnology (Anthropology 645) Not offered 1982-83.]

[Contemporary Japan (Government 100) Not offered 1982-83.]

Business and Labor in Politics (Government 334)

Politics in Contemporary Japan (Government 346)

[Politics of Productivity: Germany and Japan (Government 430) Not offered 1982-83.]

[Capitalism and Communism: Chinese and Japanese Patterns of Development (Government 462) Not offered 1982-83.]

[Art and Society in Modern China (History 390) Not offered 1982-83.]

History of Japan to 1750 (History 397)

History of Modern Japan (History 398)

[Seminar in Tokugawa Thought and Culture (History 489) Not offered 1982-83.]

[The Arts of Japan (History of Art 384) Not offered 1982-83.]

Other courses dealing extensively with Japan are Anthropology 313; Government 334, 348, 387, 446, 605, and 606; History 190, 191, and 192; History of Art 280, 381, 482, and 580; and Architecture 667-668.

Japan—Language Courses

Basic Course (Japanese 101-102)

Accelerated Introductory Japanese (Japanese 123)

Japanese for Business Purposes (Japanese 141-142)

Intermediate Japanese I (Japanese 201-202)

Japanese Conversation (Japanese 203-204)

Intermediate Japanese I and Conversation (Japanese 205-206)

Intermediate Japanese for Business Purposes (Japanese 241-242)

Intermediate Japanese II (Japanese 301-302)

Japanese Communicative Competence (Japanese 303-304)

Advanced Japanese (Japanese 401-402)

Linguistic Structure of Japanese (Japanese 404)

Oral Narration and Public Speaking (Japanese 407-408)

Directed Readings (Japanese 421-422)

Introductory Japanese for Business Purposes (Japanese 541-542)

Intermediate Japanese for Business Purposes (Japanese 543-544)

FALCON (full-time intensive course, Japanese 161-162)

Japan—Literature Courses

Introduction to Modern Literary Japanese (Japanese 405)

Introduction to Classical Japanese (Japanese 405-406)

Directed Readings (Japanese 421-422)

Seminar in Modern Literature (Japanese 611)

Seminar in Classical Literature (Japanese 612)

Advanced Directed Readings (Japanese 621-622)

South Asia—Area Courses

Culture and Society in South Asia (Anthropology 342)

Architecture in Its Cultural Context (Architecture 667-668)

[Government and Politics of India (Government 300) Not offered 1982-83.]

India: Social and Economic Change in a Democratic Polity (Government 451)

[Studies in Indian and Southeast Asian Art (History of Art 386) Not offered 1982-83.]

Dravidian Structures (Linguistics 440)

Indo-Aryan Structures (Linguistics 442)

Elementary Pali (Linguistics 640)

Elementary Sanskrit (Linguistics 641-642)

Seminar (Linguistics 700)

Directed Research (Linguistics 701-702)

Other courses dealing extensively with South Asia are Anthropology 425 and 628; Architecture 433; Asian Studies 250 and 351; Government 387, 605, 606, and 687; History 190 and 191; History of Art 280, 386, 482, and 580; Agricultural Economics 464; Communication Arts 624 and 626; and Rural Sociology 751.

South Asia—Language Courses

Basic Course (Hindi 101-102)

Hindi Reading (201-202)

Composition and Conversation (Hindi 203-204)

Readings in Hindi Literature (Hindi 301-302)

[Advanced Composition and Conversation (Hindi 303-304) Not offered 1982-83.]

Advanced Hindi Readings (Hindi 305-306)**Basic Course in Sinhala (Sinhalese 101-102)****Sinhala Reading (Sinhalese 201-202)****Composition and Conversation (Sinhalese 203-204)****Basic Course (Tamil 101-102)****Basic Course (Telugu 101-102)****Telugu Reading (Telugu 201-202)****Southeast Asia—Area Courses**

Microeconomic Issues in Agricultural Development (Agricultural Economics 664)

Sociotechnical Aspects of Irrigation (Agricultural Economics 701, Agricultural Engineering 771, and Rural Sociology 754)

Administration of Agricultural and Rural Development (Business and Public Administration NCE 514, International Agriculture 603, and Government 692)

Geography and Appraisal of Soils of the Tropics (Agronomy 401)

Ethnographic Films (Anthropology 205)

Applied Anthropology (Anthropology 314 and Rural Sociology 355)

Meaning across Cultures (Anthropology 320)

[Ethnology of Island Southeast Asia (Anthropology 334) Not offered 1982-83.]

Ethnology of Mainland Southeast Asia (Anthropology 335)

Myth, Ritual, and Symbol (Anthropology 424)

[Ritual Structures and Cultural Pluralism (Anthropology 425) Not offered 1982-83.]

Anthropological Approaches to the Study of Buddhism in Asia (Anthropology 619)

[Political Anthropology (Anthropology 628) Not offered 1982-83.]

Political Anthropology: Indonesia (Anthropology 628 and Government 647)

Southeast Asia: Readings in Special Problems (Anthropology 634-635)

Political Anthropology: Culture and Revolution in Indonesia (Anthropology 628 and Government 647)

Southeast Asia Seminar: Vietnam (Asian Studies 601) Fall. 4 credits. Staff.

Southeast Asia Seminar: Thailand (Asian Studies 602) Spring. 4 credits. Staff.

Southeast Asia Seminar (Asian Studies 604; also International Agriculture 601 Philippine Agricultural Development)

Southeast Asia Research Training Seminar (Asian Studies 676)

Directed Research (Asian Studies 703-704) 703, fall and spring; 704, fall and spring. Credit to be arranged.

Southeast Asia Undergraduate Seminar (Government 300)

Government and Politics of Southeast Asia (Government 344)

Political Role of the Military (Government 349)

The United States and Asia (Government 387)

Political Anthropology: Indonesia (Government 647 and Anthropology 628)

Southeast Asia Seminar: Vietnam (Government 652 and Asian Studies 601)

International Relations of Asia (Government 687)

Southeast Asian History of the Fourteenth Century: Indochina and the Archipelago to the Fourteenth Century (History 395)

Southeast Asian History from the Fifteenth Century (History 396)

Historiography of Southeast Asia (History 695-696)

Seminar in Southeast Asian History (History 795-796)

Art in Landscape: The Traditional Arts of Southeast Asia (History of Art 106)

Introduction to Art History: Asian Traditions (History of Art 280)

[Buddhist Art in Asia (History of Art 381) Not offered 1982-83.]

[Studies in Indian and Southeast Asian Art (History of Art 386) Not offered 1982-83.]

Ceramic Art of Asia (History of Art 482)

Traditional Arts in Thailand (History of Art 388)

Problems of Art Criticism (History of Art 595)

Seminar on Agricultural Development in Southeast Asia (International Agriculture 601) See also Asian Studies 604.

Special Studies of Problems of Agriculture in the Tropics (International Agriculture 602)

Comparative Methodology (Linguistics 404)

Sociolinguistics (Linguistics 405-406)

Field Methods (Linguistics 600)

Old Javanese (Linguistics 651-652)

Comparative Thai (Linguistics 752)

Seminar in Southeast Asian Languages (Linguistics 653-654)

Malayo-Polynesian Linguistics (Linguistics 655-656)

Seminar in Austro-Asiatic Linguistics (Linguistics 657-658)

A Survey of Tone and Tonal Phenomena (Linguistics 700)

Directed Research (Linguistics 701-702)

Thai Dialectology (Linguistics 751)

Comparative Thai (Linguistics 752)

Tibeto-Burman Linguistics (Linguistics 753)

Introduction to Music of the World (Music 103)

Theory and Practice of Gamelan (Music 245-246)

Cornell Gamelan Ensemble (Music 445-446)

Introduction to Ethnomusicology (Music 680)

Rural Sociology and World Development Problems (Rural Sociology 105)

Rural Development and Cultural Change (Rural Sociology 355)

Subsistence Agriculture in Transition (Rural Sociology 357)

Sociotechnical Aspects of Irrigation (Rural Sociology 754, Agricultural Economics 701, and Agricultural Engineering 771)

Social Change in Malaysia (Sociology 400)

Social Demography (Sociology 430)

Civil Liberties in Southeast Asia (Sociology 600)

Other courses dealing extensively with Southeast Asia are Anthropology 306, 320, 325, 420, 427, 611, 619, 628, and 680; Agricultural Economics 660, 664, and 701; Agricultural Engineering 771 and 774; Agronomy 401; Architecture 667-668; Asian Studies 250, 351, 352, and 650; Business and Public Administration NCE 514; Communication Arts 624; Education 627 and 629; Geological Sciences 424; Government 692; History 190 and 191; History of Art 482 and 580; International Agriculture 600, 602, 603, and 703; Nutritional Sciences 680; and Rural Sociology 650.

Southeast Asia—Language Courses

Basic Course (Burmese 101-102)

Burmese Reading (Burmese 201-202)

Composition and Conversation (Burmese 203-204)

Advanced Burmese Reading (Burmese 301-302)

Basic Course (Cambodian 101-102)

Cambodian Reading (Cambodian 201-202)

Composition and Conversation (Cambodian 203-204)

Advanced Cambodian (Cambodian 301-302)

Directed Individual Study (Cambodian 401-402)

Structure of Cambodian (Cambodian 404)

Basic Course (Cebuano [Bisayan] 101-102)

Elementary Course (Indonesian 101-102)

Indonesian Reading (Indonesian 201-202)

Composition and Conversation (Indonesian 203-204)

Linguistic Structure of Indonesian (Indonesian 300)

Readings in Indonesian and Malay (Indonesian 301-302)

Advanced Indonesian Conversation and Composition (Indonesian 303-304)

Directed Individual Study (Indonesian 305-306)**Advanced Readings in Indonesian and Malay Literature (Indonesian 401-402)****FALCON (full-time intensive course, Indonesian 161-162)****Elementary Javanese (Javanese 131-132)****Intermediate Javanese (Javanese 133-134)****Directed Individual Study (Javanese 203-204)****Basic Course (Tagalog 101-102)****Tagalog Reading (Tagalog 201-202)****Linguistic Structure of Tagalog (Tagalog 300)****Basic Course (Thai 101-102)****Thai Reading (Thai 201-202)****Composition and Conversation (Thai 203-204)****Advanced Thai (Thai 301-302)****Thai Literature (Thai 303-304)****Directed Individual Study (Thai 401-402)****Basic Course (Vietnamese 101-102)****Vietnamese Reading (Vietnamese 201-202)****Composition and Conversation (Vietnamese 203-204)****Advanced Vietnamese (Vietnamese 301-302)****Directed Individual Study (Vietnamese 401-402)**

Astronomy

Y. Terzian, chairman and director of undergraduate studies (428 Space Sciences Building 256-4935); S. V. W. Beckwith, J. M. Cordes, F. D. Drake, P. J. Gierasch, T. Gold, T. Hagfors, M. O. Harwit, J. R. Houck, P. D. Nicholson, S. T. Ostro, C. E. Sagan, E. E. Salpeter, S. L. Shapiro, S. A. Teukolsky, J. F. Veverka, I. M. Wasserman

Professors and graduate students in astronomy at Cornell are very active in the national space exploration program, as well as in studies of infrared astronomy and theoretical astrophysics. Cornell operates two local optical observatories and the world's largest radiotelescope at Arecibo, Puerto Rico.

The department offers a number of courses that are of general interest, have few or no prerequisites, and are not intended for the training of professional astronomers. These courses are numbered from 101 to 332. The last of these, Astronomy 332, requires calculus and a year of college physics, and Astronomy 111-112 requires at least coregistration in beginning calculus. The other courses have no college prerequisites at all.

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.

There is no undergraduate major in astronomy at Cornell because the department believes that a major in physics and mathematics is the best preparation for the study of astronomy at the graduate level. Students who are interested in becoming astronomers should major in physics as undergraduates. It is wise to get an early start in

mathematics and physics, preferably by registering for Mathematics 191-192 or 193-194 or 111-112 in the freshman year and by taking Physics 112 as soon as the prerequisites have been completed.

Concentration

Students interested in astronomy are encouraged to supplement their major with a concentration in astronomy, which is somewhat less intensive than a major. All students are invited to visit the Space Sciences Building, see the exhibits on display there, and consult with a faculty member about career plans or choice of courses.

Distribution Requirement

The distribution requirement in physical sciences is met by either of the following two sequences: Astronomy 101 and 102 or Astronomy 111 and 112.

Courses

101 The Universe beyond the Solar System Fall 4 credits.

Lecs, M W F 11:15; lab, M T W or R 7:30-10 p.m., or T W 2:30-5. One lab every other week.

Y. Terzian. Labs, P. Gierasch.

An examination of the universe and our place in it, and the possible existence of life and intelligence elsewhere in the cosmos. The physical nature of stars, galaxies, and quasistellar sources. The birth, evolution, and death of stars and the formation of the chemical elements, including discussions of supernovae, pulsars, neutron stars, and black holes. The physical state, composition, and influence of the interstellar material on the evolution of our galaxy. Modern theories of the structure and evolution of the universe.

102 Our Solar System Spring, 4 credits

Prerequisites: high school algebra and Astronomy 101 or permission of instructor.

Lec, M W F 11:15; lab, M T W or R 7:30-10 p.m., or T W 2:30-5 p.m. One lab every other week. Exams may be given in the evening. J. Veverka. Labs,

P. Gierasch

Formation of the solar system. Surfaces, environments, and internal structures of planets and satellites. Evolution of the earth's crust, oceans, and atmosphere. Origin of life. Search for life in the solar system and elsewhere.

103 The Universe beyond the Solar System Fall 3 credits.

Identical to 101 except for omission of the laboratory (see description above). This course does not satisfy the distribution requirement in physical sciences.

104 Our Solar System Spring, 3 credits.

Identical to 102 except for omission of the laboratory (see description above). This course does not satisfy the distribution requirement in physical sciences.

105 An Introduction to the Universe Summer, 3 credits. Recommended: one unit of high school physics.

M-F 11-12:15; evening laboratories to be arranged. Staff.

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 man 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.

106 Essential Ideas in Relativity and Cosmology

Summer, 3 credits. Prerequisites: high school algebra and trigonometry.

M-F 9:30-10:45. Staff.

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 relativity—space travel, equivalence of mass and energy, nuclear fission and fusion, and thermonuclear processes in the sun; in general relativity—motion of light and particles in curved space-time, cosmological models, and the question of whether the universe is open or closed.

111 Astronomy: Stars, Galaxies, and Cosmology

Spring, 4 credits. Intended for engineering and physical sciences freshmen. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191.

Lecs, M W F 10:10; rec, one hour each week to be arranged; plus some evening observing periods. I. Wasserman.

The formation and evolution of stars. Supernovae, pulsars, quasars, and black holes. The interstellar medium. The structure and evolution of galaxies. Cosmology.

112 The Solar System, Planets, and Life Fall, 4 credits.

Intended for engineering and physical sciences freshmen. Prerequisite: introductory calculus or coregistration in Mathematics 111 or 191.

Lecs, M W F 10:10; rec, one hour each week to be arranged; some evening labs to be arranged. S. Ostro.

The origin of the solar system. Celestial mechanics. The physics and chemistry of planetary surfaces, atmospheres, and interiors. Spacecraft results. Prebiology and the origin of life. The search for life elsewhere in the universe.

201 Our Home in the Universe Fall, 2 credits.

T R 2:30-3:45. T. Gold.

A general discussion of man's relation to the physical universe; the nature of space and time as understood in modern physics; the universe of galaxies and stars, and the particular system of planets and satellites encircling one such average star, our sun. The origin and evolution of the solar system, as revealed by modern planetary exploration. The great uncertainties that remain.

215 Information and Knowledge in Science and Engineering Fall, 4 credits.

T R 10:10-11:35. M. Harwit.

Topics to be covered include the exact and probabilistic laws of nature; messages, information content, and entropy; the Heisenberg uncertainty principle as a fundamental limitation on what we can know about the behavior of physical systems; coding of messages, cryptography, unbreakable codes, error correcting codes; self-replicating machines; transmission of genetic information in biology; mutations and biological evolution; transmission, storage, and processing of information in machines and in animals; robots and artificial intelligence; transmission of information across the universe—astronomical data and communication with intelligent civilizations. At the Level of *Scientific American*.

[321 Life in the Universe Spring. Not offered 1982-83.]**332 Elements of Astrophysics** Spring 4 credits.

Prerequisites: calculus, Physics 213. Physics 214 strongly recommended.

Lecs, M W F 11:15. P. Nicholson.

An introduction to astronomy, with emphasis on the application of physics to the study of the universe. Physical laws of radiation. Theories of the solar system. Distance, size, mass, and age of stars, galaxies, and the universe; stellar evolution and nucleosynthesis; interstellar matter and star formation. Supernovae, pulsars, and black holes.

Galaxies and quasars. Introduction to cosmology. Intended for students interested in astronomy, physics, and engineering.

431 Introduction to Astrophysics and Space Sciences I Fall. 4 credits. Prerequisites: Physics 214 and 318 or their equivalent.

M W F 11:15. S. Beckwith, P. Nicholson.
A systematic development of modern astrophysical concepts for physical science majors. Atomic and electromagnetic processes in space. Introduction to star formation, stellar structure, stellar atmospheres, and the interstellar medium. At the level of *Astrophysical Concepts*, by Harwit.

432 Introduction to Astrophysics and Space Sciences II Spring. 4 credits. Prerequisite: Astronomy 431 or permission of instructor.

M W F 10:10. S. Beckwith.
Formation of the chemical elements. Origin of the solar system; stellar evolution; white dwarfs, neutron stars and black holes; stellar systems, clusters, galaxies and quasars. Cosmology. At the level of *Astrophysical Concepts*, by Harwit.

[433 **The Sun** Fall. Not offered 1982-83.]

[434 **The Evolution of Planets** Fall. Not offered 1982-83.]

440 Independent Study in Astronomy Fall or spring. 2-4 credits. Prerequisite: consent of instructor. Recommended: familiarity with the topics covered in Astronomy 332, 431, or 434.

Hours to be arranged. Staff.
Individual work on selected topics. A program of study is devised by the student and instructor.

[490 **Senior Seminar** Fall. Not offered 1982-83.]

509 General Relativity (also Physics 553) Fall. 4 credits. Prerequisite: knowledge of special relativity at the level of, for example, *Classical Mechanics*, by Goldstein.

T R 1:25-2:40. S. Shapiro.
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, Thorne, and Wheeler.

510 Applications of General Relativity (also Physics 554) Spring. 4 credits. Prerequisite: Astronomy 509.

T R 10:10-11:35. S. Shapiro.
A continuation of Astronomy 509 with emphasis on applications to astrophysics and cosmology. Topics include: relativistic stars, gravitational collapse and black holes, gravitational waves, cosmology.

[511 **High-Energy Astrophysics** Spring. Not offered 1982-83.]

[516 **Galactic Structure and Stellar Dynamics** Spring. Not offered 1982-83.]

[520 **Radio Astronomy** Fall. Not offered 1982-83.]

[521 **Radio Astrophysics** Spring. Not offered 1982-83.]

523 Signal Processing in Astronomy Spring. 4 credits. Prerequisites: mathematical background equivalent to undergraduate physical science curriculum; familiarity with FORTRAN programming.

T R 2:30-4. J. Cordes, S. Ostro.
Topics will include Fourier analysis of discrete and continuous time series, spectral analysis, parameter estimation, probability theory and stochastic processes with an orientation towards applications in observational radio astronomy and astrophysics.

Discussion of applications such as interferometry, image processing, scintillation theory, planetary radar, and pulsar studies. Course work will include applications on the IBM 370.

555 Theory of the Interstellar Medium (also Physics 665) Fall. 4 credits.

M W F 1:25-2:40. E. Salpeter, G. Contopoulos.
Summary of observational data: theories of ionization and thermal equilibrium of the gas; grain formation and destruction; cloud structure and star formation; interstellar effects of cosmic rays. Galactic dynamics.

[560 **Theory of Stellar Structures and Evolution (also Physics 667)** Fall. Not offered 1982-1983.]

[571 **Mechanics of the Solar System (also Theoretical and Applied Mechanics 673)** Spring. Not offered 1982-83.]

575 Planetary Atmospheres Fall. 4 credits.

Hours to be arranged. P. Gierasch, J. Veveřka.
Introduction to radiative transfer. Scattering and line formation. Energy balance and thermal structure. Energy transport by motions; elements of circulation theory. Observations. At the level of *Radiative Transfer*, by Chandrasekhar.

[579 **Celestial Mechanics (also Theoretical and Applied Mechanics 672)** Fall. Not offered 1982-83.]

620 Seminar: Advanced Radio Astronomy Fall. 2 credits.

Hours to be arranged. J. Cordes.
Advanced topics in radio astrophysics and radio astronomical data accumulation and processing methods.

[633 **Seminar: Infrared Astronomy** Fall. Not offered 1982-1983.]

640 Advanced Study and Research Fall or spring. Credit to be arranged.

Hours to be arranged. Staff.
Guided reading and seminars on topics not currently covered in regular courses.

660 Cosmic Electrodynamics (also Applied and Engineering Physics 608) Spring. 2 credits.

Hours to be arranged. R. Lovelace.
Selected topics discussed in detail: the solar corona and wind; extragalactic radio sources; magnetized accretion discs and modes and instabilities of self-gravitating systems.

671 Special Topics in Planetary Astronomy: The Saturn System Spring. 3 credits.

W 11:30-1:30. C. Sagan.
Topics vary. The course has focused on such topics as the interiors of planets; Martian exploration; cosmic chemistry and exobiology; and instrumental techniques.

[673 **Seminar: Current Problems in Planetary Fluid Dynamics** Spring. Not offered 1982-83.]

[680 **Seminar: Cosmic Rays and High-Energy Electromagnetic Radiation (also Physics 680)** Spring. Not offered 1982-83.]

699 Seminar: Current Problems in Theoretical Astrophysics Fall. 3 credits. May be repeated for credit.

Hours to be arranged. I. Wasserman.
Study of the latest problems in theoretical astrophysics; contents change from year to year.

Biological Sciences

R. Barker, director; H. T. Stinson, associate director and director of undergraduate studies (118 Stimson Hall, 256-5233); S. D. Miller, assistant director for academic affairs/student services (Biology Center, G20 Stimson Hall, 256-3358).

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 and environmental sciences; 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.

At Cornell the program of study in biology 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.

The biology program is designed to enable students to acquire necessary scientific foundations, to become familiar with different aspects of modern biology, and then to concentrate in a specific area of biology. Areas of concentration include animal physiology and anatomy; biochemistry; botany; cell biology; ecology, systematics, and evolution; genetics and development; or neurobiology and behavior. Special programs are available for qualified students with particular interest in areas such as marine biology, nutrition, microbiology, biophysics, or general biology. For more details see the Division of Biological Sciences section.

Burmese, Cambodian, and Cebuano (Bisayan)

See Modern Languages, Literatures, and Linguistics, p. 146.

Chemistry

R. Hoffmann, chairperson and director of undergraduate studies (124 Baker Laboratory, 256-4174); A. C. Albrecht, B. A. Baird, J. M. Burlitch, B. K. Carpenter, J. C. Clardy, D. B. Collum, W. D. Cooke, G. S. Ezra, R. C. Fay, M. E. Fisher, J. H. Freed, B. Ganem, M. J. Goldstein, E. R. Grant, G. G. Hammes, P. L. Houston, F. W. McLafferty, J. E. McMurry, J. Meinwald, G. H. Morrison, R. F. Porter, L. Que, J. R. Rasmussen, H. A. Scheraga, M. J. Sienko, D. A. Usher, B. Widom, J. R. Wiesenfeld, C. F. Wilcox, P. T. Wolczanski. Visiting professors: T. R. Beebe, D. E. U. Ekong.

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.

The Major

The chemistry major at Cornell is not an easy option; it requires conceptual skills in mathematics and logical thinking, practical and laboratory skills, and creativity in the design of experiments. 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 provide the basis for significant work in related areas such as

molecular biology, chemical physics, geochemistry, chemical engineering, and solid state physics. A major in chemistry permits considerable flexibility in the detailed planning of a course program. The required courses 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 courses (including mathematics and physics) prerequisite to those that are more advanced. During the first year, the student should normally register for general chemistry (preferably but not necessarily Chemistry 215), mathematics, a Freshman Seminar course, a foreign language if necessary, or, in some instances, physics. Although Chemistry 215-216 is preferred, students may begin their programs with Chemistry 207-208. Chemistry 215-216 is limited to 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 the 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; 389-390, Physical Chemistry I and II; and 302-303, Experimental Chemistry II and III, which should be completed in the third year. Advanced work in chemistry and related subjects can be pursued in the fourth year and, to some extent, in the earlier years as well. The opportunity for independent research is also available. All students with questions about details of a major program are encouraged to consult the chairperson of the Department of Chemistry or the chairperson's representative. Entering students who are exceptionally well prepared in chemistry may receive advanced placement credit for Chemistry 207-208 and proceed to a more advanced program.

Prerequisites for admission to a major in chemistry are (1) Chemistry 215-216 or 207-208 plus 300, (2) Physics 207, 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. Knowledge of simple computer programming is essential. This may be achieved either by self-study (a syllabus is available) or by taking courses such as Computer Science 100. The minimum additional courses that must be completed for a major in chemistry are listed below.

- 1) Chemistry 301, 302, 303, 359-360 (or if necessary, 357-358 may be substituted), and 389-390.
- 2) Mathematics 112 plus 214, 215, 216, 217; or 122 plus 221, 222; or 192 plus 293, 294
- 3) Physics 208

Potential majors electing to take the mathematics sequence 214-217 are strongly urged to do so in their sophomore year to avoid scheduling conflicts with Chemistry 389 in their junior year.

This sequence is a core program in chemistry. It is anticipated that students will, through elective courses, extend it substantially in whatever direction suits their own needs and interests. It is particularly important that those going on to do graduate work in chemistry recognize that these requirements are minimal, and such students are strongly urged to supplement their programs, where possible, with Chemistry 404, 405, 420, 605, 606, 607, 668, 681, and German or Russian. 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 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. However, 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. Selection will be 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 will be 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, superior performance, including the writing of a thesis, in the honors seminar (Chemistry 498) is expected.

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 glasses or approved eye-protective devices in all chemistry laboratories. 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 \$5 fee in addition to charges for any breakage.

Courses

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

103-104 Introduction to Chemistry 103, fall; 104, spring. 3 credits each term. Enrollment limited. Prerequisite for Chemistry 104: Chemistry 103. Recommended for students who have not had high school chemistry and for those needing a less mathematical course than Chemistry 207-208.

Lecs, M W 11:15 or 12:20; lab, T or R 8-11, or F 10:10-1:10, or M W or F 1:25-4:25. Prelims: 7:30-9:00 p.m. Oct. 7, Nov. 16, March 3, April 14. Fall: H. A. Scheraga; spring, D. E. U. Ekong, J. E. McMurry.

An introduction to chemistry, with emphasis on the important principles and facts of inorganic and organic chemistry.

[202 Origins of Life Spring. 3 credits.

Prerequisite: one year of chemistry or biochemistry. Extra sessions will be held periodically for students without this background. S-U grades; letter grades possible after consultation with instructor. Not offered 1982-83.

Lecs, T R 12:20-1:30. D. A. Usher. Birth of solar system and conditions on the early earth; characteristics of molecules essential to life today; prebiotic syntheses of biological molecules and further chemical evolution; origin of protein synthesis and the genetic code; effect of cycles in temperature (day and night, summer and winter) and humidity (dew, rain, tides) on early chemical systems; the rock record; geological and molecular fossils; other possibilities for life; different genetic material and extraterrestrial life. A determined effort is made to distinguish fact from hypothesis and from fiction; there will be much critical reading of the research literature.]

203 In the Realm of Organic Chemistry Fall. 3 credits.

Lecs and discs, T R 12:20. M. J. Goldstein. The applications of organic chemistry surround us; they touch us more frequently than those of any

other science. Organic chemistry is also unique among the sciences in its use of a pictographic language to record and transmit its ideas. Each of these two aspects illustrates a different human preoccupation: a concern for people, and a search for order in patterns that transcend personal experience. This course will examine the historical development of contemporary organic chemistry as a unique marriage of these two preoccupations. Interactions with biochemistry, inorganic chemistry, mathematics, and physics will also be considered. Readings from the original scientific literature will be analyzed in class and then evaluated in papers to be submitted at regular intervals. No formal examinations will be offered, nor will any formal prerequisites be required. A talent for spatial perception, a previous exposure to French and German, and an inquiring mind will reward those who might chance to possess them.

207-208 General Chemistry 207, fall; 208, spring. 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 103-104.

Lecs: fall, T R 9:05, 10:10, or 12:20; spring, T R 9:05 or 10:10. Lab: fall, T W R or S 8-11; F 10:10-1:10; M T W R or F 1:25-4:25; spring, M T W R or F 12:20-4:25 or S 8-12. Prelims: 7:30-9:00 p.m. Oct. 5, Nov. 9, March 1, April 12. Fall, M. E. Fisher, B. Widom; spring, L. Que.

The important chemical principles and 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 Chemistry 207-208 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.

215-216 General Chemistry and Inorganic Qualitative Analysis 215, fall; 216, spring. Fall, 4 credits; spring, 5 credits. Recommended for students who intend to specialize in chemistry or in closely 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: lec, M W F 12:20; lab, M T W R or F 1:25-4:25. Spring: lec, M W F 12:20; two labs, M W 1:25-4:25, T R 10:10-1:10, T R 1:25-4:25 or F 1:25-4:25 and S 8-11. Prelims: 7:30-9:00 p.m. Sept. 23, Oct. 28, Nov. 23, Feb. 17, March 8, April 21. Fall, B. A. Baird; spring, T. R. Beebe, 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.

251 Introduction to Experimental Organic Chemistry Fall. 2 credits. Recommended for non-chemistry majors. Prerequisite or corequisite: Chemistry 253 or 357 or permission of instructor. Lec, M or F 8 (all students attend first lecture); lab, M T W or R 1:25-4:25, or T or R 8-11. Prelims: 7:30-9:00 p.m. Oct. 19, Nov. 18. D. B. Collum. Introduction to synthesis and the separation and handling of materials, including applications of many types of chromatography, simple and fractional distillation, crystallization, extraction, and others.

252 Elementary Experimental Organic Chemistry Spring. 2 credits. Recommended for non-chemistry majors. Prerequisite: Chemistry 251. Lec, M 8; lab, M T W or R 1:25-4:25. C. F. Wilcox. A continuation of Chemistry 251.

253 Elementary Organic Chemistry Fall. 4 credits. Primarily for students in the premedical and biological curricula. Enrollment limited to 480 students. Prerequisite: Chemistry 104 with grade of C or better or Chemistry 208 or 216.

Lecs, M W F S 10:10; make-up lec may be given in the evening. Prelims: 7:30-9:00 p.m. Sept. 30, Oct. 28, Nov. 23. J. Meinwald.

The occurrence and properties of organic molecules and the mechanisms of organic reactions, including a brief introduction to the organic chemistry of biological systems, are studied.

Note: Because of duplication of material, students are not permitted to earn both 4 credits for Chemistry 253 and 3 credits for Chemistry 357. In special situations (consult instructor for details), students should take Chemistry 255 for 2 credits after having earned 3 credits for Chemistry 357. Premedical students should determine the entrance requirements of the particular medical school they wish to enter. Students may earn 6 credits by taking Chemistry 251-253 or 8 credits by taking Chemistry 253-301 or 253, 251, and 252.

255 Elementary Organic Chemistry Fall. 2 credits.

Same course as Chemistry 253, but to be taken for reduced credit by students already having 3 credits for Chemistry 357.

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.

Lecs, M W F 9:05; rec, M or W 1:25, T 9:05. Prelims: 7:30-9 p.m., Sept. 30, Oct. 28, Dec. 2, Feb. 17, Mar. 24, Apr. 28. Fall, E. R. Grant; spring, B. A. Baird.

A systematic treatment of the fundamental principles of physical chemistry.

289-290 Introductory Physical Chemistry

Laboratory 289, fall; 290, spring. 2 credits each term. Prerequisite for Chemistry 290: Chemistry 289. Corequisite: registration in Chemistry 287-288.

Lec, T 1:25 or R 9:05; lab, M T W R or F 1:25-4:25. Fall, J. R. Wiesenfeld; spring, P. L. Houston. Quantitative and qualitative methods basic to the experimental study of physical chemistry.

300 Quantitative Chemistry Fall. 2 credits.

Prerequisite: Chemistry 208 or advanced placement in chemistry.

Lec, F 12:20; lab, M T W R 12:20-4:25 or W 12:20 and F 1:25-4:25 or R 8-12 p.m. Laboratory includes one hour recitation. Organizational meeting on first class day of semester, 12:20. J. M. Burlitch.

Quantitative procedures and techniques, including volumetric, gravimetric and spectra photometric methods, are emphasized. The relationships between theories and applications are stressed.

301 Experimental Chemistry I Spring. 4 credits.

Prerequisite: Chemistry 216 or 300, and 253 or 357 or 359. Concurrent registration in Chemistry 253 is not recommended.

Lecs, M W 8; 2 labs, M W 1:25-4:25 or T R 8-11, or T R 1:25-4:25. J. R. Rasmussen.

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

302 Experimental Chemistry II Fall. 4 credits.

Enrollment limited; preference given to chemistry majors. Prerequisite: Chemistry 301.

Lecs, M W 9:05; 2 labs, M W 1:25-4:25, T R 9:05-12:05, T R 1:25-4:25, or F 1:25-4:25 and S 9-12. Prelims: 7:30-9:00 p.m. Oct. 19, Nov. 30. J. M. Burlitch, C. F. Wilcox.

Synthesis and quantitative analysis of both inorganic and organic compounds, instrumental methods including optical spectroscopy, atomic absorption,

NMR, mass spectroscopy, gas chromatography, GCMS, and electrochemical methods are surveyed. Trace element analysis.

303 Experimental Chemistry III Spring. 4 credits.

Each lab limited to 18 students. Prerequisites: Chemistry 302, 389, 390; coregistration in the latter is permissible; knowledge of computer programming is essential.

Lecs, M W 9:05 (some weeks lec may be on F instead of W); 2 labs, M W 1:25-4:25 or T R 8-11 or 1:25-4:25. R. F. Porter.

An introduction to the techniques of vacuum line construction and operation; the principles and assembly of electronic measuring devices, optics, and kinetics.

357-358 Introductory Organic Chemistry 357,

fall; 358, spring. 3 credits each term. Prerequisites: Chemistry 208 or 216 or advanced placement in chemistry. Recommended: concurrent registration in Chemistry 251 in the fall term or Chemistry 301 in the spring term. Prerequisite for Chemistry 358: Chemistry 357.

Lecs, M W F 9:05; optional rec may be offered. J. C. Clardy.

A systematic study of the more important classes of carbon compounds—reactions of their functional groups, methods of synthesis, relations, and uses.

Note: Because of duplication of material, students are not permitted to earn both 4 credits for Chemistry 253 and 3 credits for Chemistry 357. In special situations (consult instructor for details), students should take Chemistry 255 for 2 credits after having earned 3 credits for Chemistry 357.

359-360 Organic Chemistry I and II 359, 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, or 208 with a grade of B or better, or consent of instructor. Prerequisite for Chemistry 360: Chemistry 359.

Lecs, M W F 9:05; make-up lecs, W 7:30 p.m. B. Ganem.

A rigorous and systematic study of organic and organometallic compounds, their structures, the mechanisms of their reactions, and the ways that they are synthesized in nature and in the laboratory.

389-390 Physical Chemistry I and II 389, fall;

390, spring. 4 credits each term. Prerequisites: Mathematics 214, 215, 216 or ideally, 221-222; Physics 208, Chemistry 208 or 216 or permission of instructor. Prerequisite for Chemistry 390: Chemistry 389.

Lecs, M W F 10:10; rec and make-up lec, W 7:30 p.m. Prelims: 7:30-9:00 p.m. Sept. 23, Oct. 14, Nov. 11, Dec. 9, Feb. 22, March 22, April 19. Fall, P. L. Houston; spring, A. C. Albrecht.

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

[404 Advanced Measurements Laboratory Fall 4 credits. Prerequisite: Chemistry 303. Not offered 1982-83.

Lab, M T R 1:25-4:25, plus occasional evening lec. Alternative hours may be arranged if necessary. Applications of modern experimental techniques in a variety of fields. Emphasis is on kinetics, spectroscopy, and electronics.]

405 Techniques of Modern Synthetic Chemistry

Spring. 4 credits. Enrollment limited. Prerequisite: Chemistry 302 and permission of instructor. Selection of students will be based on grades in Chemistry 301 and 302. With permission of the instructor, graduate students may perform a minimum of three two-week experiments on a prearranged schedule.

Lab time required: 12 hours each week, including at least two 4-hour sessions in 2 sections (M W 1:25 or T R 1:25). First meeting will be at 4:30 on first class day of semester. Lec, first week only, at times to be arranged. J. M. Burlitch.

The syntheses of complex organic and inorganic molecules will be carried out with emphasis on the following techniques: vacuum line, high pressure, high temperature solid state, inert atmosphere, nonaqueous solvents, radioactive labeling, photochemical and electrochemical methods, solid phase peptide synthesis, and macro and micro techniques. Elementary glassblowing.

[420 Inorganic Chemistry Spring. 4 credits.

Prerequisites: Chemistry 358 (or 360) and Chemistry 389. Not offered 1982-83.

A systematic study of synthesis, structure, and reactivity of inorganic and organometallic compounds. At the level of *Inorganic Chemistry*, by Huheey.]

421 Introduction to Inorganic Research Fall 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.

433 Introduction to Analytical Research Fall 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.

461 Introduction to Organic Research Fall or spring. 2-4 credits. Enrollment limited to those having a record of B- or better in prerequisite courses. Prerequisites: Chemistry 302 and 358 or 360 or permission of instructor.

Selected faculty. Research in organic chemistry involving both laboratory and library work, planned in consultation with a faculty member.

477 Introduction to Research in Physical Chemistry Fall or spring. 2-4 credits. Prerequisites: 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.

498 Honors Seminar Spring. No credit. Admission by departmental invitation. Additional prerequisite 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.

J. Meinwald, D. A. Usher. Informal presentations and discussions of selected topics in which all students participate. Individual research is on advanced problems in chemistry under the guidance of a faculty member, culminating in a written report.

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 4:40. 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.

605 Advanced Inorganic Chemistry I: Symmetry and Structure Fall. 4 credits. Prerequisite: Chemistry 389-390 or equivalent or permission of instructor.

Lecs, M W F 11:15. L. Que.

This is the first of a three-term sequence. Symmetry and structure of discrete molecules, translational symmetry of arrays of molecules in crystals. Group theory at the level of Cotton's *Chemical Applications of Group Theory*, Schonland's *Molecular Symmetry*, and Hall's *Group Theory and Symmetry in Chemistry*. Applications include molecular orbital theory, hybridization, and molecular vibrations. Readings in the chemistry of nontransition elements at the level of Cotton and Wilkinson's *Advanced Inorganic Chemistry*.

606 Advanced Inorganic Chemistry II: Synthesis and Reactivity of Inorganic and Organotransition Metal Compounds. Spring. 4 credits. Prerequisite: Chemistry 605 or permission of instructor.

Lecs, M W F 9:05. P. T. Wolczanski.
The second of a three-term sequence. Structure and reactivity of coordination complexes, including substitution processes and electron transfer mechanisms. Synthesis of organometallic compounds and mechanistic considerations of fundamental reactions. Emphasis on catalytic transformations. Readings at the level of Basolo and Pearson's *Inorganic Reaction Mechanisms* and Collman and Hegedus's *Principles and Applications of Organotransition Metal Chemistry*.

[607 Advanced Inorganic Chemistry III: Structure and Properties] Spring. 4 credits. Prerequisite: Chemistry 605 or permission of instructor. Not offered 1982-83.

Lecs, M W F 9:05. M. J. Sienko.
The third of a three-term sequence. Introduction to ligand field theory and solid-state structure and properties, at the level of Figgis' *Introduction to Ligand Fields*, Krebs' *Fundamentals of Inorganic Crystal Chemistry* and Sach's *Solid State Theory*. Reading in transition metal chemistry at the level of Cotton and Wilkinson's *Advanced Inorganic Chemistry*.

[622 Chemical Communication (also Biological Sciences 623)] Fall. 3 credits. Limited to 30 students. Prerequisites: Chemistry 358, Biological Sciences 102, and Biochemistry 231. Intended primarily for research-oriented students. Offered alternate years. Not offered 1982-83.

Lecs, M W F 1:25.
The production, transmission, and reception of chemical signals in communicative interactions of animals, plants, and microorganisms. Communication involving insects is emphasized. Specific topics are treated, with varying emphasis on chemical, biochemical, neurobiological, ecological, and evolutionary principles.]

625 Advanced Analytical Chemistry I Fall. 4 credits. Open to undergraduates with permission of instructor. Prerequisite: Chemistry 288 or 390 or equivalent.

Lecs, M W F 8; exams, T 7:30 p.m. W. D. Cooke, F. W. McLafferty.
The application of molecular spectroscopy to chemical problems. Topics in ultraviolet, infrared, NMR, Raman, and mass spectroscopy are discussed.

[627 Advanced Analytical Chemistry II] Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalent. Not offered 1982-83.

Lecs, T R 10:10; problem sessions and exams, T 7:30.
Modern analytical methods including electron, Mossbauer, and Fourier spectroscopy; mass spectrometry; methods applicable to macromolecules; information theory.]

[628 Advanced Analytical Chemistry III] Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalent. Offered alternate years. Not offered 1982-83.

Lecs, T R 10:10.
Modern trace, micro, and surface methods of analysis, including atomic spectrometry, solid mass

spectrometry, activation analysis, microscopes, microprobes, and electron spectroscopy.]

650-651 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 8:15 p.m.
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 and faculty members.

665 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; make-up lectures and exams, W 7:30 p.m. C. F. Wilcox.
A survey of reaction mechanisms and reactive intermediates in organic chemistry. Applications of qualitative molecular orbital theory are emphasized.

666 Synthetic Organic Chemistry Spring. 4 credits. Primarily for graduate students and upperclass undergraduates. Prerequisites: Chemistry 665 or permission of instructor.

Lecs, M W F 10:10; additional lec to be arranged. D. B. Collum.
Modern techniques of synthesis; applications of organic reaction mechanisms to the problems encountered in rational multistep synthesis, with particular emphasis on modern developments in synthetic planning.

[668 Chemical Aspects of Biological Processes] Fall. 4 credits. Prerequisites: Chemistry 358 or 360 and 390 or 288 or equivalents. Not offered 1982-83.

Lecs, M W F 10:10.
Biochemical systems, bioenergetics, enzymes, metabolic pathways, chemical evolution. This course forms the chemical basis for the graduate program in molecular biology.]

[672 Enzyme Catalysis and Regulation] Spring. 4 credits. Primarily for graduate students in chemistry and biochemistry. Prerequisites: Chemistry 358 or 360 and 390 or equivalents, and a course in general biochemistry. Not offered 1982-83.

Lecs, M W F 9:05 and occasionally W 7 p.m. G. G. Hammes.
Protein structure and dynamics; steady-state and transient kinetics; binding isotherms; chemical modification enzymes; application of NMR, EPR, and fluorescence, acid-base catalysis; allosterism; discussion of specific enzymes to illustrate general principles.]

677 Chemistry of Nucleic Acids Fall. 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. D. A. Usher.
Properties, synthesis, and reactions of nucleic acids.

[678 Thermodynamics] Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 288 or 390 or equivalents. Not offered 1982-83.

Lecs, T R 8:30-9:55; disc to be arranged.
Development of the general laws of equilibrium thermodynamics. Applications to the study of physicochemical equilibrium in gases, liquids, solids, and liquid solutions.]

681 Physical Chemistry III Fall. 4 credits. Prerequisites: Chemistry 288 or 390; Mathematics 214, 215, 216, 217, and Physics 208; or equivalents.

Lecs, M W F 10:10 and occasionally W 7:30 p.m. A. C. Albrecht.
An introduction to the principles of quantum theory and statistical mechanics, atomic and molecular

spectra, and elementary valence theory. At the level of *Atoms and Molecules*, by Karplus and Porter.

686 Physical Chemistry of Proteins Spring. 4 credits. Primarily for graduate students. Prerequisites: Chemistry 288 or 390 or equivalents. Offered alternate years.

Lecs, M T W R F 8, and occasionally W 7:30 p.m. H. A. Scheraga.
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.]

700 Baker Lectures Spring, on dates to be announced. No credit.

J. M. Thomas, University of Cambridge.
Distinguished scientists who have made significant contributions to chemistry present lectures for periods varying from a few weeks to a full term.

701-702 Introductory Graduate Seminar in Analytical, Inorganic, and Physical Chemistry 701, fall; 702, spring. No credit. Required of all first-year graduate students majoring in analytical, inorganic, physical, theoretical, and biophysical chemistry.

Hours to be arranged. Fall, F. W. McLafferty; spring, D. A. Usher, R. Hoffmann.

[716 Selected Topics in Advanced Inorganic Chemistry] Fall. 3 credits. Prerequisite: Chemistry 390 or equivalent. Not offered 1982-83.

Lecs, T R 12:20. B. K. Carpenter.]

765 Physical Organic Chemistry I Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 665 or permission of instructor.

Lecs, M W F 11:15. B. K. Carpenter.
Continues and extends the approach of Chemistry 665 to more complicated organic reactions. Emphasis is on applications of reaction kinetics and isotope effects to gain an understanding of reaction mechanisms.

[766 Physical Organic Chemistry II] Spring. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 765 or permission of instructor. Not offered 1982-83.

Quantitative aspects of organic chemistry.]

770 Selected Topics in Organic Chemistry Fall. 3 credits. Primarily for graduate students. Prerequisite: Chemistry 665-666 or permission of instructor.

Lecs, M W 11:15. J. R. Rasmussen.
Carbohydrate chemistry—the analysis, synthesis, and biological significance of complex carbohydrates.

774 Chemistry of Natural Products Fall. 3 credits. Primarily for graduate students. Prerequisites: Chemistry 665-666.

Lecs, T R 12:20. D. E. U. Ekong
Particular attention is devoted to methods of structure determination and synthesis as applied to selected terpenes, steroids, alkaloids, and antibiotics.

780 Principles of Chemical Kinetics Spring. 4 credits. Prerequisite: Chemistry 681 or permission of instructor.

Lecs, M W F 11:15. E. R. Grant.
Principles and theories of chemical kinetics; special topics such as fast reactions in liquids, enzymatic reactions, energy transfer, and molecular beams.

[782 Special Topics in Biophysical and Bioorganic Chemistry] Spring. 3 credits. Not offered 1982-83.

Lecs, T R 11:15.
Topics vary from year to year.]

789 X-Ray Crystallography Spring; offered only when sufficient registration warrants. 4 credits. Prerequisite: Chemistry 288 or 390 or permission of instructor.

Hours to be arranged. J. C. Clardy.
A beginning course in the application of X-ray crystallography to structural 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 theoretical aspects are illustrated by conducting an actual structure determination as a classroom exercise. At the level of Ladd and Palmer's *Structure Determination by X-Ray Crystallography*.

792 Scattering Theory for Chemists Spring, 3 credits.

793 Quantum Mechanics I Fall, 4 credits.
Prerequisites: Chemistry 681, coregistration in Mathematics 421, and Physics 431 or equivalents or permission of instructor.

Lecs, T R 8:40-9:55. J. H. Freed.
Schrödinger's equation, wave packets, uncertainty principle, WKB theory, matrix mechanics, orbital and spin angular momentum, exclusion principle, perturbation theory, variational principle, Born-Oppenheimer approximation. At the level of Bohm's *Quantum Theory*.

794 Quantum Mechanics II Spring, 4 credits.
Prerequisites: Chemistry 793 or equivalent and coregistration in Physics 432 and Mathematics 422, or permission of instructor.

Lecs, M W F 10:10. J. H. Freed.
Time-dependent phenomena in quantum mechanics and interaction with radiation. Group theory and applications in molecular spectroscopy and electronic structure of atoms and molecules. At the level of Tinkham's *Group Theory in Quantum Mechanics*.

796 Statistical Mechanics (also Physics 562)

Spring, 4 credits. Primarily for graduate students.
Prerequisite: Chemistry 793 or equivalent.

Lecs T R 8:30-9:55. M. E. Fisher.
Thermodynamic assemblies; Legendre transformation. Ergodic and information theory ideas. Ensembles and partition functions; equivalences and fluctuations; indistinguishability. Thermodynamic properties of ideal gases and crystals; Third Law; chemical equilibria. Imperfect gases; correlation functions and their applications. Ideal quantal gases; Bose-Einstein condensation. Ideal paramagnets. Ising models and lattice gases. At the level of Kubo's *Statistical Mechanics*.

[798 Selected Topics in Physical Chemistry]

Spring, 3 credits.
Lecs, T R S 9:05. Not offered 1982-83.]

Chinese

See Department of Asian Studies, p. 102, and Modern Languages, Literatures, and Linguistics, p. 146.

Classics

K. Clinton, chairman; L. S. Abel, F. M. Ahl, J. E. Coleman, M. L. Cook, J. R. Ginsburg (director of undergraduate studies, 127 Goldwin Smith Hall 256-3354), G. M. Kirkwood, P. M. Kirkwood, P. I. Kuniholm, G. M. Messing, P. T. Mitsis, P. Pucci (graduate faculty representative)

The Department of Classics provides an interdisciplinary approach to the Greek- and Latin-speaking civilizations of antiquity and to the work of later writers and thinkers who used Latin as their linguistic medium. It also offers, from time to time, courses in other ancient languages of Italy and, every other year, a program in modern Greek. Historical writers, poets, philosophers, and the great architects and artists of Greco-Roman civilization are the

subject matter. The department teaches them primarily for their central importance in a humanistic education. The department offers courses in Bronze Age and Classical archaeology and sponsors an archaeological dig at Alambra in Cyprus. Here at Cornell it has a fine collection of ancient artifacts, reproductions of ancient sculpture, and one of the few laboratories in the world that concentrate on tree-ring dating of ancient monuments from Greece, Cyprus, and Turkey. The archaeology courses may be used to satisfy some of the requirements 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, Roman law, 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 a course in the Greek and Latin elements that make up well over half of modern English usage, and programs in Latin and Greek at the elementary level; another course deals with Greek and Latin elements in bioscientific vocabulary. For the more ambitious, there are courses involving the 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. 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.

The 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 courses in Greek or Latin (courses numbered 201 or above) and 15 credits in related subjects selected after a conference with the adviser.

Classical civilization

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 (courses in the humanities selected in conference with the adviser).

Greek

Those who major in Greek must complete 24 credits of advanced courses in Greek and 15 credits in related subjects (including Latin). One or more courses offered by the Department of Comparative Literature may be counted towards the required 24 credits of Greek if the student obtains the prior approval of the major adviser.

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 also must complete successfully 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 B- or better, and 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.

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. 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 regular and summer programs for qualified graduate students. Detailed information on these programs is available in the Department of Classics office, 120A Goldwin Smith Hall.

Placement in Latin

Placement of first-year students in Latin courses is determined by an examination given by the Department of Classics during orientation week, or, if necessary, in the second half of the fall term.

Classical Civilization

[100 Word Power: Greek and Latin Elements in the English Language] Fall, 3 credits. Not offered 1982-83

G. M. Messing.

This course gives the student with no knowledge of Classical languages an understanding of how the Greek and Latin elements, which 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.]

102 Word Power for the Biological Sciences Fall, 3 credits.

M W F 11:15. M. Cook.

This course teaches 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 these elements and the rules of word formation will usually recognize the basic meaning of any unfamiliar word in this field. Attention will also be paid to misinformations, common errors, and words still in use that reflect scientific theories since rejected.

[118 Freshman Seminar in Ancient Philosophy] Fall or spring, 3 credits. Not offered 1982-83.

P. T. Mitsis.

An examination of the mythic, tragic, and philosophical views of man presented in Homer, Hesiod, the Pre-Socratics, Aeschylus, Sophocles, Euripides, Plato, Aristotle, Epicurus, and the Stoics.]

119 Freshman Seminar in Greek Literature Fall or spring, 3 credits.

M W F 8. Staff.

"Can you tell me, Socrates, whether excellence is something teachable; or not teachable but rather acquired through training; or is it neither practiced nor learned, but something which arises in men by nature or in some other way?" Selected readings from Plato, concentrating on the *Meno*.

120 Freshman Seminar in Latin Literature Fall or spring, 3 credits.

T R 12:20. Staff.

Fictions, ancient and modern. An examination of Robert Graves's historical novels, *I Claudius* and *Claudius the God*, together with the ancient sources on which these novels are based: Tacitus, *The Annals of Imperial Rome*, and Suetonius, *Lives of the Caesars*. Discussion will focus on narrative technique in the works of Tacitus, Suetonius, and Robert Graves and the extent to which any of them, ancient or modern, can be said to reflect the past accurately.

121 Freshman Seminar in Classical Archaeology Fall or spring, 3 credits.

T R 9:05. Staff.

Ancient civilizations of the Mediterranean world. The ancient Mediterranean world produced such important cultures as those of the Egyptians, Mycenaeans and Minoans, Phoenicians, Greeks, and Romans. In this course we shall examine the rise and fall of the great civilizations of the Mediterranean basin and compare these cultures in terms of their writing systems, political and economic organizations, religion, trade, and architecture. Topics covered include the environment and natural resources of the Mediterranean regions, the development of writing, the opium trade in the eastern Mediterranean, and the causes of the rise and fall of Mediterranean empires.

150 Freshman Seminar In Greek and Roman Myths Fall. 3 credits.

T R 11:15. E. Adler.
An introductory course on the myths of Greece and Rome for students interested in acquiring a basic background in Greek and Roman myths and legends as they occur in ancient literature and art. It should serve as a foundation for those interested in pursuing various theories as well as for those seeking to improve their grasp of mythical motifs in later European and American literature. But the primary purpose will be to acquaint the student with the stories themselves, and, where appropriate, to compare Greek and Roman myths with those of the Celts and other European peoples.

[200 Mediterranean Archaeology (also Near Eastern Studies 280)] Fall. 3 credits. Not offered 1982-1983

An examination of the archaeological bases of ancient Mediterranean civilization, with special focus on contacts and interrelationships in the Bronze Age. Topics include the rise of civilization in Egypt; the Bronze Age states of Syro-Palestine (Ebla, Ugarit, Byblos, et cetera); the Hittites and Bronze Age Anatolia; Minoans, Mycenaeans, and their eastern and western contacts; the role of Cyprus; the invention and spread of writing; and ancient shipping and trade. Lectures by instructors will be supplemented with talks by other scholars from Cornell and elsewhere.]

211 The Greek Experience Fall. 3 credits.

M W F 11:15. F. M. Ahl.
An introduction to the literature and thought of ancient Greece, with emphasis on their oral and dramatic presentation and intellectual and visual contexts. There will be an analysis of tragedy and comedy, satire, and epic and lyric poetry; also selected prose works, augmented by films, slides, play readings, and individual student interpretations.

212 The Roman Experience Spring. 3 credits.

M W F 1:25.
An introduction to the civilization of the Romans as expressed in their literature, art, and social and political institutions. This course will examine not only the intellectual life of the Romans, but what it meant for men and women of all social classes to live in the Roman world. Selected readings in translation of works of literature, history, and philosophy, supplemented by slides and other visual materials.

[222 The Individual and Society in Classical Athens] Spring. 3 credits. Prerequisite: Classics 211 or 220 or History 161 or 265 or 266 or permission of instructor. Not offered 1982-1983.

From Classical Athens (fifth and fourth centuries B.C.) come many of the most outstanding achievements in Western civilization: in literature, art, philosophy, historical writing, and the sciences. This course will survey Athenian daily life and discuss Athenian society with a view to isolating aspects which facilitated the development of the individual and individual achievement. Topics will include family life, education, economics, government, material culture, religion, social structure. Political and military history, while not totally disregarded, will not be of primary concern.]

[224 Greek Philosophy] Fall. 3 credits. Not offered 1982-1983.

An introduction to the pre-Socratic philosophers and Plato.]

[225 Hellenistic and Roman Philosophy] Spring. 3 credits. Not offered 1982-1983.

An introduction to Aristotle and later Greek and Roman philosophy, including Stoicism and Epicureanism.]

[226 The Genius of Christianity] Fall. 3 credits. Not offered 1982-1983.

An evocation of the spirit of the Christian religion over the course of its history. Lectures and class discussions will examine four major themes: New Testament, monasticism, the Reformation, and modernism in theology. Authors read will include theologians, apologists, poets, and mystics from all periods.]

[236 Greek Mythology (also Comparative Literature 236)] Fall. 3 credits. Not offered 1982-1983.

M W F 2:30. M. L. Cook
A survey of the Greek myths, with emphasis on the myths that have entered the postclassical Western tradition. Of the aspects of mythology to be studied the following will be among the most important: what "myth" meant to the Greeks; the factors and influences involved in the creation of myths; and the significance of myths in daily life, religion, and thought. Comparison and contrast to Roman myths, will also be included.]

[237 Greek and Roman Mystery Religions] Spring. 3 credits. Not offered 1982-1983.

M W F 11:15. K. Clinton.
The development and character of Mystery cults from the original Mystera of Demeter and Persephone to the Christian Mysteries. The cults include the Kabiroi, the Great Gods of Samothrace, Dionysus, Osiris, and other cults of Asia Minor and the Near East. Investigation will focus on the distinctive features of the Mystery cults that contributed to their success.]

[238 The Ancient Epic] Spring. 3 credits.

M W F 11:15. K. Clinton.
A close reading of the Homeric epics and Vergil's *Aeneid*. The *Iliad* and the *Odyssey* will be considered as oral poetry and in terms of their place in a traditional society, but with reference to modern interpretations. The *Aeneid* will be read as a major rewriting of Homer designed for a new audience.

245 Greek and Roman Historians Fall. 3 credits.

M W F 12:20. J. R. Ginsburg.
Study of historical writing in antiquity through selected readings (in translation) from the Greek and Roman historians. Among the topics to be examined are the historian's task as understood by the ancients; the method, narrative technique, and accuracy of the Greek and Roman historians; their attitudes to the events which they relate.

[270 Cicero and His Age (also History 270)] Spring. 4 credits. Not offered 1982-1983.

An interdisciplinary examination of the final decades of the Roman Republic as seen through the eyes of the period's most prolific writer. Selections from Cicero's speeches, his personal correspondence, and his philosophical, political, and oratorical essays are studied for the light they throw on both the man and his times. (Students who are enrolled in Classics and History 270 and who know Latin may read selected texts in the original in an additional section each week. See Classics 319 below.)

[300 Greek and Roman Drama (also Comparative Literature 300)] Spring. 4 credits. Not offered 1982-1983.

T R 10:10-11:35. G. M. Kirkwood.
A study of ancient tragedy and comedy as exemplified by representative plays, read in translation, of Aeschylus, Sophocles, Euripides,

Aristophanes, Menander, Plautus, Terence, and Seneca. Main emphasis is on the development of Greek tragedy. Consideration also of the development of Greek theater (illustrated) and its relationship to the form and presentation of the dramas, the origins of tragedy, and the influence of Greek tragedy and Seneca on later European drama.]

[304 Roman Law] Spring. 4 credits. Not offered 1982-83.

While based upon a history of the formal structure of Roman Law from the XII Tables to the Digest, this course will deal with Roman law in its wider context: law as a weapon in political strategies; law as it appears in Roman philosophy, rhetoric, education, and literature (comedy and satire); law as a mirror of society (the family, slavery, social classes, position of women).]

[331 Greek Foundations of Western Literature (also Comparative Literature 331)] Fall. 4 credits. Not offered 1982-1983.]

[332 Pagans and Christians at Rome (also Comparative Literature 332)] Fall. 3 credits. Not offered 1982-1983.

A survey of the history of the later Roman Empire seen through the various religious controversies of that age. Readings from a variety of original sources in translation.]

[333 Latin Foundations of Western Literature (also Comparative Literature 333)] Spring. 4 credits. Not offered 1982-1983.]

336 Foundations of Western Thought (also Comparative Literature 336)] Fall. 4 credits.

M W F 2:30. P. Mitsis.
The Greeks and Romans first raised many of the central questions that have long preoccupied Western thinkers: Is belief in a god rational or just a matter of faith? Are there objective ethical and political values? Are we responsible for our actions if everything in the world is causally determined? What is the relation of science and politics, and is scientific thinking just another form of myth? We will examine the cultural, political, and religious contexts in which such questions first arise and assess the distinctively Greek and Roman responses given by Classical tragedians, historians, philosophers, and religious thinkers. Authors examined will include Homer, Heraclitus, Aeschylus, Sophocles, Thucydides, Plato, Aristotle, Epicurus, the Stoics, St. Paul, and Augustine.

337 Ancient Philosophy of Science Spring. 4 credits.

M. Cook.
The development of scientific method by the ancient Greeks; the pre-Socratic philosophers, Aristotle, the ancient atomists, and the medical writers (Hippocrates, Galen, and the empiricists).

[339 Ancient Wit: An Introduction to the Theory and Form of Comic and Satiric Writing in Greece and Rome (also Comparative Literature 339)] Spring. 4 credits. Not offered 1982-1983.

The aim is not only to provide an introduction to the comedy, satire, and other humorous writings in Greek and Roman literature, but to discuss the ancient works in light of modern theories of comedy and laughter. Discussion of the nature of laughter itself in light of both ancient and modern scholarship on the subject, from Plato's *Philebus* to Freud's *Wit and Its Relations to the Unconscious* and Koestler's *The Act of Creation*. Examination of select works and passages of Homer, Euripides, Aristophanes, Hierocles, Lucian, Plautus, Nonnus, Horace, Martial, Juvenal, and Petronius.]

340 Ancient Greek Constitutions Spring. 3 or 4 credits. Prerequisite: survey of Greek history, a course in Greek civilization, ability to read Greek, or permission of the instructor.

T R 12:20. L. Abel.

The Greek word *politeia* means, "constitution," but not a single written document. It means the form of political life within a state. This course will survey briefly the variety of forms of political life in ancient Greece from Mycenaean kingdoms to the classical fourth-century Athenian democracy. The majority of time will be devoted to the history, functioning, and assessment of the Athenian democracy and Athenian law. The second major topic will be the constitution of Sparta and its role as the alternative to democracy. As each constitution is studied, the role of women will be considered. Required readings will be in translation. For those who can read Greek, an additional hour will be arranged each week to study selected documents in the original.

[363 Women in Classical Greece and Rome] Spring. 4 credits. Not offered 1982-1983.

L. S. Abel.
In this course students will examine the evidence about the social and political position of women in ancient Greece and Rome. The purpose will be to trace the origins of some Western attitudes about women and to address general historical questions about the nature of the evidence, basic chronology, and the development of political systems.]

[426 Augustine] Fall. 4 credits. Prerequisites: Classics 428 or permission of the instructor. Not offered 1982-1983.

The life and works of the dominant native genius of Western medieval intellectual history. Readings are taken mainly from the works of Augustine in English translation.]

[428 The Church of the Fathers] Spring. 4 credits. Not offered 1982-1983.

A rigorous historical survey of the development of doctrines and ecclesiastical institutions in the early church from the second through eighth centuries. Readings from original sources in translation.]

[430 Genre and Periods in Greek and Roman Literature (also Comparative Literature)]

430 Spring. 4 credits. Prerequisite: one upper-division course in Classics, comparative literature, English, or the modern foreign languages; senior standing, or permission of the instructor. Not offered 1982-1983.]

[463 Decline and Fall of the Roman Empire] Fall. 4 credits. Limited to 20 students. Not offered 1982-1983.

The fall of Rome has transfixed modern scholars with fascination. In the camps of the barbarian invaders, in the cloisters of the new monastic movement, and in the decaying cities of the ancient world, they seek guiding principles to help them understand how great societies can lose their vitality and how new life can spring from the ruins of the dying past. The focus will be on the ideas and events of late antiquity, but attention will be paid throughout to the implications of those events and ideas for modern scholars and modern societies.]

465-466 Independent Study in Classical Civilization, Undergraduate Level. 465, Fall; 466, spring. Up to 4 credits.
Hours to be arranged.

610 Language of Myth (also Anthropology 610) Spring. 4 credits.

P. Pucci.
An analysis of the theories on language, leading to Levi-Strauss and Derrida.

[681 Patristic Seminar: Graduate] Fall or spring. 4 credits. Not offered 1982-1983.]

711-712 Independent Study for Graduate Students in Classical Civilization 711, fall; 712, spring. Up to 4 credits.
Hours to be arranged.

Greek

101 Greek for Beginners Fall and spring. 4 credits.

M T W F 12:10. Fall, G. M. Kirkwood; spring, staff. Introduction to Attic Greek. Designed to enable the student to read the ancient authors as soon as possible.

103 Attic Greek Fall and spring. 4 credits. Prerequisite: Classics 101 or equivalent.

M T W F 12:20. Fall, M. L. Cook; spring, staff. A continuation of 101.

[111-112 Modern Greek] 111, fall; 112, spring. 3 credits. Not offered 1982-1983.
M W F 9:05. G. M. Messing.]

201 Attic Authors Fall. 3 credits. Prerequisite: Classics 103 or equivalent.

M W F 1:25. G. Kirkwood.
Selected readings from Plato, Thucydides, and Euripides.

203 Homer Spring. 3 credits. Prerequisite: Classics 103 or equivalent.

M W F 1:25. M. Cook.
Selected readings from Plato.

[209 Greek Composition] Fall. 2 credits. Prerequisite: Classics 203 or equivalent. Not offered 1982-1983.

T R 10:10-11:35. P. Pucci.]

[210 Greek Composition] Spring. 2 credits.

Prerequisite: Classics 209 or equivalent. Not offered 1982-1983.

T R 10:10-11:35. Staff.]

[301 Greek Historians] Fall. 4 credits. Prerequisite: Classics 203, 204, or equivalent. Not offered 1982-1983.

J. E. Coleman.
Topic varies. In 1981-82 the course consisted of reading (in Greek) and study of selected passages from Herodotus.]

[302 Greek Tragedy] Fall. 4 credits. Prerequisite: Classics 203 or equivalent. Not offered 1982-1983.

G. M. Kirkwood.]

[305 Attic Comedy] Spring. 4 credits. Prerequisite: Classics 203 or 204 or equivalent. Not offered 1982-1983.

P. Pucci.]

306 Greek Melic, Elegiac, and Bucolic

Poetry Spring. 4 credits. Prerequisite: Classics 203, 204, or equivalent.
G. Kirkwood.

307 Plato Fall. 4 credits. Prerequisite: Classics 203 or 204 or equivalent.

M W F 11:15. P.T. Mitsis
Plato on egoism, love, and friendship: *Lysis* and *Symposium*.

[308 New Testament Greek] Spring. 4 credits. Prerequisite: two terms of 200-level Greek or permission of instructor. Not offered 1982-83.

Readings in New Testament texts discussed in seminar format, with one session a week devoted exclusively to problems with language and translation exercises.]

[310 Greek Undergraduate Seminar] Fall or spring. 4 credits. Prerequisite: two terms of 200-level Greek or permission of instructor. Not offered 1982-1983.]

340 Ancient Greek Constitutions Spring. 4 credits. Prerequisites: survey of Greek history, a course in Greek civilization, ability to read Greek, or permission of the instructor.

T R 12:20, additional section to be arranged.
L. Abel.

See description under Classical Civilization.

401-402 Independent Study in Greek, Undergraduate Level 401, fall; 402, spring. Up to 4 credits.

Hours to be arranged.

417 Advanced Readings in Greek Literature Fall. 4 credits. Intended for advanced undergraduates and graduate students. Prerequisite: two terms of 300-level Greek or permission of instructor.

M W F 12:10. J. E. Coleman.
Homer and the Heroic Age. Extensive readings in the *Iliad* and the *Odyssey*, coupled with a consideration of the archaeological and cultural background of the Homeric poems. Topics of study will include the Mycenaean palaces, Linear B, Troy, the collapse of Mycenaean civilization, Geometric Greece, and the introduction of the Phoenician alphabet into Greece.

[418 Advanced Readings in Greek Literature] Spring. 4 credits. Intended for advanced undergraduates and graduate students. Prerequisite: two terms of 300-level Greek or permission of instructor. Not offered 1982-1983.

P. Pucci.]

419 Advanced Greek Composition Fall. 2 credits. Prerequisite: Classics 209, 210, or equivalent.

Hours to be arranged. G. M. Messing.

[442 Greek Philosophy] Fall or spring. 4 credits. Not offered 1982-1983.]

671 Seminar in Greek: Graduate Fall. 4 credits.

T 3-5. M. Cook.
Greek historiography.

[672 Seminar in Greek: Graduate] Spring. 4 credits. Not offered 1982-1983.]

701-702 Independent Study for Graduate Students in Greek 701, fall; 702, spring. Up to 4 credits.

Hours to be arranged.

Latin

105 Latin for Beginners Fall or spring. 4 credits.

Fall: M T W F 8, P. Kirkwood; M T W F 10:10, K. Clinton; M T W F 1:25, staff. Spring: M T W F 8, P. Kirkwood.

An introductory course in the essentials of the Latin language, designed for rapid progress toward reading the principal Latin writers.

106 Elementary Latin Fall or spring. 4 credits.

Prerequisite: Classics 105 or placement by departmental examination.
M T W F 8, staff; M T W F 10:10, P. Kirkwood; M T W F 1:25, staff.

A continuation of Classics 105, using readings from various authors.

[107 Intensive Latin] Spring. 7 credits. Not offered 1982-1983.

M T W R F 8, plus an additional session to be arranged.

The course work of Classics 105 and 106 is combined in one term.]

108 Latin in Review Fall. 3 credits. Prerequisite: placement by departmental examination.

M W F 11:15. Staff.

205 Intermediate Latin Fall. 3 credits.

Prerequisite: Classics 106 or 107 or 108 or placement by departmental examination.
Sec 1, M W F 10:10, P. Kirkwood; sec 2, M W F 1:25, J. Ginsburg.
Cicero's *Pro Cluentia*: a tale of murder and intrigue, with Cicero for the defense.

[207 Catullus] Spring. 3 credits. Prerequisite: Classics 106 or 107 or 108 or one term of 200-level Latin. Not offered 1982-1983.

M W F 2:30. G. M. Messing.

Readings from Catullus's poetry with emphasis on the traditions of love poetry, the poet's relation to his society, and other literary topics.]

208 Roman Drama Spring. 3 credits. Prerequisite: Classics 106 or 107 or 108 or one term of 200-level Latin.

F. M. Ahl.

216 Vergil Spring. 3 credits. Prerequisite: one term of 200-level Latin.

M W F 11:15. G. Kirkwood.

Selections from Vergil's *Aeneid* will be read with emphasis on Vergil's use of the epic tradition, his own poetic milieu, his poetic techniques, and his relation to the politics of his time.

241 Latin Composition Fall. 2 credits.

Prerequisite: Classics 106 or 107 or 108 or equivalent.

T R 2:30. P. Pucci.

242 Latin Composition Spring. 2 credits.

Prerequisite: Classics 241 or equivalent.

E. Adler.

[312 Latin Undergraduate Seminar Fall or spring. 4 credits. Prerequisite: two terms of 200-level Latin or permission of instructor. Not offered 1982-1983.]

314 The Augustan Age Fall. 4 credits.

Prerequisite: two terms of 200-level Latin.

M W F 9:05. F. M. Ahl.

315 Roman Satire Spring. 4 credits. Prerequisite: two terms of 200-level Latin.

E. Adler.

[316 Roman Philosophical Writers Fall. 4 credits. Prerequisite: two terms of 200-level Latin. Not offered 1982-1983.

P. T. Mitsis.

Selected readings from Lucretius's *De Rerum Natura* and Cicero's *De Finibus*.]

[317 Roman Historiography Spring. 4 credits.

Prerequisite: one term of 300-level Latin or permission of the instructor. Not offered 1982-1983.

M W F 1:25. J. R. Ginsburg.

Readings from Livy and Tacitus with particular attention to narrative technique.]

[318 Roman Elegy: Tibullus, Propertius, Ovid Fall. 4 credits. Prerequisite: two terms of 200-level Latin. Not offered 1982-1983.]

[319 Readings in Cicero (also History 319)

Spring. 1 credit. Prerequisite: two terms 200-level Latin. Corequisite: Classics 270 (also History 270). Not offered 1982-1983.

Hours to be arranged.

Students who are enrolled in Classics 270 and History 270 and who know Latin may read selected texts in the original in an additional section each week.]

[365 Cicero and His Age Fall or spring. 4 credits.

Prerequisite: two semesters of 200-level Latin or permission of instructor. Not offered 1982-1983.]

[366 Late Latin Spring. 4 credits. Prerequisite: permission of the instructor. Not offered 1982-1983.]

[368 Medieval Latin Literature Fall. 4 credits.

Prerequisite: Classics 214 or permission of the instructor. Not offered 1982-1983.

Medieval Latin texts and their historical and cultural contexts are closely studied. Each term the course will concentrate on two or three topics, such as particular authors, genres, or periods.]

411-412 Advanced Readings in Latin

Literature 411, fall; 412, spring. 4 credits. For advanced undergraduates and graduate students.

Prerequisite: two terms of 300-level Latin or permission of instructor.

Staff.

[441 Advanced Latin Composition Spring. 2 credits. For undergraduates who have completed Latin 241-242 and for graduate students. Not offered 1982-1983.]

451-452 Independent Study in Latin,

Undergraduate Level 451, fall; 452, spring. Up to 4 credits.

Hours to be arranged.

[460 The Latin Poems of Milton Fall. 4 credits.

Prerequisite: two semesters of 300-level Latin. Not offered 1982-1983.]

679 Seminar in Latin: Graduate (also History of Art 520) Fall. 4 credits.

R 3-5. E. Adler.

The Empire in transition. Art, literature, and life in the Roman world from Nero's death to the mid-second century A.D.

680 Seminar in Latin: Graduate Spring. 4 credits.

R 3-5. Staff.

Topic to be announced.

751-752 Independent Study for Graduate

Students in Latin 751, fall; 752, spring. Up to 4 credits.

Hours to be arranged.

Classical Archaeology

[206 The Rise of Classical Greece Fall. 3 credits. Not offered 1982-1983.

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.]

220 Introduction to Classical Archaeology (also History of Art 220) Fall. 3 credits.

M W F 9:05. J. E. Coleman.

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.

221 Minoan-Mycenaean Art and Archaeology (also History of Art 221) Spring. 3 credits.

M W F 10:10. J. E. 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. Topics also include Cyprus as an intermediary between the Aegean and the Levant, the effects of the volcanic eruptions of Thera (possibly Plato's Atlantis), and the evidence of Homer and the Greek myths.

232-233 Archaeology in Action I and II 232, fall;

233, spring. 3 credits each term. Prerequisites: Archaeology 100, Classics 220, or permission of the instructor. M 2:30-4:25; two labs to be arranged.

P. I. Kuniholm.

Objects from the Classical, Hellenistic, and Roman periods are "dug" out of Cornell basements, identified, cleaned, restored, cataloged, and photographed, and are considered in their appropriate historic, artistic, and cultural contexts.

309 Dendrochronology of the Aegean Fall or spring. Up to 4 credits. Limited to 10 students.

Prerequisite: permission of the instructor.

M 12:10-2:15; two labs to be arranged.

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 or Turkey.

[320 Arts and Monuments of Athens (also History of Art 320) Fall. 4 credits. Prerequisite: Classics 220 or permission of instructor. Not offered 1982-1983.]

[321 Archaeology of Cyprus (also History of Art 321) Spring. 4 credits.

Prerequisite: Classics 220 or permission of instructor. Not offered 1982-1983.

Study of Cyprus from its first settlement in the Neolithic period until the end of the ancient world. Special emphasis on the Bronze Age, the acme of Cypriot culture, and the neighboring civilizations. Lectures and oral reports by students. Students will have the opportunity to examine and study original unpublished material from the Cornell excavation at Alambra and study the collection.]

322 Greeks and Their Eastern Neighbors (also History of Art 322) Spring. 4 credits.

Prerequisite: Classics 220, 228, or permission of the instructor.

J. E. Coleman.

A study of the archaeological and other evidence for the interaction between Greek civilization and the Eastern and Western Mediterranean from the thirteenth to the fourth centuries B.C.E. The course will focus on Greek relationships with Phoenicia and the rest of the Levant, Cyprus, Anatolia, and the Etruscans in the post-Bronze Age period.

[323 Painting in the Greek and Roman World (also History of Art 323) Spring. 4 credits. Not offered 1982-1983.]

[325 Greek Vase Painting (also History of Art 325) Fall. 4 credits. Not offered 1982-1983.

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 other than Attic will be stressed.]

[326 Art and Archaeology of Archaic Greece (also History of Art 326) Fall. 4 credits. Not offered 1982-1983.

A study of the formative period of Classical Greek civilization, based primarily on the evidence of art and archaeology. Attention is concentrated on the beginnings and early developments of architecture, sculpture, and painting.]

[327 Greek and Roman Coins (also History of Art 327) Spring. 4 credits.

Not offered 1982-1983.

A look at the varied issues of Greek cities and the Roman state. The coins will be 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, work with actual examples.]

[329 Greek Sculpture (also History of Art 329) Fall. 4 credits.

Not offered 1982-1983.

Study of ancient Greek sculptural techniques and achievements in marble and bronze. Detailed examination of a selection of works to illustrate sculptural development.]

[330 Art in Pompeii: Origins and Echoes (also History of Art 330) Spring. 4 credits. Not offered 1982-1983.

Greek and Roman art in the context of the daily life of a provincial Italo-Greek town. The interrelation of art and household objects in classical culture will be stressed, and earlier traditions will be described. Subsequent development of Roman minor arts will be covered, as well as the discovery of Pompeii and its effect on European taste.]

350 Arts of the Roman Empire (also History of Art 322) Spring. 4 credits.

M W F 9:05. A. Ramage.

The visual arts in the service of the first world state. The course starts with the Etruscan and Republican period but concentrates on monuments of the

imperial era in Italy and the provinces until the time of Constantine.

423 Ceramics (also History of Art 423) Spring. 4 credits. Prerequisite: permission of instructor. W 2:30-4:30. A. Ramage.

[629 Seminar in Classical Archaeology Fall. 4 credits. Not offered 1982-1983.

The seminar will focus on the shaft graves at Mycenae and will examine the evidence from the shaft graves for mainland continuity and for influences from Crete, the Cycladic islands, and abroad.]

[630 Seminar in Classical Greek Archaeology: Graduate Spring. 4 credits. Not offered 1982-1983.]

Classical Linguistics

420 History of the Greek Language Fall. 3 credits.

M W F 9:05. G. M. Messing. Graduate students in Classics will be expected, in addition, to register in Classics 419, Advanced Greek Composition. Lectures and assigned readings will cover the evolution of Greek from Indo-European and its subsequent development up to the Koine.

422 History of the Latin Language Spring. 3 credits.

G. M. Messing.

[423 Vulgar Latin Spring. 4 credits. See also Romance Linguistics. Not offered 1982-1983. Selected texts such as the *Peregrinatio ad loca sancta* will be used to chart the changes in Latin that contributed to the development of the Romance languages.]

[424 Italic Dialects Fall or spring. 4 credits. Not offered 1982-1983.]

[425 Greek Dialects Fall. 4 credits. Not offered 1982-1983.

Hours to be arranged. G. M. Messing. Selected inscriptions will be read in the various ancient Greek dialects, including Mycenaean.]

Honors Courses

370 Honors Course Spring. 4 credits. To be taken in the junior year.

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

471 Honors Course Fall. 4 credits. To be taken in the senior year.

A continuation of Classics 370, with change of author or topic.

472 Honors Course: Senior Essay Spring. 4 credits. For students who have successfully completed Classics 471.

Topics must be approved by the honors adviser at the end of the first term of the senior year.

Comparative Literature

W. W. Holdheim, chairman (244 Goldwin Smith Hall, 256-4155); C. M. Carmichael, W. Cohen (director of undergraduate studies), W. J. Kennedy, with J. Culler (English), D. I. Grossvogel (Romance Studies), P. Hohendahl (German), E. Rosenberg (English)

Also cooperating: M. H. Abrams, C. Moron-Arroyo, J. P. Bishop, E. A. Blackall, E. G. Fogel, G. Gibian, S. L. Gilman, A. V. Grossvogel, N. Hertz, C. Kaske, R. E. Kaske, G. M. Kirkwood, C. Levy, H. S. McMillin, T. Murray

A broad spectrum of courses in various literary problems (imitation and influence, Marxist aesthetics,

literature and history), major authors (Dostoevsky, Ibsen, Dante), key thematic, (the hero, the city, the detective), stylistic modes (satire, parody, allegory), generic forms (drama, novel, short fiction), and historical periods (medieval, Renaissance, modern) are offered by the department. For the student who chooses to major in another literature, courses in comparative literature offer a rich background that supplements his or her specialization.

The Major

The major is designed to integrate students' knowledge of Western literature, to develop their critical reading abilities, and to train them for careers that demand analytical, interpretive, and evaluative skills. By the beginning of the sophomore year, proficiency in at least one foreign language is required. By the end of sophomore year, students normally have taken the introductory courses surveying the literature of two or more national traditions (such as German, English, Romance studies, Russian, Classics, Near Eastern studies, or Asian studies). Students then select 52 credits of advanced courses in those literatures and in comparative literature to form a sequence that combines an education in a wide range of literatures with techniques of analyzing, interpreting, and evaluating literary texts.

Freshman Seminars

Any 100-level course may be used toward satisfying the Freshman Seminar requirements.

Courses

201-202 Great Books 201, fall; 202, spring. 4 credits. Comparative Literature 201 is not a prerequisite for 202.

Fall: T R 12:20-1:35, T. Bahti. Spring: M W F 10:10, W. Cohen.

A reading each semester of seminal texts that represent and have often shaped Western culture, and ought to be part of every college student's education. By analyzing, interpreting, and evaluating them students will develop essential critical reading abilities. 201: selections from Homer, Sophocles, Plato, the Bible, Virgil, Ovid, Augustine, Dante, and Petrarch. 202: selections from Voltaire, Austen, Goethe, Dickinson, Balzac, Ibsen, T. S. Eliot, Pirandello, Garcia Marquez, and others.

312 Comedy Fall. 4 credits.

M W F 12:20. W. J. Kennedy. Discussion of comic styles (classical, colloquial, improvisational, absurd) and modes of comedy (satire, romance, farce, grotesque) in drama and narrative fiction from Aristophanes to Nabokov, with special attention to Chaucer, Rabelais, Moliere, Shaw, and Ionesco.

315 Rhetoric and Technology Spring. 4 credits.

M W F 12:20. W. J. Kennedy. A study of ways in which communication between authors and audiences undergoes changes through the influence of various media in texts from oral, literate, and advanced technological cultures. Readings include works by Plato, Dante, Swift, Nietzsche, Joyce, Borges.

326 Christianity and Judaism Spring. 4 credits.

Not open to freshmen. T R 10:10-11:25. C. M. Carmichael. A study of the New Testament as a product of first-century Palestinian and Hellenistic Judaism. Other text (also in translation): *Passover Haggadah*.

343 Medieval Literature Fall. 4 credits.

M W F 12:20. R. E. Kaske. Analysis and interpretation of great medieval literary works in translation. Though readings will vary somewhat from year to year, a typical program would be *Beowulf*; *Nibelungenlied*; *Njalssaga*; a romance of Chretien; Wolfram's *Parzival*; Gottfried's *Tristan and/or Sir Gawain and the Green Knight*.

344 Dante in Translation (also Italian 334)

Spring. 4 credits. M W F 12:20. G. Mazzotta.

The literary, intellectual, and moral complexities of this fundamental work in our poetic and spiritual history are examined critically. From close readings of some celebrated passages in *Inferno*, *Purgatorio*, and *Paradiso*, the lectures and discussions map out Dante's own interpretations of myths and concerns in classical and Christian culture. We pursue, for instance, Dante's sense of the crisis in the earthly city and how Vergil and St. Augustine are brought to bear on Dante's elaboration. Issues such as utopia, chiliastic impulses, and eschatology are given ample treatment, just as the problem of "how to read" the past and Dante's own formulations is kept steadily in focus.

352 Classic and Renaissance Drama (also Theatre Arts 325) Spring. 4 credits.

M W F 11:15. W. Cohen. Comparative drama from the Greeks to the mid-seventeenth century. Emphasis on relations among history, ideology, theater, and dramatic form, approached primarily from a Marxian perspective. Readings in Aeschylus, Sophocles, Aristophanes, Plautus, medieval drama, Shakespeare, Lope de Vega, Calderon, Corneille, Moliere, and others.

354 Modern Drama (also Theatre Arts 327) Spring. 4 credits.

M W F 12:25. A. Caputi. A study of the major currents of modern drama against the background of modern culture. Readings will include Ibsen, Strindberg, Chekhov, Shaw, Pirandello, O'Neill, Brecht, Beckett, Genet, and others.

359 Being, God, Mind: Humanistic Revolutions from Plato to Vico (also Romance Studies 459) Fall. 4 credits.

T R 12:20-1:35. C. M. Arroyo. A study of the origins of scientific language: body and soul, matter and form, act and potentiality, and being. A study of the ideological background of Western literatures: the conception of human personality and the presentation of character, the conception of reality, and the sense of literary structures. A study of the fusion of Greek thought and the Bible, and its reflection on the development of the ideas of freedom and equality in Western thought.

363-364 The European Novel Fall and spring. 4 credits. Comparative Literature 363 is not a prerequisite for 364.

Fall: M W F 11:15, W. Cohen. Spring: T R 10:10-11:25, E. Rosenberg. Close reading of several works each term. 363: from Cervantes to Dostoevsky. 364: from Tolstoy to Gide. Authors to be read will also include Fielding, Balzac, Stendhal, Dickens, Flaubert, Hardy, and Mann. The works discussed will illustrate novelistic subgenres such as the picaresque novel, the novel of manners, the philosophical tale, the historical novel, the detective story, and the *Bildungsroman*.

369 The Reader in the Novel (also Romance Studies 393) Fall. 4 credits.

T R 12:20-1:35. K. Vernon. Devoted to an examination of the image of the reader and the act of reading as thematized in classic and contemporary texts, and the implications for our own reading experience. Works in translation by Cervantes, Fielding, Diderot, Nabokov, and others.

379 The Russian Connection (also Russian Literature 379) Spring. 4 credits.

M W F 10:10. P. Carden. Russian literature in its European context. We will discuss great works of the Russian prose tradition in their reciprocal relations with European prose. Among the Russian authors to be studied will be Pushkin, Gogol, Lermontov, Tolstoy, and Dostoevsky. Among the European authors whose work helped to shape or was in some degree shaped by Russian literature, we will look at Rousseau, Goethe, Constant, Sterne (*Tristram Shandy*), Hoffmann, and Stendhal (*The Charterhouse of Parma*). In English translation.

391 Readings in Modern Poetry Spring, 4 credits.

T R 12:20-1:35. T. Bahti.

An intensive introduction to five major modern poets: Baudelaire, Mallarme, Yeats, Rilke, and Stevens. Questions will include the relations of self and language; the poet, history, and myth; "Romanticism" and "modernity"; and the intrinsic difficulty and interest of poetry. Bilingual texts will be used.

399 The Divided Self in Women's Writing Spring, 4 credits.

T R 12:20-1:35. I. Ezergailis.

A thematic and structural investigation of women's writing to explore the tension between the highly developed self-awareness of narrator and/or heroine and the desire for wholeness. We will trace some of the ways in which women writers have tried to resolve or transcend this problem of identity by retreat, acceptance, or new synthesis. The list of authors includes Virginia Woolf, Doris Lessing, and Sylvia Plath, as well as translations of contemporary German women novelists.

400 The Japanese Noh Theatre and Modern Dramatists (also Asian Studies 400) Spring, 4 credits.

M W 2:30-3:45. K. Brazell.

Several weeks will be spent studying the literary, performance, and aesthetic aspects of the Noh theatre. Emphasis will be on Noh as a performance system, a total theatre in which music, dance, text, costume, and props all interact to create the effect. Then attention will turn to modern theatre people who have reacted to Noh in some creative way. Choice of dramatists will depend partially on student interests but will probably include Yeats, Brecht, Britten, Claudel, Grotowski, and Mishima. All readings may be done in English translation.

405 Metaphor, Modernism, and Cultural Context: The Use of Metaphor in Modernist Hebrew, Yiddish, English, and American Poetry (also Near Eastern Studies 405) Spring, 4 credits.

Prerequisite: a 200-level or higher course in one of the following: Hebrew or Yiddish language or literature, English or comparative literature.

R 2:30-4:25. C. Kronfeld.

This course investigates the issue of the typical modernist metaphor against the background of interdisciplinary theories of metaphor. Examples are taken from three different literatures and branches of modernism: Hebrew antiformalist poetry, the Yiddish introspectivists, English and American imagists, etc. Readings will include Fogel, Amichai, Glatstein, Sutzkever, Eliot, Stevens, Williams, and others. Discussions and readings in English; students will have the option of reading these texts in Hebrew and/or Yiddish.

410 What Is Literature? Fall, 4 credits.

M W 2:30-3:45. T. Bahti.

A seminar for advanced majors in this and the other literature departments, designed to enable them to reflect upon their object of study in a general but rigorous way. Literary works (in translation) representing different traditions, genres, and periods will be paired with theoretical or philosophical works representing different traditions and approaches: Shakespeare's *Tempest* and Frye's *Anatomy of Criticism*; Holderlin's "Bread and Wine" and Heidegger's "Origin of the Work of Art"; Flaubert's *Madame Bovary* and Aristotle's *Poetics*.

411 Freud as Imaginative Writer and Reader Spring, 4 credits. Limited to 15 students.

Prerequisite: at least one literature course at the 200 level or above.

T R 2:30-3:45. C. Chase.

This course will introduce Freud as an imaginative writer and a reader of imaginative writing—the source of psychoanalytic criticism. Texts will include works by Freud, Shakespeare, Sophocles, and E. T. A. Hoffmann. No previous familiarity with Freud's writings or with psychoanalytic theory is necessary.

419-420 Independent Study Fall and spring.

Variable credit. Comparative Literature 419 is not a prerequisite for 420.

Hours to be arranged. Staff.

429 Readings in the New Testament Fall, 4 credits. Limited to 25 students.

M W F 1:25. J. P. 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 in 1982 will be on the synoptics: Mark, Matthew, and Luke. 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.

433 Problems in Romanticism: Holderlin and Keats (also German Literature 633) Spring, 4 credits. 600-level credit can be granted to graduate students after consultation with the instructor.

M 2:30-4:25. T. Bahti.

A seminar on two of the major poets of European romanticism. Points of focus will include their different Hellenisms; their ways of handling narrative within various poetic forms; and their different treatments of the problems of art, representation, and poetic language. While some attention will be given to their early works, the accent will be on Holderlin's late hymns and Keats's late odes and the *Hyperion-project*. Reading knowledge of German extremely useful but not required.

452 English Renaissance Drama and Its European Contexts (also Theatre Arts 452) Fall, 4 credits. 600-level credit can be granted to graduate students after consultation with the instructor.

M 3:35-5:30. W. Cohen.

A study of Shakespeare's leading contemporaries in relation to sixteenth- and seventeenth-century drama in France, Spain, and Italy. The aim of the course is to define and assess the specificity of the Elizabethan and Jacobean stage by viewing it against the background of European Renaissance theater as a whole. Considerable attention will be given to the connections among dramatic genre, theatrical institution, ideology, and social and political history, primarily from a Marxist point of view. Complementary or opposing perspectives are welcome. Readings from Marlowe, Jonson, Marston, and Webster; Corneille, Moliere, and Racine; Lope de Vega and Calderon; and others. All texts available in English.

458 Petrarch, Ronsard, and Donne Spring, 4 credits. 600-level credit can be granted to graduate students after consultation with the instructor.

W 2:30-4:25. W. J. Kennedy.

A close study of the poetry of Petrarch; of his Renaissance emulator, Ronsard; and of the Baroque poet who reshaped Petrarchan forms, Donne.

459 Italy and the Transalpine Renaissance: Ariosto, Spenser, and Rabelais Fall, 4 credits.

600-level credit can be granted to graduate students after consultation with the instructor.

W 2:30-4:25. W. J. Kennedy.

The impact of Italian literature upon English and French literature of the sixteenth century, studied through the interrelationships among *Orlando Furioso*, *The Faerie Queene*, and *Gargantua and Pantagruel*.

472 Ibsen and Chekhov (also Theatre Arts 442) Fall, 4 credits. Prerequisite: permission of the instructor.

T 2:30-5. S. Williams.

A study of selected minor and major plays by Ibsen and Chekhov, with particular attention being paid to how the playwrights evolved a dramaturgy that suitably expressed the artistic problems of their time. Aspects of performance and staging will also be discussed.

477 The Bildungsroman in Modern Literature Fall, 4 credits. 600-level credit can be granted to graduate students after consultation with the instructor.

T 2:30-4:25. W. W. Holdheim.

Seminar for graduates and advanced undergraduates on the novel of education and development, from Goethe, Balzac, Stendhal, and Dickens via Flaubert and Henry Adams to Gide and Thomas Mann (*Magic Mountain*, *Felix Krull*). Discussion will relate the problems of development in time to the form of the novel. Related subjects (such as the *Kunsterroman* and the novel of cultural diagnosis) will be taken up.

495 The Aesthetic Theory of the Frankfurt School (also German 495) Spring, 4 credits.

T 2:30-4:25. P. Hohendahl.

The course is designed as an introduction to the history of the Frankfurt School and the essential concepts of critical theory. The emphasis will be placed on the theory of culture and its application to the understanding of literature and aesthetics. The reading material will be taken from the works of Max Horkheimer, Theodor W. Adorno, Walter Benjamin, and Jurgen Habermas.

619-620 Independent Study Fall and spring.

Variable credit. Comparative Literature 619 is not a prerequisite for 620.

Hours to be arranged. Staff.

671 Baudelaire and Hugo Fall, 4 credits.

M 1:25-3:25. J. Culler.

Study of Baudelaire's verse and prose, and comparison of his poetry with the early and late poetry of Hugo. Conducted in English. Good reading knowledge of French required.

696 Proust and Mystery (also Romance Studies 696) Spring, 4 credits.

T 2:30-4:25. D. I. Grossvogel.

If mystery is what arouses curiosity through the unexplained, the inexplicable, or merely the secret, three possibilities are adumbrated for literature: the text as discussion about the ontological evidence; as rehearsal of the ontological sense; or the reduction of that sense for the sake of a game. The course proposes to read substantial portions of *A la Recherche du Temps Perdu* as the focus of these three kinds of concern, and alongside other texts that focus more specifically on one or the other of these three possibilities.

Related Courses in Other Departments

Many of these courses are conducted in English, and readings are in translation.

[Chinese Philosophical Literature (Asian Studies 371) Not offered 1982-83.]**Chinese Poetry (Asian Studies 372)****Twentieth-Century Chinese Literature (Asian Studies 373)****[Japanese Poetry and Drama (Asian Studies 375) Not offered 1982-83.]****Modern Japanese Fiction (Asian Studies 376)****Japanese Narrative Literature (Asian Studies 377)****Southeast Asian Literature in Translation (Asian Studies 379)****Feminist Theory: Franco-American Currents (Society for the Humanities 419)****On the Bias: New Designs on Literary Criticism (Society for the Humanities 420)****The Language(s) of Politics in the Renaissance (Society for the Humanities 425-426)****The Age of Symbolism (Russian 498)**

Computer Science

D. Gries, chairman; B. Aspvall, O. Babaoğlu, T. Coleman, R. L. Constable, R. W. Conway, A. J. Demers, J. R. Gilbert, J. Hartmanis, J. E. Hopcroft, F. T. Luk, P. A. Pritchard, G. Salton, F. B. Schneider, D. Skeen, R. Teitelbaum, S. Toueg, C. Van Loan

The Department of Computer Science is in both the College of Arts and Sciences and the College of Engineering. A student in either college can major in computer science. The following describes the College of Arts and Sciences major.

The Major

The major has three components: a core (a minimum of 42 credits), a group of electives in computer science and related fields (a minimum of 9 credits), and a concentration outside computer science (a minimum of 14 credits). The core focuses on the central topics within computer science: the logical design of programs, data structures, and algorithms. The remaining components of the major—the related electives and the outside concentration—provide a flexible extension to the core program. Students are expected to choose in consultation with their advisers the electives and the outside concentration that best suit their graduate and career plans.

Students interested in pursuing an advanced degree in theoretical computer science should concentrate in mathematics. Students preparing for advanced work in scientific computation should take Computer Science 621 (instead of Computer Science 321) and Computer Science 622 (as a related elective) and concentrate in some branch of applied mathematics. Qualified students are encouraged to concurrently major in mathematics.

Admission

The prerequisites for admission to the major are:

- 1) Completion of Computer Science 100-211;
- 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; and
- 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.

Core

The core consists of the following courses:

- 1) Calculus and linear algebra: Mathematics 111-122-221-222 or 191-192-293-294
- 2) One of the following discrete mathematics courses: Computer Science 280, Mathematics 332, 381, 432
- 3) Basic programming: Computer Science 100 and 211
- 4) Computer systems: Computer Science 314 and 410
- 5) Theory of computation: Computer Science 481 and 482
- 6) Numerical analysis: Computer Science 321

Related Electives

The related electives requirement consists of three courses. Two must be computer science courses numbered above 410; the other one is to be selected from the following:

- Electrical engineering courses numbered 230 or higher.
- Operations research courses numbered 260 or higher.
- Mathematics courses numbered 381 or higher.

Students are expected to select related electives that complement their concentration.

Concentration

This component encourages the student to study some discipline outside of computer science in reasonable depth. The concentration consists of an approved sequence of four courses (at least 14 credits) numbered 200 or higher in some field related to the theoretical or practical aspects of computing. A list of approved concentrations is available in the Computer Science Office, 405 Upson Hall. Students may also design their own concentrations, subject to the approval of their adviser. The concentration requirement is waived for students who concurrently major in a related field such as mathematics, linguistics, or psychology.

Other Requirements

Computer science majors must also satisfy the College of Arts and Sciences and University requirements. In particular, the spirit of the 15-credit electives requirement will be strictly followed. This requirement helps insure breadth of education and, consequently, no computer- or mathematics-related course can be used toward its fulfillment. In general, no courses may be used to fulfill more than one requirement. There are two exceptions: first, appropriate core courses may be used to satisfy the Group IV distribution requirement, and second, in the case of a double major, the same course may be applied to both majors.

Probability and statistics courses. Computer science majors are encouraged to include at least one course in the field of probability and statistics in their program of study. Although there is no formal department of statistics at Cornell, the Department of Mathematics and the School of Operations Research and Industrial Engineering offer a wide range of probability and statistics courses suitable for computer science majors, including the following introductory two-course sequences:

- Math 471, Basic Probability
- Math 472, Statistics
- OR&IE 260, Introductory Engineering Probability
- OR&IE 370, Introduction to Statistical Theory with Engineering Applications

A less rigorous but satisfactory one-semester introduction to probability and statistics is given in either of:

- Math 370, Elementary Statistics
- OR&IE 270, Basic Engineering Statistics.

Courses

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

100 Introduction to Computer Programming

Fall, spring, summer. 4 credits. S-U grades optional. Students who plan to take both Computer Science 101 and 100 must take 101 first.

2 lecs, 1 rec (optional). 3 evening exams, final.

101 The Computer Age

Spring, summer. 3 credits. S-U grades optional. Credit cannot be granted for both Computer Science 100 and 101 unless 101 is taken first.

2 lecs, 1 rec.

211 Computers and Programming

Fall, spring, summer. 3 credits. Prerequisite: Computer Science 100 or equivalent programming experience.

2 lecs, 1 rec.

280 Discrete Structures

Fall. 4 credits. Prerequisite: Computer Science 211 or permission of the instructor.

3 lecs.

[305 Social Issues in Computing

Fall. 3 credits. Prerequisite: Computer Science 100 or 101 or permission of instructor. Not offered 1982-83.]

314 Introduction to Computer Systems and Organization

Fall, spring, summer. 4 credits. Prerequisite: Computer Science 211 or equivalent.

2 lecs, 1 lab.

321 Numerical Methods

Fall, spring. 4 credits. Prerequisites: Mathematics 221 or 293, and knowledge of FORTRAN equivalent to what is taught in Computer Science 100.

3 lecs.

410 Data Structures

Fall, summer. 4 credits. Prerequisite or corequisite: Computer Science 314. Recommended: Computer Science 280.

2 lecs.

414 Systems Programming and Operating Systems

Spring. 4 credits. Prerequisite: Computer Science 314 or permission of instructor.

3 lecs.

417 Interactive Computer Graphics (also Architecture 334)

Spring. 4 credits. Enrollment limited for 1982-83. Prerequisite: Computer Science 314.

2 lecs, 1 lab.

432 Introduction to Database Systems

Spring. 4 credits. Prerequisite: Computer Science 211.

2 lecs, 1 rec.

481 Introduction to Theory of Computing

Fall. 4 credits. Prerequisites: Computer Science 211 and Computer Science 280 or equivalent mathematics, or permission of instructor.

3 lecs.

482 Introduction to Analysis of Algorithms

Spring. 4 credits. Prerequisites: Computer Science 410 and 481 or permission of instructor.

3 lecs.

490 Independent Reading and Research

Fall, spring. 1-4 credits.

600 Computer Science and Programming

Fall. 1 credit. Prerequisite: graduate standing in computer science or permission of instructor.

611 Advanced Programming Languages

Fall. 4 credits. Prerequisite: Computer Science 410 or permission of instructor.

3 lecs.

612 Translator Writing

Spring. 4 credits. Prerequisites: Computer Science 410 and 481 or permission of instructor.

3 lecs.

613 Concurrent Programming and Operating Systems Principles

Fall. 4 credits. Prerequisites: Computer Science 414 and 600 or permission of instructor.

3 lecs.

[615 Machine Organization

Spring. 4 credits. Prerequisite: Computer Science 314 or permission of instructor. Not offered 1982-83.]

621-622 Numerical Analysis

621, fall; 622, spring. 4 credits each term. Prerequisites: Computer Science 321 and Mathematics 411 and 431.

3 lecs.

623 Short Course on Linear and Nonlinear Least Squares

Fall. 2 credits. Prerequisite: Computer Science 321 or permission of instructor. Not offered every year.

624 Short Course on Spline Approximation

Fall. 2 credits. Prerequisite: Computer Science 321 or permission of instructor. Not offered every year.

632 Database Systems

Fall. 4 credits. Prerequisites: Computer Science 410 and either Computer Science 432 or permission of instructor.

2 lecs.

635 Information Organization and Retrieval Spring. 4 credits. Prerequisite: Computer Science 410 or equivalent.
2 lecs.

643 Design and Analysis of Computer Networks Fall. 4 credits. Prerequisite: Computer Science 414 or permission of instructor. Not offered every year.
2 lecs.

681 Analysis of Algorithms Fall. 4 credits. Prerequisite: Computer Science 481 or permission of instructor.
3 lecs.

682 Theory of Computing Spring. 4 credits. Prerequisite: Computer Science 481 or permission of instructor.
3 lecs.

709 Computer Science Graduate Seminar Fall, spring. 1 credit. For staff, visitors, and graduate students interested in computer science.
1 sem.

711 Theory of Programming Languages Spring. 4 credits. Prerequisites: Computer Science 481 and 611. Not offered every year.

712 Theoretical Aspects of Compiler Construction Spring. 4 credits. Prerequisite: Computer Science 612. Not offered every year.

713 Seminar in Operating Systems Fall, spring. 4 credits. Prerequisite: Computer Science 613 or permission of instructor.
1 sem.

719 Seminar in Programming Fall or spring. 4 credits. Prerequisite: Computer Science 611 or permission of instructor.
1 sem.

721 Advanced Numerical Analysis Fall. 4 credits. Prerequisite: Computer Science 621 or 622 or permission of instructor. Alternates with Computer Science 722. Not offered every year.

722 Advanced Numerical Analysis Spring. 4 credits. Alternates with Computer Science 721. Not offered every year.

729 Seminar in Numerical Analysis Fall, spring. 4 credits. Prerequisite: permission of instructor.

[733 Selected Topics in Information Processing (also Operations Research and Industrial Engineering 789)] Not offered 1982-83.]

734 Seminar in File Processing Fall. Credit and hours to be arranged. Prerequisite: Computer Science 733.

739 Seminar in Information Organization and Retrieval Fall, spring. Credit and hours to be arranged. Prerequisite: Computer Science 635.

749 Seminar in Systems Modeling and Analysis Fall, spring. 4 credits. Prerequisite: permission of instructor.
1 sem.

781 Advanced Theory of Computing Fall. 4 credits. Prerequisites: Computer Science 681 and 682 or permission of instructor. Alternates with Computer Science 782. Not offered every year.

782 Advanced Theory of Computing Spring. 4 credits. Alternates with Computer Science 781. Not offered every year.

789 Seminar in Theory of Algorithms and Computing Fall, spring. 2-4 credits. Prerequisite: permission of instructor.
1 sem.

790 Special Investigations in Computer Science Fall, spring. Prerequisite: permission of a computer science adviser.

890 Special Investigations in Computer Science Fall, spring. Prerequisite: permission of a computer science adviser.

990 Special Investigations in Computer Science Fall, spring. Prerequisite: permission of a computer science adviser.

Dutch

See Modern Languages, Literatures, and Linguistics. p. 146.

Economics

M. Majumdar, chairman; R. Masson, field representative; N. Kiefer, director of undergraduate studies; K. Burdett, R. Chirinko, M. G. Clark, T. E. Davis, D. Easley, L. Ebrill, R. Ehrenberg, G. Fields, R. H. Frank, W. Greene, E. Grinols, G. Hay, W. Isard, R. Joyeux, A. E. Kahn, P. D. McClelland, T. Mitra, U. M. Possen, R. E. Schuler, G. J. Staller, J. Svejnar, E. Thorbecke, S. C. Tsiang, J. Vaneek, H. Y. Wan, Jr., M. Yano

The study of economics provides an understanding of the way economies operate and insight into public issues. The department offers a broad range of undergraduate courses in such fields as money and banking; international and comparative economics; econometrics; theory; history; growth and development; and the organization, performance, and control of industry.

The Major

Students who wish to major in economics must have completed Economics 101-102 or equivalent courses and Mathematics 111 or its equivalent with grades of C or better. Prospective majors should apply at the department office. Students considering a major in economics are encouraged to take Economics 313 and 314 instead of Economics 311 and 312.

The requirements for a major are (1) Economics 319, 313 and 314 or (with the advisor's approval) 311 and 312; and (2) 20 credits of other economics courses listed by the Department of Economics, except that Economics 399 will not count toward the 20-credit requirement. With the permission of the major adviser, one or (in exceptional cases) two economics courses offered outside the College of Arts and Sciences may be applied to fulfill this requirement. Also with the major adviser's permission, a statistics course offered by another department may be substituted for Economics 319.

Students who have taken Economics 311 or 312 before or during the 1981-82 academic year should not take Economics 313 or 314. These students will be permitted to apply 311-312 toward requirement (1).

Students planning graduate work in economics or business are strongly encouraged to prepare themselves well in mathematics and econometrics.

Courses

101 Introductory Microeconomics Fall or spring and summer. 3 credits. Economics 101 is not a prerequisite for 102.

Lecs and disc.
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.

102 Introductory Macroeconomics Fall or spring and summer. 3 credits. Economics 101 is not a prerequisite for 102.

Lecs and disc.
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.

301 Economics of Market Failure Fall. 4 credits. Prerequisite: Economics 101 and 102.

The course will review briefly the welfare properties of the perfectly competitive market model and will then consider a range of situations in which these properties are modified and where there may be a case for some form of government intervention. The cases to be considered will include (a) the presence of externalities, pollution, and the economics of the environment; (b) the provision of public goods, the free-rider problem; (c) uncertainty and imperfect information, an analysis in the context of labor and insurance markets, and the market for medical care; (d) the regulation of natural monopoly and public utility pricing; (e) the failure of the market to achieve desired redistributive objectives; (f) direct and indirect taxation as instruments of redistribution.

302 The Impact and Control of Technological Change (also Government 302 and City and Regional Planning 440) Spring. 4 credits.

Examines social, environmental, and economic implications of technological change in the United States in the context of possible policies and strategies of control. Several specific cases will be considered in detail, followed by a broader investigation of the problems of a modern technological society. Alternative political-economic solutions will be explored.

304 Economics and the Law Spring. 4 credits. Prerequisite: Economics 311 or 313 or permission of instructor.

An examination, through the lens of economic analysis, of legal principles drawn from a variety of legal fields including contracts, property, torts, and procedure. No legal training is required.

[306 Economics of Defense Spending Spring. 4 credits. Prerequisite: Economics 101 and 102. Not offered 1982-83.

The economic aspects of defense spending are analyzed. Emphasis is on the procurement of weapons systems. Topics covered include an overview of the defense budget, special characteristics of the defense market, the structure of the defense industry, and the economic behavior of defense firms.]

307 Introduction to Peace Science Fall. 4 credits. Prerequisite: Econ 101-102 or permission of instructor.

Introduction to theories and research on conflict resolution. Topics include conflict, its role and impact upon society; theories of aggression and altruism; causes of war; game theory; conflict management procedure and other analytical tools and methods of peace science; alternatives to war.

308 Economic Analysis of Government (also Engineering CEE 322) Spring. 4 credits.

Prerequisites: one year of college-level mathematics plus Engineering CEE 321 or Economics 311 or 313. Government intervention in a market economy is analyzed. Public goods, public finance, cost-benefit analysis, environment regulation, and macroeconomic topics are covered.

[309 Capitalism and Socialism (also Industrial and Labor Relations 347)] Fall. 4 credits. Prerequisite: permission of instructor. Not offered 1982-1983.]

- 311 Intermediate Microeconomic Theory** Fall or spring and summer. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. The pricing processes in a private enterprise economy are analyzed under varying competitive conditions, and their role in the allocation of resources and the functional distribution of national income is considered.
- 312 Intermediate Macroeconomic Theory** Fall or spring and summer. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. The theory of national income determination and economic growth in alternative models of the national economy is introduced. The interaction and relation of aspects of these models of empirical aggregate economic analysis is examined.
- 313 Intermediate Microeconomic Theory** Fall or spring. 4 credits. Prerequisites: Economics 101-102 and calculus. See Economics 311 for course description.
- 314 Intermediate Macroeconomic Theory** Fall or spring. 4 credits. Prerequisite: Economics 101-102 and calculus. See Economics 312 for course description.
- 315 History of Economic Thought** Spring. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. Selected readings from the works of Adam Smith, T. Malthus, D. Ricardo, J. S. Mill, L. Walrus, J. A. Schumpeter, A. Marshall, and J. M. Keynes.
- 317 Intermediate Mathematical Economics I** Fall. 4 credits. 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.
- 318 Intermediate Mathematical Economics II** Spring. 4 credits. Advanced techniques of optimization and application to economic theory.
- 319 Quantitative Methods** Fall. 4 credits. Prerequisite: thorough understanding of microeconomic and macroeconomic theory and elementary calculus. The use of quantitative analysis in economics is introduced. Topics include index numbers, input-output analysis, elementary decision theory, and an introduction to hypothesis testing and the formulation and estimation of econometric models.
- 320 Quantitative Methods** Spring. 4 credits. Prerequisites: thorough understanding of microeconomic and macroeconomic theory and some elementary calculus. The use of quantitative analysis in economics is introduced. Topics include index numbers, input-output analysis, elementary decision theory, and an introduction to hypothesis testing and the formulation and estimation of econometric models.
- 323 American Economic History** Fall. 4 credits. Problems in American economic history from the first settlements to early industrialization are surveyed.
- 324 American Economic History** Fall. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. A survey of problems in American economic history from the Civil War to World War I.
- 325 Economic History of Latin America** Fall. 4 credits. Open to upperclass students with some background in economics or history, or with permission of instructor.
- 326 History of American Enterprise.** Spring. 4 credits. Prerequisites: Economics 101-102 or equivalents.
- 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 government) and the various responses of business organizations and entrepreneurs to those challenges.
- 329 Eastern Europe Today: Economics, Government, Culture (also Government 326 and Russian 329)** Spring. 4 credits. Economics majors cannot use this course to fulfill major requirements. Introductory, interdisciplinary survey of Poland, Hungary, Czechoslovakia, and Yugoslavia since World War II, with emphasis on contemporary development. The goals of the course are to examine differences (the variety of backgrounds) among East European countries, the common elements (for example, political relations with the USSR), domestic situations, the economy, culture.
- 330 The Soviet Union: Politics, Economics, and Culture (also Government 330 and Russian 330)** Fall. 4 credits. Economics majors cannot use this course to fulfill major requirements. Interdisciplinary survey of the USSR since the Revolution, with emphasis on contemporary developments.
- 331 Money and Credit** Spring. 4 credits. Prerequisites: Economics 101-102. 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.
- 333 Theory and Practice of Asset Markets** Fall. 4 credits. Prerequisites: Economics 311 or 313 and 312 or 314. The theory and decision making in the presence of uncertainty, and the practical aspects of particular asset markets are examined.
- 335 Public Finance: Resource Allocation and Fiscal Policy** Fall. 4 credits. Prerequisites: Economics 101-102. The role of government in a free market economy is analyzed. Topics covered include the federal debt, taxes, the budget, and government regulation. Current topics of an applied nature will vary from term to term.
- 336 Public Finance: Resource Allocation and Fiscal Policy** Spring. 4 credits. Prerequisites: Economics 101-102, one semester of calculus or permission of instructor. A continuation of Public Finance, Economics 335, covering noninstitutional topics. Subjects covered include cost-benefit analysis, choice of public discount rate, optimal commodity taxation, local public good, collective choice, and other topics depending on the interests of the instructor and the class.
- 338 Macroeconomic Policy** Fall. 4 credits. Prerequisite: Economics 312 or 314. The use of fiscal and monetary policies for achieving full employment, price-level stability, and appropriate economic growth are studied.
- [341 Labor Economics** Fall. 4 credits. Prerequisites: Economics 101-102. Not offered 1982-83.]
- [342 Problems in Labor Economics (also Industrial and Labor Relations 343)** Fall. 4 credits. Prerequisites: Economics 311 or 313 or Industrial and Labor Relations 240. Not offered 1982-83. The theory and empirical analysis of labor markets and their applications to policy issues are considered in depth. Specific topics vary each semester. The course is designed to increase each student's competence in applying microeconomic theory and econometrics to policy issues through an econometric research project.]
- 351 Industrial Organization** Fall. 4 credits. Prerequisites: Economics 311 or 313 or permission of instructor. An examination of the ways in which markets in a modern industrial economy differ from the atomistically competitive model, the consequences of those deviations, and (if appropriate) the cures for them. The course covers the economic theories of monopoly and oligopoly, including issues involving mergers and vertical integration, and analyzes efforts of the United States, primarily through its antitrust laws, to deal with perceived shortcomings in the behavior of the American economy.
- 352 Advanced Topics in Industrial Organization** Spring. 4 credits. Prerequisites: Economics 311, 351, and some knowledge of calculus. This course examines some of the major issues raised in the industrial organization literature. Major topics include market structure; information and advertising; pricing and entry; regulation; research and development and technological progress; integration; and antitrust policy. Typically, about half of these topics would be covered in any individual year. The course will blend empirical and institutional analysis, with a heavy emphasis on theoretical modeling.
- 354 Economics of Regulation** Spring. 4 credits. A study of the economics of direct regulation of industry. Concentration will be on the application of economic principles to common problems of regulation, with equal emphasis on institutional problems—the characteristics and problems of the regulatory process itself, the proper role and definition of competition—and recognition throughout of the necessity for reconciling economic and noneconomic goals.
- 355 Economics of the American System of Private Enterprise** Spring. 4 credits. Prerequisites: Economics 311 or 313 and 312 or 314, or equivalents. A critical examination of the private sector of the United States economy: its history, some leading current issues involving it, and its relation to theoretical and philosophical interpretations of the market economy.
- 356 Economics of the American System of Private Enterprise** Spring. 4 credits. Prerequisites: Economics 311 or 313 and 312 or 314 or equivalents. For course description, see Economics 355, above.
- 357 Economics of Imperfect Information** Fall. 4 credits. Prerequisites: Economics 101-102 and calculus. This course covers a variety of topics in the economics of uncertainty, including basic decision theory, search theory, risk insurance, and equilibrium price dispersion.
- 358 Current Economic Issues** Fall. 3 or 4 credits. Prerequisites: Economics 101-102. (A research paper will be required if the 4-credit option is chosen.) The emphasis will be on the application of simple microeconomics and industrial organization concepts to the formulation of public policy in the present and recent past. Among the topics likely to be covered will be policies relating to energy, communications, transportation; the financing and delivery of medical care, public utility, and other kinds of regulation; and the economics of inflation.
- 361 International Trade Theory and Policy** Fall. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. The principles that have guided the formulation of international trade and commercial policies are surveyed. The evolution of the theory of international trade, principles and practices of commercial policy, problems of regional integration and customs unions, and institutions and practices of state trading are considered.

362 International Monetary Theory and Policy Spring. 4 credits. Prerequisites: Economics 101-102 or permission of instructor.

The principles that guided the formulation of international financial policies are surveyed. The evolution of the theory of balance of payments adjustment, international monetary standards, international capital movements, economic aid, international monetary institutions, and proposals for international monetary reforms are considered.

[367 Comparative Economic Systems: Soviet Union and Europe Fall. 4 credits. Prerequisite: Economics 311-312 or permission of instructor. Not offered 1982-1983.

Discussion of approaches to comparison of economic systems. Consideration of abstract models (market economy, central planning, decentralized socialist market) as well as national economies (France and Sweden, Yugoslavia and Soviet Union). Possibility of convergence of economic systems is explored.]

[368 Comparative Economics: United States, Europe, and the Soviet Union Spring. 4 credits. Prerequisites: Economics 101-102. Intended for students who are not majoring in economics. Not offered 1982-1983.

European and Soviet economies after the Second World War are surveyed. The European countries studied include France, Sweden, and Italy. A descriptive and institutional approach is used and designed for nonmajors.]

369 Selected Topics in Socialist Economics Fall. 4 credits. Prerequisite: Economics 101-102.

Selected topics on the contemporary economic situation in the Soviet Union and Eastern European countries. Evolution of East-West economic relations. Special emphasis on Poland and the implications of its current crisis. The application of formal economic models to the analysis of these countries' economic problems (economic growth, business cycles, inflation, technology factor, etc.).

371 Economic Development Spring 4 credits. Prerequisites: Economics 313 or 311 and calculus, and Economics 320.

Study of the problem of economic growth in less-developed countries. Trade-offs between growth, welfare, and equity; 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.

[372 Applied Economic Development Spring 4 credits. Not offered 1982-83.]

[373 International Specialization and Economic Development Spring. 4 credits. Prerequisites: Economics 101-102 or permission of instructor. Not offered 1982-83.

The assessment of the gains and risks and the appropriate role for specialization and trade in economic development; management of the external disequilibrium attending serious efforts to accelerate economic development; and the processes, institution, and opportunities for innovation in transferring income from the relatively developed countries to those less developed.]

374 National and International Food Economics (also Nutritional Sciences 457) Spring 3 credits. Prerequisites: a college course in economics and junior standing or permission of instructor. Examination of individual components essential for an understanding of the United States and world food economies. Analysis of the world food economy. Review and analysis of (a) the major economic factors determining the demand for food, the composition of food consumption and nutritional intake, and (b) the major economic factors affecting food production and supply. Examination and

evaluation of the effectiveness of various food policies and programs in altering food consumption patterns. Principles of nutritional planning in developing countries within the context of the process of economic and social development.

378 Economics, Population, and Development Fall. 4 credits.

The economic aspects of population and the interaction between population change and economic change are introduced. Particular attention is paid to economic views of fertility, mortality, and migration, and to the impact of population growth on economic growth, development, modernization, resources, and the environment.

381 Economics of Participation and Workers' Management Fall. 4 credits. Prerequisites: Economics 311 or 313 and 312 or 314.

After a historical survey of the ideas and practices of self-management and workers' cooperation, the main economic issues relating to the participatory firms and economies will be studied. Special attention will be given to the outcome of the decision-making process at the level of the enterprise, the consistency of these outcomes with national plans, and the policies used to implement them. Examples will be drawn from the Yugoslav experience and, depending on student interest, the discussion will cover other foreign experiences such as Algeria, the Basque region, Chile, West Germany, Israel, Peru, and others. A considerable emphasis will be given to the new developments and new possibilities of implementing democratic, worker-owned and worker-managed enterprises in the United States. Drawing on theoretical analysis developed in the course, appropriate institutions and legal forms of self-management in the United States will be examined.

382 The Practice and Implementation of Self-Management Fall. 4 credits. Prerequisite: Economics 311 or 313 and 312 or 314 or permission of the instructor.

The various forms of labor participation in the world today are described, and how producer cooperatives and labor-managed firms and systems can be created is explained. Extensive use is made of the theory of labor-managed systems. The history of various doctrines and self-managed experience is considered.

399 Readings in Economics Fall or spring. Variable credit. Independent study.

416 Intertemporal Economics Fall. 4 credits. Prerequisites: Economics 313 or 311 and calculus. This course is intended for advanced economics majors who are specially 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 return in guiding investment decisions; (c) growth, exhaustible resources, pollution, and conservation; discussion of the trade-offs facing a society.

445 Topics in Microeconomic Analysis—Markets and Planning Fall. 4 credits. Prerequisites: Economics 313 or 311 and one term of calculus.

This is a course of economic theory designed for upperclass undergraduates. Course contents may vary from year to year. Issues which may be examined here 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? etc. This course serves two purposes: (1) to introduce concepts that are novel to the 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.

446 Topics in Macroeconomic Analysis—Is Keynesianism Dead? Spring. 4 credits.

Prerequisites: Economics 314 or 312 and one term of calculus.

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.

481 Economic Effects of Participation and Labor-managed Systems Spring 4 credits.

Prerequisites: Economics 313 or 311 and calculus, Economics 320 and 381.

The course applies microeconomic theory to analyze the performance of firms in which employees either participate in the decision-making process or make all the important decisions. Numerous empirical studies are examined with particular emphasis on their ability to model the relevant institutions and test the resulting theoretical predictions with appropriate econometric methods.

Graduate Courses and Seminars

503 Nonparametric Methods for Peace Scientists and Regional Scientists Fall 4 credits.

Topics to be covered include advantages and disadvantages of parametric and nonparametric methods; problems involved in measurement; nonparametric methods based on one sample and many samples; nonparametric methods requiring only nominal measurement, and those requiring only ordinal measurement; nonparametric measures of association; procedures for nonnormal distributions.

504 Economics and the Law Spring. 4 credits. See Economics 304 for course description.

505 Interdependent Decision Making Fall. 4 credits.

The basic elements in interdependent decision-making situations are examined. Situations where decision makers have different sets of objectives that they wish to achieve and employ different criteria for evaluating performance are focused on. The use of maximizing incremental procedures, game theory, and diverse methods for establishing priorities and cooperative action as well as recursive, interactive approaches to resolve conflict are considered. Coalition theory and related topics are covered.

509 Microeconomic Theory I Fall. 4 credits. Topics in consumer and producer theory.

510 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.

513 Macroeconomic Theory: Static Income Determination Fall. 4 credits.

514 Macroeconomic Theory: Dynamic Models, Growth, and Inflation Spring. 4 credits.

517 Intermediate Mathematical Economics I Fall. 4 credits.

518 Intermediate Mathematical Economics II Spring. 4 credits.

519 Quantitative Methods Fall. 4 credits.

520 Quantitative Methods Fall. 4 credits.

Prerequisites: good control of microeconomic and macroeconomic theory and some knowledge of calculus, linear algebra, and probability; or permission of instructor.

The application of quantitative analysis to testing of economic theories provides a framework for study and evaluation of cross-section and time-series data, methodology and theory of economic measurement, statistical techniques, empirical studies, and economic forecasting.

523 American Economic History Fall. 4 credits.

See Economics 323 for course description.

524 American Economic History Spring. 4 credits.

See Economics 324 for course description.

525 Economic History of Latin America Fall. 4 credits.

See Economics 325 for course description.

535 Public Finance: Resource Allocation and Fiscal Policy Fall. 4 credits.

See Economics 335 for course description.

536 Public Finance: Resource Allocation and Fiscal Policy Spring. 4 credits.

See Economics 336 for course description.

551 Industrial Organization Fall. 4 credits.

See Economics 351 for course description.

552 Public Regulation of Business Spring. 4 credits.

See Economics 352 for course description.

555 Economics of the American System of Private Enterprise Fall. 4 credits.

See Economics 355 for course description.

556 Economics of the American System of Private Enterprise Spring. 4 credits.

See Economics 356 for course description.

557 Economics of Imperfect Information Fall. 4 credits.

Prerequisites: Economics 509 and statistics. The purpose of the 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 search theory will be discussed.

561 International Trade Theory and Policy Fall. 4 credits.

See Economics 361 for course description.

562 International Monetary Theory and Policy Spring. 4 credits.

See Economics 362 for course description.

565 Economic Problems of Latin America Spring. 4 credits.**567 Comparative Economic Systems: Soviet Union and Europe** Fall. 4 credits.

See Economics 367 for course description.

571 Economic Development Spring. 4 credits.

See Economics 371 for course description.

572 Applied Economic Development Spring. 4 credits.

See Economics 372 for course description.

573 International Specialization and Economic Development Spring. 4 credits.

See Economics 373 for course description.

578 Economics, Population, and Development Fall. 4 credits.

See Economics 378 for course description.

581 Economics of Participation and Worker Management Fall. 4 credits.

See Economics 381 for course description.

582 The Practice and Implementation of Self-Management Fall. 4 credits.

See Economics 382 for course description.

599 Readings in Economics Fall or spring.

Variable credit. Independent study.

603 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.

605 Advanced Social Theory for Peace Scientists Spring. 4 credits. Prerequisites: Economics 505 and knowledge of microeconomic theory.

Study of diverse social science hypotheses and theories as they relate to, and can be synthesized within, multiregional, multinational, and generally multigroup conflict and cooperative frameworks. Particular attention will be given to developments stemming from microeconomics and general systems theory. Dynamic analyses will be emphasized.

611 Advanced Microeconomic Theory Fall. 4 credits.**612 Advanced Macroeconomic Theory** Fall. 4 credits.**617 Mathematical Economics** Fall. 4 credits.**618 Mathematical Economics** Spring. 4 credits.**619 Econometrics** Fall. 4 credits. Prerequisites: calculus and linear algebra. Recommended: Economics 520 or equivalent.

Detailed examination of regression models at the level of H. Theil, *Principles of Econometrics*. Emphasis is on theoretical aspects rather than practical applications. Topics include distribution theory and the use of sufficient statistics, the classical regression model, generalized least squares, modified generalized least squares, and the multivariate regression model.

620 Econometrics Spring. 4 credits. Prerequisites: calculus and linear algebra plus Economics 619 or permission of instructor. Recommended: Economics 520 or equivalent.

Advanced topics in econometrics, such as asymptotic distribution theory, errors in variable and latent variable models (e.g. factor analysis), simultaneous equation models with particular attention to problems of identification, time series analysis, qualitative response models, and aggregation.

[623 American Economic History Fall. 4 credits. Not offered 1982-83.]**[624 American Economic History** Spring. 4 credits. Not offered 1982-83.]**[626 Methods in Economic History** Spring. 4 credits. Not offered 1982-83.]**631 Monetary Theory and Policy** Fall. 4 credits.**632 Monetary Theory and Policy** Spring. 4 credits.**635 Public Finance: Resource Allocation and Fiscal Policy** Fall. 4 credits.**636 Public Finance: Resource Allocation and Fiscal Policy** Spring. 4 credits.**[638 Public Finance: Local Government and Urban Structure.** Fall. 4 credits. Not offered 1982-83.]**641 Seminar in Labor Economics** Fall. 4 credits.**642 Seminar in Labor Economics** Spring. 4 credits.**[644 The Labor Market and Public Policy: A Comparative View** Spring. 4 credits. Not offered 1982-83.]**647 Economics of Evaluation [also Industrial and Labor Relations 647]** Spring. 4 credits. See Industrial and Labor Relations 647 for course description.**[648 Issues in Latin America** Spring. 4 credits. Not offered 1982-83.]**651 Industrial Organization and Regulation** Fall. 4 credits.**652 Industrial Organization and Regulation** Spring. 4 credits.**661 International Economics: Pure Theory and Policy** Fall. 4 credits.**662 Seminar in International Economics** Spring. 4 credits. Prerequisites: Economics 661, acquaintance with conventional trade analysis, or permission of the instructor.

The course will cover advanced topics in international economics normally covered in International Economics 661.

664 International Economics: Balance of Payments and International Finance Spring. 4 credits.**[670 Economic Demography and Development** Fall. 4 credits. Not offered 1982-83.]**671 Economics of Development** Spring. 4 credits.**[672 Economics of Development** Fall. 4 credits. Not offered 1982-83.]**673 Economic Development** Spring. 4 credits. Prerequisites: Economics 509, 520. 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.**[674 Economic Systems** Spring. 4 credits. Not offered 1982-83.]**[678 Economic Growth in Southeast Asia** Spring. 4 credits. Not offered 1982-83.]**[679 Theory of Quantitative Economic Policy** Spring. 4 credits. Not offered 1982-83.]**681 Economic Theory of Participation and Self-Management** Fall. 4 credits.

The theory of labor-management economies is developed systematically, and literature on that and related subjects is surveyed. Theories of the participatory firm, industry, and general equilibrium are covered together with microeconomic theory and analysis of special dimensions of the system. Efficient decision-making processes within the firm are also studied. Illustrative references to Yugoslavia and other real instances of labor participation are made throughout.

682 Seminar on Economics of Participation and Labor-managed Systems Fall. 4 credits.**684 Seminars in Advanced Economics** Fall and spring. 4 credits.

English

A. R. Parker, chairman; T. D. Hill, director of undergraduate studies (323 Goldwin Smith Hall, 256-3335); M. H. Abrams, B. B. Adams, A. R. Ammons, J. P. Bishop, J. F. Blackall, L. Brown, A. Capuli, C. Chase, M. J. Colacurcio, J. Culler, D. D. Eddy, S. B. Elledge, R. T. Farrell, E. G. Fogel, D. Fried, L. Green, J. Harris, L. Herrin, M. Hite, M. Jacobus, P. Janowitz, C. V. Kaske, R. E. Kaske, R. Kirschten, C. S. Levy, A. Lurie, D. E. McCall, K. A. McClane, J. R. McConkey, H. S. McMillin, P. L. Marcus, D. M. Mermin, R. Morgan, T. C. Murray, D. Novarr, S. M. Parrish, M. A. Radzinowicz, B. Rosecrance, E. Rosenberg, P. L. Sawyer, D. R. Schwarz, M. Seltzer, H. E. Shaw, S. Siegel, W. J. Slatoff, J. Stallworthy, S. C. Strout, G. Teskey

The Department of English offers a wide range of courses in English and American literature as well as in creative writing and expository prose. Literature courses focus variously on close reading of texts, on study of particular authors and genres, on the relationship of literary works to their historical periods, and on questions of critical theory and method. The department not only stresses the development of analytical reading and lucid writing but, through the study of major literary texts, teaches students to think about the nature and value of human experience.

Students who major in English develop their own programs of study in consultation with their advisers. Some focus on a particular historical period or develop programs that concentrate on poetry, drama, or the novel. Others have a special interest in creative writing. Students may also concentrate in medieval studies or American studies.

The Major

Any student considering a major in English should see the department's director of undergraduate studies to arrange an assignment to a major adviser. Copies of a brochure containing suggestions for English majors and prospective English majors are available in the department office, 252 Goldwin Smith Hall. Prospective English majors should take one or more courses from among English 270, 271, 272, 275, 280, and 281 as early as possible. All of these courses are open to sophomores and to qualified freshmen. As soon as students have completed one of these courses, they may declare themselves English majors provided they have achieved an average of C or better in the English courses they have taken. English 270, 271, 272, open to all second-term freshmen, may be used to satisfy the Freshman Seminar requirement. First-term freshmen who have received advanced placement credit in English may enroll in English 270, 271, or 272 as space permits, and students interested in majoring in English are encouraged to do so.

Students majoring in English are required to complete 6 credits of foreign language study (preferably in the literature of a foreign language) in courses for which qualification is a prerequisite. Majors are urged to complete this requirement by the end of their sophomore year, and students who enter Cornell without sufficient preparation should therefore begin studying a language during their freshman year.

In addition to satisfying the requirements outlined above, English majors must take a minimum of 36 credits in courses approved for the major and complete them with passing letter grades. Courses approved for the major are English 201, 202, and all English courses numbered 300 or above except English 496. In addition to 201-202, students may count up to two courses for the major from the category entitled "200-Level Courses Approved for the Major." Students may also offer in satisfaction of the major as many as three courses numbered 300 or above in a foreign literature, in comparative literature, or in special courses such as those sponsored by the Society for the Humanities provided these alternatives are approved by their adviser.

Among the courses approved for the major, English 201 and 202 are especially recommended for English majors and should be taken by the end of the sophomore year. Students who do not take English 201-202 should choose their major courses with a view toward covering the historical range of English and American literature. Literature courses at the 300 level are intended to provide such coverage. Of the 36 credits required for the major, at least 8 must be in English or American literature written before 1800.

Honors. Prospective candidates for the degree of Bachelor of Arts with honors in English should consult the chairperson of the Honors Committee during the spring term of their sophomore year or early in their junior year. Honors candidates will take one or two honors seminars (English 491 or 492) during their junior year, as well as a 400-level course in the field in which they plan to work during their senior year. The work of the senior year is a year-long tutorial (English 493 and 494) on a special topic of the candidate's choosing, culminating in the writing of a scholarly honors thesis of approximately fifty pages, or a book-length work of high quality in creative writing completed for English 480-481. 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 and 600 levels for nonmajors will vary from topic to topic, and permission of the instructor is required.

Courses for Freshmen

As part of the Freshman Seminar Program, the Department of English offers many one-semester 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 Seminar requirement.

Courses for Sophomores

Although courses numbered in the 200s are primarily for sophomores, some of them are open to qualified freshmen and to upperclass students. Courses approved for the major are English 201, 202, and all courses numbered 300 or above except English 496. In addition to English 201-202, students may count up to two 200-level courses toward the major from Courses Approved for the Major, listed below.

201-202 The English Literary Tradition 201, fall; 202, spring. 4 credits each term. Open to all undergraduates. English 201 is not a prerequisite to 202. May be counted toward the English major.

Fall: M W F 11:15; M. A. Radzinowicz, G. Teskey.

Spring: M W F 11:15; M. H. Abrams, J. Stallworthy.

Interpretation of major works ranging from *Beowulf* through Yeats. English 201 surveys Old English poetry, Chaucer, medieval romances, Spenser, Shakespeare, Donne, and Milton. 202 includes Dryden, Swift, Pope, Samuel Johnson, Blake, Jane Austen, the major Romantic and Victorian poets, Shaw, and Yeats. The course will be conducted by a combination of lectures and intensive seminars in special topics.

Courses Primarily for Nonmajors

205-206 Readings in English and American Literature 205, fall; 206, spring. 3 credits each term. Open to all undergraduates. English 205 is not a prerequisite to 206.

Fall: M W F 10:10; R. T. Farrell. Spring:

M W F 10:10; J. Culler.

205: An introduction to some of the major works of English and American literature from the sixteenth to the nineteenth century. Plays, poems, and novels will be covered with particular emphasis on the Renaissance, the eighteenth century, and three American writers of the nineteenth century. Readings will be from such writers as Shakespeare, Jonson, Marlowe, Donne, Pope, Swift, Johnson, Cooper, Melville, and James.

206 covers literature since the mid-nineteenth century: novels by such authors as Emily Brontë, Twain, Conrad, Lawrence, James, Hardy, Hemingway, and Faulkner; perhaps a play by Shaw or Pinter; and poems by Yeats, Auden, Frost, or others. Two lectures and a small discussion section each week. One short paper, a prelim, and a final examination.

208 Forms of Poetry Fall. 3 credits.

M W F 11:15. D. Fried.

This is an introductory course for which no previous literary training is assumed. The aim of the course is to develop the students' skills in reading and talking about poetry through the close study of a wide range of short poems. Inquiring into the implications of Wallace Stevens's claim that "All poetry is experimental poetry," we will explore how poets make rules for themselves in order to break them and create poetic traditions by transgressing against traditional forms. Not a historical survey, Forms of Poetry will group poems according to the poetic devices and formal patterns they share. From time to time throughout the course, questions of poetic form will be studied through analogues from painting, architecture, and popular culture. Poets to be read include Shakespeare, Herbert, Pope, Blake, Keats, Poe, Whitman, Dickinson, Frost, Williams, Bishop, Merwin, and Ammons. Requirements: two brief (two to three pages) papers, an in-class midterm examination, and a final examination.

210 Medieval Romance: The Voyage to the Otherworld Spring. 3 credits.

M W F 10:10. T. D. Hill.

The course will survey some representative medieval narratives concerned with voyages to the otherworld, or with the impinging of the otherworld upon ordinary experience. The syllabus will normally include some representative Old Irish otherworld literature, selections from the *Mabinogion*, selections from the *Lais of Marie de France*, Chretien de Troyes' *Erec*, *Yvain*, and *Lancelot*, the Middle English *Sir Orfeo*, *Sir Gawain and the Green Knight*, and the *Tam Lin* ballads. We will finish by looking at a few modern otherworld romances, such as ones by Lewis Carroll, J. R. R. Tolkien, and Madeleine L'Engle. All readings will be in modern English. Requirements: three brief (two to three typed pages) papers and a final exam designed to test the students' reading.

227 Shakespeare Fall or spring. 3 credits. Each section limited to 25 students.

M W F 10:10 or 1:25, or T R 12:20-1:35 or 2:30-3:45. C. Levy and others.

A critical study of representative plays from the principal periods of Shakespeare's career.

265 Contemporary Afro-American Literature Spring. 3 credits. Limited to 15 students.

T R 8:40-9:55. K. McClane.

If one wishes to understand the inner workings of a neighbor's household, it is often a good idea to consult the maid. By the same token, if one wishes to understand American society, to understand it fully, one must ask those who have been its metaphoric housekeepers—that is, black people. This course does just that: it attempts to define American experience through the works of selected contemporary black writers, showing indeed that there may be two distinct American experiences—one black and one white. It also assumes that we develop some understanding of the commonality of the dispossessed and of those forces—powerful and deep—which characterize Third World consciousness. Novels, poetry, and plays by Zora Neale Hurston, Gwendolyn Brooks, Imamu Baraka,

- Toni Morrison, James Baldwin, Alice Walker, Langston Hughes, and others.

288-289 Expository Writing 288, fall; 289, spring. 3 credits each term. Each section limited to 18 students.

M W 9:05 or 10:10 or 2:30, or T R 11:15 or 2:30, plus conferences to be arranged. This course is intended to meet the needs of undergraduates from a range of disciplines who wish to gain skill in expository writing. Under the instructor's direction, students will write on topics related to their own interests. A substantial amount of new writing or a revision of an earlier essay will be expected each week. Since the class is the primary audience for the essay, attendance and participation in discussion by all students are essential. In addition to regularly scheduled class meetings, instructors will hold frequent conferences with students.

200-Level Courses Approved for the Major

Students may take up to two of the following courses for credit toward the English major.

207 Twentieth-Century Biography Spring 4 credits.

M W F 12:20. D. Novarr.
An introduction to some forms of modern biography, traditional and experimental, to see how writers have represented and illuminated character and achievement. Subjects range from Leonardo da Vinci and Martin Luther to George Washington, F. Scott Fitzgerald, and Marilyn Monroe; writers from Freud and Erikson to Lytton Strachey, Virginia Woolf, and Norman Mailer. Consideration of the values of biography, biographical "truth," the relation of biography to history, psychology, ethics, and the novel.

248 Feminist Issues in Nineteenth- and Twentieth-Century Literature (also Women's Studies 249) Spring, 4 credits.

M W F 1:25. M. Jacobus.
An introductory course in writing by and about women, exploring the relation between women, literature, and feminism. There will be five main areas of concern: work and home; education and marriage; sexuality; motherhood; and the woman artist or writer herself. Readings will include novels by Charlotte Bronte, Charles Dickens, George Eliot, Thomas Hardy, Virginia Woolf, Sylvia Plath, Margaret Atwood, and Adrienne Rich, as well as a variety of texts drawn from writers on women and feminism from Mary Wollstonecraft to the present day.

251 Twentieth-Century Women Novelists (also Women's Studies 250) Fall, 4 credits.

M W F 1:25. M. Hite.
In this course we will be especially concerned with self-consciously experimental novels and with the questions such novels raise about vision or style. Novels we will be reading include Virginia Woolf's *The Waves*, Gertrude Stein's *Three Lives*, Djuna Barnes's *Nightwood*, Doris Lessing's *The Golden Notebook*, and Margaret Atwood's *Surfacing*.

253 The Modern Novel Fall, 4 credits.

M W F 12:20. B. Rosecrance.
A survey of English, European, and American novels and shorter fiction, with some attention to their contemporary historical and intellectual contexts. Works by such writers as Conrad, Joyce, Lawrence, Forster, Woolf, Mann, Kafka, Nabokov, Faulkner, and one or two contemporary Americans will be considered.

267 Twentieth-Century Southern Fiction Spring, 4 credits.

M W F 12:20. L. Herrin.
The course will deal exclusively with the fiction of the twentieth-century American South—arguably, in time and place, the richest concentration of writers we have—and will proceed more or less chronologically. After a brief background survey, the course will begin

with William Faulkner, then move to Thomas Wolfe, James Agee, and Robert Penn Warren. The stories and short novels of Katherine Anne Porter, Flannery O'Connor, Carson McCullers, and Eudora Welty will make up one part of the course, as will the short work of three black writers, Richard Wright, Ernest Gaines, and Gayl Jones. The semester will end with novels by two contemporaries, William Styron and Walker Percy, and, if time permits, by one or two others. Short interpretative papers and class discussion.

273 Irish Culture Fall, 4 credits.

M W F 10:10. P. L. Marcus.
An interdisciplinary survey of Irish culture from earliest times to the present. Topics include medieval literature and mythology, early Irish social life, the Irish language, and the visual arts; the decline of the Gaelic order and corresponding rise of the Anglo-Irish ascendancy. The modern literary revival will receive particular attention, and major works by Yeats, Synge, Joyce, O'Casey, and others will be studied in relation to historical and political developments from the Young Ireland movement of the 1840s to the Revolution and Civil War of 1916-23. The course will conclude with a consideration of post-Revolutionary literature and of the continuing Ulster crisis. No prerequisites.

290 Literature and Value Spring, 4 credits.

T R 10:10-11:25. J. McConkey and others.
Each week a different member of the department discusses a poem, group of poems, story, play, or novel that is of particular importance to him or her, perhaps as a work that contributed to the person's decision to devote a lifetime to the study of literature or the writing of fiction or verse, perhaps as a work that has affinity with his or her present-day attitudes and values. In following meetings that week, class members will discuss in detail the same or related works. Students will be encouraged to explore, in their papers for the course as well as their discussions, the relationship between specific texts and their own experiences, attitudes, and values.

Courses that Satisfy the Major Prerequisite

270 The Reading of Fiction Fall or spring, 3 credits. Each section limited to 22 students.

Recommended for prospective majors in English. Fall: open to freshmen who have received advanced placement in English. Spring: open to other qualified freshmen. Upperclass students admitted as space permits. May be used to satisfy either the Freshman Seminar requirement or the distribution requirement in the humanities, but not both.

M W F 10:10, 11:15, 1:25, 2:30, or T R 10:10-11:25 or 12:20-1:35.
Forms of modern fiction, with emphasis on the short story and novella. Critical study of works by English, American, and continental writers from 1880 to the present—Bellow, Chekhov, Conrad, Faulkner, Joyce, Mann, Kafka, and others.

271 The Reading of Poetry Fall or spring, 3 credits. Each section limited to 22 students.

Recommended for prospective majors in English. Fall: open to freshmen who have received advanced placement in English. Spring: open to other qualified freshmen. Upperclass students admitted as space permits. May be used to satisfy either the Freshman Seminar requirement or the distribution requirement in the humanities, but not both.

M W F 10:10 or T R 10:10-11:25. Fall: C. Chase, J. Stallworthy. Spring: E. Fogel, J. Stallworthy.

Designed to sharpen the student's ability to understand and respond to poetry. Readings in the major periods, modes, and genres of poetry written in English.

272 Introduction to Drama Fall or spring, 3 credits. Each section limited to 22 students.

Recommended for prospective majors in English. Fall: open to freshmen who have received advanced

placement in English. Spring: open to other qualified freshmen. Upperclass students admitted as space permits. May be used to satisfy either the Freshman Seminar requirement or the distribution requirement in the humanities, but not both.

M W F 11:15 or T R 2:30-3:45.

Selected masterworks by such playwrights as Sophocles, Ibsen, and Shaw introduce the chief idioms and styles of Western dramatic tradition. The course work will consist of discussions and papers, as well as a special project related to the plays being produced by the Department of Theatre Arts. The course will be taught in small sections.

275 The American Literary Tradition Fall or spring, 3 credits. Recommended for prospective majors in American studies.

Fall: T R 12:20-1:35, M. Seltzer. Spring: M W F 9:05, D. Fried.

The problem of an American national literature is explored through the reading and discussions of eight texts representing the four principal periods in American literary history. Not a survey, this course focuses on the relations of the texts to each other, the role of Americanness in those relationships, and the assumptions about history with which critical appreciation must engage. Works by such writers as Franklin, Hawthorne, Dickinson, Melville, Twain, Wharton, James, Stein, and Hemingway.

280-281 Creative Writing 280, fall; 281, spring, 3 credits each term. Each section limited to 18 students. Recommended for prospective majors in English. Prerequisite for English 281: recommendation from English 280 instructor.

M W 9:05, 10:10, 12:20, 2:30, or T R 9:05, 12:20, 2:30.

An introductory course in the theory and practice of writing narrative prose, poetry, and allied forms.

Courses for Sophomores, Juniors, and Seniors

Courses at the 300 level are open to juniors and seniors, and to others with the permission of the instructor. There are no specific prerequisites, except as noted for English 382-383 and 384-385.

Major Periods of English Literature

310 Old English Literature in Translation Fall, 4 credits.

M W F 12:20. T. D. Hill.
Cultural backgrounds, reading, and critical analysis of Anglo-Saxon poetry in translation, pagan and Christian epic, elegy, heroic legend, and other forms. Attention will be given to the relations of this literature to that of later periods.

320 The Sixteenth Century: Tudor Culture Spring, 4 credits.

M W F 12:20. C. Levy.
The development of English as an imaginative and persuasive medium, from Wyatt and Ascham through Sidney, Spenser, Marlowe, Shakespeare (the nondramatic verse), and Hooker. Consideration in particular of lyric verse, pastoral, epic, and epyllion; prose stylistics and rhetorical doctrine; such early prose fiction as that of Greene, Lodge, and Nashe; with some attention to Elizabethan drama other than Shakespearean. Offered in 1983 and every other year thereafter.

330 Restoration and Eighteenth-Century Literature Spring, 4 credits.

M W F 1:25. L. Brown.
A course in the history of English literature from 1660 to 1790, concentrating on generic evolution and on the relationship between literature and society. Major themes will include the development of the novel, the nature of satire, the literary characteristics of sentimentalism, the rise of "preromantic" poetry, and the interactions among all these phenomena. Works by Milton, Wycherley, Dryden, Swift, Pope, Richardson, Fielding, and Johnson.

333 The Eighteenth-Century English Novel Fall. 4 credits.

M W F 1:25. L. Brown.

The rise and development of the English novel from Defoe to Burney. We will discuss the sociological, cultural, and formal causes for the sudden appearance of the novel as a primary genre in the eighteenth century, as well as the major trends in its early evolution—picaresque, parodic, mock-heroic, didactic, and sentimental. Readings: Defoe, *Moll Flanders*; Richardson, *Clarissa*; Fielding, *Tom Jones*; Sterne, *Tristram Shandy*; Smollett, *Humphrey Clinker*; Burney, *Evelina*.

334 The Romantic Poets Fall. 4 credits.

M W F 11:15. S. M. Parrish.

A close reading of the poems of Blake, Coleridge, Wordsworth, Byron, Shelley, and Keats, together with some of their letters and their critical writings. With the help of selected critical works of recent years we will try finally to arrive at some plausible definitions of Romanticism.

335 The Victorian Period Spring 4 credits.

T R 10:10-11:25. P. Sawyer.

The poetry of Tennyson, Browning, Arnold, and the Pre-Raphaelites; two novels, *Great Expectations* and *Middlemarch*, selections from works by Carlyle, Ruskin, Mill, Darwin, Pater, and others; plays by Wilde and Shaw. Lectures and discussion. Concentrating on close reading of texts, the course will consider the relationship of the literature to the art, science, religion, and politics of the time; the development of new literary forms; and the Victorians' own sense of living in an age of transition.

350 The Early Twentieth Century (to 1914) Fall. 4 credits.

M W F 10:10. D. R. Schwarz.

Critical study of major works by Hardy, Conrad, Lawrence, Joyce, Eliot, Yeats, Hopkins, Wilde, and others. While the emphasis will be upon individual works, some attempt will be made to place the authors and works within the context of literary and intellectual history. The course will seek to define the development of literary modernism in England by reference to these authors' innovations in themes and techniques. These literary works will be examined as part of a transition in British culture that takes place between 1890 and 1914.

351 Modern Literature Since 1914 Spring 4 credits.

M W F 10:10. J. Stallworthy.

A survey of modern English, Anglo-Irish, and Anglo-Welsh fiction, poetry, and drama by Shaw, Lawrence, Joyce, Forster, Woolf, Waugh, Yeats, Eliot, O'Casey, Auden, Beckett, Pinter, and others. Although the emphasis in lectures and discussions will be upon individual works, the wider context of literary, intellectual, and social history will also be considered. Complementing the texts, film versions of certain novels will be shown, and there will be some taped recordings of the poets.

Major English Authors

319 Chaucer Spring. 4 credits.

M W F 11:15. R. T. Farrell.

The course will center on a close reading of the major *Canterbury Tales*, the *Troilus*, and some of the minor works. Students will be given ample opportunity to learn Chaucer's language, so that all dimensions of the poems will be available to them. Prior knowledge of Middle English is neither expected nor required; course participants will be encouraged to follow up their own interests in class reports and papers.

327 Shakespeare Fall. 4 credits.

M W F 9:05. B. B. Adams.

An introduction to the works of Shakespeare, based on a selection of plays representative of the stages of his artistic development and the range of his achievement.

329 Milton Spring. 4 credits.

M W F 9:05. G. Teskey.

An introduction to the poetry of John Milton. Close attention will be given to the Nativity Ode, *Comus*, "Lycidas," *Paradise Lost*, and *Paradise Regained*.

Major Periods of American Literature

361 Early American Literature Fall. 4 credits.

M W F 10:10. M. J. Colacurcio.

The literature of ideas produced by America's Puritan and Enlightenment writers: Bradford, Taylor, Edwards, and Franklin. The first achievements of the national literature: Irving, Cooper, Poe, and Hawthorne.

362 The American Renaissance Fall. 4 credits.

Recommended but not required: English 361.

M W F 1:25. D. Fried.

America's literary maturity at midcentury: the individual masterpieces and the interrelated careers of Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson.

363 The Age of Realism and Naturalism Spring. 4 credits.

M W F 10:10. M. Seltzer.

The literary expression of new attitudes toward American society and culture between the Civil War and the early years of the twentieth century. We will read representative works by writers such as Mark Twain, W. D. Howells, Henry James, Edith Wharton, Stephen Crane, Kate Chopin, and Theodore Dreiser.

364 American Literature in the Twentieth Century Fall. 4 credits.

M W F 9:05. C. Strout.

A study of important writers from the time of the first World War to the end of the second who deal with characteristically modern problems, whether as innovators or traditionalists. The main focus will be on the novel, but memoirs and essays will be included. Such writers as Adams, Cather, Lewis, Hemingway, Fitzgerald, Dos Passos, Steinbeck, Cozzens, Wright, McCarthy, Faulkner, and Bellow will be considered.

365 American Literature since 1945 Spring. 4 credits. Limited to 55 students.

M W F 11:15. J. Bishop.

This course will alternate with English 364, which surveys American literature between the world wars. It will accordingly be concerned with a sequence of texts that can be taken to represent aspects of the cultural moment we are still accustomed to think of as our own. Prose fiction by Ellison, Salinger, Bellow, Updike, Pynchon, and Morrison may be included, together with poetry by Lowell, Ginsberg, and Plath and nonfictional prose by Trilling, Mailer, and Didion. These texts will be read as witnesses to what certain Americans have found it possible or impossible to believe in through these years.

Genres and Special Topics

367 The Modern American Novel Spring. 4 credits.

M W F 1:25. W. Slatoff.

A reading of some major American novels of the twentieth century. Works by Wharton, Dreiser, Hemingway, Fitzgerald, Faulkner, Ellison, Sartre, Bellow, and others.

372 English Drama (also Theatre Arts 372) Spring. 4 credits.

M W F 10:10. S. McMillin.

Important events in the English theatre from the beginning to the twentieth century. Plays by Marlowe, Shakespeare, Jonson, Webster, Wycherly, Dryden, Behn, Congreve, Sheridan, Shelley, Shaw, and others. Relationships between play houses, dramatic texts, and politics.

Creative and Expository Writing

382-383 Narrative Writing 382, fall; 383, spring. 4 credits each term. Each section limited to 15

students. Prerequisite: English 280-281 or permission of instructor.

M W 11:15 or 2:30, or T R 12:20 or 1:25; plus conferences to be arranged. Instructors to be announced.

The writing of fiction; study of models; analysis of students' work.

384-385 Verse Writing 384, fall; 385, spring. 4 credits each term. Each section limited to 15 students. Prerequisites: English 280 and 281 and permission of the instructor.

T 2:30-4:25. Fall: P. Janowitz, R. Morgan. Spring: P. Janowitz, K. McClane.

The writing of poetry; study of models; analysis of students' poems; personal conferences.

386 Autobiographical Writing Fall. 4 credits. Limited to 18 students. Prerequisite: permission of instructor. Interested students should submit a writing sample to Professor McMillin before the beginning of the term.

T R 10:10-11:25 and conferences to be arranged. S. McMillin.

A course in autobiographical writing and reading. Students will keep journals, which will be the source of finished autobiographical essays. Readings in such journalsists and autobiographers as J. Boswell, T. DeQuincey, V. Woolf, J. Agee.

389 The Art of the Essay Spring. 4 credits.

Limited to 18 students. Prerequisites: permission of instructor. Interested students should submit a writing sample to Professor Levy before the beginning of the term.

M W 3:35 and conferences to be arranged.

C. Levy.

For both English majors and nonmajors who have done well in such courses as Freshman Seminars or English 288-289 and who desire intensive practice in writing expository and personal essays; particular, but not exclusive, emphasis on expository techniques of analysis and persuasion.

Courses for Advanced Undergraduates

Enrollment in courses at the 400 level is limited by prerequisite or permission of instructor.

402 Topics in Criticism: Literature and Ideology Spring. 4 credits.

M W F 12:20. L. Green.

An introduction to critical assumptions underlying semiotics, such as the belief that signs and, consequently, texts have value only within a cultural and historical context. As one of the field's original thinkers, Saussure, put it, semiotics is "the study of the life of signs within society." The course will examine the possibilities of cultural and historical criticism inherent in semiotics. We will read texts by Saussure, Marx, and Freud as well as their revisionary descendants, Derrida, Foucault, and Althusser. In addition, we will explore practical applications of such theorizing in the literary criticism of Barthes, Eagleton, and Jameson.

408 Evolution of Epic Spring. 4 credits.

T R 10:10-11:25. M. A. Radzinowicz.

The course is concerned with the poetic and thematic transformation of a genre often and prematurely called dead. It will explore such topics as epic tradition and poetic originality; the bard and his presence or absence; the social and historical components of heroic virtue; and unity and fragmentation in long poems. Readings, sometimes in selections, will include Spenser, *The Faerie Queene*; Milton, *Paradise Lost*; Dryden, *The Hind and the Panther*; Blake, *Milton*; Wordsworth, *The Prelude*; Whitman, *Song of Myself*; Melville, *Clarel*; and William Carlos Williams, *Paterson*. A final epic poem may be chosen by the class from among Berryman, *Dream Songs*; Lowell, *History*; or David Jones, *Anathemata*.

409 Freud as Imaginative Writer and Reader (also Comparative Literature 411) Spring. 4 credits. Limited to 15 students.

T R 2:30-3:45. C. Chase.

This course will introduce Freud as an imaginative writer and a reader of imaginative writing—the source of psychoanalytic criticism. Texts will include works by Freud, Shakespeare, Sophocles, and E. T. A. Hoffmann. No previous familiarity with Freud's writings or with psychoanalytic theory is necessary. Open to all students who have taken at least one literature course at the 200-level or above.

421 Spenser Fall. 4 credits.
M W F 2:30. C. Kaske.

The course will be organized around questions of identity and life-style. Shorter poems—*Epithalamion*, *Muiopotmos*, *Fowre Hymnes*, selections from the *Shepherd's Calendar*, *Colin Clouts Come Home Againe*, and *Mutabilitie Cantos*—will occupy the first third of the course. The rest will concern Books I, III, and VI of Spenser's epic, *The Faerie Queene*.

427 Studies in Shakespeare: Critical Approaches Spring. 4 credits.

T R 2:30-3:45. T. Murray.
The course will focus on critical approaches to five Shakespeare plays (including *The Tempest*, *Othello*, and *King Lear*). Discussion of the plays in terms of psychoanalysis, linguistics, social theory, semiotics, and deconstruction will explore such topics as socio-sexual politics; antitheatricality; rascism-sexism; scapegoats and strangers; the representation of authority; displacement of stage and place; the problem of nothingness in Shakespeare. In addition to attentive readings of the plays, several critical essays will be discussed. Students will be asked to lead seminar discussions based on two short written analyses of plays and a final term paper.

448 The Art and Poetry of William Blake Spring. 4 credits.
M 2:30-4:25. J. Viscomi.

An examination of the complete Blake: printmaker, painter, and poet. Special attention will be paid to the illuminated books, color-print drawings, and tempera paintings, and the techniques by which they were made.

450 The History of the Book Spring. 4 credits. Limited to 20 students. Prerequisite: permission of instructor.

T 7-9 p.m. D. Eddy.
Morphology of letters (calligraphy and type). Abbreviations and their cultural significance. Printing and its terminology. The book trade. Texts and their transmission. The book as a physical object. The impact of the book on social and economic changes. The book as a work of art.

451 Twentieth-Century Women Writers Fall. 4 credits.
M W 2:30-3:45. B. Rosecrance.

A consideration of selected fiction by British women writers from the turn of the century to the present day, including writers of English, Irish, Australian, Canadian, and South African origin. Critical study of stories and novels will emphasize evolutions in the craft and artistic consciousness of women writers in this period. We will draw upon works of such writers as Sarah Grand, Olive Schreiner, Ada Levenson, Dorothy Richardson, Virginia Woolf, Katherine Mansfield, Elizabeth Bowen, Jean Rhys, Barbara Pym, Rebecca West, Marie-Claire Blais, Iris Murdoch, Doris Lessing, Nadine Gordimer, Margaret Atwood, Margaret Drabble, Antonia (Drabble) Byatt, and Susan Hill. The emphasis will be on lesser-known novelists within the earlier period and on both well- and lesser-known contemporary writers.

452 Yeats and Lawrence Fall. 4 credits.
M W F 9:05. P. L. Marcus.

A close reading of major novels and stories by Lawrence and poems and plays by Yeats, with some attention to both authors' non-fictional prose. Topics to be explored include the impact of World War I, the search for values, formal experimentation, and the question of influence.

453 The Trial of Oscar Wilde Fall. 4 credits.
T R 10:10-11:25. S. Siegel.

What influence do Art and Life have on one another? Is all Art moral or immoral? Should some Art be censored? What are the limits of privacy? These Victorian preoccupations were addressed and acted out at the trial of Oscar Wilde. Reports of the trial in the periodical press contributed greatly to the shaping of the legend of the Wilde we have come to know. The "text" for this seminar will be the transcripts of the trial; the reports that circulated in the press; and works by Wilde, particularly those that authorized that legend, but simultaneously serve to dispel it. The seminar will encourage the use of primary sources, with the expectation of gaining a clearer picture of British social thought at the turn of the century.

460 The Politics of Realism Fall. 4 credits.
T R 10:10-11:25. M. Seltzer.

This course will investigate the ways in which the American realist novel represents the subject of power. We will focus on the relation between techniques of representation and technologies of power in the late nineteenth century. Emphasis will be primarily on the fiction—novels by Twain, Howells, James, Norris, Dreiser, Crane. But the course will be essentially interdisciplinary, and we will read these novels against the social, economic, and political discourses of writers such as Adams, William James, Veblen, and Beard.

462 Dickinson and Whitman Spring. 4 credits.
T R 10:10-11:25. D. Fried.

A close study of poems and selected letters of Emily Dickinson, and *Leaves of Grass* and selected prose of Walt Whitman. Related readings in American poetry and poetics of the nineteenth century, and some attention to the varieties of critical responses these two idiosyncratic writers continue to invite, including recent feminist interest. Primary focus will be on questions of poetic form, the creation of an American literary voice, and the special problems of interpretation posed by Dickinson and Whitman. Requirements will include class reports and two short papers culminating in a longer essay.

463 The Political Novel in America Fall. 4 credits. Limited to 15 students.
R 1:25-3:20. C. Strout.

A study of ideas, historical contexts, and methods of politically oriented novels by important writers from after the Civil War to the present. Such figures as Adams, Chesnut, Steinbeck, Dos Passos, Hemingway, Wright, Ellison, Cozzens, and Vidal (among others) will be included. Previous work in American literature, history, or government recommended.

464 American History and the Literary Imagination Spring. 4 credits.
T R 2:30-3:45. C. Strout.

The interplay between the literary and historical imaginations in various forms of narrative is examined. Certain controversial American events are focused on, such as the Salem Witchcraft trial, the Nat Turner slave revolt, Huey Long's career, the Oppenheimer Security Hearing, the Rosenberg spy case, and the March on the Pentagon. Texts include literary works by Hawthorne, Adams, Twain, Mailer, Styron, Warren, Miller, and Doctorow; pertinent documents and readings in controversies over interpretation and the overlap between history and literature.

466 Poetry of the 60s and 70s: The Feminine Sensibility (also Women's Studies 467) Fall. 4 credits.
T R 10:10-11:25. P. Janowitz.

This seminar will attempt to define what is meant by a feminine sensibility; can it be differentiated from a masculine one in poetry of the 1960s and 70s? We will consider problems relating to theme, voice, language, style, imagery, distancing, and subjectivity, while reading the works of poets such as Levertov, Bishop, Piercy, Swenson, Gluck, Plath, Kumin,

Ammons, Ashbery, Lowell, Ginsberg, Strand, Merwin, and other, younger poets. One long paper and several oral reports.

470 Studies in the Novel: Dickens and Thomas Mann Fall. 4 credits. Limited to 25 students. Primarily for upperclass students.

T R 12:20-1:35. E. Rosenberg.
Reading of eight novels: *Oliver Twist*, *Bleak House*, *Little Dorrit*, *Great Expectations*; *Death in Venice*, *Magic Mountain*, *Dr. Faustus*, *Felix Krull*, and one or two of the major novellas. Two short papers or one long paper; midterm exam; occasional oral reports. Primarily for third- and fourth- year students.

473 Trends in Contemporary Criticism Fall. 4 credits. Limited to 20 students.
M W F 11:15. J. Culler.

Study of a range of critical and interpretive writings to identify the methods and principles on which they rely. This course will touch upon the major schools of recent criticism. It will focus less on literary theory and attendant philosophical problems than on the strategies and presuppositions of various critical interpretations. Critics read will include Barthes, Bloom, Booth, Brooks, Burke, de Man, Fish, Jameson, Leavis, Lukacs, Poulet, and Sartre.

472 Irish Fiction Spring. 4 credits.
M W F 9:05. P. L. Marcus.

A close reading of major Irish novels and stories from Maria Edgeworth's *Castle Rackrent* to Flann O'Brien's *At Swim-Two-Birds*. Other authors to be studied include George Moore, Somerville and Ross, Yeats, Joyce, James Stephens, O'Connor, O'Faolain, and O'Flaherty. The texts will be analyzed in relation to the Irish literary movement of the nineteenth and twentieth centuries and to corresponding historical and political developments, but no previous study of these topics is expected.

474 Satire Fall. 4 credits.
T R 2:30-3:45. P. Holland.

This course will explore the nature of satire through a survey of works from antiquity to modern times, with an emphasis on intellectual satire and encyclopedic forms. We will begin with Greek and Roman satire, then move to four seriocomic classics of the Renaissance, by Erasmus (*Praise of Folly*), More (*Utopia*), Rabelais (*Gargantua and Pantagruel*), and Burton (*The Anatomy of Melancholy*). After a brief look at poems by Skelton, Donne, Jonson, Butler, and Rochester, we will proceed to Dryden (*MacFlecknoe*), Swift, (*A Tale of a Tub*), Pope (*The Dunciad*), Johnson (*The Vanity of Human Wishes*), Sterne (*Tristram Shandy*), and Blake (*An Island in the Moon*). We will also read Diderot (*Rameau's Nephew*), Flaubert (*Bouvard and Pecuchet*), Twain (*Letters from the Earth*), Melville (*The Confidence Man*), Dostoevsky (*Notes from Underground*), and Beckett (*Watt*) if time permits. Our readings should give us a basis for consideration of such topics as irony, parody, persona, Menippean satire, satire, and inversionary rituals such as those of carnival and holiday, and the theoretical approaches to satire and the novel by the Russian scholar Mikhail Bakhtin.

479 On Reading Women Poets (also Women's Studies 479) Spring. 4 credits.
T R 12:20-1:35. S. Siegel.

An examination of the traditional controversy over whether or not reading, writing, and gender are related to one another. Detailed study of the autobiographical, critical, and poetic writings of such authors as Amy Lowell, Hilda Doolittle, Marianne Moore, Sylvia Plath, Audre Lorde, June Jordan, and Adrienne Rich. The seminar will consider salient departures from conventional poetic modes and themes and the pressures each poet has felt to be significant in her attempt to shape herself, her esthetic, and her poetry. Discussion will begin with a specific question, which will recur throughout the semester: How would Virginia Woolf have read these poets?

480-481 Seminar in Writing 480, fall; 481, spring. 4 credits. Limited to 15 students. Prerequisites: English 382-383 or 384-385, and permission of instructor.

Fall: W 2:30-4:25, R. Morgan. Spring: T 12:20-2:15, J. McConkey.

Intended for those writers who have already gained a basic mastery of technique. 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 discussions of the students' manuscripts and published works that individual members have found of exceptional value.

482 Poetics for Poets and Critics Spring. 4 credits. Limited to 15 students.

J. Stallworthy.

Designed for poets prepared to take Yeats's advice, "... learn your trade. /Sing whatever is well made," and for critics wishing to study the ways in which the principal verse forms of English poetry have been adopted and adapted through the centuries. Each week's assignment will be an example of the form under discussion, from blank verse and ballad, sonnet and villanelle, to "shaped" and "concrete" poems.

491 Honors Seminar I: Milton and Romantic Poetry Fall. 4 credits.

T R 2:30-3:45. C. Chase.

This course will focus on the poetry of Milton and on three of the Romantic poets for whom his influence was essential: Blake, Wordsworth, and Shelley. Reading Milton, we will try to see what in his poems the Romantics found important for their sense of their position in the history of English poetry. Reading Blake, Wordsworth, and Shelley, we will look at the different kinds of impact Milton's poetry had on their writing—the role of allusion, the psychological effect of recognizing a great predecessor, and conceptions of history and poetry drawn from reading *Paradise Lost* and Milton's other works.

492 Honors Seminar II Spring. 4 credits.

M W 10:10-12. M. J. Colacurcio.

Can Nathaniel Hawthorne be seriously regarded as a "major author" of world literature? Can he be read at all without constant reference to his most provincial allusions—to the "annalists" of American Puritanism and to other traditions equally arcane or occult? What did Melville find in him and his work? Can we take him as our model "Hawthorne critic"? What can his response to Hawthorne tell us about the general dynamics of literary encounter and influence? What might this whole episode suggest about the problem of "American Provincialism"? About the nature of literary history?

493 Honors Essay Tutorial I Fall or spring. 4 credits. Prerequisite: senior standing and permission of the chairperson of the honors committee.

Staff.

494 Honors Essay Tutorial II Fall or spring. 4 credits. Prerequisite: English 493 and permission of the chairperson of the honors committee.

Staff.

495 Independent Study Fall or spring. 2-4 credits. After consulting their major adviser, students should apply to the director of undergraduate studies for permission to take independent study. Permission will be granted only to students who present an acceptable prospectus and who have secured the agreement of a faculty member to serve as supervisor for the project throughout the term.

496 Teaching and Research Fall or spring. 1-2 credits. May not be used in satisfaction of the English major.

Staff.

For students who, with the consent of a professor, assist in the teaching of that professor's course.

Courses Primarily for Graduate Students

Permission of the instructor is a prerequisite for admission to courses numbered in the 600s. These are primarily intended for graduate students, although qualified undergraduates are not excluded. Undergraduates seeking admission to a 600-level course should consult the appropriate instructor. The list of courses given below is illustrative only; a definitive list, together with course descriptions and class meeting times, will be published in a separate department brochure before course enrollment each term.

602 Advanced Old Norse: Poetry and Poetics Fall. 4 credits.

J. Harris.

611 Old English Fall. 4 credits.

J. Harris.

612 Beowulf Spring. 4 credits.

T. D. Hill.

613 Chaucer Spring.

R. E. Kaskie.

620 Piers Plowman Spring. 4 credits.

R. E. Kaskie.

623 Metaphysical Poets Fall. 4 credits.

D. Novarr.

625 Ben Jonson Spring. 4 credits.

D. Novarr.

627 Shakespeare: The Histories and Comedies Spring. 4 credits.

H. S. McMillin.

629 Milton Fall. 4 credits.

M. A. Radzinowicz.

633 The Earlier Eighteenth Century Fall. 4 credits.

L. Brown.

636 Richardson and Fielding Spring. 4 credits.

H. Shaw.

643 The French Revolution and the British Literary Imagination Fall. 4 credits.

R. Parker.

644 Studies in Romantic Prose Spring. 4 credits.

M. Jacobus.

645 Major Victorian Poets Spring. 4 credits.

D. Mermin.

655 The London Vortex Fall. 4 credits.

L. Green.

662 Emerson and His Circle Fall. 4 credits.

M. J. Colacurcio.

668 Post-Modernist Fiction Spring. 4 credits.

M. Hite.

669 The American Writer and the 1930s Spring. 4 credits.

C. Strout.

671 Evolution of the Novel II Fall. 4 credits.

D. R. Schwarz.

Graduate Seminars

Permission of the instructor is a prerequisite for admission to any course numbered in the 700s. Most of these courses may be limited in enrollment at the discretion of the instructor. For course descriptions see the department brochure.

701 Introduction to Research and Scholarly Methods Fall. 2 credits.

S. M. Parrish.

702 Introduction to Criticism and Literary Theory Spring. 2 credits.

J. Culler.

712 Readings in Old English Fall. 5 credits.

T. D. Hill.

740 Romantic Masterworks Spring. 5 credits.

M. H. Abrams.

757 Joyce's Ulysses Spring. 5 credits.

D. R. Schwarz.

759 Virginia Woolf Fall. 5 credits.

S. Siegel.

762 Melville Spring. 5 credits.

M. J. Colacurcio.

780.1 Writing Seminar: Prose Fall. 5 credits.

J. McConkey.

780.2 Writing Seminar: Poetry Fall. 5 credits.

P. Janowitz.

781.1 Writing Seminar: Poetry Spring. 5 credits.

A. Ammons.

781.2 Writing Seminar: Prose Spring. 5 credits.

L. Herrin.

793 Master's Essay Fall or spring. No credit.

Staff.

794 Directed Study Fall or spring. 5 credits.

Staff.

795 Group Study Fall or spring. 5 credits.

Staff.

796 Teaching and Research Fall or spring. 5 credits.

Staff.

Related Courses in Other Departments

In addition to courses offered by the Department of Comparative Literature, the Women's Studies Program, and the Africana Studies and Research Center, the following courses will be of particular interest to English majors and graduate students in English.

Comparative Literature

Great Books (Comparative Literature 202-202)

Comedy (Comparative Literature 312)

Rhetoric and Technology (Comparative Literature 313)

The European Novel (Comparative Literature 363-364)

Reading in Modern Poetry (Comparative Literature 391)

What Is Literature? (Comparative Literature 410)

Problems in Romanticism: Holderlin and Keats (Comparative Literature 433)

English Renaissance Drama and Its European Contexts (Comparative Literature 452)

Petrarch, Ronsard, and Donne (Comparative Literature 458)

The Bildungsroman in Modern Literature (Comparative Literature 477)

Society for the Humanities

"The Heart of My Mystery:" The Alliance of Sexuality and Power in the Principal Plays of William Shakespeare (Society for the Humanities 412-414)

Eighteenth-Century Scottish Moral Science (Society for the Humanities 417)

Self-Interest and Social Theory (Society for the Humanities 418)

Feminist Theory: Franco-American Currents (Society for the Humanities 419)

On the Bias: New Designs on Literary Criticism (Society for the Humanities 420)

French

See Modern Languages, Literatures, and Linguistics, p. 146, and Romance Studies, p. 180.

Geological Sciences

D. L. Turcotte, chairman; A. L. Bloom, director of undergraduate studies (211 Kimball Hall, 256-5267); S. B. Bachman, W. A. Bassett, J. M. Bird, L. D. Brown, J. L. Cisne, A. K. Gibbs, B. L. Isacks, D. E. Karig, S. Kaufman, R. W. Kay, J. E. Oliver, F. H. T. Rhodes, W. B. Travers

As an intercollege unit, the Department of Geological Sciences has degree programs in both the College of Arts and Sciences and the College of Engineering.

Within the past few years, studies of the earth have become increasingly important. The need for increased understanding of plate tectonics, limited energy and mineral reserves, awareness of natural hazards such as earthquakes and volcanic eruptions, and an increasing concern for our environment encourage studies of the earth by geologists. Consequently, interest in geology courses and the employment of geologists have greatly increased.

There are fifteen faculty members, including Cornell's President, in the department, and forty to fifty undergraduate majors. A variety of courses provides our students with a broad and solid foundation. The department is particularly strong in geophysics, petrology and geochemistry, structural geology, and tectonics.

Students study the deeper parts of the earth's crust using many techniques but concentrating on seismic methods. High-pressure, high-temperature mineralogy research uses the diamond anvil and Cornell's synchrotron as research tools. Undergraduates have served as field assistants for faculty and graduate students who work in Greenland, British Columbia, the Aleutian Islands, Scotland, Barbados, the South Pacific, and various parts of the continental United States. Undergraduates are encouraged to participate in research activities, sometimes as paid assistants.

Students who major in geological sciences are encouraged to take courses in the other sciences and mathematics, appropriate to their interests. In order to develop skills in observing the natural earth, geology majors attend a six-week summer field camp, usually during the summer following their junior year. Cornell has recently established a joint summer field camp with Harvard and Yale in the Sierra Madre of Wyoming.

The Major

The prerequisites for admission to a major in geological sciences in the College of Arts and Sciences are two of the two-semester sequences of courses chosen from the following, or their equivalents: Biological Sciences 101-103 and 102-104, Chemistry 207-208, Mathematics 191-192,

and Physics 112-213. Geological Sciences 101-102 is recommended, but a student with a strong foundation in mathematics and science may be accepted as a major without completion of 101-102.

Majors take the five core courses in geological sciences, a summer field geology course, 6 credits of additional course work from geological sciences courses numbered 300 or 400, and a third two-semester sequence chosen from the courses in biological sciences, chemistry, mathematics, and physics listed above, plus an additional course in one of these fields at an intermediate or advanced level.

Core Courses

325 Structural Geology
355 Mineralogy
356 Petrology and Geochemistry
376 Sedimentology and Stratigraphy
388 Geophysics and Geotectonics

Prospective majors should consult one of the following departmental major advisers: W. A. Bassett, 222 Kimball Hall; W. B. Travers, 219 Kimball Hall; J. Oliver, 209 Kimball Hall; A. L. Bloom, 211 Kimball Hall; or A. K. Gibbs, 224 Kimball Hall, 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-level courses in geology 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, 210 Kimball 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 a senior thesis (Geological Sciences 490). Students interested in applying should contact their advisers during the second semester of the junior year.

German Literature

P. Hohendahl, chairperson; H. Deinert, director of undergraduate studies; E. A. Blackall, I. Ezergailis, S. L. Gilman, A. Groos, P. W. Nutting

The Department of German Literature offers courses in German, Yiddish, and Old Icelandic literatures. These courses reflect the heterogeneous composition of the department. They range from close readings of major texts through courses in culture and intellectual history. Major areas of specialization cover the period from the early Middle Ages to the twentieth century, with emphasis on the eighteenth and nineteenth centuries. The department often jointly sponsors courses with other departments in the humanities, such as music and the history of art.

For information about majors and courses, see Modern Languages, Literatures, and Linguistics, p. 146.

Government

I. Kramnick, chairman; B. R. O'G. Anderson, M. G. Bernal, S. Buck-Morss, W. J. Dannhauser, A. T. Dotson, M. J. Esman, B. Ginsberg, S. Jackson, G. McT. Kahin, M. Katzenstein, P. Katzenstein, E. W. Kelley, E. G. Kenworthy, R. King, P. Leeds, T. J. Lowi, D. Meyers, T. J. Pempel, J. Rabkin, R. H. Rosecrance, M. Rush, L. Scheinman, M. Shefter, V. Shue, S. G. Tarrow, N. T. Uphoff, P. Vaughan

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

For a major in government the following requirements must be completed: (1) three of the following introductory courses: Government 111, 131, 161, 181; (2) a minimum of 24 additional credits in government department courses numbered 300 or above; (3) in related subjects, a minimum of 12 credits selected with the approval of the adviser from courses numbered 300 or above in the Departments of Anthropology, Economics, History, Philosophy, Psychology, and Sociology. S-U options are not allowed for any course taken to fulfill major requirements.

Juniors and seniors majoring in the Department of Government who have superior grade records may apply for supervised study in government with a particular instructor, whose consent is required. Admission is by application only.

Cornell-in-Washington program. Government majors also have an opportunity to apply to the Cornell-in-Washington program, in which students take courses and undertake a closely supervised internship during a fall or spring semester. For further information see p. 8 and p. 93.

European Studies Concentration. Government majors may elect to group some of their required and optional courses in the area of European studies, drawing from a wide variety of courses in relevant departments. Students are invited to consult Professors P. Katzenstein, Scheinman, and Tarrow for advice concerning course selection, foreign study programs, et cetera.

Honors. A small number of exceptionally well qualified students are accepted each year in the honors program. Admission is by application and is competitive. Students who wish to be considered must complete an application in the spring semester of their sophomore or junior year. Those who are admitted will register for Government 400. Successful completion of Government 400 entitles the student to write an honors thesis (Government 494, 8 credits) in the senior year, provided other requirements have been met. The decision to award honors and in what degree will be based on the quality of the thesis or paper, the student's record in government courses, and the student's overall record at Cornell. Interested students should consult the supplement available in the departmental office in 125 McGraw Hall. Further inquiries may be addressed to the director of undergraduate studies.

Introductory Courses

Students registering for introductory courses should register for the lecture only. Sections will be assigned during the first week of class.

111 The Government of the United States Spring, 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.

131 Introduction to Comparative Government and Politics Spring, 3 credits.

M. J. Esman.

A survey of the institutions, processes, and major problems of politics and government in contemporary states. The structures and ideologies of different regimes, the relationships of individuals and groups to the state, the shaping and implementation of public policy, the regulation of political conflict, and the adaptation of political systems to changing conditions.

161 Introduction to Political Theory Fall. 3

credits.

E. Spitz.

A survey of the development of Western political theory from Plato to the present. Readings from the work of the major theorists; an examination of the relevance of their ideas to contemporary politics.

181 Introduction to International Relations Fall. 3 credits.

R. Rosecrance.

An introduction to the basic concepts and practice of international politics.

Freshman Seminars**100 Freshman Seminars** Fall or spring. 3 credits.

Seminars will be offered in both the fall and spring terms. Consult the supplement issued by the department and the Freshman Seminar booklet for course descriptions and instructors.

Major Seminars**300 Major Seminars** Fall or spring. 4 credits.

Consult the supplement issued by the department for course descriptions and instructors. Admission by application only. Forms are provided each term for students to indicate their seminar preferences and are available in 125 McGraw Hall. Nonmajors may be admitted upon application, but government majors are given priority. Majors are encouraged to take at least one seminar course during the junior or senior year.

The following courses are open to sophomores, juniors, and seniors without prerequisites unless otherwise indicated.

American Government and Institutions

Government 111 is recommended.

[301 The Politics of Regulation 2 credits. Not offered 1982-83.]**[302 The Impact and Control of Technological Change** 4 credits. Not offered 1982-83.]**[303 American Democracy and the Limits to Growth** 4 credits. Not offered 1982-83.]**309 Interpretation of American Politics** Fall. 4 credits.

R. King.

This course shall attempt to move beyond description of specific institutions and policies to initiate a more theoretical discussion of the general characteristics of the polity that exists in America. The primary theme for the term will concern the joint presence of both capitalism and mass democracy, the different forms this association has taken over time, and the inherent congruities and incongruities between these two basic, constitutive elements.

[311 Urban Politics 4 credits. Not offered 1982-83.]

312 Urban Affairs Laboratory Fall and spring. 4 credits. Open to both undergraduate and graduate students. Application required to assure balanced enrollment from different colleges and majors. Applications available in 125 or B29 McGraw. Course fee, \$20.

P. C. Vaughan.

An interdisciplinary course in urban affairs which emphasizes learning through participation in a complex gaming simulation. Students assume roles of decision makers in a simulated city and test their solutions to environmental, economic, social, and political problems. Issue-related readings and lectures provide complementary theoretical focus.

313 The Nature, Functions, and Limits of Law Spring. 4 credits.

K. Hanslowe.

A general education course for students at the sophomore or 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 are analyzed, considering also the constitutional limits on their power and practical limits on their effectiveness. Readings consist mainly of judicial and administrative decisions, statutes and rules, and commentaries on the legal process.

[314 Common Law and Lawyers in America 4 credits. Not offered 1982-83.]**[316 The American Presidency** 4 credits. Not offered 1982-83.]**317 Political Parties and Elections** Spring. 4 credits.

B. Ginsberg.

The relationship between citizen participation and public policy is one of the central questions of democratic politics. This course will focus on American voting behavior, the role of political parties, and the links between citizens' choices at the polls and the behavior of public officials.

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.

[319 American Political Behavior 4 credits. Not offered 1982-83.]**321 Public Policy and Public Revenues** Fall. 4 credits.

R. King.

Money is, in a sense, the lifeblood of government, and the politics of federal taxing and spending is essential to the allocation of more than one-fifth of the national product. This course attempts to examine the general patterns of budgetary outcomes in America, their distributional consequences, and the institutional processes by which they are determined. Particular attention is given to the role of popular representatives, especially the members of Congress, in fiscal decision making.

[323 The Fourth Branch 4 credits. Not offered 1982-83.]**327 Civil Liberties in the United States** Spring. 4 credits.

J. Rabkin.

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.

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.

329 Race, Gender, and Politics Fall. 4 credits

M. Katzenstein.

A writing workshop for sophomores and juniors that focuses on readings about gender, class, and race in American society. This is a class in how to read analytically and in how to write clear, organized analytical papers. It will be taught in individual tutorials of about an hour-long meeting each week with a paper due every other week. It is open to any sophomore or junior interested in improving writing skills but will be limited to approximately five students.

353 The Feminist Movement and Public Policy (also Women's Studies 353) Fall. 4 credits.

M. Katzenstein.

The course examines the aims and strategies of the feminist movement in the United States and the response of both society and the state to feminist claims. It is, thus, a course about political protest and the capacity of American political institutions to promote, shape, as well as to counter social change. In examining the law and public policy on such issues as job discrimination, wife battery, rape, abortion, etc., the course explores the contradictions between and the congruence of the dual ideals of individual choice and group equality.

406 Politics of Education Fall. 4 credits.

E. W. Kelley.

Education is simultaneously America's biggest business and the set of formal and informal processes through which skills and values are passed on to the next generation. A topic involving both basic values and so much money must be the subject matter of politics. This course will deal with conflicts about and the politics of education as they occur at both national and state levels. What (including values) will be taught, to whom; who will benefit from formal education as a vehicle for entry into economic opportunity? What are the powers and restrictions on both state and national government in this area? How does the American system, in particular its politics, differ from other systems? These and other questions, like the effects of constitutional, electoral, and legislative rules and structures on educational policies, will be considered.

[411 Political and Economic Power in Cities 4 credits. Not offered 1982-83.]**[412 Size of the State** 4 credits. Not offered 1982-83.]**414 The Administrative State** Spring. 4 credits.

J. Rabkin.

The course will examine the problem of how or whether legitimate governmental authority can be distinguished from arbitrary coercion in the modern era of pervasive regulation. It will consider several different theoretical approaches to this problem, as illustrated in the works of modern legal and social theorists, in some landmark cases in the history of American administrative law, and in a representative sampling of modern cases. The course will also look at several case studies of the regulatory process in today's world, suggesting the difficulties of applying—or putting much reliance on—these accepted approaches in actual practice.

424 Political Change in the United States Spring. 4 credits.

M. Shefter.

This seminar analyzes the sources and consequences of major realignments in American politics. Half the semester will be devoted to examining earlier realignment periods and half will be devoted to analyzing changes in the structure of contemporary American politics.

[426 Science, Technology, and Public Policy 4 credits. Not offered 1982-83.]

428-429 Government and Public Policy: An Introduction to Analysis and Criticism. Fall and spring. 4 credits each. Open to undergraduates with permission of the instructor.

T. J. Lowi.

The analysis and criticism of public policies and the governments and politics responsible for them is stressed in Government 428. 429 is a weekly workshop for a smaller group, concentrating on problems for research, writing, and publication.

Comparative Government

Government 131 is recommended.

326 Eastern Europe Today: Economics, Government, and Culture (also Russian Literature 329 and Economics 329) Spring. 4 credits.

G. Gibian, J. Reppy, K. Poznanski.
Introductory, interdisciplinary survey of Poland, Hungary, Czechoslovakia, and Yugoslavia since World War II, with emphasis on contemporary developments. The two goals of the course are to examine differences (the variety of backgrounds) among East European countries, the common elements (for example, political relations with the USSR), domestic situations, the economy and culture.

[330 Soviet Union: Politics, Economics, and Culture] 4 credits. Not offered 1982-83.]

[332 Politics and Society in France and Italy.] 4 credits. Not offered 1982-83.]

333 Government and Politics of the Soviet Union Fall. 4 credits.

S. Larrabee.

A focus on the politics of the top leaders, the institutions through which they operate, and the impact of their policies on the Soviet people. Emphasis is also on phases in the development of the Soviet system and on the ways in which the Soviet Union served as the prototype for all subsequent Communist states, as well as on the variant forms that have appeared in other states.

334 Business and Labor in Politics Spring. 4 credits.

T. J. Pempel.

Historically, business and labor have been critical elements in shaping the specific politics of most advanced industrial democracies. Land grants to United States railroad magnates, unionization and class consciousness in continental Europe, the development of social welfare programs, and colonization and imperialism are but a few of the foremost examples. Today such interactions are similarly crucial in such diverse areas as the rise of multinational corporations, immigrant labor, strikes by public-sector employees, racial and class exclusionism in unions, environmental pollution, consumer protection, and electoral financing. The historical and contemporary roles of business and labor in such areas are examined in different industrialized societies.

[335 Cuba: Culture and Revolution] 4 credits. Not offered 1982-83.]

[336 The Ethnic Dimension in Politics] 4 credits. Not offered 1982-83.]

340 Latin American Politics Fall. 4 credits.

E. Kenworthy.

An introduction to the national politics of the larger Latin American nations, focusing on the post-1964 era. Explanations for the dominant pattern of authoritarian rule will be sought, and alternatives to this pattern explored.

341 Society and Politics in Central Europe Fall. 4 credits.

P. Katzenstein.

The political, social, economic, and cultural differences and similarities of the Federal Republic, the German Democratic Republic, and Austria since 1945 are analyzed. Focus is on the consequences of the fragmentation of a unified Germany.

[342 Government and Politics of Canada] 4 credits. Not offered 1982-83.]

[344 Government and Politics of Southeast Asia] 4 credits. Not offered 1982-83.]

346 Politics in Contemporary Japan Fall. 4 credits.

T. J. Pempel.

The focus will be on the political, social, and economic delimiters of policymaking in postwar Japan, with some particular attention given to ideological conflict, political parties and elections, the bureaucracy, the consumer movement, student protest, defense policy, and economic penetration of Southeast Asia.

347 Chinese Government and Politics Fall. 4 credits.

M. Bernal.

An examination of the politics of modern China including the breakdown of the traditional order and the revolutionary struggle of the Chinese Communist party. Primary emphasis on the institutions, methods, policies, and problems of the Communist regime since 1949.

[348 Politics of Industrial Societies] 4 credits. Not offered 1982-83.]

349 Political Role of the Military Fall. 4 credits.

B. Anderson.

Comparative study of selected modern states and types of political systems in which the military have played a major role in domestic politics. Attention is given to the social and ideological character of the politicized military and various forms of military government.

350 Comparative Revolutions Fall. 4 credits.

M. Bernal.

An analysis of major twentieth-century revolutions, treating their social, cultural, and political origins as well as their ideology and organization. Special emphasis will be given to the nature of the state to which they are opposed and the course of the revolutionary struggle.

[351 Democracy in Britain and France] 4 credits. Not offered 1982-83.]

352 Society and Politics in Saudi Arabia (also Near Eastern Studies 398) Spring. 4 credits.

J. Goldberg.

The emergence of the Wahhabi state and its transformation into the present Saudi kingdom will be examined, as well as the structure of society in Saudi Arabia and the ways it was affected by modernization and oil, and the power structure of the state and its foreign policy.

354 America in the World Economy. Spring. 4 credits.

P. Katzenstein.

Unemployed auto workers in Detroit and the woodstoves in New England signal an important change in America's relation to the world economy. This course characterizes these changes in a number of fields (trade, money, energy, technology), explains them as the result of the political choices of a declining imperial power, and examines their consequences for America and international politics.

[355 From Politics to Policy: The Political Economy of Choice] 4 credits. Not offered 1982-83.]

356 Elites and Society: The Political Economy of Power Spring. 4 credits.

N. T. Uphoff.

For students who have an interest in the nature and uses of power in politics. Consideration of how power has been treated by earlier political thinkers and by contemporary social scientists. Propositions will be formulated and critiqued about the distribution and consequences of power in America, other industrialized societies, and in the Third World, and their implications for the making of public policy. A game-simulation, "Third World Power Play," is undertaken at the end of the course.

[357 Political Development in Western Europe] 4 credits. Not offered 1982-83.]

358 Politics of the Middle East (also Near Eastern Studies 294) Fall. 4 credits.

I. Rabinovich.

An examination of the Middle East conflict, including domestic and foreign determinants of Arab and Israeli policy. The impact of major-power conflict on Middle Eastern politics, the sources of instability in local regimes, and the problem of small-state dependence on the superpowers.

365 Social Movements and Politics in Industrial Societies Fall. 4 credits.

S. G. Tarrow.

Studies of historical and contemporary social movements and left-wing parties in Western Europe and the United States, with an emphasis on the relations between movement strategies, between political alliances and policy outcomes.

425-426 The Language(s) of Politics in the Renaissance (also Society for the Humanities 425-426) Fall and spring. 4 credits.

J. M. Najemy.

The political experience of the Italian city-republics was represented and transformed through a variety of "foreign" idioms, or languages: in particular, those of the Aristotelian polis, of Roman rhetoric, *virtus*, and law; and of Christian sin and redemption. This seminar will explore the creative tensions generated by the adaptation of these languages to a political culture whose roots lay in the communal and corporate traditions of the Italian middle ages. The objectives will be 1) to test the hypothesis of a language of political experience existing apart from (or prior to the imposition of) these idioms; 2) to sample the reception of foreign idioms into republican discourse; and 3) to investigate this confrontation of political languages (which took place in two actual languages, Latin and Italian) in selected texts. The fall term will deal with the period 1250-1400, focusing on the generation of Dante and Marsilius of Padua. The spring term will cover the period 1400-1530, from the Florentine civic humanists to Machiavelli and his contemporaries.

[430 The Politics of Productivity: Germany and Japan] 4 credits. Not offered 1982-83.]

[435 Politics of Decentralization and Local Reform] 4 credits. Not offered 1982-83.]

[446 Comparative Communism] 4 credits. Not offered 1982-83.]

451 India: Social and Economic Change in a Democratic Polity Spring. 4 credits.

M. Katzenstein.

This course explores the social, economic, and political forces that have shaped India's development since independence. It considers why democratic political institutions in India have proved so resilient and what effect these institutions have on the economic and social policies that are pursued. The importance of international as well as domestic forces in shaping India's economic and political choices is also assessed.

[456 Policymaking in Britain and France] 4 credits. Not offered 1982-83.]

[459 Politics in Contemporary Europe: The Politics of the Left] 4 credits. Not offered 1982-83.]

Political Theory

Government 161 is recommended.

361 Modern Ideologies: Liberalism and Its Critics Spring. 4 credits.

I. Kramnick.

Since the rise of capitalism, one political ideology has been dominant in the Western world—liberalism. However, its hegemony has been questioned by a series of critics: democracy, socialism, anarchism, conservatism, Freudianism, and feminism. This course will study the tensions between liberalism and these critics and speculate on the possible survival or extinction of this venerable and very American ideology.

[363 Classics in Political Thought] 4 credits. Not offered 1982-83.]

364 Liberty, Equality, and the Social Order Spring. 4 credits.

D. Meyers.

We consider the accounts of liberty and equality provided by several major political philosophers, including Hobbes, Locke, Rousseau, and Mill, and we examine their proposals for embodying these concepts in political institutions. We will also read recent discussions of these issues.

[367 The Logic of Liberalism 4 credits. Not offered 1982-83.]

368 Economic Models of Politics Fall. 4 credits.
E. W. Kelley.

Economic factors influencing the structure of political systems and economic models of such systems are considered. The rationalistic presumptions underlying some such models are introduced and modified. Applications to enduring policy arenas may be made.

[373 Feminist Political Thought 4 credits. Not offered 1982-83.]

[375 American Political Thought 4 credits. Not offered 1982-83.]

[376 Marx 4 credits. Not offered 1982-83.]

[379 Freud 4 credits. Not offered 1982-83.]

417 Eighteenth-Century Scottish Moral Science (also Society for the Humanities 417) Fall. 4 credits.

D. Lieberman.
The social speculation of the eighteenth-century Scottish moralists provides a leading example of the Enlightenment attempt to treat now-independent intellectual disciplines—politics, economics, history, religion, scientific discovery, aesthetics, and literary criticism—within a unified science of human nature. The seminar will examine the contributions of Francis Hutcheson, David Hume, Adam Smith, Henry Home, and John Millar, as well as the social and cultural conditions which helped to frame their philosophic enterprises.

418 Self-Interest and Social Theory (also Society for the Humanities 418) Spring. 4 credits.

D. Lieberman.
The model of the individual social actor as a rational utility-maximiser motivated by self-interest continues to inform micro economics and economic theories of politics. The seminar will examine some of the earliest attempts to utilize the model for systematic social analysis in the works of Claude Helvetius, Jeremy Bentham, and James Mill. It will consider the psychological theory on which the model was grounded, the programs for political and legal reform it was claimed to sanction, and its related impact on the emerging discipline of political economy.

423 Cultural History as a Subversive Activity (also Society for the Humanities 423) Fall. 4 credits.

S. Buck-Morss.
If the past cultural "treasures" have become the inheritance of the rulers, how might a critical humanist read the bourgeois intellectual tradition against the grain of its collusion with domination? Subversive strategies of interpretation will include Theodor Adorno on Bach and Wagner, Walter Benjamin on Baudelaire, Roland Barthes on Balzac, John Berger on Rembrandt and Picasso, Michel Foucault on Velasquez, Adorno and Max Horkheimer on Odysseus and Kant, Adrienne Rich on Bronte and Dickinson.

425 A Case Study in Materialist Pedagogy: Nineteenth-Century Paris (also Society for the Humanities 424) Spring. 4 credits.

S. Buck-Morss.
Benjaminian approaches to the images and texts of Paris in the era of high capitalism. Cultural documents will include architecture, city planning, commercial art, political cartoons, and photographs, as well as historical and literary texts.

[466 The Repressed Feminine in the Writings of Marx 4 credits. Not offered 1982-83.]

467 Current Topics in Political Philosophy (also Women's Studies 467) Spring. 4 credits.

D. Meyers.
This course will explore the philosophical dimensions of current political issues. Topics will vary but could include equal opportunity, capital punishment, free speech, and the like. Emphasis will be placed on careful analysis of issues and methods of normative justification.

International Relations

Government 181 is recommended.

382 Integration in the World System 4 credits.
S. Jackson.

This seminar explores theories of interdependence, regional integration, and dependency as particular applications of the generalized concept of integration in the world system. Readings include works by Deutsch, Haas, Keohane, Nye, Lenin, Cardoso.

383 Theories of International Relations Spring. 4 credits.

R. Rosecrance.
A survey of relevant theories of international relations, emphasizing war prevention and conflict resolution. Theories will be tested against the international experience of the past two centuries.

385 Contemporary American Foreign Policy Fall. 4 credits.

R. Rosecrance.
An analysis of the dilemmas that have confronted American foreign policy since 1945, both specific problems and more general questions of capabilities, priorities, and morality.

386 Structure and Process in the Global Political Economy 4 credits.

S. Jackson.
We will examine the global structures and transnational processes which constrain and condition economic development, the operations of multinational corporations, international trade, and world debt. We will also investigate transnational decision making at the nongovernmental, official bilateral, and official multilateral level, with an emphasis on North-South relations.

387 The United States and Asia Fall. 4 credits.
G. McT. Kahin.

The relations of the United States with the major states of Asia and with those smaller countries (especially Vietnam) with which it has been particularly concerned are analyzed. Attention is also given to the relationship of American policy to the Asian policies of France, Great Britain, and Soviet Russia.

[389 International Law 4 credits. Not offered 1982-83.]

[390 The Foreign Policy of China 4 credits. Not offered 1982-83.]

478 Accumulation on a World Scale 4 credits.
S. Jackson.

In *Accumulation on a World Scale*, Samir Amin has developed the nearest thing to a comprehensive explanation for underdevelopment in the periphery of the world system to emerge from recent critical theorists of global political economy. In this course, we will examine Amin chapter by chapter, looking at the growing body of systematic evidence relevant to an evaluation of Amin's theory.

479 Dependencia and the State 4 credits.
S. Jackson.

In this course we will examine closely a sampling of the principal theoretical and empirical works that seek to explain the constraints on and possibilities for state action in dependent societies, focusing particularly on those factors arising directly from the location of countries in the global system, including the role of multinational corporations, the World Bank, and military aid.

480 Foreign Economic Policies of Advanced Industrial States Spring. 4 credits.

P. Katzenstein.
An examination of the contemporary crisis of the international economy. Of primary concern is the manner in which domestic politics condition the foreign economic policies of the United States, Britain, France, and the Federal Republic of Germany. Case studies to be considered will include agricultural, commercial, financial, and energy policy.

[481 Foreign Policy of the USSR 4 credits. Not offered 1982-83.]

[482 Imperialism and Dependency 4 credits. Not offered 1982-83.]

[483 Political and Economic Interdependence 4 credits. Not offered 1982-83.]

484 Defense Policy and Arms Control Fall. 4 credits.

S. Larrabee.
The requirements for military defense and the problems caused by it are analyzed. Subjects covered include nuclear deterrence reasoning, military strategy, approaches to disarmament, the working of military-industrial complexes, and defense budgeting and policy procedures.

[485 Logic and Methods of Research in International Relations 4 credits. Not offered 1982-83.]

Political Methodology

[391 Human and Social Statistics 4 credits. Not offered 1982-83.]

Honors Courses

400 Honors Seminar: Political Analysis Fall. 4 credits. Limited to honors students.
M. Shefter.

494 Honors Thesis Fall or spring. 8 credits.
In their senior year, honors students will be required to take Government 494, in which they will prepare and write an honors thesis—an extended piece of original independent research. Before the end of the semester that precedes the semester in which the thesis is to be written, each participant must submit an approved proposal to the department office. Proposal forms may be obtained from the undergraduate secretary in 125 McGraw Hall. Honors theses are given to a second reader for evaluation, and students are examined orally on their work by the two faculty members involved. In cases where students feel the need for a period of preparatory work before undertaking an honors thesis, they may make use of the option available under Government 499.

Supervised Study

Except under very unusual circumstances, supervised study, Government 499, is open only to government majors doing superior work in the major. The application form may be obtained in 125 McGraw Hall and must be approved by the director of undergraduate studies for credit to be granted. There is no limit established for the total number of credits in 499 a government major may take while at Cornell, but he or she may count no more than 4 credits toward fulfillment of the major. Students who wish to continue taking Government 499 for more than one semester must select a new theme or subject each semester, and applicants must present a well-defined program of study that cannot be satisfied by taking regular courses. 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. The permission of the instructor is required.

499 Readings Fall or spring. 1-4 credits.
Staff.

Graduate Seminars

Qualified undergraduates are encouraged to apply for seminars listed with 600 course numbers. Consult the supplement that lists graduate courses, available in the department office.

Field Seminars

601 Scope and Methods of Political Analysis

Fall. 4 credits.

S. Jackson.

This seminar offers an overview of the main problem areas and theoretical orientations in the four subfields of contemporary political analysis: political theory, American politics, comparative politics, and international relations. Selected topics, including questions of research design, are treated through a reading of the best contemporary literature. The broad issues of the philosophy of social science or specific techniques of analysis may also be addressed.

602 Field Seminar in Political Methodology

Spring. 4 credits.

E. W. Kelley.

Some attention is given to general problems of research design and hypothesis formulation. Emphasis is on measurements and hypothesis testing. Topics to be covered include statistics, both parametric and nonparametric; unidimensional and multidimensional scaling; data theory; and causal modeling.

603 Field Seminar in American Politics

Spring. 4 credits.

B. Ginsberg.

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.

604 Field Seminar in Public Policy

Spring. 4 credits.

E. W. Kelley.

An introduction to the study of public policy. Various analytical approaches will be presented: models of public choice and political economy; analysis of bureaucratic politics, executive and political leadership, and interest groups and public opinion; economic analysis of public finance and welfare economics; and organization theory, game theory, and decision theory as these relate to the analysis of public policy formation and applications.

605 Field Seminar in Comparative Politics

Fall. 4 credits.

P. Katzenstein.

An introduction to selected theoretical problems in the study of comparative politics and to their application in empirical analysis. Basic problems are social class and politics, authority and legitimacy, participation and mobilization, economic development and democracy, authoritarian and totalitarian politics, corporatism and pluralism, nation building and political integration.

606 Field Seminar in International Relations

Spring. 4 credits.

R. Rosecrance.

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.

607 Field Seminar in Political Thought

Spring. 4 credits.

I. Kramnick.

An introduction to political theory through a reading of selected classics in political thought from Plato to Marx.

American Government and Institutions

[616 **Theories of Judicial Review** 4 credits. Not offered 1982-83.]

[619 **Labor in American Politics** 4 credits. Not offered 1982-83.]

[621 **Elections and Public Policy** 4 credits. Not offered 1982-83.]

[623 **Capitalism, the State, and the Economy** 4 credits. Not offered 1982-83.]

Public Policy

[628-629 **Politics of Technical Decisions I and II (also B&PA NPA 516 and City and Regional Planning 541)** Fall and spring. 4 credits each.
D. Nelkin.

Political aspects of decision making in areas traditionally regarded as technical. Subjects include the origins and characteristics of "technical politics," the role of experts in government, and the problem of expertise in a democratic system. Alternatives to current decision-making procedures are explored.

Comparative Government

[636 **Political Development of the European Welfare State** 4 credits. Not offered 1982-83.]

[637 **Comparative Theories of Decentralization** 4 credits. Not offered 1982-83.]

[639 **Politics of the Soviet Union** 4 credits. Not offered 1982-83.]

[642 **The Politics of Communalism** Fall. 4 credits.
M. J. Esmar.

A review, analysis, and evaluation of the major theoretical literature on the genesis, expression, and management of political conflict resulting from ethnic, religious, racial, and linguistic pluralism.

[645 **Politics of China** 4 credits. Not offered 1982-83.]

[647 **Political Anthropology: Indonesia** 4 credits. Not offered 1982-83.]

[648 **Political Economy of Change: Rural Development in the Third World** Fall. 4 credits.
N. T. Uphoff.

The substantive focus is on economic, social, and political change in Third World countries, particularly with reference to rural development. The analytical approach integrates economic, social, and political factors into a common framework for dealing with policy choices and political action. Special attention is given to different instruments for promoting rural development in Third World countries.

[651 **Readings from Mao Zedong** 4 credits. Not offered 1982-83.]

[652 **Southeast Asia Seminar: Vietnam (also Asian Studies 601)** Fall. 4 credits.

G. Kahin, O. W. Wolters.

An assessment of the historical evolution of Vietnamese nationalism, with particular emphasis on the twentieth century.

[655 **Latin American Society and Politics** 4 credits. Not offered 1982-83.]

[656 **Comparative Institutions and the Welfare State** 4 credits. Not offered 1982-83.]

[659 **Politics in Postwar Western Europe** Fall. 4 credits.

S. G. Tarrow.

This course is a survey of the post-World War II European political systems, which will use some major approaches to the politics of advanced

industrial democracies to analyze the main periods and problems of postwar European politics. The periods and topics covered are Reconstruction, the transition to mass democracy and the growth of the welfare state; mature party-systems, neocorporatism and the "end" of ideology; the resurgence of class conflict, party dealignment and "postindustrial" cleavages; no-growth politics, realignment, and attacks on the welfare state. Students will prepare critical review essays on particular theoretical problems or on particular countries in Western Europe.

[660 **Research Topics on Advanced Industrial Democracies: Social Movements, Collective Protest, and Policy Innovation** 4 credits. Not offered 1982-83.]

Political Theory

[665 **American Political Thought** 4 credits. Not offered 1982-83.]

[666 **The Political Philosophy of Nietzsche** 4 credits. Not offered 1982-83.]

[667 **Justice and Equality: The Philosophical Foundation of Public Policy** Not offered 1982-83.]

[668 **Foundations of English Liberalism** 4 credits. Not offered 1982-83.]

[669 **Modern Social Theory** 4 credits. Not offered 1982-83.]

[670 **Toward a Feminist Social Theory** 4 credits. Not offered 1982-83.]

[673 **Economic Models of Politics** Fall. 4 credits.
E. W. Kelley.

Both economic factors influencing the structures of political systems and economic models of such systems are considered. The rationalistic presumptions underlying such models are introduced and modified. Applications to enduring policy arenas may be made.

[678 **Classic Political Philosophy** 4 credits. Not offered 1982-83.]

International Relations

[686 **International Strategy** 4 credits. Not offered 1982-83.]

[687 **International Relations of Asia** Spring. 4 credits.

G. McT. Kahin.

American Southeast Asian policies: their genesis, character, impact, and long-term consequences. Elements involved in the formation of American policies toward Southeast Asia by the several postwar administrations (Truman through Carter), including international factors and American domestic politics. The ways in which these policies have been applied and their influence on political forces within the countries of Southeast Asia and upon American policies towards other countries.

[692 **The Administration of Agricultural and Rural Development** Spring. 4 credits.

N. T. Uphoff.

The political, bureaucratic, economic, and technical environments of administration for agricultural and rural development; the various functions involved in administration (personnel management, planning, budgeting, economic analysis, information systems); several major tasks (research, extension, services, and infrastructure development); and specific problems of integrating activities, interfacing with rural populations, and utilizing external assistance. Intended primarily for persons who expect to have some future responsibilities in agricultural or rural development administration in Third World countries.

Greek

See Department of Classics, p. 112.

Hebrew

See Department of Near Eastern Studies, p. 166.

Hindi-Urdu

See Modern Languages, Literatures, and Linguistics, p. 146.

History

R. L. Moore, chairman; D. A. Baugh, A. H. Bernstein, S. Blumin, S. G. Cochran, T. H. Holloway, C. Holmes, I. V. Hull (director of undergraduate studies, 323 McGraw Hall, 256-3359), J. J. John, M. Kammen, S. L. Kaplan, J. V. Koschmann, D. C. LaCapra, W. F. LaFeber, J. M. Najemy, M. B. Norton, C. A. Peterson, W. M. Pintner, R. Polenberg, W. B. Provine, J. H. Silbey, F. Somkin, B. Strauss, B. Tierney, D. Usner, J. Weiss, L. P. Williams, O. W. Wolters, D. K. Wyatt

The popularity of history among Cornell students is due to its usefulness as preparation for graduate, professional, or law school and for any career that requires critical thinking and good writing; the reputation of the faculty for scholarship, teaching, and advising; and, most of all, the intrinsic interest of the discipline. A wide variety of introductory and advanced courses is offered. The department is particularly strong in ancient, medieval, and modern European history; in American, Latin American, Chinese, and Southeast Asian history; and in the history of science.

The Major

To complete the history major, a student must fulfill the requirements listed below:

- 1) Complete the prerequisite requirement by taking either Introduction to Western Civilization (History 151-152) or Introduction to Asian Civilization (History 190-191) or, alternatively, three courses in European history—one in ancient history; one in medieval, Renaissance, or early modern history; and one in modern history.
- 2) Take history department courses totaling 36 credits (which may include the prerequisite courses) and complete all these courses with a grade of C or better—of the 36 credits, a minimum of 20 must be taken in courses numbered 250 and above.
- 3) Take a minimum of 8 credits in each of two of the following fields: American, European, Asian, Latin American history, or history of science; alternatively, a student may elect to take a total of 16 credits in three of these fields. Credits taken to fulfill the prerequisite requirement (see item (1), above) do not count toward this requirement.
- 4) Take at least one course at the advanced (400 or higher) level.
- 5) Take two courses above the elementary level offered by other departments that relate to the student's area of special interest.

Prospective majors may wish to discuss their projected program with the director of undergraduate studies before formally enrolling with the department.

Honors. History majors with an overall B+ average in all their history courses are eligible to enroll in History 400, the Honors Proseminar, which is normally taken in the junior year or, at the latest, in the fall of senior year. (Honors candidates are strongly encouraged to take another 400-level seminar during their junior

year.) Upon successful completion of the proseminar, students may become candidates for the degree of Bachelor of Arts with honors in history by submitting to a prospective faculty adviser a written thesis proposal delineating the general area of inquiry for an honors essay, and having the proposal approved by the adviser. The proposal should be submitted as soon as possible after the completion of History 400, normally during the junior year or at the beginning of the senior year.

After acceptance of the proposal by an adviser, honors candidates should then enroll with their advisers in History 302, Supervised Research, during the first term of their senior year. History 302 is a four-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 302, the student will submit to his or her adviser a ten-to-fifteen-page overview of the entire thesis or a draft of some substantial section of the thesis and will undergo an oral examination on the broad field of history that the student researched. The examination will be administered by a committee consisting of the student's adviser and one other department member, who will eventually serve as a reader of the thesis. The committee will then recommend whether the student may proceed to enroll in History 401, Honors Guidance, during the final semester of senior year. History 401 is a 4-credit course that permits honors candidates to complete the honors essay and to prepare both to defend the essay and to demonstrate their understanding of the general historical interests they have pursued within the major. Students who do not take History 400 in their junior year must submit both the thesis proposal and the prospectus by the end of the fall semester of their senior year in order to be eligible to enroll in History 401 by their final semester.

Honors candidates must complete a minimum of 40 credits in history, 8 of which must be History 400-401. The completed thesis will be examined by three readers, including the two faculty members who administered the preliminary oral examination.

The text of the honors essay may not exceed sixty pages except by permission of the chairperson of the honors committee and the student's adviser. Two copies will be due during the third week of April. In May each honors candidate will be given an oral examination administered by the major adviser and one or both of the essay readers. The examination will focus on the specific issues of the essay as well as the broad field of history in which the student has concentrated his or her research (e. g., Periclean Athens, seventeenth-century science, nineteenth-century America).

To qualify for a Bachelor of Arts degree with honors in history, a student must (1) sustain at least a 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.

Students considering the honors program should consult with Professor Wyatt during the second term of their sophomore year or early in their junior year.

Freshman Seminars

104 Communes and Utopias: Alternative Life Styles in American History Fall. 3 credits.
M W 2:30. G. C. Altschuler.

This course examines individual and group critiques of American society and experiments with alternative lifestyles. Topics include the Puritans, the Oneida community, the Mormons, Walden, the Ferrer Colony and Modern School, Vedanta Monasteries, Walden II, and contemporary communes.

105 Freshman Seminar: The Growth of Political Democracy in the United States Fall. 3 credits.
Prerequisite: permission of instructor.
M 3:30. J. H. Silbey.

An examination of the democratization of American political life since the American Revolution. Such topics as the expansion of white, black, and women's suffrage and the changing concepts of participation and leadership in American politics will be explored. A number of books and documents covering the topic will be read and discussed and several short papers written.

106 Democracy and Education: History of Learning in America Spring. 3 credits.
M W 2:30. G. C. Altschuler.

A survey of the history of educational thought and institutions from Puritan times to the present, with emphasis on the nineteenth and twentieth centuries. Topics include the family and church as educational institutions, the democratization of education, the emergence of the university, educational testing, and vocational education. John Dewey and progressive education, "alternate education," student radicalism.

[107 The Family in American History Not offered 1982-83.
M. B. Norton.]

108 Civil Liberties in the United States Spring. 3 credits. Prerequisite: permission of instructor.

T R 2:30-3:45. R. Polenberg.
Freedom of speech and dissent from Jefferson's time to the present, with emphasis on the twentieth century. Topics include Jefferson and Burr, Lincoln and martial law; war and the Supreme Court; the American Civil Liberties Union and the New Deal; the relocation of Japanese Americans; the cold war and McCarthyism; religious cults and "brainwashing;" censorship and obscenity; John Milton, John Stuart Mill, and the critique of libertarianism.

[112 The North Atlantic Community and the Wider World Not offered 1982-83.
T. H. Holloway.]

113 Gender in Early Modern Europe Spring. 3 credits.
T R 12:20. S. D. Amussen.

An examination of the nature and importance of gender in Europe from ca. 1550 to ca. 1750. Readings will focus on different aspects and implications of gender in families and communities—relations between husbands and wives, attitudes toward sexuality, the position of women—form one subject of study; the other major subject of the course will be the ideological and intellectual role of gender, seen in social and political theory and popular literature and drama.

114 Seminar on American Foreign Policy Fall. 3 credits. Open to freshmen and sophomores. Limited to 12 students; preference will be given to non-history majors. Prerequisite: permission of instructor.

T 2:30-4:25. W. LaFeber.
The seminar will examine a contemporary American foreign policy problem, analyzing its various parts and charting the possible alternatives open to policy makers by placing the problem in its historical framework and using, in part, the methods of comparative history. History will be used as a tool to analyze the complexities and opportunities of present foreign policy dilemmas.

119 History of North American Indians Spring. 3 credits. Prerequisite: permission of instructor.

R 2:30-4:25. D. H. Usner.
This seminar examines major themes in Native American history from colonial times to the present. Discussions will consider the cultural histories of particular tribes as well as the comparative elements of Indian relations with non-Indians.

121 Religious Experience and Western Culture Fall and spring. 3 credits.
W F 12:20-1:45. R. Whalen.

122 Western Civilization as Concept and Identity Fall and spring. 3 credits.
W F 12:20-1:45. L. Kramer.

123 A Social History of the American House, 1780-1980 Fall and spring. 3 credits.
M W 10:10-11:35. S. McMurry.

124 War and Peace in the Western World Fall and spring. 3 credits.
T R 12:20-1:45. R. Whalen.

[146 America in the Camera's Eye Not offered 1982-83.
R. L. Moore.]

161 The Heroic Ideal in Antiquity Spring 3 credits.
M W 2:30-3:45. B. Strauss.
An examination of one of the outstanding figures of antiquity: the hero. The course studies the origin and growth of the heroic ideal in four civilizations: Mesopotamia, Israel, Greece, and Rome. We will consider the differences between each civilization's concept of heroism, what these differences indicate more generally about each civilization's spirit and values, and the lessons of ancient heroism for modern times. Readings in translation from the *Epic of Gilgamesh*, the Bible, Homer, Aeschylus, Sophocles, Plato, Plutarch.

171 Revolution and Russian Society Fall. 3 credits.
M W 1:25-2:20. W. M. Pintner.
The state's attempts to maintain stability, and the tension between the dissenting intelligentsia and the mass of the population are examined. Russia before and after the revolution of 1917 is discussed.

174 Foodways: A Social History of Food and Eating Spring. 3 credits.
M 2:30-4:30. 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. Illustrative examples are drawn from throughout history, from ancient Egypt to the present.

[192 Japan and the West Not offered 1982-83.
J. V. Koschmann.]

[193 China and the West before Imperialism Not offered 1982-83; next offered 1983-84.
C. A. Peterson]

[194 Chinese Views of Themselves Spring. Not offered 1982-83.
S. Cochran.]

Underclass Seminars

209 Political History of North American Indians during the Eighteenth and Nineteenth Centuries Fall. 4 credits. Prerequisite: permission of the instructor.
R 10:10-12:05. D. H. Usner.
An investigation of political organization and evolution among Indian 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, colonial policies and treaties, federal-state-tribal sovereignties, and Indian strategies of autonomy and resistance through the plains wars.

222 Public Life and Literature in Tudor England Fall. 4 credits. Prerequisite: permission of instructor.
M W 9:05. F. G. Marcham.
A study of the chief developments in the political, governmental, and religious life of England in the sixteenth century, and weekly discussions of a selection of Tudor prose, poetry, and drama.

223 Public Life and Literature in Stuart England Spring. 4 credits. Prerequisite: permission of instructor.
M W 9:05. F. G. Marcham.

A study of the chief developments in the political, governmental, and religious life of England in the seventeenth century, and weekly discussions of a selection of Stuart prose, poetry, and drama.

225 Public Life and Literature in Nineteenth-Century Great Britain Fall. 4 credits. Prerequisite: permission of instructor.
T R 9:05. F. G. Marcham.

British political, constitutional, economic, and imperial history are studied in the light of Victorian prose, poetry, and drama. History and literature are both considered: history through lectures and discussions of constitutional documents; literature through comment upon readings. Authors assigned include Macaulay, Carlyle, Tennyson, Mill, Darwin, Huxley, Gilbert and Sullivan, and Shaw.

226 Public Life and Literature in Twentieth-Century Great Britain Spring. 4 credits. Prerequisite: permission of instructor.
T R 9:05. F. G. Marcham.
A study of British political, social, and constitutional history is paralleled by the reading of plays. Both history and literature are considered. The development of parliamentary democracy in Great Britain, the consequences for her of the two world wars, the emergence of the welfare state, the application to the economy of nationalization, and Great Britain's withdrawal from imperialism are presented. Among the writers read and discussed are Shaw, Barrie, Maugham, O'Casey, Sherrif, and Eliot.

227 Modern American Sex Roles in Historical Perspective (also Women's Studies 227) Fall. 4 credits. Intended primarily for sophomores. Limited to 20 students.
T 2:30-4:30. M. B. Norton.
A reading and discussion course. The class will begin by examining sex roles in the United States in the 1980s, looking at a variety of sources like popular magazines and contemporary commentaries. We will then move backwards in time in an attempt to uncover the roots of current attitudes. The students will help to determine which topics the class will investigate in detail.

232 The City in History Spring. 4 credits. Limited to 12 students.
R 10:10-12:05. S. Blumin.
Reading and discussion of classic interpretations of the rise, role, and character of cities in ancient Greece, medieval Europe, and nineteenth- and twentieth-century Europe and America. Further reading on the history of a particular city of the student's own choice. Several short papers.

Comparative History

360 Early Warfare, East and West Fall. 4 credits.
M W F 1:25. C. A. 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 background and the role of nonmilitary factors.

History of Science

281-282 Science in Western Civilization 281, fall; 282, spring. 4 credits each term. History 281 is not a prerequisite to 282.
T R 8-10. L. Pearce Williams.
The development of scientific thought from antiquity to the present. Readings and discussions of original sources.

287 History of Biology (also Biological Sciences 201) Fall. 3 credits. Prerequisite: one year of introductory biology.
T R 10:10-11:30. W. Provine.
An examination of the history of biology, emphasizing the interaction of biology and culture. Covers the period from Charles Darwin to the present.

[288 History of Biology Not offered 1982-83.
W. Provine.]

[380 Social History of Western Technology Not offered 1982-83; next offered 1983-84.
J. Weiss.]

447 Seminar in the History of Biology Fall. 4 credits. No prerequisites.
T 2:30-4:25. W. Provine.
Mechanism, design, and ethics in relation to modern biology.

448 Seminar in the History of Biology Spring. 4 credits. Prerequisite: knowledge of elementary genetics.
T 2:30-4:25. W. Provine.
An examination of geneticists' attitudes toward race differences and race crossing in the twentieth century, emphasizing the period 1950 to the present.

[481-482 Science in Classical Antiquity Not offered 1982-83.
L. P. Williams.]

680 Seminar in the History of Nineteenth-Century Physical Science Spring. 4 credits.
Hours to be arranged. L. P. Williams.

American History

[201 Introduction to American History: From the Beginning to 1865 Fall. Not offered 1982-83.
F. Somkin.]

[202 Introduction to American History: From the Civil War to Recent Times Spring. Not offered 1982-83.]

275 Crime and Punishment: From the Puritans to Mickey Spillane Fall. 4 credits.
T R 1:25. F. Somkin.
Social sanctions and the transgressor will be examined in selected novels and other materials. Texts include fiction by Hawthorne, Cooper, Stowe, Melville, Van T. Clark, Cain, Hammett, Chandler, and Spillane.

303 American Dreams Fall. 4 credits. Limited enrollment. Recommended: a fair knowledge of American history. Permission of instructor required.
M 2:30-4:25. F. Somkin.
A reading-discussion course on the origins and development of key themes whose character has given a distinctive shape to American culture: the collective dream of natural mission; the individual dream of personal success; the dream of material abundance; the dream of social redemption through education; the dream of a democratic art; the dream of equal justice under law.

311-312 The Structure of American Political History 311, fall; 312, spring. 4 credits.
M W F 10:10. J. H. Silbey.
History 311 examines the course of American politics from 1787 to the Civil War, focusing on the nature of decision making, popular and legislative voting behavior, and the role of interest groups, political parties, and political elites in shaping our political history. 312 continues discussion from 1865 to the present.

[313-314 History of American Foreign Policy Not offered 1982-83.
W. LaFeber.]

[318 American Constitutional Development Not offered 1982-83; next offered 1984-85.
M. B. Norton.]

321 The Origins of American Civilization Spring. 4 credits.
M W F 1:25. M. Kammen.
The colonial genesis of American culture and society, with emphasis upon the emergence of distinctive

institutions, attitudes, and social patterns. Topics include race relations, religion, politics, movements of protest, and cultural developments.

[323-324 Native American History Not offered 1982-83.
D. H. Usner.]

325 Age of the American Revolution, 1763-1815 Fall. 4 credits.

T R 8:30-9:55. M. B. Norton.

An examination of the process by which the thirteen English colonies became an independent and united nation, with emphasis on political thought and practice, social and economic change, and cultural development.

326 Women in the American Society, Past and Present Spring. 4 credits.

M W F 11:15. 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, and contemporary feminism.

327-328 American Frontier History 327, fall; 328, spring. 4 credits each term.

M W F 12:20. D. H. Usner.

Survey of exploration, settlement, and expansion across North America since the sixteenth century. First term covers international rivalry over territory, frontier trade systems, Indian-colonial relations, and the early administration of United States territories. Topics in second term include the evolution of land and Indian policies, life in frontier communities, and political movements and economic change in the American West.

[330 The United States in the Middle Period, 1815-1850 Not offered 1982-83; next offered 1983-84.

J. H. Silbey.]

[331 The American Civil War and Reconstruction Spring. Not offered 1982-83; next offered 1983-84.

J. H. Silbey.]

332-333 The Urbanization of American Society 332, fall; 333, spring. 4 credits per term. First term not prerequisite to the second.

M W F 11:15. S. Blumin.

An examination of the process of urbanization in America from the earliest European settlements to the present. Emphasis will be placed on the development of urban forms, institutions, classes and life-styles, and on the changing impact of cities upon nonurban areas and the nation as a whole. First term covers the period up to the emergence of the industrial city (ca. 1860); the second term covers the period from 1860 to the present.

[336-337 American Social History Not offered 1982-83; next offered 1983-84.

S. Blumin.]

340-341 Recent American History, 1917 to the Present 340, fall; 341, spring. 4 credits each term.

First term is not prerequisite to the second.

T R 12:20; discussion section to be arranged.

R. Polenberg.

History 340 topics include radicalism and repression in World War I; individualism and conformity in the 1920s; Franklin Roosevelt and the New Deal; World War II, the atomic bomb, and the Holocaust. 341 considers the Hiss, Rosenberg, and Oppenheimer cases; the Supreme Court and civil rights; Kennedy, Johnson, and social reform; the Vietnam war and the protest movement; the Carter and Reagan presidencies.

344 American Ideas: From Puritanism to the Civil War Spring. 4 credits.

M W F 2:30; discussion section to be arranged.

F. Somkin.

Ideas, thinkers, feeling, and expression from the founding of New England to the death and rebirth of the Republic. Topics include Puritanism; the Enlightenment; the Great Awakening; the theory of republicanism; Jeffersonian and Jacksonian democracy; Mormonism; social reform (temperance, women's rights, abolition); the southern attack on natural rights; Lincoln and the mystic Union.

345 The Modernization of the American Mind Fall. 4 credits.

M W F 11:15; discussion to be arranged.

R. L. Moore.

American thought and culture from 1890 to the present. Course emphasizes the intellectual impact of major political and economic events and the adaptation of social ideas and values to new conditions.

346 Major Themes in American Religious History Spring. 4 credits.

M W 9:05; discussion to be arranged. R. L. Moore.

An examination of the impact of American religions upon American culture and politics from the first settlement of Massachusetts Bay to the Civil War. Major topics include the Puritans and American Calvinism, religion and the American revolution, the evangelical movement and the antebellum political order, and the cultural meaning of religious diversity.

[411 Undergraduate Seminar in American Political History Not offered 1982-83.

J. H. Silbey.]

414 Motivations of American Foreign Policy

Fall. 4 credits. Prerequisites: History 314 and permission of instructor.

R 2:30-4:25. W. LaFeber.

418 Undergraduate Seminar in the History of the American South Spring. 4 credits. Prerequisite: permission of instructor.

M 3-5. J. H. Silbey.

Topic for 1982-83: Slavery, the slave system, and the crisis of the Union, 1846-1861.

419 Seminar in American Social History Fall. 4 credits. Prerequisite: permission of instructor.

R 2:30-4:30. S. Blumin.

Topic for 1982: The emergence of the middle class, 1750-1900. The hypothesis of middle-class formation will provide a common theme for reading, discussion, and individual research.

421 Constitutionalism as a Cultural Problem in America Spring. 4 credits.

T 1:25. M. Kammen.

This seminar (for juniors and seniors) will examine the changing role of the U. S. Constitution in American politics and ideological controversy. Coverage will begin with the John Marshall era, but our major concern will be the period 1880-1980.

426 Undergraduate Seminar in Early American History Spring. 4 credits. Prerequisite: permission of instructor. Preference will be given to students who have completed History 325. Topic for 1983: Adams, Jefferson, and Madison.

M 2:30-4:30. M. B. Norton.

This seminar will examine in depth the lives and political thought of three of the most influential founding fathers of the United States: John Adams, Thomas Jefferson, and James Madison. The class will read widely in the political writings of each and interpret those writings in light of each man's life and experiences. Discussion will focus on their individual and collective contributions to the shaping of the American political system.

[429 Undergraduate Seminar in Indians of Eastern North America Not offered 1982-83.

D. H. Usner.]

430 Law and Authority in America: Freedom, Restraint, and Judgment Spring. 4 credits.

Prerequisite: permission of instructor.

R 2:30-4:25. F. Somkin.

A reading-discussion course. Selected themes in the history of law and authority will be studied. Topics may include treason; the law of business and industry; criminal law; mob violence; the gun; sex and liquor regulation; and the despotism of the courts.

440 Undergraduate Seminar in Recent American History Fall. 4 credits. Prerequisite: permission of instructor.

T R 2:30-3:45. R. Polenberg.

Topic for 1982: Anarchism in America.

[445 Undergraduate Seminar: Deviance and Conformity in a Liberal Society Not offered 1982-83.

R. L. Moore.]

[521 Heritage and Memory in American Culture Not offered 1982-83.

M. Kammen.]

[613-614 Graduate Seminar in American Foreign Relations Not offered 1982-83.

W. LaFeber.]

[615-616 Seminar in American Cultural and Intellectual History Not offered 1982-83.

F. Somkin.]

[617-618 Seminar in Recent American Cultural History Not offered 1982-83.

R. L. Moore.]

[619 Seminar in American Social History Not offered 1982-83.

S. Blumin.]

621 Problems of American Cultural History Fall. 4 credits.

R 2:30. M. Kammen.

This seminar will assess various modes of examining American culture, using iconography and artifacts as well as historical and literary texts. Special attention will be given to historians' use of the "culture concept" as it has developed in anthropology, and to the potential of cultural history as the theoretical basis for a fresh synthesis in American historical writing.

[626 Graduate Seminar in the History of American Women Fall. Not offered 1982-83.

M. B. Norton.]

[627 Graduate Seminar in the History of American Women Spring. Not offered 1982-83.]

[633-634 Seminar in Nineteenth-Century American History Not offered 1982-83.

J. H. Silbey.]

710 Colloquium in American History Fall. 4 credits. Required of all first-year American history graduate students.

Time to be arranged. J. H. Silbey.

Examination of the major themes, epochs, and interpretations of American history.

Asian History

190 Introduction to Asian Civilizations Spring. 4 credits.

W F 12:20, plus an additional hour, M 12:20, 1:25, or 3:35. J. V. Koschmann, D. K. Wyatt.

An introduction to the distinctive cultures of China, India, and Japan, which features an intensive examination of selected topics and periods of particular significance in the history of each.

191 Introduction to Asian Civilizations in the Modern Period Fall. 4 credits.

W F 12:20, plus an additional hour, M 12:20, 1:25, or 3:35. S. Cochran, D. K. Wyatt.

The history of Asian civilizations in modern times is introduced, focusing on the relationship between key figures and societies. English translations of

autobiographies, novels, short stories, diaries, and other documents written by Asians are used to assess the perspectives, social priorities, and historical significance of intellectual and political leaders.

381-382 War as Myth and History in Postwar Japan (Frederick G. Marcham Seminar, also Society for the Humanities 381-382 and Asian Studies 381-382) 381, fall; 382, spring. 4 credits each term.

Fall: T R 1:25. Spring: irregular class meetings; students will pursue independent work in consultation with the instructors, and the class will meet for special events and presentations by class members. B. deBary, J. V. Koschmann.

How is the "war story" told in postwar Japan? The course will examine persisting manifestations of the war memory in contemporary Japanese cultural life, with emphasis on ways in which the story of World War II has been retold, reinterpreted, and given new symbolic and factual significance in light of changing historical circumstances. Class discussion will focus on the interpretation of texts, ranging from political thought and history to fiction, film, and poetry.

[390 Art and Society in Modern China Fall. Not offered 1982-83.
S. Cochran, M. Young.]

393 History of China up to Modern Times Fall. 4 credits.

T R 10:10; disc to be arranged. C. A. Peterson.
A broad examination of the major aspects of Chinese culture and civilization from earliest times to the late imperial period. Seeks to expose both those features maintaining continuity and the significant (but frequently overlooked) instances of change.

394 History of China in Modern Times Spring. 4 credits.

T R 10:10, plus an additional hour, R 1:25, 2:30, or 3:35. 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 and political unity.

395 Indochina and the Archipelago to the Fourteenth Century Fall. 4 credits.

T R 11:15, plus one hour to be arranged.
O. W. Wolters.

A survey of the early history of Indochina and the Archipelago, with particular attention to questions raised in the source material concerning religious beliefs and political and social assumptions.

396 Southeast Asian History from the Fifteenth Century Spring. 4 credits.

T R 11:15; disc. to be arranged. D. K. Wyatt.
A survey focusing on cultural, social, and economic change in Southeast Asia.

397 History of Japan to 1750 Fall. 4 credits.

M W F 10:10. J. V. Koschmann.
A survey of Japanese history from its beginnings to the early modern period. Attempts to draw relationships among such factors as political and institutional change, social structure, aesthetic sensibility, literary form, and religious consciousness. Primary texts in translation will be read whenever feasible.

398 History of Modern Japan Spring. 4 credits.

M W F 10:10. J. V. Koschmann.
A survey of Japan from the mid-eighteenth through the mid-twentieth centuries, with special attention to changing configurations of institutional structure, knowledge, action, and conceptions of history. Japanese political, literary, and philosophical texts will be read and discussed in addition to secondary sources.

[489 Seminar in Tokugawa Thought and Culture Not offered 1982-83.
J. V. Koschmann.]

[492 Undergraduate Seminar in Medieval Chinese History Not offered 1982-83; next offered 1983-84.
C. A. Peterson.]

493 Self and Society in Late Imperial and Twentieth-Century China Fall. 4 credits.
Prerequisite: History 191, 394, or permission of instructor.

R 2:30-4:30. S. Cochran.
Conceptions of self and relationships between the individual and society in China from the seventeenth century to the present.

691 Chinese Historiography and Source Materials Fall. 4 credits. Prerequisite: permission of instructor.

C. A. Peterson.

693-694 Problems in Modern Chinese History 693 fall; 694, spring. 4 credits each term.
Prerequisite: permission of instructor.
Hours to be arranged. S. Cochran.

695-696 The Historiography of Southeast Asia 695, fall; 696, spring. 4 credits each term.
Prerequisite: permission of instructor.
Hours to be arranged. O. W. Wolters, D. K. Wyatt.

[791 Seminar in Medieval Chinese History Not offered 1982-83; next offered 1983-84.
C. A. Peterson.]

793-794 Seminar in Modern Chinese History 793, fall; 794, spring. 4 credits each term.
Prerequisite: permission of instructor
Hours to be arranged. S. Cochran.

795-796 Seminar in Southeast Asian History 795, fall; 796, Spring. 4 credits each term.
Hours to be arranged. D. K. Wyatt.

Ancient European History

265 Ancient Greece from Homer to Alexander the Great Fall. 4 credits. Open to freshmen.
M W 11:15; disc to be arranged. 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.

[267 The Roman Republic Not offered 1982-83.
A. H. Bernstein.]

[268 Rome of the Caesars Not offered 1982-83.
A. H. Bernstein.]

373 The Greek City from Alexander to Augustus Spring. 4 credits.

M W 11:15; disc to be arranged. B. Strauss.
A two-fold search: for Alexander the conqueror and the man, and for the character of the world he created, in which the Greek city was planted as far as Egypt and India. These new cities saw a change from republicanism to monarchy, from community values to individualism, from particularism to ecumenicalism; embraced the new philosophies of Stoicism and Epicureanism; and were the hothouses of a new religion: Christianity. Readings in translation include Arrian, Plutarch, Aristophanes, Menander, Theocritus, Polybius, the Bible, Epicurus, Lucretius.

452 The Tragedy of Classical Athens, 462-404 B.C. Fall. 4 credits. Prerequisite: History 265, 373, or permission of instructor.

M 2:30-4:30. B. Strauss.
The rise and fall of Athenian democracy, imperialism, and enlightenment in Athens' great age. 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, Plutarch.

[453 Crisis of the Greek City-State, 415-301 B.C. Not offered 1982-83.
B. Strauss.]

[460 Roman Imperialism Not offered 1982-83.
A. H. Bernstein.]

[461 The Roman Revolution Not offered 1982-83.
A. H. Bernstein.]

[561 Social and Economic History of Rome, 60 B.C. to A.D. 117 Not offered 1982-83.
A. H. Bernstein.]

[661 Graduate Seminar in Ancient Classical History Not offered 1982-83.
A. H. Bernstein.]

Medieval, Renaissance, and Early Modern European History

151-152 Introduction to Western Civilization 151, fall; 152, spring. 4 credits each term. History 151 is not a prerequisite to 152. Neither 151 nor 152 may be taken as Freshman Seminars.

Fall: T R 11:15, plus disc to be arranged;
C. Holmes. Spring: T R 11:15, plus disc to be arranged; W. Provine.

A survey of European history, History 151 covers antiquity to the Reformation. 152 spans the seventeenth century to the present day. The major political and social developments and the intellectual heritage of the West are both studied. A considerable portion of the reading is drawn from contemporary sources.

257 English History from Anglo-Saxon Times to the Revolution of 1688 Spring. 3 or 4 credits.
M W F 12:20. C. Holmes.

A survey of the government, social organization, and cultural and religious experience of the English, laying particular stress on the unification of the realm, the rise of Parliament, changes in agrarian organization, and the development of urban and commercial classes.

263 The Earlier Middle Ages Spring. 4 credits.
M W F 12:20. 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.

264 The High Middle Ages Fall. 4 credits.
T R 10:10-11:25. B. Tierney.
A survey of medieval civilization from ca. 1100 to ca. 1450, dealing with religious, intellectual, political, and economic developments in Western Europe. Lectures and class discussions.

[349 Greece in Late Antiquity and Early Byzantine Times, A.D. 306-565. Not offered 1982-83.
B. Strauss.]

[350 Early Renaissance Europe Not offered 1982-83.
J. Najemy.]

359 The Early Development of Anglo-American Common Law (also Law 632) Spring. 4 credits.
Prerequisite: 257 or permission of instructor.
Hours to be arranged. C. Holmes.
A survey of the English legal system from the Anglo-Saxon period to the age of Blackstone. The class will

consider the development and the powers of the major legal institutions; the relationship between precedent, equity, and positive legislation in English law; and those constitutional conflicts that vitally affected the nature of the system.

[361 The Culture of the Early Renaissance (also Comparative Literature 361 and History of Art 350) Not offered 1982-83; next offered fall 1983. C. Lazzaro, J. Najemy, and others.]

[365 Medieval Culture, 400-1150 Spring Not offered 1982-83; next offered 1983-84. J. J. John.]

366 Medieval Culture, 1100-1300 Spring, 4 credits. Prerequisite: History 264 or permission of instructor.

T R 2:30-3:45. 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, etc.

[367 Church and State During the Middle Ages Not offered 1982-83; next offered 1983-84. B. Tierney.]

368 Francis of Assisi and the Franciscans Fall, 4 credits. Limited to 12 students. Prerequisite: any introductory course in a medieval subject. W 2:30-4:30. B. Tierney.

A seminar with lectures, class papers, and class discussions. The course will begin with a detailed study of the early lives of Francis in translation, then consider the impact of the Franciscans on the medieval church and vice versa.

[369 The History of Florence in the Time of the Republic, 1250-1530 Not offered 1982-83. J. Najemy.]

[371 History of England under the Tudors and Stuarts Not offered 1982-83. C. Holmes.]

466 Population, Family, and Society in Eighteenth-Century England Fall, 4 credits. Hours to be arranged. L. Bonfield.

The seminar will focus on two themes: the social and economic effects of demographic change in preindustrial England, and the nature and organization of the family. Specific topics to be discussed will be demography, marriage, land ownership, migration, crime, and the poor laws.

[468 Undergraduate Seminar in Renaissance History Not offered 1982-83. J. Najemy.]

[469 Undergraduate Seminar in Reformation History Not offered 1982-83. J. Najemy.]

[475 Seminar in the English Civil War, 1640-1660 Not offered 1982-83. C. Holmes.]

484 Communities in Early Modern Europe Fall, 4 credits.

R 2:30-4:30. S. D. Amussen.
Communities—families, villages, churches, and nations—were essential to social order and social definition in early modern Europe. We will explore the social role of communities as well as the norms, expectations, and rituals that held them together and the conflicts that divided them. Most of the readings will focus on England, but comparative material will be drawn from the continent, and students will be asked to consider how and why the English experience differed from that on the continent.

485 The Transformation of Feudal Society Fall, 4 credits.

Hours to be arranged. C. Holmes.
The seminar will examine the ideas of a number of scholars who have suggested that England experienced a major shift in the nature of social organization and relations in the sixteenth century. Theories about feudal society and its collapse will be tested against contemporary legal and literary sources concerning the political, social, and religious experience of the English people in the middle ages.

[663 Seminar in Renaissance History Not offered 1982-83. J. Najemy.]

664-665 Seminar in Latin Paleography 664, fall; 665, spring, 4 credits each term. Hours to be arranged. J. J. John.

666 Seminar in Medieval History Fall, 4 credits. Hours to be arranged. J. J. John.

669 Seminar in Medieval History Spring, 4 credits. Open to qualified undergraduates. Prerequisite: Latin.

Hours to be arranged. B. Tierney.
Topic for spring 1983: Introduction to medieval canon law.

Modern European History

152 Introduction to Western Civilization Spring, 4 credits. No prerequisite. 152 may not be taken as a freshman seminar.

T R 11:15, plus disc to be arranged. W. Provine.
The second half of the European History survey, 152 covers the seventeenth century to the present day. The major political and social developments and the intellectual heritage of the West are both studied. A considerable portion of the reading is drawn from contemporary sources.

[258 English History from the Revolution of 1688 to the Present Not offered 1982-83. D. A. Baugh.]

352 The End of the Austro-Hungarian Monarchy, 1848-1918 Fall, 4 credits.

M W 9:05; disc W 10:10 and W 1:25. I. V. Hull.
The decline and fall of the multinational empire. Emphasis is on the political and social problems presented to the monarchy both by industrialization and by the increasingly restive subject nationalities (Poles, Czechs, Serbs, Croats). How did the monarchy handle these problems? Why did it fail? Focus is on cultural matters. Readings are drawn from Freud, Schnitzler, Hofmannsthal, Karl Kraus, Joseph Roth, and others.

[353-354 European Intellectual History in the Nineteenth and Twentieth Centuries 353, fall; 354, spring, 4 credits each term. First term is not a prerequisite to the second. Not offered 1982-83. D. C. LaCapra.]

[355 The Old Regime, France in the Seventeenth and Eighteenth Centuries. Not offered 1982-83. S. L. Kaplan.]

356 The Era of the French Revolution and Napoleon Spring, 4 credits.

T R 2:30-3:50. S. L. 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 experience, the tension between the desires to destroy and to create, and the implications of the Revolution for the modern world.

[357 Survey of German History, 1648-1890 Not offered 1982-83; next offered 1983-84. I. V. Hull.]

358 Survey of German History, 1890 to the Present Spring, 4 credits. Open to freshmen. M W 9:05, disc. W 10:10 and W 1:25. I. V. Hull.

The "German problem" is examined. Major topics include tensions caused by rapid industrialization presided over by a preindustrial, political elite; origins of World War I; growth of anti-Semitism; social dislocations of World War I; failure of the socialist revolution of 1918-19; unstable Weimar democracy and the rise of Nazism; the Nazi state; World War II; the two Germanies.

362 Russian History to 1800 Fall, 4 credits. Open to freshmen.

T R 10:10-11:25. W. M. Pintner.
The origin and development of the fundamental social, political, economic, and cultural institutions that determined the nature of contemporary Soviet society.

363 Russian History since 1800 Spring, 4 credits. Open to freshmen.

T R 10:10-11:25. W. M. Pintner.
Nineteenth- and twentieth-century Russia, with emphasis on the major social, political, and economic changes that have transformed Russia since the mid-nineteenth century.

[372 Social and Cultural History of Contemporary Europe Not offered 1982-83; next offered 1983-84. J. H. Weiss.]

383-384 Europe in the Twentieth Century 383, fall; 384, spring, 4 credits each term. History 383 is not a prerequisite to 384.

M F 1:25, and disc to be arranged. J. Weiss.]

An investigation of the major developments in European history since 1900. Emphasis upon the development of democratic political systems and their alternatives. 383 topics include the reorientation of liberalism and democratic 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, and the interaction between politics and social structure. 384 topics include the origins and course of the cold war in Europe, the emergence of welfare states, the movement for European unity, ethnic and regional movements, the crises of 1968, the end of dictatorship in Spain and the Socialist experiment in France, and the politics of the arms race.

[405 Population and History Not offered 1982-83. S. L. Kaplan.]

409 Seminar on Work in Europe and America Fall, 4 credits.

W 2:30-4:30. 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.

[450 Seminar in European Imperialism Not offered 1982-83; next offered 1983-84. I. V. Hull.

[451 Lord and Peasant in Europe: A Seminar in Social History Not offered 1982-83. S. L. Kaplan.]

456 Seminar on Germany, 1890-1918 Spring, 4 credits. Prerequisite: permission of instructor.

M 1:25-3:25. I. V. Hull.
A consideration of the many paradoxes of the Wilhelminian age—the last decades of the monarchy, as it wrestled with economic and social change.

457 Seminar in European Fascism Fall. 4 credits. Prerequisite: permission of instructor. M 1:25-3:25. I. V. Hull.

An attempt to define and understand the social, political, and intellectual origins, mechanisms, and goals of European fascist movements of the 1920s and 1930s by detailed study of German National Socialism, Italian Fascism, and the Action Francaise.

[458 Seminar in Weimar and Nazi Germany, 1918-1945 Not offered 1982-83. I. V. Hull.]

[459 The Making of the English Ruling Class, 1660-1780 Not offered 1982-83. D. A. Baugh.]

467 Seminar in Modern European Political History Spring. 4 credits. Prerequisite: History 383 or permission of the instructor.

Hours to be arranged. J. H. Weiss.
Topic for 1983: Resistance, collaboration, and retribution in World War II. A study of the response of individuals, social groups, and political bodies to the extreme pressure of occupation, imprisonment, civil war, and Nazi extermination actions. The concluding section focuses primarily on the war-crimes trials at Nuremberg.

471 Russian Social and Economic History Spring. 4 credits. M 2:30-4:30. W. M. Pintner.

A seminar devoted to an examination of the transformation of Russia from a backward agrarian nation to the second of the world's superpowers.

474 Topics in Modern European Intellectual History Spring. 4 credits. W 1:25-3:25. D. LaCapra.

Topic for 1982-83: French conservative thought in the nineteenth century. The course will focus on the transformations of "conservative" thought in different genres of writing. Readings will include Maistre, Tocqueville, Balzac, Baudelaire, and Durkheim as well as recent critics such as Sartre, Barthes, Jameson, and Girard.

[476 Documenting the Depression: Film, Literature, and Memory Not offered 1982-83; next offered 1983-84. J. H. Weiss.]

477 Seminar on the Politics of the Enlightenment Fall. 4 credits.

M 2:30-4:30. S. L. Kaplan.
An inquiry into the historical origins of European (especially French) political, social, and economic thought, beginning in the 1680s at the zenith of Louis XIV's absolutism and culminating in the French Revolution a century later. Emphasis is on the relationship 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, etc., as well as from modern scholarly and polemical literature.

[478 Seminar in Eighteenth-Century French Social History Not offered 1982-83. S. L. Kaplan.]

[480 Twentieth Century Britain Not offered 1982-83. D. A. Baugh.]

483 Seminar in Modern European Social History Fall. 4 credits.

Hours to be arranged. J. H. Weiss.
Topic for 1982: Getting ahead: historical perspectives on social mobility and professional advance. Case studies from Modern European and American history

investigate why societies are stratified as they are, how some individuals and groups rise to the top and some fall, how those at the top remain there, and the role of education, professionalism, and ideology in shaping these processes.

[655 Seminar in Eighteenth-Century British History Not offered 1982-83. D. A. Baugh.]

[656 Seminar in Nineteenth-Century British History Not offered 1982-83. D. A. Baugh.]

[671 Seminar in the French Revolution Not offered 1982-83. S. L. Kaplan.]

[672 Seminar in European Intellectual History Not offered 1982-83. D. LaCapra.]

673 Seminar in European Intellectual History Spring. 4 credits. Hours to be arranged. D. LaCapra.

677 Seminar in Russian History Spring. 4 credits. Hours to be arranged. W. M. Pintner.

678 Seminar in Modern European Social History Spring. 4 credits. Hours to be arranged. J. H. Weiss.

Research seminar. Topic for 1983: Education, professional structures, and social stratification since 1800.

[679 Seminar in European History Not offered 1982-83. S. L. Kaplan.]

Latin American History

295 Colonial Latin America Fall. 4 credits. M W F 10:10. T. H. Holloway.

Survey of Latin America from the rise of pre-Columbian civilizations through the European conquest, establishment of the Spanish and Portuguese colonial societies, imperial rivalries in the New World, background of the independence movements, and the achievement of political independence.

296 Latin America in the Modern Age Spring. 4 credits. M W F 10:10. T. H. 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.

347 Agrarian Societies in Latin American History Spring. 4 credits. T R 2:30-3:50. T. H. 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.

[348 Twentieth-Century Brazil (also Sociology 368) Not offered 1982-83. T. H. Holloway, J. Kahl.]

449 Undergraduate Seminar in Latin American History Fall. 4 credits. Prerequisite: permission of instructor.

M 2:30-4:30. T. H. Holloway.
Topic for 1982-83: Race and class in Latin American history.

[649 Seminar in Latin American History Not offered 1982-83. T. H. Holloway.]

Honors and Research Courses

301 Supervised Reading Fall or spring. 2 credits. Open only to upperclass students. Prerequisite: permission of instructor.

302 Supervised Research Fall or spring. 3 or 4 credits. Open only to upperclass students. Prerequisite: permission of instructor.

400 Honors Proseminar Fall or spring. 4 credits. Limited to 15 students. For prospective honors candidates who have permission of instructor. Fall: T 2:30, M. Kammen. Spring: W 2:30-4:30, R. L. Moore.

An introduction to historical writing and modes of research, emphasizing the possibilities and limitations of historical inquiry.

401 Honors Guidance Fall or spring. 4 credits. Prerequisites: History 400 and permission of instructor.

703-704 Supervised Reading 703, fall; 704, spring. 4 credits each term. Open only to graduate students. Prerequisite: permission of instructor.

Society for the Humanities Seminars of Interest to History Students

The Language(s) of Politics in the Renaissance (Society for the Humanities 425-426) 425, fall; 426, spring. J. Najemy.

Scientists and Political Revolutions (Society for the Humanities 415-416) 415, fall; 416, spring. B. Reeves.

Eighteenth-Century Scottish Moral Science (Society for the Humanities 417) Fall. D. Lieberman.

Cultural History as a Subversive Activity (Society for the Humanities 423) Fall. S. Buck-Morss

History of Art

A. Ramage, chairman and director of undergraduate studies; T. M. Brown, R. G. Calkins, E. G. Dotson, R. C. Hobbs, H. P. Kahn, C. Lazzaro, T. W. Leavitt, N. Neaher, S. J. O'Connor, A. S. Roe, M. W. Young

The visual arts—painting, sculpture, and architecture—are a principal mode of human expression. Art historians investigate works of art to understand them in their artistic, historic, and cultural contexts. Courses offered by the department cover the mainstream of Western art (classical, medieval, Renaissance, baroque, nineteenth and twentieth century) and non-Western art, including Oriental and tribal traditions. Art history is an integral part of interdisciplinary programs such as the Archaeology Program, Africana Studies, the China-Japan Program, Medieval Studies, and the Southeast Asia Program.

Course offerings vary in scope from introductory courses designed to acquaint the student with the ways of seeing, discussing, and writing about works of art, to advanced seminars that concentrate on more specialized topics. The resources of the Herbert F. Johnson Museum of Art frequently serve as the focus for discussion sections and research assignments.

The Major

Students who wish to major in the history of art should complete two courses in the Department of

History of Art by the end of their sophomore year. These courses should be completed with a grade of C or better and are prerequisites for admission to the major, but may not be counted toward fulfillment of the major requirements. In their junior and senior years majors work closely with their advisers to determine acceptable programs in the major field. The program should include at least 30 credits in history of art courses (24 of which must be at the 300 level or higher) and a minimum of two additional courses in this department or in a related area approved by the major adviser. Courses at the 200 level or above taken in the freshman or sophomore years may be counted toward the major provided that the courses are in addition to those taken as prerequisites to the major. Majors are encouraged to take studio courses offered by the Department of Art, but these are considered to be electives and do not fulfill major requirements.

Honors. In order 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 B for all courses taken in the department. Admission into the program requires application to the department chairperson 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 among the regular requirements History of Art 493 and 494, which entail the preparation of a senior thesis. This program may not be condensed into one semester.

Freshman Seminars

The history of art courses listed below are offered in the Freshman Seminar Program and as freshman electives, but may not be used to satisfy the distribution requirement.

103 Freshman Seminar in Visual Analysis Fall or spring. 3 credits.

Fall: M W F 10:10, 12:20; T R 10:10-11:25 or 12:20-1:35. Spring: M W F 9:05, 10:10, 11:25, or T R 10:10-11:25. Staff.

The nature of man-made objects, from tools to cities, including such conventional categories as painting, sculpture, and architecture is examined. Students are introduced to the problems of perceiving such objects and articulating the visual experience. The course is organized by media and themes rather than chronology, and it is a supplement, not a prerequisite, to art history.

104 How to Look at Works of Art Fall. 3 credits. Not open to students who have taken History of Art 103.

M W F 9:05. Staff.

Several major works of art, primarily paintings, are examined in detail. The cultural and historical contexts in which the works were created and their unique qualities as works of art are considered.

[105 Myth and Image in Modern Society (also Sociology 103) 3 credits. Not offered 1982-83.]

106 Art in a Landscape: Traditional Arts in Southeast Asia Spring. 3 credits.

M W F 11:15. S. J. O'Connor.

The traditional arts in Southeast Asia, such as textiles, ceramics, architecture, sculpture, and puppet theatre will be examined in varying social and physical contexts. The aim of the course will be to introduce the works themselves and to explore the way they are, or were, implicated in daily life. We will encounter works created in the palaces and monasteries of the centralized kingdoms, as well as those that are part of the village world. Among the topics to be discussed: Wayang theatre, a world of shadows; batik and ikat, the dyer's art; the life of Buddha in art; stoneware and porcelain ceramics from Thailand, Cambodia, and Vietnam; ritual art in Bali; and the cosmic mountain in architecture. Emphasis will be on writing short papers.

107 Principles of Architecture Fall. 3 credits.

M W F 11:15. T. M. Brown.

Through analysis, readings, and discussions; examination of some theoretical and practical aspects of architecture as it affects our lives.

Introductory Courses

The following courses are designed to introduce students to the processes and methods of art history by means of a systematic examination of a closely related body of visual material. The courses need not be taken in any particular sequence. One 200-level course is normally the prerequisite to courses at the 300 level.

215 Introduction to Art History: African Art Spring. 3 credits.

T R 12:20-1:35. N. Neahr.

The cultural foundations of art in sub-Saharan Africa, including an examination of masking traditions; royal arts; body aesthetics and figurative sculpture; and domestic and sacred architecture.

220 Introduction to Art History: The Classical World (also Classics 220) Fall. 3 credits.

J. Coleman.

See description under Classics.

[221 Introduction to Art History: Minoan-Mycenaean Art and Archaeology (also Classics 221) 3 credits. Not offered 1982-83.]

230 Introduction to Art History: Monuments of Medieval Art Spring. 3 credits.

T R 10:50-12:05. R. G. Calkins.

An introduction to the approaches to art history through a study of selected works of art from the Middle Ages: architecture, sculpture, painting, manuscript illumination, metal work, and ivory.

240 Introduction to Art History: The Renaissance Fall. 3 credits.

M W F 9:05, plus one discussion section, M 10:10, 1:25, 2:30, or T 9:05. E. G. Dotson.

A study of selected works of architecture, sculpture, and painting in Italy and northern Europe from about 1300 to about 1575. Major artists considered include Donatello, Jan van Eyck, Michelangelo, and Brueghel. Various approaches to the understanding of works of art and various interpretations of the Renaissance are explored.

250 Introduction to Art History: The Baroque Era Spring. 3 credits.

M W F 10:10. C. Lazzaro.

A survey of the art and architecture of Italy, France, Spain, Holland, and Flanders in the seventeenth century. A few artists, such as Bernini, Rembrandt, and Velazquez, will be emphasized and placed within the context of the major trends and ideas of the time. In addition to distinguishing artistic styles and aesthetic concerns, the course will consider other cultural factors shaping the work of art, such as patronage, religion, politics, and economics.

261 Introduction to Art History: Modern Art Fall or spring. 3 credits.

Fall: T 10:10, plus one disc, T 12:20, 2:30, R 10:10, 12:20, or 2:30; R. C. Hobbs. Spring: M W F 9:05, staff.

A topical discussion of some of the major artists, movements, and ideas that make up modern art. Emphasis is on European and American painting of the nineteenth and twentieth centuries.

[270 Introduction to Art History: American Art 3 credits. Not offered 1982-83.]

280 Introduction to Art History: Asian Traditions Fall. 3 credits.

M W F 11:15. S. J. O'Connor.

Designed to introduce students to the varied responses of the Asian artist in different social and geographical contexts. By selective focus and emphasis rather than broad survey, the student will

gain some familiarity with the Javanese shadow-puppet theatre, high-fired ceramics, Chinese landscape painting, Buddhist sculpture and painting of Thailand, Indian miniature paintings, and Japanese prints. A number of class sessions will meet in the Herbert F. Johnson Museum of Art.

290 Introduction to Art History: Architecture and Environment Fall. 3 credits. Limited to 50 students.

M W 12:20, plus one disc, F 9:05 or 12:20.

T. M. Brown.

Emphasis is placed on the social and humanistic aspects of nineteenth- and twentieth-century design. After a lengthy introduction to the architectural categories of space, form, function, and structure, the ideas and forms that have influenced the physical shape of the contemporary world are considered.

Intermediate Courses

The following courses are intended primarily for upperclass students, qualified sophomores, and first-year graduate students. Except as noted, all require as a general prerequisite one course at the 200 level. Some of the courses have discussion sections.

311 Techniques and Materials: Painting Spring. 4 credits. Limited to 30 students.

T R 10:10-12:05. H. P. Kahn.

The techniques of painting in their historical and formal contexts; analytical research of materials and conservation.

313 Books, Prints, and the Graphic Image Fall. 4 credits. Limited to 30 students.

T R 10:10-12:05. H. P. Kahn.

The history and formal evolution of letters, types, illustrations, books, and publications; theories of design and message.

[320 The Archaeology of Classical Greece (also Classics 320) 4 credits. Not offered 1982-83.

A. Ramage.]

[321 The Archaeology of Cyprus (also Classics 321) 4 credits. Not offered 1982-83.]

322 Arts of the Roman Empire (also Classics 350) Spring. 4 credits

M W F 9:05. A. Ramage.

The visual arts in the service of the first world state. The course starts with the Etruscan and Republican period but concentrates on monuments of the Imperial era in Italy and the provinces until the time of Constantine.

[323 Painting in the Greek and Roman World (also Classics 323) 4 credits. Not offered 1982-83.

A. Ramage.]

[324 Architecture in the Greek and Roman World (also Classics 324) 4 credits. Not offered 1982-83.]

[325 Greek Vase Painting (also Classics 325) 4 credits. Not offered 1982-83.

A. Ramage.]

[326 Art and Archaeology of Archaic Greece (also Classics 326) 4 credits. Not offered 1982-83.]

[327 Greek and Roman Coins (also Classics 327) 4 credits. Not offered 1982-83.

A. Ramage.]

328 Greeks and Their Eastern Neighbors (also Classics 322) Spring. 4 credits.

J. Coleman.

See description under Classics.

[329 Greek Sculpture (also Classics 329) 4 credits. Not offered 1982-83.

A. Ramage.]

[330 Art in Pompeii: Origins and Echoes (also Classics 330) 4 credits. Not offered 1982-83.]

[332 Architecture in the Middle Ages 4 credits. Not offered 1982-83.
R. G. Calkins.]

[333 Early Medieval Art and Architecture 4 credits. Not offered 1982-83.
R. G. Calkins.]

[334 Romanesque Art and Architecture 4 credits. Not offered 1982-83.
R. G. Calkins.]

[335 Gothic Art and Architecture 4 credits. Not offered 1982-83.
R. G. Calkins.]

[336 Late Medieval Italian Art and Architecture 4 credits. Not offered 1982-83.
R. G. Calkins.]

[337 The Medieval Illuminated Book 4 credits. Not offered 1982-83.
R. G. Calkins.]

[341 Flemish Painting 4 credits. Not offered 1982-83.
R. G. Calkins.]

[342 Medieval and German Renaissance Art 4 credits. Not offered 1982-83.
R. G. Calkins.]

[343 Italian Renaissance Art of the Fifteenth Century. 4 credits. Not offered 1982-83.]

[344 Italian Renaissance of the Sixteenth Century 4 credits. Not offered 1982-83.
C. Lazzaro.]

[345 Sculpture of the Italian Renaissance 4 credits. Not offered 1982-83.]

[350 The Culture of the Early Renaissance (also History 361 and Comparative Literature 361) 4 credits. Not offered 1982-83.
C. Lazzaro, J. Najemy.]

[351 Introduction to the Culture of the Later Renaissance (also History 364 and Comparative Literature 362) 4 credits. Not offered 1982-83.
E. G. Dotson, C. Kaske.]

352 Dutch Painting in the Seventeenth Century Fall. 4 credits. Limited to 40 students.
T R 1:25-2:15, plus disc, W 10:10 or 11:15.
C. Lazzaro.

A study of the flourishing of painting in seventeenth-century Holland, with emphasis on the major artists—Rembrandt, Hals, Vermeer—and on the traditions of still-life, genre, and landscape painting. Context and content as well as stylistic development will be considered.

[355 French Art of the Sixteenth and Seventeenth Centuries 4 credits. Not offered 1982-83.
E. G. Dotson.]

[357 European Art of the Eighteenth Century 4 credits. Not offered 1982-83.
E. G. Dotson.]

359 Major Masters of the Graphic Arts Spring. 4 credits. Limited to 30 students.
T R 2:30-3:45. H. P. Kahn, C. Lazzaro.
The range of graphic media used by the great masters of our tradition, especially Durer, Brueghel, Rembrandt, Goya, Picasso, and their contemporaries.

[361 Modern Artists and Their Critics 4 credits. Not offered 1982-83.]

362 Topics in Modern Art Fall. 4 credits.
M W F 1:25. Staff.
Topic for fall 1982 to be announced.

[364 Modern Sculpture 4 credits. Not offered 1982-83.
R. C. Hobbs.]

[365 Art from 1940 to the Present 4 credits. Not offered 1982-83.
R. C. Hobbs.]

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.
Scott.

An 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 urban-scape of the nation's capital. The vocabulary of architectural analysis and criticism will be taught. Field trips required.

[376 Painting and Sculpture in America: 1850-1950 4 credits. Not offered 1982-83.
T. W. Leavitt.]

[378 American Architecture, the City, and American Thought: 1850-1950 4-credits. Not offered 1982-83.
T. M. Brown.]

379 Art and Technology: 1850-1950 Spring. 4 credits.

T R 12:20-1:35. T. M. Brown.
Approached topically, an examination of the issues of two- and three-dimensional visual art and design within the context of a mass-technological world. Discussion will revolve around topics presented, as well as required weekly reading.

380 Introduction to the Arts of China Fall. 4 credits.

M W 12:20, plus disc on T. M. W. Young.
A one-semester course designed for those students who have had no previous experience in art history or knowledge of China. Although the course has a general chronological framework, it is not a survey of Chinese art but an examination of selected masterpieces of Chinese expression in the visual arts, from ancient bronze vessels to modern landscape paintings. Special emphasis will be put on the art of the later centuries, and the course will end with a discussion of art in contemporary China. The collection of the Herbert F. Johnson Museum of Art will be used in conjunction with the discussion sections. There will be two short papers and a final take-home examination.

[381 Buddhist Art in Asia 4 credits. Not offered 1982-83.
S. J. O'Connor.]

[383 The Arts of Early China 4 credits. Not offered 1982-83.
M. W. Young.]

[384 The Arts of Japan 4 credits. Not offered 1982-83.
M. W. Young.]

[385 Chinese Painting 4 credits. Not offered 1982-83.
M. W. Young.]

[386 Studies in Indian and Southeast Asian Art 4 credits. Not offered 1982-83.
S. J. O'Connor.]

Seminars

Courses at the 400 level are open to upperclass students, majors, and graduate students. Seminars at the 500 level are primarily for graduate students, but qualified upperclass students may be admitted. All seminars involve the writing and presentation of research papers. Enrollment is limited, and permission of the department or instructor is normally

required. Students may repeat 500-level courses that cover a different topic each semester.

401 Independent Study Fall or spring. 2-4 credits. May be repeated for credit. Prerequisite: permission of a department faculty member.

Hours to be arranged. Staff.
Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

402 Independent Study Fall or spring. 2-4 credits. May be repeated for credit. Prerequisite: permission of a department faculty member.

Hours to be arranged. Staff.
Individual investigation and discussion of special topics not covered in the regular course offerings, by arrangement with a member of the department.

[405 Original Works of Art 4 credits. Not offered 1982-83.]

[406 Introduction to Museums 2 credits. Not offered 1982-83.
T. W. Leavitt.]

[421 History of Art Criticism 4 credits. Not offered 1982-83.]

423 Ceramics Spring. 4 credits. Prerequisite: permission of instructor.

W 2:30-4:25. A. Ramage.
Greek and Roman pottery specimens from several Near Eastern and Mediterranean sites will be studied to provide direct experience in one of the basic prerequisites of archaeological excavation—the identification and dating of pottery types. A report, delivered in class, will concern ancient ceramic materials or particular types and periods. Practical experience in making and decorating pottery will be encouraged.

[431 Greek Sculpture (also Classics 431) 4 credits. Not offered 1982-83.
A. Ramage.]

448 Mannerism and the Early Baroque Era in Italy Fall. 4 credits.

W 2:30-4:30. E. G. Dotson.
Topic for Fall 1982: Paradox, wit, and humor in sixteenth-century painting, sculpture, architecture, and garden art.

[449 Studies in Italian Renaissance Art 4 credits. Not offered 1982-83.
C. Lazzaro.]

[450 History of the Book (also English 450) 4 credits. Not offered 1982-83.
H. P. Kahn, D. Eddy.]

[452 Studies in English Art 4 credits. Not offered 1982-83.]

454 The Art and Poetry of William Blake (also English 448) Spring. 4 credits.
M 2:30-4:25. J. Viscomi.

An examination of the complete Blake: printmaker, painter, and poet. Special attention will be paid to the illuminated books, color-print drawings, and tempera paintings, and the techniques by which they were made.

[456 Literature and the Arts in Sixteenth-Century France (also French 456) 4 credits. Not offered 1982-83.

E. G. Dotson, E. P. Morris.]

[458 Classic and Romantic Art 4 credits. Not offered 1982-83.
E. G. Dotson.]

[459 The Romantic Movement in Poetry, Painting, and Graphic Arts (also English 442) 4 credits. Not offered 1982-83.
J. Viscomi.]

464 Studies in Modern Art Spring. 4 credits.

Hours to be arranged. Staff.
Topic for spring 1983 to be announced.

465 Problems in Modern Art and Architecture Spring. 4 credits. Limited to 15 students. Prerequisite: permission of the instructor.

M 12:20-2:15. T. M. Brown.
Topic for spring 1983 to be announced.

[474 American and European Decorative Arts from the Renaissance Period to the Early Nineteenth Century 4 credits. Not offered 1982-83.

A. S. Roe.]

[475 The Earliest Arts in Colonial America: The Seventeenth Century 4 credits. Not offered 1982-83.

A. S. Roe.]

476 Seminar on American Art: 1840-1940

Spring. 4 credits.
M 2:30-4:30. T. W. Leavitt.

An exploration of aspects of American painting represented in the collection of the Herbert F. Johnson Museum of Art. Works will be examined in many different contexts.

[481 The Arts in Modern China 4 credits. Not offered 1982-83.

M. W. Young.]

482 Ceramic Art of Asia Fall. 4 credits.

R 2:30-4:25. S. J. O'Connor.
The Herbert F. Johnson Museum of Art's collection of Asian ceramics will provide a principal resource of study. Lectures, reports, and discussions.

[483 Chinese Art of the T'ang Dynasty 4 credits. Not offered 1982-83.

M. W. Young.]

[486 Studies in Chinese Painting 4 credits. Not offered 1982-83.

M. W. Young.]

488 Traditional Arts of Southeast Asia Spring. 4 credits.

R 2:30-4:25. S. J. O'Connor.
The course will focus on the art and archaeology of Thailand.

493 Honors Work Fall or spring. 4 credits. Intended for senior art history majors who have been admitted to the honors program. S-U grades only.

Hours to be arranged. Staff.
Basic methods of art historical research will be discussed and individual readings assigned, leading to the selection of an appropriate thesis topic.

494 Honors Work Fall or spring. 4 credits. Prerequisite: History of Art 493.

Hours to be arranged. Staff.
The student, under faculty direction, will prepare a senior thesis.

[520 The Empire in Transition 4 credits. Not offered 1982-83.

A. Ramage.]

531 Problems in Medieval Art and Architecture Spring. 4 credits.

T 2:30-4:30. R. G. Calkins.
Topic for spring 1983: Insular art and architecture in its context 563-1065.

[540 Seminar in Renaissance Art 4 credits. Not offered 1982-83.]

550 Seminar in Baroque Art Fall. 4 credits.
M 2:30-4:30. C. Lazzaro
Topic for fall 1982: Art theory, artistic creativity, and the artist's self-image in the Renaissance and baroque. An investigation of the status and position of

the artist and the perceived nature of artistic activity in the Renaissance and baroque periods. These ideas and developments will be studied against the background of writings by and about artists and of artists' images of themselves in both self-portraits and allegories. The changing role of the artist and the changed perception of the nature of artistic creativity will be at the core of these investigations. Corresponding with the developments of the periods themselves, the Renaissance will be studied chiefly through writings and the baroque through images.

[564 Problems in Modern Art: Post-1940 American Art 4 credits. Not offered 1982-83.

R. C. Hobbs.]

[580 Problems in Asian Art 4 credits. Not offered 1982-83.

S. J. O'Connor.]

591-592 Supervised Reading 591, fall; 592, spring. 4 credits. May be repeated for credit. Limited to graduate students.

Staff.

[594 Methodology Seminar I 4 credits. Not offered 1982-83.]**595 Methodology Seminar II** Fall. 4 credits. Prerequisite: permission of the instructor. S-U grades only.

T 2:30-4:25. R. G. Calkins.
An examination of various methods of investigation in the history of art and architecture. Required of all graduate students.

[596 Problems in Art Criticism 4 credits. Not offered 1982-83.

S. J. O'Connor.]

Related Courses in Other Departments**Cultural History as a Subversive Activity (Society for the Humanities 432)****A Case Study in Materialist Pedagogy: Nineteenth-Century Paris (Society for the Humanities 424)****The Age of Symbolism (Russian 498)**

See courses listed under Classics.

Indonesian

See Modern Languages, Literatures, and Linguistics, p. 146.

FALCON Program:

J. U. Wolff, 307 Morrill Hall, 256-4864.

Italian

See Modern Languages, Literatures, and Linguistics, p. 146.

Japanese

See Department of Asian Studies, p. 102, and Modern Languages, Literatures, and Linguistics, p. 146.

FALCON Program:

E. Jordan, 321 Morrill Hall, 256-6457.

Javanese

See Modern Languages, Literatures, and Linguistics, p. 146.

Latin

See Classics, p. 112.

Linguistics

J. W. Gair, director of undergraduate studies, 407 Morrill Hall, 256-5110

See Modern Languages, Literatures, and Linguistics, p. 146.

Mathematics

A. Nerode, chairman; I. Berstein, L. Billera, J. Bramble, associate chairman and director of undergraduate studies (301 White Hall, 256-4185), K. Brown, L. Brown, S. Chase, M. Cohen, R. Connelly, R. Dennis, E. Dynkin, C. Earle, R. Farrell, P. Fejer, M. Fisher, W. Fuchs, S. Gelbart, L. Gross, R. Hamilton, D. Henderson, J. Hubbard, J. Hwang, P. Kahn, H. Kesten, A. Knapp, S. Lichtenbaum, G. Livesay, T. McConnell, M. Morley, L. Payne, R. Platek, A. Rosenberg, O. Rothaus, A. Schatz, S. Sen, R. Shore, B. Speh, F. Spitzer, M. Steinberger, R. Strichartz, M. Sweedler, L. Wahlbin, J. West, A. C. Zitronenbaum

Mathematics is the language of modern science; basic training in the discipline is essential for those who wish to understand, as well as for those who wish 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 Cornell 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 wish 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, 6, graduate courses. The subject matter of courses is 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 600-level courses, final grades will be S-U only, with the exception of 690. In courses with numbers below 600, students will receive letter grades, with the exception of non-mathematics majors who have requested an S-U 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 of Freshmen in the front section of this Announcement.

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.

The prerequisites and requirements below apply to students who enroll in the mathematics major after January 1, 1981. Students who enrolled before that date may fulfill either the requirements below or the old requirements.

Prerequisites: The preferred prerequisites are Mathematics 221-222 or 293-294. A unit on infinite series is required. Before Fall 1982, such a unit is offered in Mathematics 122, 293, and 217. In Fall 1982 it will also be offered in 293. Starting Fall 1982, it will be offered in 112, 122, 192, and, for a two-year transition period, in 217. (Students with two semesters of advanced placement usually have had the equivalent of 217.) 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. Alternate prerequisites are Mathematics 214-215-216- 217-218-231, normally with grades of 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 411 or 413, 412 or 414, 421, 422, 423, 418.
- 4) Further high-level mathematical courses. Any one of the following is sufficient:
 - a) three mathematics courses numbered 371 or higher, other than those used to satisfy the previous two requirements. Computer Science 621 and/or 622 may also be used toward satisfying this requirement.
 - b) four Computer Science courses numbered 314 or higher.
 - c) four Operations Research and Industrial Engineering courses numbered 320 to 383 or 431 to 472, but not 350.
- 5) One course dealing with mathematical models. Any one of the following is sufficient:
 - a) Mathematics 305 (not offered every year).
 - b) Physics 208, 213, or 217.
 - c) Computer Science 211, provided no Computer Science course has been used toward satisfying the previous requirement.
 - d) One course other than Physics 112 or 207 from outside mathematics with serious mathematical content and dealing with scientific matters, provided the course has not been used toward satisfying the previous requirement.

Major advisers can alter these requirements upon request of an advisee, provided the intent of the requirements is met.

Sample Major Programs

Below are some suggestions for what the schedule of a student with a mathematics major might look like. Many variations are possible.

For Graduate School in Mathematics

First two years: Mathematics 111-122-221-222, Computer Science 100, Physics 207-208.

Last two years: Mathematics 433-434, 413-414, 453-454; two of 418, 428, 471.

The sophomore courses 221-222 are more suitable than 293-294 in this case. A student planning to enter graduate school may get by with 411-412 and 431-432 instead of the honors versions 413-414 and 433-434, but the honors versions are strongly recommended.

For Many Technical Careers

First two years: Mathematics 111-122-221-222 or 191-192-293-294, Computer Science 100-211, Physics 112-213 or 207-208.

Last two years: Mathematics 431-336, 421-422, 428, 471-472.

Two or more semesters of computer science are highly recommended.

For Emphasis on Computer Science

First two years: Mathematics 111-122-221-222, Computer Science 100-211.

Last two years: Mathematics 431-432, 421-422, Computer Science 314, 321, 410, 414, 481.

Requirement 5 is met by Computer Science 481 in this sample program. Students interested in computer science should give consideration to a double major in mathematics and computer science.

For Emphasis on Operations Research

First two years: Mathematics 111-122-221-222 or 191-192-293-294, Computer Science 100-211.

Last two years: Mathematics 431-432, 421-422, 471; OR&IE: 320, 321, 361; two of 431, 432, 435; and possibly 462 or 471.

For Prelaw or Premed (first example)

First two years: Mathematics 111-122-221-222, Computer Science 100, Physics 207-208.

Last two years: Mathematics 431-336, 411-421, 381, 471-472.

The sophomore courses 221-222 are recommended rather than 293-294 in this sample program because they provide better preparation for 411.

For Prelaw or Premed (second example) or Prebusiness

First two years: Mathematics 111-112-214-215-216-217-231, Computer Science 100-211.

Last two years: Mathematics 332-336, two of 411-421-418, and also 381, 403, 451.

A course in statistics is also strongly recommended.

Honors. Honors in mathematics will be awarded on the basis of a high level of performance in departmental courses. Further requirements, if any, will be announced during the year.

Distribution Requirement

The distribution requirement is satisfied in mathematics by any 6 credits, not including more than one course from 100, 105, 107, 403. Computer Science 100 may be used for three of these credits. The mathematics distribution requirement is also satisfied by a score of 3 on the CEEB calculus BC examination. Mathematics 109 and ALS 115 (College of Agriculture and Life Sciences) do not satisfy the requirement.

Basic Sequences

Precalculus

Description	Course Numbers
1) Algebra and trigonometry to prepare students for calculus	Mathematics 109* or Agriculture and Life Sciences 5*
2) Algebra, analytic geometry, elements of calculus	Agriculture and Life Sciences 115**

*Mathematics 109 and ALS 5 do not carry credit for graduation.

**Students who want a second semester of mathematics after ALS 115 may take Mathematics 107 or 105 or, if they need more calculus, 111 or

113. They may not, however, receive credit for both ALS 115 and Mathematics 108.

Calculus

Description	Mathematics Course Numbers
1) Standard 3-semester sequence for students who do not expect to take advanced courses in mathematics	111 (or 113)-112-214-215-216-217-218
2) Usual sequence for prospective mathematics majors and others who expect to take advanced courses in mathematics	111 (or 113)-122-221-222
3) Calculus for engineers (also taken by some physical science majors)	191 (or 193)-192-293-294

Mathematics 191 (or 193) may be substituted for 111 (or 113) in sequences 1 and 2. Mathematics 113 and 193 are variants of 111 and 191 for students who have had some calculus in high school but have not received advanced placement. 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 Mathematics 112 is exceptional may switch to sequence 2 and take 221, but 217 must then be taken concurrently.

Special Purpose Sequences

Description	Mathematics Course Numbers
1) Finite mathematics and calculus for biology majors	105-106
2) Finite mathematics and calculus for students in the more descriptive areas of the social sciences. (This is normally a terminal sequence. It does not fulfill the mathematics requirement for biology majors.)	107-108
3) Other possible finite mathematics and calculus sequences	105-111 or 107-111
4) One semester of calculus	108 (possible without 107)

Students who wish 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, or, in exceptional circumstances (with consent of the instructor), with 214-218. Although 108 is normally a terminal course, students who do extremely well in it may take 112.

Switching between calculus sequences is often difficult, especially at the 200 level. Students should not attempt such a switch without consulting the associate chairman.

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.

105 and 107
108 and ALS 115 (College of Agriculture and Life Sciences)
106, 108, 111, 113, 191, 193
112, 122, and 192
112 and 217**
214 and 293
216 and 294
217 and 293†
218 and 293

221 and 214
221 and 216
216 and 192
217 and 122
221, 294, and 231
372 and 472

**This pair of courses will have overlapping content beginning fall, 1982.

†This pair of courses will have overlapping content in fall 1982.

Basic Sequences

103 Mathematics for Architects (also Architecture 221)

Fall, 3 credits.

Lec, T 10:10, plus 2 recs to be arranged.

Rudiments of calculus and introduction to vectors and matrices.

105 Finite Mathematics for Biologists (also Theoretical and Applied Mechanics 105)

Fall, 3 credits.

Prerequisite: three years of high school mathematics including trigonometry and logarithms.*

Lecs, T R 12:20, plus 2 hours to be arranged.

Prelims: 7:30 p.m. Oct. 5, Nov. 9, Dec. 2.

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.

106 Calculus for Biologists (also Theoretical and Applied Mechanics 106)

Spring, 3 credits.

Prerequisite: Mathematics 105 or Mathematics 109 or ALS 115 or consent of instructor. (A strong background in functions is required.) Mathematics 111, rather than 106, is recommended for those planning to take Mathematics 112.*

Lecs, T R 11:15, plus 2 hours to be arranged.

Prelims: 7:30 p.m. Feb. 17, Mar. 17, Apr. 21.

Introduction to differential and integral calculus, partial derivatives, elementary differential equations. Examples from biology are used.

107 Finite Mathematics

Fall and summer, 3 credits.

Prerequisite: three years of high school mathematics, including at least two years of high school algebra. This course cannot be used toward fulfillment of the mathematics requirement for biology majors.*

Lecs, T R 12:20, plus 2 hours to be arranged.

Prelims: 7:30 p.m. Sept. 23, Oct. 28, Dec. 2.

Functions, enumeration, permutations and combinations, probability, vectors and matrices, Markov chains.

108 Introduction to Calculus

Spring, 3 credits.

Intended primarily for students in the more descriptive areas of the social sciences. Prerequisite: three years of high school mathematics including trigonometry and analytic geometry of the line and circle. Recommended: Mathematics 107. This course does not normally provide adequate preparation for any higher course in mathematics, nor can it be used toward fulfillment of the mathematics requirement for biology majors.*

Lecs, T R 12:20, plus 2 hours to be arranged.

Prelims: 7:30 p.m. Feb. 17, Mar. 17, Apr. 21.

Behavior of functions, introduction to differential and integral calculus, elementary differential equations.

109 Precalculus Mathematics

Fall and summer, 3 transcript credits only; cannot be used toward graduation.

M W F 11:15.

This course is designed to prepare students for Mathematics 111 or 108. Algebra, trigonometry, logarithms, and exponentials are reviewed.

111 Calculus

Fall, spring, and summer, 4 credits.

Intended for students who have a good background in high school mathematics but who have not studied calculus (see Mathematics 113.) Prerequisite: Mathematics 109 or three years of high school mathematics including trigonometry.*

Fall: lecs, M W F 12:20, plus 2 hours to be arranged.

Spring: lecs, M W F 11:15, plus 2 hours to be arranged.

Prelims: fall, 7:30 p.m. Oct. 7, Oct. 26, Dec. 7; spring, 7:30 p.m. Feb. 15, Mar. 15, Apr. 19.

Plane analytic geometry, differentiation and integration of algebraic and trigonometric functions, applications of differentiation, logarithmic and exponential functions.

112 Calculus

Fall, spring, and summer, 4 credits.

Prerequisites: Mathematics 106 or 111 or 113 with a grade of C or better, or exceptional performance in Mathematics 108. Those who do extremely well in Mathematics 111 or 113 should take 122 instead of 112, unless they plan to continue with Mathematics 214-218.*

Fall: lecs, M W F 11:15, plus 2 hours to be arranged.

Spring: lecs, M W F 10:10, 11:15, 12:20, plus 2 hours to be arranged.

Prelims: fall, 7:30 p.m. Oct. 7, Oct. 26, Dec. 7; spring, 7:30 p.m. Feb. 15, Mar. 15, Apr. 19.

Applications of integration, methods of integration, plane curves and polar coordinates, vectors and solid analytic geometry, infinite series, complex numbers, introduction to partial derivatives.

113 Calculus

Fall, 4 credits. Prerequisite:

Mathematics 109 or three years of high school mathematics, including trigonometry. This course covers the same material as Mathematics 111, but it is intended for students who have had enough calculus to be able to differentiate polynomial functions.*

Lecs, M W F 11:15 or 12:20, plus 2 hours to be arranged. Prelims: 7:30 p.m. Oct. 7, Oct. 26, Dec. 7.

122 Calculus

Fall or spring, 4 credits. Prerequisite:

performance at a high level in Mathematics 111 or 113 or permission of the department. Students planning to continue with Mathematics 214-218 are advised to take 112 instead of this course.*

Fall: M W F 10:10, 11:15, or 12:20. Spring: M W F 9:05 or 10:10.

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.

191-193 Calculus for Engineers

Fall, 4 credits.

Prerequisite: three years of high school mathematics, including trigonometry. Mathematics 193 is a course parallel to 191 for students who have had a substantial amount of calculus in high school but who did not place out of 191. Although the same topics will be covered in 193 as in 191, some may be treated in greater depth in 193.*

191: lecs, M W F 11:15, plus 2 hours to be arranged.

193: lecs, M W F 9:05 or 11:15, plus 2 hours to be arranged.

Prelims: 7:30 p.m. Oct. 7, Oct. 26, Dec. 7.

Plane analytic geometry, differential and integral calculus, and applications.

192 Calculus for Engineers

Fall, spring, and summer, 4 credits. Prerequisite: Mathematics 191 or 193.*

Fall: lecs, M W F 9:05 or 11:15, plus 2 hours to be arranged.

Spring: lecs, M W F 9:05 or 11:15, plus 2 hours to be arranged.

Prelims: fall, 7:30 p.m. Oct. 7, Oct. 26, Dec. 7; spring, 7:30 p.m. Feb. 15, Mar. 15, Apr. 19.

Methods of integration, polar coordinates, vectors and parametric equations, vector functions of one variable, infinite series, complex numbers, introduction to partial derivatives.

213 Calculus

Summer.

This course covers the same material as 214-215-216-217-218.

214-215-216-217-218

Fall or spring; 1 credit each.

Prerequisite: Mathematics 112 or 122. These courses are taught as a unified third-semester calculus package, but students may register for any subset of these courses in accordance with their interests and needs, subject to the credit regulations explained at the end of the introduction. Students in doubt about their choices should consult their advisers and the course instructors. The courses are offered in sequence (though not necessarily in numerical order) through the semester, and each lasts three to four weeks. The expected order is Mathematics 218, 216, 214, 215, but some variation is possible. (Note: Infinite series and complex numbers are prerequisites for 214 and 215. Multivariable calculus is prerequisite for 216.) Beginning in fall 1982, the content of 217, Infinite Series and Complex Numbers, will be taught in 112. For a two-year transition period, 217 will still be offered, primarily for students who took 112 before fall 1982. It will be taught during the same four-week period as 218, Multivariable Calculus, which is intended for students who take 112 during fall 1982 or thereafter.

Lecs, M W F 10:10, plus 2 hours to be arranged.

All students should attend the first lecture of the semester to learn the order in which the course will be taught, the dates for each course, the examination dates, and the structure of the whole. Prelims will be given some evenings at 7:30 p.m.

214 Introduction to Differential Equations

Prerequisite: Mathematics 217 or equivalent material from Mathematics 112 or 122.

Simple first- and second-order equations with applications; series solutions. See also the entire 214-215-216-217-218 description above.

215 Differential Equations (Continued)

Prerequisites: Mathematics 214 and 217 or equivalent material from Mathematics 112, 122, or 293.

Introduction to numerical methods of solution, systems of differential equations, elementary partial differential equations, and boundary value problems. Applications. See also the entire 214-215-216-217-218 description above.

216 Vector Analysis

Vectors, vector valued functions, line integrals. See also the entire 214-215-216-217-218 description above.

217 Infinite Series and Complex Numbers

See the entire 214-215-216-217-218 description above.

218 Multivariable Calculus

See the entire 214-215-216-217-218 description above.

221 Linear Algebra and Calculus

Fall or spring, 4 credits.

Prerequisite: Mathematics 122 with a grade of B or better, or permission of instructor. Students who obtain permission to use Mathematics 112, taken before fall 1982, as prerequisite should take Mathematics 217 and 221 concurrently.*

Fall: M W F 9:05, 10:10, or 11:15. Spring M W F 10:10 or 11:15.

Linear algebra and differential equations. Topics include vector algebra, linear transformations, matrices, linear differential equations, as well as an introduction to proving theorems.

222 Calculus

Fall or spring, 4 credits. Prerequisite: Mathematics 221

Fall: M W F 11:15 or 12:20. Spring: M W F 9:05 or 10:10 or 11:15.

Vector differential calculus, calculus of functions of several variables, multiple integrals.

293 Engineering Mathematics

Fall or spring, 3 credits. Prerequisites: Mathematics 192 or 194, plus a

*See the list of courses with overlapping content at the end of the introduction.

knowledge of computer programming equivalent to that taught in Engineering Common Courses 105. In exceptional circumstances, Mathematics 192 and 293 may be taken concurrently.*

Fall: lects, M W 10:10, 11:15, or 12:20, plus one hour to be arranged. Spring: lects, M W 10:10 or 12:20, plus one hour to be arranged. Prelims: fall, 7:30 p.m. Oct. 5, Nov. 4, Dec. 7; spring, 7:30 p.m. Feb. 24, Mar. 22, Apr. 26.

Note: there will be a curriculum change beginning spring 1983. Fall: infinite series, complex numbers, first- and second-order ordinary differential equations with applications in the physical and engineering sciences. Spring: partial derivatives, multiple integrals, first- and second-order ordinary differential equations with applications in the physical and engineering sciences.

294 Engineering Mathematics Fall, spring, and summer. 4 credits. Prerequisite: Mathematics 293.*

Fall: lects, M W F 10:10 or 12:20, plus one hour to be arranged. Spring: lects, M W F 10:10, 11:15, or 12:20, plus one hour to be arranged. Prelims: fall, 7:30 p.m. Oct. 5, Nov. 4, Dec. 7; spring 7:30 p.m. Feb. 24, Mar. 22, Apr. 26.

Vector spaces and linear algebra, matrices, eigenvalue problems and applications to systems of linear differential equations. Vector calculus. Boundary value problems and introduction to Fourier series.

General Courses

Students who want a general introductory mathematics course are advised to take Mathematics 107-108, described above.

401 Honors Seminar Fall or spring. 4 credits.

Prerequisite: permission of instructor. Students will discuss selected topics under the guidance of one or more members of the staff.

[403 History of Mathematics Spring. 4 credits.

Prerequisite: one term of calculus and permission of instructor. Not offered 1982-83.

T R 10:10-11:25.

Topics in mathematics from antiquity to the present.]

[408 Development of Modern Mathematical Thought Spring. 4 credits.

Limited to students who are completing a major in mathematics or in a related subject with a strong concentration in mathematics. Prerequisites: Mathematics 411 or 421, and 431 or 231. Not offered 1982-83.

Selected topics tracing the development of mathematics from antiquity to the present (including harmonic analysis and music, calculus, foundations, and modern physics), chosen to shed light on general questions such as What is Mathematics? How does it develop? How does it relate to other areas of knowledge? Students will be expected to write expository papers.]

690 Supervised Reading and Research Variable credit (up to 6 credits each term).

Applied Mathematics and Differential Equations

[305 Mathematics in the Real World Fall or spring. 4 credits. Not offered 1982-83.]

421 Applicable Mathematics Fall, spring, and summer. 4 credits. Prerequisites: high level of performance in Mathematics 294, or 217 and 222, or 214-217 and 231. Graduate students who need mathematics extensively in their work and who have had a solid advanced calculus course and complex variables course as undergraduates should take Mathematics 515-516. With less preparation, they

should take Mathematics 421-422-423. Students who have not had infinite series, some linear algebra, and some ordinary differential equations should take Mathematics 214-218, 231, and then Mathematics 421-422-423.

T W R F 12:20. Evening prelims may be scheduled. Theorems of Stokes, Green, Gauss, etc. Sequences and infinite series. Fourier series and orthogonal functions. Ordinary differential equations. Solution of partial differential equations by separation of variables.

422 Applicable Mathematics Spring, summer. 4 credits. Prerequisite: Mathematics 421.

T W R F 12:20. Evening prelims may be scheduled. Complex variables. Generalized functions. Fourier transforms, Laplace transforms. Partial differential equations.

423 Applicable Mathematics Fall. 4 credits.

Prerequisite: Mathematics 421; however, students who have not taken 422 should talk to the instructor before taking this course.

T W R F 12:20.

Normed vector spaces. Elementary Hilbert space theory. Projections. Fredholm's alternative. Eigenfunction expansions. Applications to elliptic partial differential equations, and to integral equations.

[425 Numerical Solutions of Differential Equations Spring. 4 credits. Prerequisites:

Mathematics 222 or 294, one course numbered 300 or higher in mathematics, and Computer Science 321, or consent of the instructor. This course is a natural sequel to Computer Science 321. Not offered 1982-83.

M W F 11:15.

Methods and basic theory for the numerical solution of ordinary and partial differential equations. Linear multistep methods, Runge-Kutta 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.]

427 Introduction to Ordinary Differential Equations Fall. 4 credits. Prerequisite: Mathematics

222 or 294, or permission of instructor. Offered alternate years.

T R 10:10-11:25.

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.

[428 Introduction to Partial Differential Equations Spring. 4 credits. Prerequisite:

Mathematics 222 or 294 or permission of instructor. Not offered 1982-83.

T R 10:10-11:25.

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.]

Analysis

411-412 Introduction to Analysis 411, fall; 412, spring. 4 credits each term. Prerequisite: Mathematics 222. Students who need measure theory and Lebesgue integration for advanced probability courses should take Mathematics 413-414 or arrange to audit the first few weeks of Mathematics 521. Undergraduates who plan to attend graduate school in mathematics should take 413-414.

T R 8:40-9:55.

An introduction to the theory of functions of real variables, stressing rigorous logical development of the subject rather than technique of applications. Topics include Euclidean spaces, the real number system, continuous and differentiable functions,

Riemann integral, uniform convergence and approximation theorems, Fourier series, calculus in several variables, and differential forms.

413-414 Introduction to Analysis 413, fall; 414, spring. 4 credits each term. Prerequisite: Mathematics 222.

T R 8:40-9:55.

Honors version of Mathematics 411-412. Metric spaces are included in 413, and 413 proceeds at a faster pace than 411. The second semester includes an introduction to the Lebesgue integral.

418 Introduction to the Theory of Functions of One Complex Variable Spring. 4 credits.

Prerequisite: Mathematics 222 or 294 or 214-218.

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.

Algebra

231 Linear Algebra Spring, summer. 3 credits.

Prerequisite: one year of calculus.*

M W F 10:10.

Vectors, matrices, and linear transformations; affine and Euclidean spaces, transformation of matrices, and eigenvalues.

332 Algebra and Number Theory Fall only. 4

credits. Prerequisite: one year of calculus. (Also one course from 221, 231, and 294, effective 1982-83). Mathematics 332 does not satisfy prerequisites for courses numbered 500 and above.

M W F 9:05.

Various topics from modern algebra and number theory, usually including rings, fields, and finite groups. Motivation and examples are derived mostly from geometry, arithmetic, and congruence problems on the integers.

336 Applicable Algebra Spring. 4 credits.

Prerequisites: Mathematics 221, or 294, or 217 and 231.

M W F 9:05.

An introduction to concepts and methods of abstract algebra that are of importance in science and engineering. Applications of the theory to concrete problems will be stressed. Each year the course will treat aspects of the following topics: partially ordered sets, lattices, graph theory, and Boolean algebras; finite machines and languages; applications of groups, fields, and modular arithmetic, such as Latin squares, elementary coding theory, or fast Fourier transform; difference equations. Additional topics may be chosen by the instructor.

431-432 Introduction to Algebra 431, fall; 432,

spring. 4 credits each. Prerequisite: Mathematics 221 or 231. Undergraduates who plan to attend graduate school in mathematics should take 433-434.

M W F 10:10.

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.

433-434 Introduction to Algebra 433, fall; 434, spring. 4 credits each. Prerequisite: Mathematics 221 or 231.

M W F 10:10.

Honors version of 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.

*See the list of courses with overlapping content at the end of the introduction.

Geometry and Topology

451-452 Classical Geometries 451, fall, summer; 452, spring. 4 credits each term. Prerequisite: 221 or 231 or permission of instructor. [Mathematics 452 not offered 1982-83.]

M W F 11:15.

Foundations of geometry. Various geometric topics, including Euclidean, non-Euclidean, and projective geometry and rigidity theory.

453 Introduction to Topology Fall. 4 credits.

Prerequisites: Mathematics 411 and 221, or permission of instructor.

M W F 12:20.

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.

454 Introduction to Differential Geometry

Spring. 4 credits. Prerequisite: Mathematics 222 or 294. Mathematics 453 is not a prerequisite.

M W F 12:20.

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.

Probability and Statistics

372 Elementary Statistics Spring. 4 credits.

Prerequisites: one year of calculus; also Computer Science 100 or 101 or 108, or permission of instructor. A terminal course for students who will take no further courses in statistics.*

M W F 9:05. Prelims: 7:30 p.m. Feb. 17, Mar. 17, Apr. 21.

Introduction to the principles underlying modern statistical inference, to the practical application of statistical techniques, and to the rationale underlying the choice of statistical methods in various situations. Topics in probability that are essential to an understanding of statistics. Homework involves statistical analysis of data sets on hand calculators and on a computer by means of packaged programs.

471 Basic Probability 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.

Lecs, M W F 11:15; rec, R 12:20. Prelims: 7:30 p.m. Sep. 30, Oct. 28, Dec. 2.

Topics covered 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 571.

472 Statistics Spring. 4 credits. Prerequisite:

Mathematics 471 and knowledge of linear algebra such as taught in Mathematics 221.*

M W F 11:15. Prelims: 7:30 p.m. Feb. 17, Mar. 17, Apr. 21.

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.

473 Further Topics in Statistics Fall. 4 credits.

Prerequisite: Mathematics 472 or 574. For corresponding subject matter taught in more detail, see description of Mathematics 573 and 675.

M W F 9:05.

More detailed discussion of some of the topics not covered at length in Mathematics 472. Design and analysis of experiments. Multivariate analysis. Nonparametric inference; robustness. Sequential analysis.

Mathematical Logic

381 Elementary Mathematical Logic Spring. 4 credits. Prerequisite: Mathematics 122.

M W F 11:15.

Propositional and predicate logic. Completeness and incompleteness theorems. Set theory.

Graduate Courses

Students interested in taking graduate courses in mathematics should consult the department for further course details, times, and possible changes in courses as described below.

503 History of Mathematics Spring. 4 credits.

Prerequisites: Mathematics 511 and 531. Intended for graduate students in the mathematical sciences. May not be offered 1982-83.

This course will be devoted to the history of mathematics in the nineteenth century from the original sources, with emphasis on the history of the foundations of analysis and of the foundations of commutative algebra. Typical authors in algebra who will be studied are Lagrange, Ruffini, Gauss, Abel, Galois, Dirichlet, Kummer, Kronecker, Dedekind, Weber, M. Noether, Hilbert, Steinitz, Artin, and E. Noether. Typical authors in analysis who will be studied are Cauchy, Fourier, Bolzano, Dirichlet, Riemann, Weierstrass, Heine, Cantor, Peano, and Hilbert. If time permits, a sketch will be given of the history of probability and statistics from Bernoulli to Pearson. Students will be required to read and explain one important nineteenth century paper.

511-512 Real and Complex Analysis

511: measure and integration, functional analysis.

512: complex analysis, Fourier analysis, and distribution theory.

515-516 Mathematical Methods in Physics 515,

fall; 516, spring. 4 credits each. 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 421-422-423. Undergraduates will be admitted only with permission of instructor. Mathematics 515 is a prerequisite for 516.

T W R F 12:20.

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.

[517-518 Ordinary Differential Equations Not

offered 1982-83.

Basic theory of ordinary differential equations.]

519-520 Partial Differential Equations

521 Measure Theory and Lebesgue Integration Measure theory, integration, and L_p spaces.

522 Applied Functional Analysis

Spectral theorem for bounded operators, spectral theory for unbounded operators in Hilbert space, compact operators, distributions. Applications.

[527 Analysis of Numerical Methods for Partial Differential Equations Not offered 1982-83.

Tools for analyzing practical numerical methods, especially with regard to asymptotic convergence. Finite difference and finite element method.]

531-532 Algebra

531: finite groups, field extensions, Galois theory, rings and algebras, tensor and exterior algebra. 532: Wedderburn structure theorem, Brauer group, group cohomology, Ext, Dedekind domains, primary decomposition, Hilbert basis theorem, local rings. Additional topics selected by instructor.

[537 Elementary Number Theory Prerequisites: Mathematics 432 and 412. Not offered 1982-83.

Introduction to number theory, suitable for first-year graduate students and advanced undergraduates. Choice of topics discussed depends on the instructor. In previous years the text has been *A Course in Arithmetic*, by J. P. Serre; the topics covered have included quadratic forms, quadratic reciprocity, and modular forms.]

549-550 Lie Groups and Differential Geometry

551 Introductory Algebraic Topology

Fundamental group and covering spaces. Homology theories for complexes and spaces.

552 Differentiable Manifolds Prerequisites:

advanced calculus and some elementary point-set topology (e.g., knowledge of the concepts of continuity, compactness, and connectedness). This course will be an introduction to differential topology, intended for undergraduate seniors and beginning graduate students. The first part of the course will emphasize examples and constructions of manifolds. Topics will include C^r and analytic structures, non-smooth manifolds, immersions and imbeddings, tangent bundles, tubular neighborhoods, transversality, cobordism, vector fields and dynamical systems, foliations.

[561 Geometric Topology Not offered 1982-83.

Topics from general topology. Introduction to geometric properties of manifolds.]

571-572 Probability Theory Prerequisites: 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 521. 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.

571-574 Probability and Statistics This course is

a prerequisite to all advanced courses in statistics. 571: same as Mathematics 571 above. 574: topics include an introduction to the theory of point estimation, consistency, efficiency, sufficiency, and the method of maximum likelihood; the classical tests of hypotheses and their power; the theory of confidence intervals; the basic concepts of statistical decision theory; the fundamentals of sequential analysis. Intended to furnish a rigorous introduction to mathematical statistics.

[573 Experimental Design, Multivariate Analysis

Not offered 1982-83.

Rationale for selection of experimental designs and algorithms for constructing optimum designs. Optimum properties and distribution theory for classical analysis of variance procedures and their simplest multivariate analogues.]

[575 Sequential Analysis, Multiple Decision

Problems Not offered 1982-83.]

*See the list of courses with overlapping content at the end of the introduction.

[577 Nonparametric Statistics] Prerequisite: a course in mathematical statistics such as Mathematics 574. Not offered 1982-83.

A study of nonparametric techniques, especially order statistics, rank order statistics scores, local optimality properties, and perhaps some asymptotic theory.]

581 Logic

Basic topics in mathematical logic, including propositional and predicate calculus; formal number theory and recursive functions; completeness and incompleteness theorems.

611-612 Seminar in Analysis

613 Functional Analysis

Topological vector spaces. Banach and Hilbert spaces, Banach algebras. Additional topics to be selected by instructor.

[615 Fourier Analysis] Not offered 1982-83.]

[622 Riemann Surfaces] Not offered 1982-83.]

[623 Several Complex Variables] Not offered 1982-83.]

627 Seminar in Partial Differential Equations

631-632 Seminar in Algebra

[635 Topics in Algebra I] Not offered 1982-83. Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.]

637 Algebraic Number Theory

[639 Topics in Algebra II] Not offered 1982-83. Selection of advanced topics from algebra, algebraic number theory, and algebraic geometry. Course content varies.]

640 Homological Algebra

651-652 Seminar in Topology

653-654 Algebraic Topology

Duality theory in manifolds, applications, cohomology operations, spectral sequences, homotopy theory, general cohomology theories, categories and functors.

657-658 Advanced Topology

Selection of advanced topics from modern algebraic, differential, and geometric topology. Course content varies.

[661-662 Seminar in Geometry] [661 not offered 1982.] 662 offered spring 1983.

[667 Algebraic Geometry] Not offered 1982-83.]

[670 Topics in Statistics] Not offered 1982-83.

A course taught occasionally to cover special topics in theoretical statistics not treated in other listed courses. Typical of the subjects that will be treated are time series analysis, and classification and cluster analysis.]

671-672 Seminar in Probability and Statistics

[674 Multivariate Analysis] Not offered 1982-83.]

675-676 Statistical Decision Theory

677-678 Stochastic Processes

681-682 Seminar in Logic

683 Model Theory

684 Recursion Theory

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.

685 Metamathematics

Topics in metamathematics. Course content varies.

[687 Set Theory] Not offered 1982-83.]

Models of set theory. Theorems of Godel and Cohen, recent independence results.]

688 Automatic Theorem Proving

Fall. Prerequisites: Math 581. Some feeling for what is computationally feasible, using existing and near-term technologies, would be helpful.

Automatic theorem proving is that area of formal logic concerned with proof-theoretic computational efficiency. This course will survey the following areas: (1) Machine-oriented predicate calculus systems (resolution and natural deduction styles). (2) the computational complexity of the decidable fragments of predicate calculus and other frequently occurring decidable theories (e.g. Presburger arithmetic); (3) rewrite rule systems, which simplify expressions in algebraic theories to normal forms and the basic theorems in universal algebra that guarantee that such normal forms exist; (4) languages for knowledge representation, which facilitate the accessing according to content of possibly useful prior results; (5) heuristic systems, which discover proofs through educated guesses (e.g., which variable one should induct on to prove the associativity of addition); (6) artificial intelligence systems, which aim to simulate the evolution of mathematics by automatically generating new concepts, generalizations, conjectures from existing theorems.

690 Supervised Reading and Research

Modern Languages and Linguistics

J. Jasanoff, chairman (Department of Modern Languages and Linguistics); J. Noblitt, associate chairman (314 Morrill Hall); J. Gair, director of undergraduate studies (407 Morrill Hall); L. Babby, J. Bowers, W. Browne, J. Gair, J. Grimes, W. Harbert, J. Herschensohn, F. Huffman, R. Jones, E. Jordan, G. Kelley, H. Kufner, R. Leed, S. McConnell-Ginet, J. McCoy, G. Messing, J. Noblitt, C. Pira, C. Rosen, C. Ross, D. Solá, M. Suárez, F. van Coetsem, L. Waugh, J. Wolff

The Department of Modern Languages and Linguistics offers courses in linguistics (the study of the structure of language) and elementary, intermediate, and advanced courses in the minor as well as the major languages of Europe and south, southeast, and east Asia. Students take these courses because they are interested in the structure of language or because they are interested in the area in which the language is spoken.

See Modern Languages, Literatures, and Linguistics, below.

Modern Languages, Literatures, and Linguistics

Courses in modern languages, literatures, and linguistics are offered by various departments of the college. Most courses in modern languages and linguistics are offered by the Department of Modern Languages and Linguistics (see Linguistics, p. 155). Literature courses, and certain language courses as well, are taught by the following departments:

Africana Studies and Research Center: Swahili
Asian Studies: Chinese, Japanese
Classics: Greek, Latin
German Literature: German
Near Eastern Studies: Akkadian, Arabic, Aramaic, Hebrew
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.

Burmese

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Burmese 102: Burmese 101 or equivalent.

Hours to be arranged. R. B. Jones.

A semi-intensive course for beginners or for those who have been placed in the course by examination. The purpose of the course is to give a thorough grounding in all the language skills: listening, speaking, reading, and writing.

201-202 Burmese Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Burmese 201, qualification in Burmese; for Burmese 202, Burmese 201.

Hours to be arranged. R. B. Jones.

203-204 Composition and Conversation 203, fall; 204, spring. 3 credits each term. Prerequisites: for Burmese 203, qualification in Burmese; for 204, Burmese 203.

Hours to be arranged. R. B. Jones.

301-302 Advanced Burmese Reading 301, fall; 302, spring. 4 credits each term. Prerequisites: for Burmese 301, Burmese 202 or permission of instructor.

Hours to be arranged. R. B. Jones.
Selected Burmese readings in various fields.

Cambodian (Khmer)

101-102 Elementary Course 101 fall; 102, spring. 6 credits each term. Prerequisite for Cambodian 102: Cambodian 101 or equivalent.

Hours to be arranged. F. E. Huffman.

201-202 Cambodian Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Cambodian 201, qualification in Cambodian; for Cambodian 202, Cambodian 201.

Hours to be arranged. F. E. Huffman.

203-204 Composition and Conversation 203, fall; Cambodian 204, spring. 3 credits each term. Prerequisites: for Cambodian 203, qualification in Cambodian; for Cambodian 204, Cambodian 203.

Hours to be arranged. F. E. Huffman.

301-302 Advanced Cambodian 301, fall; 302, spring. 4 credits each term. Prerequisites: for Cambodian 301, Cambodian 201-202 or the equivalent; for Cambodian 302, Cambodian 301.

Hours to be arranged. F. E. Huffman.

401-402 Directed Individual Study 401, fall; 402, spring. For advanced students. 4 credits each term. Prerequisite: permission of instructor.

Hours to be arranged. F. E. Huffman.

404 Structure of Cambodian Spring. 4 credits. Prerequisite: Linguistics 101-102 or equivalent.

Hours to be arranged. F. E. Huffman.

Cebuano (Bisayan)

101-102 Basic Course 101, fall; 102, spring. Offered according to demand. 6 credits each term. Prerequisite for Cebuano 102: Cebuano 101 or equivalent.

Hours to be arranged. J. U. Wolff.
A semi-intensive course for beginners.

Chinese

Languages and Linguistics

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Chinese 102: Chinese 101 or equivalent.

Lecs, M W F 9:05; drill, M-F 8 or 2:30. C. Ross, P. Wang, and staff.

A semi-intensive course for beginners or for those who have been placed in the course by examination. The course gives a thorough grounding in all the language skills: listening, speaking, reading, and writing.

111-112 Cantonese Basic Course 111, fall; 112, spring. 6 credits each term. Prerequisite: permission of instructor.

Lecs, T R 11:15; drill, M-F 10:10. J. McCoy, S. Fessler.

Conversation in standard Cantonese and readings in modern expository Chinese with Cantonese pronunciation.

201-202 Intermediate Chinese I 201, fall; 202, spring. 4 credits each term. Prerequisite: qualification in Chinese.

M-F 9:05 or 11:15. P. Wang and staff.

211-212 Intermediate Cantonese I 211, fall; 212, spring. 4 credits each term. Prerequisite: Cantonese 112 or permission of instructor.

Hours to be arranged. S. Fessler.

213-214 Introduction to Classical Chinese 213, fall; 214, spring. 3 credits each term. Prerequisite: qualification in Chinese or permission of instructor. This course may be taken concurrently with Chinese 101-102, 201-202, or 301-302.

213: M W 11:15, plus 1 hour to be arranged. 214: hours to be arranged. Staff.

301-302 Intermediate Chinese II 301, fall; 302, spring. 4 credits each term. Prerequisites: for Chinese 301, Chinese 202 or equivalent; for Chinese 302, Chinese 301.

M W F 11:15; P. Ni.

Readings and drill in modern expository Chinese.

303-304 Chinese Conversation—Intermediate 303, fall; 304, spring. 1 credit each term. May be repeated for credit. Prerequisite: Chinese 201-202. S-U grades only.

T R 1:25. Staff.

Guided conversation and oral composition and translation. Corrective pronunciation drill.

311-312 Intermediate Cantonese II 311, fall; 312, spring. 4 credits each term. Prerequisite: Cantonese 212 or permission of instructor.

Hours to be arranged. S. Fessler.

315-316 Chinese Composition 315, fall; 316, spring. 4 credits each term. Prerequisite: Chinese 202 or 212.

M W F 10:00. P. Ni.

Special emphasis on developing the style and vocabulary of modern written Chinese through practice and example.

401 History of the Chinese Language Fall or spring, according to demand. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. J. McCoy, C. Ross.

Survey of phonological and syntactic developments in Chinese.

[403 Linguistic Structure of Chinese: Phonology and Morphology Fall or spring according to demand. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1982-83.

Hours to be arranged. C. Ross.

Introductory course in the phonology of modern Mandarin Chinese.]

[404 Linguistic Structure of Chinese: Syntax

Fall or spring, according to demand. 4 credits.

Prerequisite: permission of instructor. Offered alternate years. Not offered 1982-83.

C. Ross.

Syntax of modern Mandarin Chinese.]

405 Chinese Dialects Fall or spring, according to student demand. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. J. McCoy.

Introductory survey of modern dialects and their distinguishing characteristics.

411-412 Readings in Modern Chinese

Literature 411, fall; 412, spring. 4 credits each term.

Prerequisite: Chinese 302.

M W F 1:25. P. Ni.

607 Chinese Dialect Seminar Fall or spring on student demand. 4 credits. Prerequisite: Chinese 405 and permission of instructor.

Hours to be arranged. J. McCoy.

Analysis and field techniques in a selected dialect area.

FALCON

161-162 Intensive Mandarin Course 161, fall; (parallels first 16 credits of instruction in regular program); 162, spring (parallels second 16 credits of instruction in regular program). Prerequisite: permission of instructor.

J. McCoy and staff.

Literature

313 Chinese Philosophical Texts Fall or spring on demand. 4 credits. Prerequisite: Chinese 214.

T. L. Mei.

314 Classical Narrative Texts Spring. 4 credits. Prerequisite: Chinese 214.

E. M. Gunn.

420 Tang and Sung Poetry Fall or spring on demand. 4 credits. Prerequisite: permission of instructor.

T. L. Mei.

421-422 Directed Study Fall or spring or both. 2-4 credits each term. Prerequisite: permission of instructor.

Staff.

424 Readings in Literary Criticism Fall or spring on demand. 4 credits. Prerequisite: permission of instructor.

T. L. Mei.

430 Readings in Folk Literature Fall or spring on demand. 4 credits. Prerequisite: permission of instructor.

J. McCoy.

For complete descriptions of courses numbered 600 or above, consult the appropriate instructor.

603 Seminar in Chinese Poetry and Poetics Fall or spring on demand. 4 credits. Prerequisite: permission of instructor.

605 Seminar in Chinese Fiction Fall or spring on demand. 4 credits. Prerequisite: permission of instructor.

E. M. Gunn.

609 Seminar in Chinese Folk Literature Fall or spring, according to demand. 4 credits. Prerequisite: permission of instructor.

J. McCoy.

621-622 Advanced Directed Reading 621, fall; 622, spring. Credit to be arranged. Prerequisite: permission of instructor.

E. J. Gunn, J. McCoy, T. L. Mei.

Dutch

131-132 Reading Course 131, fall; 132, spring. 3 credits each term. Prerequisite: permission of instructor.

Hours to be arranged. F. C. Van Coetsem.

[Seminar in Dutch Linguistics (German 740)

Not offered 1982-83.]

English

Intensive English Program, see p. 193.

102 English as a Second Language Fall. 6 credits. Prerequisite: placement by the instructor.

M-F 9:05. M. Martin.

Intermediate spoken and written English, with emphasis on speaking, understanding, and reading.

103 English as a Second Language Spring. 3 credits. Prerequisite: English 102 or placement by the instructor.

M W F 2:30. M. Martin.

Designed for those who have completed English-102 and who require or desire further practice. Emphasis is on developing control of written as well as spoken language.

211-212 English as a Second Language 211, fall; 212, spring. 3 credits each term. Prerequisite: placement by the instructor.

M W F 10:10, 11:15, 2:30; T R 2:30-4. M. Martin.

Advanced reading and writing, with emphasis on improving vocabulary and control of college-level written English.

213 English for Nonnative Speakers. Spring. 3 credits. Prerequisite: placement by the instructor.

T R 10:10, plus a weekly interview. M. Martin.

Designed for those whose writing fluency is sufficient for them to carry on regular academic work but who feel the desire for refining and developing their ability to express themselves clearly and effectively. As much as possible, students receive individual attention.

Freshman Seminar

215-216 English for Later Bilinguals 215, fall; 216, spring. 3 credits each term. Not designed for students whose schooling has been entirely in English.

M W F 2:30. M. Martin.

A course designed to strengthen the English language skills of students who have studied for one to five years in American high schools and whose language in the home is not English. Intensive work in written English is offered, with emphasis on sentence structure, cohesion, vocabulary expansion, grammatical structure, and maturity of style.

French

J. Béreud, chairman; D. Brewer, A. M. Colby-Hall, I. Daly, N. Furman (director of undergraduate studies, 262 Goldwin Smith Hall, 256-8222), D. I. Grossvogel, J. Herschensohn, R. Klein, P. Lewis, S. A. Littauer, E. P. Morris, J. S. Noblitt, A. Seznec, L. R. Waugh

The Major

The major in French 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 and linguistic analysis.

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 at Cornell and become a major. Students wishing to major in French should consult the director of undergraduate studies, Professor Furman,

Department of Romance Studies, who will admit them to the major. After their admission, students will choose an adviser from among the French faculty. Students interested in the linguistics option should consult Professor Waugh, Department of Modern Languages, Literatures, and Linguistics.

The major has a core, required of all majors, and two options that attempt to reflect the variety of student interests yet maintain the focus for a coherent and substantial program of studies.

The Core

- 1) All majors are expected to acquire a sound degree of competence in language. This competence is demonstrated by the successful completion of French 312 or by the passing of a special examination to be taken no later than the end of the junior year. A typical program will involve two semesters of language at the 200 level (to be taken no later than the end of the sophomore year) and two semesters of language at the 300 level (311-312). Students may bypass any part of the sequence through placement examinations.
- 2) In addition, all majors are expected to take French 201 and French 202. At least one of these should be completed successfully no later than the end of the sophomore year.

The Options

The following groups intentionally overlap in part, yet each is intended to emphasize different aspects of French culture.

The literature option

- 1) The successful completion of six additional courses in French literature or civilization at the 300 level or above. These courses will be selected in consultation with the student's major adviser and will normally include at least one course from each of the three major periods of French literature (medieval to Renaissance, the seventeenth and eighteenth centuries, and the nineteenth and twentieth centuries).
- 2) The successful completion of two related courses in one of the following: (a) French literature; (b) French linguistics; (c) French history, culture, music, or history of art or architecture; (d) courses in linguistic theory, history of language, psycholinguistics, or philosophy of language.

The linguistic option

- 1) The successful completion of six courses in French and general linguistics (in addition to Linguistics 101-102). These courses will include at least one course in the history of French and one course in the structure of French.
- 2) The successful completion of two courses (preferably a sequence) in one of the following: (a) French literature and civilization; (b) psycholinguistics; (c) philosophy of language; (d) anthropological linguistics.

Whatever option a student chooses, he or she is urged to take advantage of the ample flexibility offered by the French major. Students who wish to pursue careers in business, law, medicine, or teaching may coordinate their work with preprofessional programs. Similarly, interdisciplinary work is strongly encouraged; students may elect to enrich their major with related courses in history, archaeology, Classics, comparative literature, English and American literature, anthropology, music, history of art, philosophy, government, linguistics, and other literatures and languages.

French majors may study in France for a semester or a year during their junior year under any of the several study-abroad plans that are recognized by the Department of Romance Studies and the Department of Modern Languages and Linguistics and allow for the transfer of credit. The director of undergraduate studies has information about such plans.

Honors. The honors program encourages well-qualified students to do independent work in French, outside the structure of courses. The preparation of the senior honors essay, generally involving three terms, provides a unique learning opportunity, since it allows for wide reading, careful outlining, and extensive rewriting to a degree not practically possible in the case of course papers. At each stage of their work, the students will have regular weekly meetings with faculty tutors.

No special seminars or courses are required of honors students. The junior tutorial (ordinarily two terms) will be devoted to intensive study of selected problems or authors and to the choice of a topic for the honors essay; the senior tutorial is devoted to the writing of that essay. Honors students may be released from one or two courses in either the junior or senior year to have adequate time for honors work. (Credit is obtained by enrolling in French 419-420.) Students will take an informal oral examination at the end of the senior year. Honors students are selected on the basis of their work in French language and literature courses in the freshman and sophomore years. Students interested should consult Professor Béraud for details no later than the spring term of the sophomore year, and earlier if possible. Honors work in French linguistics will be supervised by Professor Waugh.

Fees. Depending on the course, a small fee may be charged for copies of texts for course work.

Languages and Linguistics

121-122 Elementary Course 121, fall; 122, spring. 4 credits each term. Intended for beginners or students placed by examination. Prerequisite: French 122: French 121 or equivalent. Students who obtain a CPT score of 560 after French 121-122 attain qualification and may enter the 200-level sequence; otherwise French 123 is required for qualification.

Lec, R 9:05, 10:10, 11:15, or 1:25; drills, M T W F 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, or 3:35. N. Gaenslen.

A thorough grounding in all the language skills is given: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar, reading, and cultural information.

123 Continuing French Fall or spring. 4 credits. Limited to students who have previously studied French and have a CPT achievement score between 450 and 559. Satisfactory completion of French 123 fulfills the qualification portion of the language requirement.

Lec, T 10:10 or 12:20; drills, M W R F 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, or 3:35. J. Herschensohn.

An all-skills course designed as the final course in the sequence. A review of grammar is included in addition to reading, writing, and conversation.

200 Intermediate Course: Language and Literature Fall or spring. 3 credits. Prerequisite: qualification in French with a CEEB score no higher than 629. Offered by the Department of Romance Studies.

Fall: M W F 9:05 or 12:20, or T R 8:40. Spring: M W F 9:05, or 12:20, or T R 10:10-11:25. S. Tarrow and staff.

Designed to provide an introductory examination of contemporary French culture and literature. Texts read and discussed are selected for their cultural and humanistic value. Grammar is reviewed, and emphasis is on linguistic and analytic skills.

203 Intermediate Composition and Conversation Fall or spring. 3 credits. Prerequisite: qualification in French.

Lec, T 11:15 or 1:25, W 2:30, or R 11:15; drills, M W F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. J. Daly.

Emphasis on conversation. Weekly grammar review in addition to composition.

204 Intermediate Composition and Conversation Fall or spring. 3 credits. Enrollment limited.

Prerequisite: French 203 or 211, or placement by Advanced Standing Examination offered by the Department of Modern Languages and Linguistics or the Department of Romance Studies.

Fall: lec, T 2:30 or W 1:25; drills, M W F 10:10, 2:30, or 3:35. Spring: lec, T 10:10 or W 1:25; drills, M W F 9:05, 10:10, 11:15, 12:20, or 1:25. S. A. Littauer.

Emphasis on conversation with some grammar review and compositions, all based on contemporary texts. Taught in French.

211 Intermediate French Fall. 3 credits. Offered by the Department of Romance Studies. Prerequisite: qualification.

M W F 10:10 or T R 10:10-11:25. Staff. Provides a systematic grammar review with emphasis on written exercises; reading competence is acquired through the study of short stories. Taught in French.

212 Intermediate French Spring. 3 credits. Offered by the Department of Romance Studies. Prerequisite: French 211 or 203, or placement by Advanced Standing Examinations administered by either the Department of Modern Languages and Linguistics or the Department of Romance Studies.

M W F 11:15 or 12:20. Staff. Concerned with vocabulary expansion and the development of analytical reading ability. Taught in French.

310 Advanced Conversation Fall or spring. 2 credits. Enrollment limited. Prerequisite: French 203 or 211 (or equivalence on the Cornell CASE placement examination)

T R 10:10-11:25 or 2:30-3:45. J. Béraud and staff. This course is based on audio-visual materials used in class; slides and recordings will accompany extensive discussions. A modest amount of reading each week will aim at increasing students' vocabulary.

311 Advanced Composition and Conversation Fall. 4 credits. Offered by the Department of Romance Studies. Prerequisite: French 204 or 212 or placement by the CASE test

M W F 10:10 or 1:25, or T R 10:10-11:15. J. Béraud and staff.

All-skills course. Detailed study of present-day syntax. Reading and discussion of texts of cultural relevance.

312 Advanced Composition and Conversation Spring. 4 credits. Prerequisite: French 311 or placement by CASE test.

M W F 10:10 or 1:25, or T R 10:10-11:25. Staff. Continuation of work done in French 311. Grammar will be curtailed; reading and discussion of literary texts and of topics of general interest will be increased.

[401 History of the French Language Fall. 4 credits. Prerequisites: qualification in French and Linguistics 101, or permission of instructor. Offered alternate years. Not offered 1982-83.

M W F 2:30. J. Herschensohn. Diachronic development of French from Latin, with emphasis on phonological and morphological change. Course work includes problems in reconstruction, textual analyses, discussions of theoretical topics, and external history].

407 Applied Linguistics: French Fall. 4 credits. Prerequisite: qualification in French.

M W F 10:10. J. S. Noblitt. Designed to equip the student with the ability to apply linguistic descriptions in teaching French, with special emphasis on phonetics and morphology.

[408 Linguistic Structure of French Spring. 4 credits. Prerequisite: qualification in French and Linguistics 101, or permission of instructor. Offered alternate years.

M W F 2:30. J. Herschensohn.

A descriptive analysis of modern French, with emphasis on its phonology, morphology, and syntax.]

[410 Semantic Structure of French] Fall or spring. 4 credits. Prerequisite: permission of instructor. Offered alternate years. Not offered 1982-83; next offered 1983-84.

Hours to be arranged. L. R. Waugh. Introduction to French semantic elements—morphological, lexical and syntactic—from a Jakobsonian and functional perspective.]

[424 Composition and Style] Spring. Not offered 1982-83.]

[602 Linguistic Structure of Old and Middle French] Spring. 4 credits. Prerequisite: French 408 or permission of instructor. Not offered 1982-83. Next offered 1983-84.

Hours to be arranged. J. S. Noblitt. Through the study of Old and Middle French texts, students analyze synchronically aspects of the grammar of the language at different periods.]

[604 Contemporary Theories of French Grammar] Fall. 4 credits. Prerequisite: permission of instructor.

Hours to be arranged. Staff. Selected readings of twentieth-century French linguistics.]

700 Seminar in French Linguistics Fall or spring, according to demand. 4 credits.

Hours to be arranged. Staff. 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; semantics of French.

Literature

[107 Freshman Seminar: Readings in Modern Literature] Not offered 1982-83.]

109 Freshman Seminar: An Introduction to Semiotics (also Romance Studies 109) Fall and spring. 3 credits.

TR 10:10. Staff. In its broadest meaning semiotics is the study of signs that carry information: roadside signs, fashions, advertisements, publicity posters, literary modes. This course, which does not presuppose prior technical knowledge, will introduce the students to a critical reading of signs: the signifier (the concrete expression of the sign) and the signified (the message) and their various interactions. Readings will include such books as R. Barthes, *Mythologies*, or T. Hawkes, *Structuralism and Semiotics*. Exercises will be essays on how to analyze various signs taken from practical experience, such as advertisements from magazines or T.V. or from cultural phenomena (fashion codes, artistic modes).

201 Introduction to French Literature Fall or spring. 3 credits. Prerequisite: qualification. French 201 serves as a prerequisite for all 300-level courses in French literature and is required of all majors. The course is divided into small sections of three types: those conducted in French; those that use more French as the term progresses; those conducted in English. The reading in each section is in French and is the same; students may write their principal papers in English. Relative freedom to change from one section of the course to another is given during the first two weeks.

Fall: M W F 9:05, 10:10, 11:15, or 12:20, or T R 8:40-9:55 or 10:10-11:15. (Tentatively, the section primarily conducted in English will be M W F 9:05; the sections primarily conducted in French will be M W F 10:10, M W F 11:15, and T R 8:40-9:55. The sections using both French and English will be M W F 12:20 and T R 10:10-11:25.) Spring: M W F 11:15 or 1:25, or T R 10:10-11:25. D. Grossvogel and staff.

The work of five or six major French authors from the nineteenth and twentieth centuries is introduced (films, novels, plays, poems). Stress is on the development of reading skills and, more specifically, on questions referring to cultural, sociological, and aesthetic implications of the texts. Readings will include the works of such authors as Baudelaire, Mallarme, Proust, Sartre, Camus, Beckett, and Ionesco.

202 Studies in French Literature Fall or spring. 3 credits. Prerequisite: French 201 or a CEEB achievement score of 650 or more (students who have not taken French 201 should obtain consent of instructor; those with scores in the 560-649 range should see the description of French 200 and 201). Required of all majors, but not limited to them. A fee is charged for a number of short texts distributed by the instructor.

Fall: T R 10:10-11:25. Staff. Spring: M W F 10:10, 11:15, or T 10:10-11:25. P. Lewis and staff. Study of the classic literature of seventeenth-century France (Corneille, Racine, Moliere, Madame de Lafayette) and its immediate forebears (Montaigne) and successors in the Enlightenment (Voltaire, Rousseau, Diderot, Beaumarchais).

[320 French Civilization] Not offered 1982-83; next offered 83-84.]

[331 Masterpieces of French Drama I: The Classical Era] Fall. Not offered 1982-83. P. Lewis.]

332 Masterpieces of French Drama II: The Modern Era Spring.

T R 8:40-9:55. D. Grossvogel. The history of French theater is followed from Romanticism to the present, with emphasis on theatrical experiments in the twentieth century. Plays to be studied will be chosen from works by such authors as Hugo, Musset, Vigny, Dumas, Claudel, Giraudoux, Cocteau, Sartre, Beckett, Ionesco, Genet.

[334 The Novel as Masterwork: French Novels of the Nineteenth Century.] Not offered 1982-83; next offered 1983-84.]

[335 The Novel in France: From the Origins to the French Revolution] Not offered 1982-83.]

[336 Twentieth-Century Fiction] Not offered 1982-83.]

[337 French Poetry from Its Origins to the Revolution of 1789.] Not offered 1982-83.]

[338 French Poetry in the Twentieth Century] Not offered 1982-83.]

[347 Masterpieces of Medieval Literature.] Not offered 1982-83.]

358 Gustave Flaubert. Fall. 4 credits. M W F 11:15-12:05. N. Furman.

Facts and fiction: the question of realism seen through the novels of Gustave Flaubert. Readings will include *Madame Bovary*, *L'Education sentimentale*, *Salammbô*, *Bouvard et Pecuchet*, and *Trois Contes*. Taught in French.

[368 The Baroque in France] Not offered 1982-83. A. Seznec.]

369 Comic Theater in the Seventeenth Century. Spring. 4 credits. T R 2:30. P. Lewis.

The principal focus of this course will be the comedies of Corneille and Moliere. In addition, there will be an attempt to follow the evolution of a half-century of comic theater (1625 to 1675), with attention to some interesting, if relatively minor works by Racan, Mairet, Scarron, and Racine. Conducted in French.

[379 Victor Hugo and the Romantic Movement] Not offered 1982-83. N. Furman.]

[385 Experimental and Contemporary French Novels: Subversion of the Novellistic Genre from Diderot to the Present] Fall. Not offered 1982-83. D. Grossvogel.]

[387 From Parnassus to Surrealism] Fall. Not offered 1982-83.]

389 French Romanticism Spring 4 credits. TR 12:20-1:35. N. Furman.

The history and literature of the French Romantic period will be studied through the works of Stendhal, Hugo, Vigny, Nerval and Balzac. Taught in French.

395 Camus and His Contemporaries Fall. 4 credits.

T R 12:20-1:35. S. Tarrow. The years 1936-1956 were years of political and social crisis in Western Europe. The impact of that crisis on the fiction of leading French writers will be studied in readings from Camus, Malraux, Sartre, Mauriac, Drieu la Rochelle, and Duras. Patterns of continuity and discontinuity will be traced through such themes as tradition, rebellion, and revolution.

419-420 Special Topics in French Literature 419, fall; 420, spring. 2-4 credits each term.

Prerequisite: permission of instructor. Staff. Guided independent study of special topics.

429-430 Honors Work in French 4 credits each term, with permission of the adviser. Open to juniors and seniors. Consult the director of the honors program, J. Béreaud.

447-448 Medieval Literature 447, fall; 448, spring. 4 credits each term. Prerequisite: French 201 or consent of the instructor. First term not prerequisite to the second.

M W F 9:05. A. Colby-Hall. French 447 deals with the epic and the theater; 448 with the romance and the lyric. Facility in reading Old French and appreciation of these four major genres are the primary goals of this course.

[452 Theatre in Sixteenth-Century France] Spring. Not offered 1982-83.]

[457 Rabelais] Not offered 1982-83; next offered 1983-84.]

[458 Montaigne] Spring. Not offered 1982-83.]

459 Early Sixteenth-Century Poetry: Marot, Sceve, DuBellay M W F 2:30-3:15. R. Klein.

This course will serve to introduce students to the work of three major figures in sixteenth-century poetry. Greatest emphasis will fall on the *Delie* of Sceve, a work whose Petrarchan and Neoplatonic themes will organize our reading of these poets.

[461 The Theater of Moliere] Fall. Not offered 1982-83.]

[473 Diderot and the Enlightenment] Fall. Not offered 1982-83.]

474 Voltaire: Strategies, Traps, and Play Spring. 4 credits.

M W F 1:25. D. Brewer. This course will focus on Voltaire's major writings, set within the literary, intellectual, social, and ideological framework of enlightenment. Voltaire's texts will be read as illustrating and problematizing various types or strategies of discourse: philosophical, satiric-ironic, esthetic, political-historical, and literary-fictional.

[483 Feminism and French Literature (also Women's Studies 483)] Not offered 1982-83.]

485 Reading Workshop: The Short Story Fall. W 2:30-4:25. N. Furman.

Problems relating to the analysis of prose fiction will be studied through close readings of nineteenth and twentieth century short stories. Taught in French.

[490 French Film and Literature in the Twentieth Century Spring. Not offered 1982-83. D. Grossvogel.]

[496 The Aesthetics of Coincidence (also Comparative Literature 496) Not offered 1982-83.]

[637 Old French Dialectology Fall. Not offered 1982-83. A. Colby-Hall.]

639-640 Special Topics in French Literature 639, fall; 640, spring. 4 credits each term. Staff. Guided independent study for graduate students.

[644 Medieval Seminar: The Old French Epic Not offered 1982-83.]

[646 Medieval Seminar: Villon Spring. Not offered 1982-83. A. Colby-Hall.]

[648 Medieval Seminar: La Roman de la Rose Spring. Not offered 1982-83. A. Colby-Hall.]

[658 Renaissance Poetry and the Powers Not offered 1982-83; next offered 1983-84.]

660 The Moralist Tradition Fall. 4 credits. F 2:30-4:25. P. Lewis.

What allows us to posit a moralist intertext? This course will address the responses of four seventeenth-century writers—Descartes, Pascal, La Bruyere, La Rochefoucauld—to a wide range of problems that they encounter in the work of Montaigne. Critical readings will emphasize deconstructive accounts of Descartes (Derrida, Nancy) and Pascal (De Man, Marin).

[661 Racine and His Critics Not offered 1982-83.]

[666 Seventeenth-Century Seminar. Moralities in Fiction: The Classical Moment (also Comparative Literature 666) Not offered 82-83.]

[669 Seventeenth-Century Seminar: Illusion and Representation Not offered 1982-83. P. Lewis.]

[683 Lacan (also Comparative Literature 607) Not offered 1982-83.]

[689 Bohemians and Dandies Not offered 1982-83.]

693 Twentieth-Century Seminar Fall. To be arranged.

[694 Six Critics in Search of an Author: Sartre, Criticism, Critics (also Comparative Literature 604) Not offered 1982-83.]

696 Proust and Mystery (also Comparative Literature 696) Spring. 4 credits. T 2:30-4:25. D. Grossvogel.

If mystery is what arouses curiosity through the unexplained, the inexplicable, or merely the secret, three possibilities are adumbrated for literature: the text as discussion about the ontological evidence; as rehearsal of the ontological sense; or the reduction of that sense for the sake of a game. The course proposes to read substantial portions of *A la recherche* as the locus of these three kinds of concern, and alongside other texts that focus more specifically on one or the other of these three possibilities.

Related Courses in Other Departments

Feminist Theory: Franco-American Currents (Society for the Humanities 419)

Petrarch, Ronsard, and Donne (Comparative Literature 658)

Baudelaire and Hugo (Comparative Literature 671)

The Language(s) of Politics in the Renaissance (Society for the Humanities 425-426)

Germanic Studies

E. Augsberger, V. T. Bjarnar, E. A. Blackall, H. Deinert (director of undergraduate studies (literature), 188 Goldwin Smith Hall, 256-3932), I. Ezergailis, S. L. Gilman, A. Groos, W. Harbert, P. Hohendahl, J. H. Jasanoff, I. Kovary, H. L. Kufner (director of undergraduate studies (language), 261 Morrill Hall, 256-4230), P. W. Nutting, G. Valk, F. C. van Coetsem

The German Major

Students majoring in German are encouraged to design their programs in a manner that will allow for diversity in their courses of study. It should enable them to become acquainted with an adequate selection of major works, authors, and movements of German literature and to develop their skill in literary analysis. Students majoring in German will normally proceed through German 201, 202, 203, 204.

Students who, because of previous training, are qualified to enroll in 300- or 400-level courses will be permitted to do so. For details, students may consult the major advisers, H. Deinert, in the Department of German Literature, or H. L. Kufner, in the Department of Modern Languages and Linguistics. Students majoring in German are expected to complete successfully a minimum of six 300- and 400-level courses in addition to German 303-304. These courses should be a representative selection of subjects in German literature, Germanic linguistics, or both. The attention of students majoring in German is called to the courses offered by the Department of Comparative Literature, many of which complement the course offerings in German.

Students majoring in German are expected to become competent in the German language. This competence is normally demonstrated by the successful completion of German 304. Placement of German majors who have done no work in German at Cornell will be determined by the level of preparation they have obtained elsewhere. For information, students should consult the major advisers, H. Deinert or H. L. Kufner. All German majors, particularly those who have had no German prior to coming to Cornell, are encouraged to spend at least part of their junior year abroad.

German Area Studies Major

The German area studies major is intended for students who are interested in subject matter related to German-speaking countries, but not necessarily or not exclusively in German literature or linguistics. Students will select appropriate courses offered in history, government, economics, music, theatre arts, or other suitable subjects. These students will select a committee of two or more faculty members to help them design a program and supervise their progress. One committee member must be from the German faculty of either the Department of Modern Languages and Linguistics or the Department of German Literature. The other member(s) should represent the student's main area of interest.

The student majoring in German area studies is expected to become competent in the German language. Such competence is normally demonstrated by successful completion of German 304. A minimum of six area courses above the 200 level is required for the major.

Honors. The honors program in German is open to superior students who wish to work independently in an area of their own choice. Students are free to select any faculty member of the Field of Germanic Studies (in the case of area studies majors, the appropriate member of their committee) to assist them in designing their honors program, to supervise their work, and to help them select a suitable topic for an honor essay. The independent study courses, German 451 and 452, may form part of the program.

Freshman Seminar Requirement

The following courses will satisfy the Freshman Seminar requirement: German 109, 151, 211, and 312. For details please consult the instructors.

Languages and Linguistics

121-122 Elementary Course 121, fall; 122, spring. 4 credits each term. Prerequisite for German 122: German 121 or equivalent. Intended for beginners or students placed by examination. Students who obtain a CPT score of 560 after German 121-122 attain qualification and may enter the 200-level sequence; otherwise German 123 is required for qualification.

Lec, T 9:05, 11:15, or 2:30; drills, M W R F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. H. L. Kufner. A thorough grounding in all the language skills is given: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar, reading, and cultural information.

123 Continuing German Fall or spring. 4 credits. Limited to students who have previously studied German and have a CPT achievement score between 450 and 559. Satisfactory completion of German 123 fulfills the qualification portion of the language requirement.

Fall: lec, M 2:30; drills, T-F 9:05, 10:10, 11:15, or 12:20. Spring: lec, M 2:30; drill, T-F 10:10 or 12:20. W. E. Harbert.

An all-skills course designed to prepare students for study at the 200 level.

203 Intermediate Composition and Conversation Fall or spring. 3 credits. Prerequisite: qualification in German.

Fall: M W F 9:05, 10:10, 11:15, or 1:25. Spring: M W F 9:05, or 1:25. E. Augsberger, G. Valk.

204 Intermediate Composition and Conversation Fall or spring. 3 credits. Prerequisite: German 203 or permission of instructor.

Fall: M W F 11:15. Spring: M W F 10:10 or 11:15. E. Augsberger, G. Valk.

303-304 Advanced Composition and Conversation 303, fall; 304, spring. 4 credits each term. Prerequisite for German 303: German 204 or equivalent. Prerequisite for German 304: German 303 or equivalent.

M W F 1:25. E. Augsberger, G. Valk. Emphasis is on increasing the student's oral and written command of German. Detailed study of present-day syntax and different levels of style.

306 Zeitungsdeutsch Spring. 4 credits. Prerequisite: German 304 or equivalent. M W F 11:15. E. Augsberger.

401 Introduction to Germanic Linguistics Fall. 4 credits. Prerequisite: Linguistics 101 or permission of instructor.

Hours to be arranged. W. E. Harbert. Survey of major issues in Germanic linguistics, with emphasis on historical and dialectal problems.

402 History of the German Language Spring. 4 credits. Prerequisite: German 204 and Linguistics 101 or permission of instructor. Offered alternate years.

Hours to be arranged. F. van Coetsem. Phonological, syntactic, and semantic developments from pre-Old High German times to the present.

[403 Modern German Phonology] Fall. 4 credits. Prerequisites: German 304 or equivalent, and Linguistics 101, 111, or 601. Not offered 1982-83. Hours to be arranged. F. van Coetsem. The phonological system of German is viewed from various theoretical approaches.]

[404 Modern German Syntax] Spring. 4 credits. Prerequisites: German 304 or equivalent, and Linguistics 101 or 601. Hours to be arranged. W. E. Harbert. An application of selected theoretical syntactic models to problems in the syntax of modern German.

[405 German Dialectology] Fall. 4 credits. Prerequisite: German 304 or equivalent, and Linguistics 101 or equivalent. Not offered 1982-83. H. L. Kufner. Survey of German dialects, the work done at the Sorachatlas, and a discussion of modern approaches to dialectology.]

[406 Runology] Fall. 4 credits. Prerequisite: German 401. Hours to be arranged. F. van Coetsem. A study of the inscriptions in the older *futhark* and their relevance to historical Germanic linguistics.

[407 Applied Linguistics: German] Fall. 4 credits. Not offered in 1982-83. Hours to be arranged. H. L. Kufner. Designed to equip the teacher of German with the ability to apply current linguistic theory to the second-language learning situation.]

[408 Linguistic Structure of German] Spring. 4 credits. Prerequisites: German 204 and Linguistics 101-102, or permission of instructor. Not offered 1982-83. Hours to be arranged. H. L. Kufner. A descriptive analysis of present day German, with emphasis on phonology and syntax.]

[602 Gothic] Spring. 4 credits. Prerequisite: Linguistics 101. Not offered 1982-83. Hours to be arranged. F. van Coetsem. Linguistic structure of Gothic, with extensive readings of Gothic texts.]

[604 Old Low Franconian, Old Frisian.] Fall. 4 credits. Prerequisite: Linguistics 102. Offered in alternate years. Hours to be arranged. F. van Coetsem.

[605 Structure of Old English] Fall. 4 credits. Prerequisite: German 401. Not offered 1982-83. Hours to be arranged. W. E. Harbert. Linguistic overview of Old English, with emphasis on phonology and syntax.]

[606 Topics in Historical Germanic] Fall. 4 credits. Prerequisite: German 401. Not offered 1982-83. Hours to be arranged. F. van Coetsem. The development of the sound system from Proto-Germanic to its daughter languages.]

[607 Topics in Historical Germanic Morphology] Spring. 4 credits. Prerequisite: German 401. Not offered 1982-83. Hours to be arranged. J. Jasanoff. The Germanic verbal system and its Indo-European origins.]

[608 Topics in Historical Germanic Syntax] Fall. 4 credits. Prerequisite: German 401. Hours to be arranged. W. E. Harbert. A diachronic and comparative investigation of syntactic processes in the older Germanic languages.

[609-610 Old Norse] 609, fall; 610, spring. 4 credits each term. Hours to be arranged. V. Bjarnar. Study of the linguistic structure of Old Norse, with extensive reading of Old Norse texts.

[611 Readings in Old High German and Old Saxon] Spring. 4 credits. Hours to be arranged. J. Jasanoff. Texts are chosen to suit the interests of the students taking the course but normally include selections from the more extensive Old High German and Old Saxon sources (Otfrid, Tatian, *Heliand*) as well as representative shorter works, such as *Hildebrandslied*, *Muspilli*, and *Genesis*.

[612 Germanic Tribal History] Spring. 4 credits. Prerequisite: German 401. Hours to be arranged. F. van Coetsem. The history of the Germanic tribes from about 500 B.C. to A.D. 500; introduces the study of Proto-Germanic, and the separation of the Germanic languages.

[631-632 Elementary Reading I] 631, fall; 632, spring. 3 credits each term. Limited to graduate students. Prerequisite for German 632: German 631 or equivalent. M W F 4:30 or T R 1:25-2:40. I. Kovary. Emphasis is on developing skill in reading, although some attention will be devoted to the spoken language, especially to listening comprehension.

[710 Seminar in Germanic Linguistics] Fall or spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered 1982-83. W. E. Harbert.]

[720 Seminar in Comparative Germanic Linguistics] Fall or spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered in 1982-83. Hours to be arranged. Staff. Topics include phonology, morphology, syntax, and dialectology of the older Germanic languages.]

[730 Seminar in German Linguistics] Fall or spring, subject to the needs of students and the limitations of staff time. 4 credits. Not offered in 1982-83. Hours to be arranged. Staff. Selected topics including the history, structure, and dialects of German.]

[740 Seminar in Dutch Linguistics] Spring, subject to the needs of students and to the limitations of staff time. 4 credits. Not offered in 1982-83. Hours to be arranged. F. van Coetsem. Selected topics including the history, structure, and dialects of modern Dutch.]

Literature

Freshman Seminars

[109 Folk Tales and Folk Poetry] Fall and spring. 3 credits each term. M W F 8 or T R 8:40-9:55. I. Ezergailis and staff. Discussion and analysis of various types of folk literature from primitive legends, myths, and ballads to contemporary literary tales. Aims to develop reading skills that can be redirected to the student's own expository writings. Readings (in English translation) range from Grimm's Fairy Tales to stories by J.R.R. Tolkien.

[151 Kafka, Hesse, Brecht, and Mann] Fall and spring. 3 credits each term. T R 8:40-9:55. H. Deinert and staff. This course will be based on complete works (in English translation) by four representative German authors of the first half of the century. Although dealing with works of great popular appeal (*Demian*, *Siddharta*, *Death in Venice*, *The Metamorphosis*, *Mother Courage*, *Galileo*, and others), the emphasis of the course will be on improving writing skills. We will meet twice a week for lectures and discussion. In lieu of a third class meeting there will be regular conferences between students and their instructors to discuss the papers.

Courses offered in German

[201 Introduction to German Literature I] Fall and spring. 3 or 4 credits each term. Prerequisite: qualification in German or permission of instructor. Taught in German. Fulfills both the language proficiency requirement and, followed by German 202, the humanities distribution requirement. Fall: M W F 12:20 or T R 12:20-1:35. Spring: M W F 12:20. P. W. Nutting and staff.

An intermediate course designed to improve reading, writing, speaking, and listening skills in German. Emphasis is placed on developing reading competency, tools of literary analysis, and expansion of vocabulary. Grammar review included. Readings from major twentieth-century authors, including Brecht, Duerrenmatt, Frisch, Aichinger, Bachmann, Musil, and Kafka.

[202 Introduction to German Literature II] Fall and spring. 3 or 4 credits each term. Prerequisite: German 201 or permission of instructor. Taught in German. Fall: M W F 1:25. Spring: M W F 12:20 or T R 12:20-1:35. P. W. Nutting and staff.

An intermediate course emphasizing skills in reading and interpreting German literature, using representative texts of major nineteenth-century authors. Included will be discussions of the drama (Kleist, Buechner), lyric poetry (Goethe, Hoelderlin, the Romantics, Heine), the essay (Kleist, Heine, Marx), and the novella (Kleist, Buechner, Keller, Moerike).

[211 Intensive Workshop in Germanic Studies for Freshmen I] Fall. 6 credits. Intended for entering freshmen with extensive training in the German language (CEEB achievement score of 680 or comparable evidence; please consult instructor). Taught in German. Satisfies the language and distribution requirements or the Freshman Seminar requirement.

T R 2:30-4:30. H. Deinert. Not intended as a survey, but rather as a rigorous seminar designed to familiarize students with literary forms and the tools of critical analysis. The course will provide an intensive introduction to the study of German literature through the discussion of exemplary prose works, dramas, and poems from the eighteenth century to the present.

[305 Modern Germany] Fall. 4 credits. Prerequisite: German 304 or equivalent. T R 12:20-1:35. P. U. Hohendahl. Introduction to the history of postwar Germany, the development of the two Germanies, and their societies. The emphasis is on cultural and social institutions such as mass media, educational systems, and political parties. Students will have the opportunity to practice their spoken and written German.

[312 Intensive Workshop in Germanic Studies for Freshmen II] Spring. 4 credits. May be used to satisfy the Freshman Seminar requirement. T R 2:30-4. H. Deinert.

Taught in German. Designed primarily as a sequel to German 211. Emphasis is on German literature since 1900 (T. Mann, Hesse, Kafka, Brecht, Duerrenmatt, Peter Weiss, Plenzdorf, Rilke, Benn, Celan). Supplementary reading from contemporary philosophy, psychology, sociology, and political theory.

[355 The Age of Goethe] Not offered 1982-83.]

[356 Major Works of Goethe] Not offered 1982-83.]

[357 Heinrich von Kleist] Fall. 4 credits. Prerequisite: German 201, 202, or permission of instructor. Taught in German. W 2:30-4:30. H. Deinert. A seminar, the course will treat a representative selection of Kleist's drama and prose.

359 *Fin de Siecle Vienna* Spring. 4 credits.
Prerequisite: German 201-202 or 203 or permission of instructor. Taught in German.
M W F 9:05. Staff.

At the close of the last century, artists, intellectuals, and literati in Austria were aware that they stood at the end of one age and at the beginning of another. The Viennese *fin de siecle* is the resulting decade-long revolt against tradition and search to define the modern. This course will focus on short works of Kraus, Hofmannsthal, Freud, Schnitzler, lectures in German on the intellectual background of the period. Discussion may be in English if necessary.

361 Contemporary Literature Spring. 4 credits.
Prerequisite: German 202 or permission of instructor. Taught in German.
T R 10:10. P. W. Nutting.

Drama, poetry, and prose of the sixties and seventies from both Germanies, Austria, and Switzerland. Writers to be discussed include Christa Wolf, Johannes Bobrowski, Guenther Kunert, Sarah Kirsch, Heiner Mueller, Paul Celan, Ingeborg Bachmann, Peter Weiss, Thomas Bernhard, Peter Handke, and Max Frisch.

[365 Lyrical Poetry Not offered 1982-83.]

Courses in English Translation

[314 Nietzsche, the Man and the Artist Not offered 1982-83.]

[315 Topics in German Literature I: The Modern German Novel in English Translation Not offered 1982-83.]

[324 Old Icelandic Literature Not offered 1982-83.]

[350 Yiddish Literature in English Translation Not offered 1982-83.]

Graduate and Advanced Undergraduate Courses

405-406 Introduction to Medieval German Literature 405, fall; 406, spring. 4 credits each term. Prerequisite for German 405: reading knowledge of German. Prerequisite for German 406: 405 or the equivalent.

M W F 9:05. A. Groos.
405 will emphasize learning Middle High German in a literary context, using the *Nibelungenlied* and a romance of Hartmann von Aue. 406 will survey the classical period, emphasizing Wolfram von Eschenbach's *Parzival*, Gottfried von Strassburg's *Tristan und Isolde*, and major poets of the "Minnesang," especially Walther von der Vogelweide.

[417-418 The Great Moments of German Literature I, II Not offered 1982-83.]

438 Modern Austrian Narrative, 1900-1935 Fall. 4 credits. Taught in German.

T R 10:10. P. W. Nutting.
Close reading of classics of modernist fiction by Schnitzler, Rilke, Kafka, Musil, and Broch against the background of the collapse of the Hapsburg monarchy and resulting social and political upheaval.

451-452 Independent Study 451, fall; 452, spring. 1-4 credits each term. Prerequisite: permission of instructor.
Hours to be arranged. Staff.

Seminars

For complete descriptions of courses numbered 600 or above consult the appropriate instructor.

611 Seminar in Old Icelandic Literature I Fall. 4 credits.
Hours to be announced. J. C. Harris.

[612 Seminar in Old Icelandic Literature II Not offered 1982-83.]

[623 Seminar in Medieval German Literature I Not offered 1982-83.]

[624 Seminar in Medieval German Literature II Not offered 1982-83.]

[625 The Northern Renaissance and Reformation Not offered 1982-83.]

[627 Baroque Not offered 1982-83.]

[629 The Enlightenment Not offered 1982-83.]

[631 From Wilhelm Meister to Buddenbrooks Not offered 1982-83.]

632 The Age of Goethe Fall. 4 credits.
M 1:25-3:30. A. Groos.

The seminar will treat the major works of Goethe before 1800.

633 Problems in Romanticism: Hoelderlin and Keats (also Comparative Literature 433) Spring. 4 credits.

M 2:30-4:30. T. Bahti.
A seminar on two of the major poets of European romanticism. Points of focus will include their different Hellenisms; their ways of handling narrative within various poetic forms; and their different treatments of the problems of art, representation, and poetic language. While some attention will be given to their early works, the accent will be on Hoelderlin's late hymns and Keats's late odes and the *Hyperion* project. Reading knowledge of German extremely useful but not required; qualified undergraduates admitted with permission of instructor.

636 Nineteenth-Century Drama: Grillparzer and Hebbel Spring. 4 credits.
W 3:35-5:30. E. A. Blackall.

[637 Seminar in Realism Not offered 1982-83.]

[638 Twentieth-Century German Literature Not offered 1982-83.]

639 Modern Lyric Poetry Fall. 1-4 credits.
Hours to be arranged. I. Ezergailis.

[641 The Modern German Novel Not offered 1982-83.]

[650 Graduate Seminar in Medieval Literature (also English 710) Not offered 1982-83.]

[682 Seminar on Richard Wagner (also Music 678) Not offered 1982-83.]

[753 Tutorial in German Literature Not offered 1982-83.]

754 Tutorial in German Literature: Thomas Mann Spring. 1-4 credits. Prerequisite: permission of instructor.
Hours to be arranged. I. Ezergailis.

Related Courses in Other Departments

Great Books (Comparative Literature 201-202)

Comedy (Comparative Literature 312)

Rhetoric and Technology (Comparative Literature 315)

The European Novel (Comparative Literature 363-364)

Readings in Modern Poetry (Comparative Literature 391)

The Divided Self in Women's Writing (Comparative Literature 399)

What is Literature? (Comparative Literature 410)

English Renaissance Drama and Its European Contexts (Comparative Literature 652)

Nabokov and the Modernist Novel (Comparative Literature 654)

Petrarch, Ronsard, and Donne (Comparative Literature 658)

The Bildungsroman in Modern Literature (Comparative Literature 677)

Cultural History as a Subversive Activity (Society for the Humanities 423)

A Case Study in Materialist Pedagogy: Nineteenth-Century Paris (Society for the Humanities 424)

The End of the Austro-Hungarian Monarchy (History 352)

Seminar in European Fascism (History 457)

Society and Politics in Central Europe (Government 341)

German Philosophy after Kant (Philosophy 414)

Aesthetic Theory of the Frankfurt School (Comparative Literature 495)

Modern Greek

See listings under Classics.

Modern Hebrew

See listings under Near Eastern Studies.

Hindi-Urdu

101-102 Hindi-Urdu Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Hindi 102: Hindi 101 or equivalent.
M-F 9:05. G. Kelley.

A semi-intensive course for beginners. A thorough grounding in all the language skills is given: listening, speaking, reading, and writing.

201-202 Hindi Reading 201, fall; 202, spring. 3 credits each term. Prerequisite for Hindi 201: qualification in Hindi. Prerequisite for Hindi 202: Hindi 201 or permission of instructor.
M W F 10:10. G. Kelley.

203-204 Composition and Conversation 203, fall; 204, spring. 3 credits each term. Prerequisites: for Hindi 203, qualification in Hindi; for Hindi 204, Hindi 203 or permission of instructor.
Hours to be arranged. G. Kelley.

301-302 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.
Hours to be arranged. G. Kelley.

[303-304 Advanced Composition and Conversation 303, fall; 304, spring. 4 credits each term. Prerequisites: for Hindi 303, Hindi 204 or equivalent; for Hindi 304, Hindi 303 or equivalent. Not offered in 1982-83.
G. Kelley.]

305-306 Advanced Hindi Readings 305, fall; 306, spring. 4 credits each term. Prerequisites: for Hindi 305, Hindi 202 or equivalent; for 306, Hindi 305 or equivalent.

Hours to be arranged. G. Kelley.
Intended for those who wish to do readings in history; government, economics, etc., instead of literature.

[401 History of Hindi Fall or spring. 4 credits. Prerequisite: Hindi 101-102 or equivalent, or Linguistics 102. Not offered 1982-83. G. Kelley.]

For complete descriptions of courses numbered 600 and above, consult the appropriate instructor.

[700 Seminar In Hindi Linguistics Fall or spring. 3 credits. Prerequisite: permission of instructor. Not offered 1982-83. Hours to be arranged. J. W. Gair, G. Kelley.]

Indonesian

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Indonesian 102: Indonesian 101. M-F 8, plus 2 hours to be arranged. J. U. Wolff. A semi-intensive course for beginners.

201-202 Indonesian Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Indonesian 201, qualification in Indonesian; for Indonesian 202, Indonesian 201 or permission of instructor. Hours to be arranged. J. U. Wolff.

203-204 Composition and Conversation 203, fall; 204, spring. 3 credits each term. Prerequisite for Indonesian 204: Indonesian 203 or permission of instructor. Hours to be arranged. J. U. Wolff.

300 Linguistic Structure of Indonesian Fall or spring. 4 credits. Prerequisites: Indonesian 101-102 or equivalent, and Linguistics 101. Hours to be arranged. J. U. Wolff.

301-302 Readings In Indonesian and Malay 301, fall; 302, spring. 4 credits each term. Prerequisites: for Indonesian 301, Indonesian 201-202 or equivalent; for Indonesian 302, Indonesian 301. Hours to be arranged. J. U. Wolff.

303-304 Advanced Indonesian Conversation and Composition 303, fall; 304 spring. 4 credits each term. Prerequisites: for Indonesian 303, Indonesian 204; for Indonesian 304, Indonesian 303 or equivalent. Hours to be arranged. J. U. Wolff.

305-306 Directed Individual Study 305, fall; 306, spring. 2-4 credits. Prerequisite: Indonesian 301-302 and 303-304 or equivalent knowledge of Indonesian or Malay. Hours to be arranged. J. U. 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.

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. Hours to be arranged. J. U. Wolff.

FALCON

161-162 Intensive Course 161, fall; 162, spring. 16 credits each term. Prerequisite: permission of instructor. M-F, 6 hours each day. J. U. Wolff and staff.

Related Course

Malayo-Polynesian Linguistics (Linguistics 655-656)

Italian

A. Grossvogel, director of undergraduate studies, (261 Goldwin Smith Hall, 256-3580); G. Mazzotta, C. Rosen

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. 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 203-204 and the 201-202 sequence in Italian literature 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 24 credits of Italian literature courses at the 300 level or higher, with papers to be written in Italian or English. One or more courses offered by the Department of Comparative Literature may be counted toward the required 24 credits if students obtain the prior approval of their major adviser. Italian 402, History of the Italian Language, and 403, Structure of Italian, may be counted toward the 24 credits required for the major (an introductory linguistics course is a prerequisite of Italian 402 and 403).

Students majoring in Italian also will 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 may study in Italy, generally during their junior year, under any one of those study-abroad plans organized by American universities that allow the transfer of grades and credit, such as the Syracuse Semester in Italy, in Florence.

Fees. Depending on the course, a small fee may be charged for copies of texts for course work.

Languages and Linguistics

121-122 Elementary Course 121, fall; 122, spring. 4 credits each term. Prerequisite for Italian 122: Italian 121 or equivalent. Intended for beginners or students placed by examination. Students who obtain a CPT score of 560 after Italian 121-122 attain qualification and may enter the 200-level sequence; otherwise Italian 123 is required for qualification.

Lec, T 10:10 or 12:20; drills, M W R F 8, 9:05, 11:15, 12:20, 1:25, or 2:30. C. Rosen and staff. A thorough grounding is given in all the language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar and cultural information.

123 Continuing Italian Fall. 4 credits. Limited to students who have previously studied Italian and have a CPT achievement score between 450 and 559. Satisfactory completion of Italian 123 fulfills the qualification portion of the language requirement. M-F 11:15. C. Rosen and staff.

203-204 Composition and Conversation 203, fall; 204 spring. 3 credits each term. Prerequisites: for Italian 203, qualification in Italian; for Italian 204, 203 or equivalent. M W F 1:25 or 2:30. C. Rosen and staff.

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 have the option of taking courses in introductory literature; see separate listings under Italian 200, 201, and 202 for descriptions of these courses, any of 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 and Linguistics.

300 Advanced Italian: Language In Italian Culture. Spring. 3 credits. Prerequisite: Italian 204 or equivalent or permission of instructor.

M W F 11:15. C. Rosen and staff. Further development of all skills, with emphasis on self-expression. Readings center on two themes (1) contemporary Italian life, its trials and joys, as seen by the satirical columnist Luca Goldoni and others; (2) the Italian language, its origins, development and present state, including the role of the dialects. Emphasis on vocabulary building and awareness of stylistic levels.

[402 History of the Italian Language Spring. 4 credits. Prerequisite: Linguistics 101 (or equivalent), and qualification in Italian, or permission of the instructor. Not offered 1982-83.]

[403 Structure of Italian Fall. 4 credits. Prerequisite: Linguistics 102 and qualification in any Romance language. Offered alternate years. Next offered 1983-84]

[432 Italian Dialectology Spring, according to demand. 4 credits. Not offered 1982-83. C. Rosen.]

[700 Seminar in Italian Linguistics Offered according to demand. 4 credits. Not offered 1982-83. C. Rosen.]

Literature

201 Introduction to Medieval and Renaissance Literature 3 credits. Prerequisite: reading knowledge of Italian.

M W F 10:10. G. Mazzotta and staff. The course will focus on the major figures and texts of medieval and Renaissance literature with an eye on the wider cultural context of Italy. We will begin with readings and discussions of the poets of the Sweet New Style (Guinizelli, Cavalcanti, and Dante); selections from Petrarch's *Canzoniere* and Boccaccio's *Decameron*. Finally we shall look at some poems of Michelangelo, one canto from Ariosto's *Orlando Furioso*, and Machiavelli's *The Prince*.

202 Introduction to Modern Italian Literature 3 credits. Prerequisite: reading knowledge of Italian. M W F 10:10. A. Grossvogel and staff.

A reading of masterpieces of modern Italian literature with attention to the context in which they arose. Highlights of Galileo and Vico's writing. Selections of novels from romanticism to the contemporary period. The theater of Goldoni and Pirandello. Poetry from Leopardi to Montale.

322 Italian Civilization: Literature and Regionalism Spring. 4 credits.

T R 10:10-11:25. A. Grossvogel. All the regions of Italy will be studied in terms of their historical, literary, artistic, and sociological aspects in conjunction with the projection of the film series *L'Italia Vista dal Cielo* by Folco Quilici. The multiple reasons for still strongly felt regional boundaries, within which diversity and independence are maintained, will be studied mainly through contemporary literary texts.

[326 Twentieth-Century Novel Not offered 1982-83.]

[327-328 Dante: *La Divina Commedia* 327, fall; 328 spring, 4 credits.

Fall: T 2:30-4:25. Spring: W 2:30-4:25. G. Mazzotta. The course will study medieval doctrines. Focus is on some critical questions (such as politics, history, language, and exile) that the *Divine Comedy* poses.

334 Dante In Translation (also Comparative Literature 344) Spring, 4 credits.

M W F 12:20. G. Mazzotta. The literary, intellectual, and moral complexities of this fundamental work in our poetic and spiritual history are examined critically. From close readings of some celebrated passages in *Inferno*, *Purgatorio*, and *Paradiso*, the lectures and discussions map out Dante's own interpretations of myths and concerns in classical and Christian culture. We pursue, for instance, Dante's sense of the crisis in the earthly city and how Vergil and St. Augustine are brought to bear on Dante's elaboration. Issues such as utopia, chiliastic impulses, eschatology, are given ample treatment, just as the problem of how to "read" the past and Dante's own formulations is kept steadily under focus.

[335 Boccaccio Not offered 1982-83.]

[336 Boccaccio Not offered 1982-83.]

[345 Modern and Contemporary Short Fiction In Italy Not offered 1982-83.]

[347 Petrarch and the Renaissance Lyric Not offered 1982-83.]

353 Vico and the Renaissance Esthetics Fall, 4 credits.

T R 10:10-11:25. G. Mazzotta. After a survey of the medieval background, the course will examine the Renaissance debate on Aristotle's *Poetics*, the continuity of the Platonic tradition, and the baroque theories of metaphor in a text such as Tesauro's *Through the Looking Glass*. The hub of the course will consist in a detailed study of Vico's *New Science*, in which esthetics comes forth as the foundation of all knowledge. The texts and the discussion will be in English.

[359-360 The Italian Renaissance Not offered 1982-83.]

[366 Seventeenth-Century Prose Not offered 1982-83.]

[370 Eighteenth-Century Thought Not offered 1982-83.]

371 Goldoni and Alfieri: From Comedy to Tragedy. Fall, 4 credits.

M W F 9:05. A. Grossvogel. Readings for this course will concentrate on the dramatic works of the two major Italian playwrights of the eighteenth century. Carlo Gozzi's *fiabe*, Metastasio's melodrama, Chiari's parodies, the last sparks of the *commedia dell'arte* will be also examined to illustrate the pervasive character of the dramatic expression in the Italian literary and artistic life of the time. Attention will be given to the role of Goldoni as reformer of the theater and to the bitter controversy that he had to face. Some of the plays to be read will be *Il servitore di due padroni*, *La vedova scaltra*, *La locandiera*, *Gli innamorati*, *La bottega del caffè*, *Agamennone*, *Saul*, *Mirra*.

[381 Verga, Svevo, and Pirandello Not offered 1982-83.]

[387 Nineteenth Century Poetry: Leopardi Not offered 1982-83.]

[390 Contemporary Narrative in Italy Not offered 1982-83.]

[395 Twentieth-Century Prose: Contemporary Italian Short Fiction Not offered 1982-83.]

419-420 Special Topics in Italian Literature

419, fall; 420, spring, 2-4 credits each term. Prerequisite: permission of instructor. Staff.

Guided independent study of specific topics.

428 Eugenio Montale and Half a Century of Italian Poetry Spring, 4 credits.

T 2:30-4:25. A. Grossvogel. A reading of Montale's poetry: *Ossi di Seppia*, *Le Occasioni*, *La Bufera ed altro Satura*, *Diari* against the screen of the poetry of some of his contemporaries: D'Annunzio, Ungaretti, Saba, Quasimodo.

429-430 Honors in Italian Literature (also Italian 628) 429, fall; 420, spring, 4 credits each term.

Limited to seniors. Prerequisite: permission of instructor. Staff.

[437 Petrarch: *Canzoniere* Not offered 1982-83.]

[472 Eighteenth-Century Theater Not offered 1982-83.]

485 The Nineteenth Century: *I promessi sposi* Fall, 4 credits.

W 2:30-4:25. A. Grossvogel. Manzoni's novel together with Foscolo's *Ultime lettere di Jacopo Ortis* and Leopardi's *Operette morali* constitute the now acknowledged major contribution to the renewal of literary prose in the nineteenth century in Italy. A close reading of the texts, of their poetics, and their proximity will bring out intentions, achievements, and the unwilling reciprocity of the three major Italian writers of the century as they set out, in the brief span of a quarter of a century, to constitute modern prose.

[486 The Nineteenth Century Not offered 1982-83.]

[488 Giacomo Leopardi and Modern Italian Poetry In the Nineteenth Century Not offered 1982-83.]

527 Dante: *La Divina Commedia* 527, fall; 528, spring, 4 credits.

Fall: T 2:30-4:25. Spring W 2:30-4:25. G. Mazzotta. See Italian 327 for description.

[635 Boccaccio Not offered 1982-83.]

639-640 Special Topics in Italian Literature 639, fall; 640, spring, 4 credits each term.

Staff.

685 The Nineteenth Century: *I Promessi Sposi* Fall.

W 2:30-4:25. A. Grossvogel. See Italian 485 for description.

Japanese

Languages and Linguistics

101-102 Elementary Course 101, fall; 102, spring, 6 credits each term. Prerequisite for Japanese 102: Japanese 101 or equivalent. Intended for beginners or for those who have been placed in the course by examination.

Lecls, M W F 10:10; drills, M-F 9:05, 11:15, 12:20. E. H. Jordan and staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

123 Accelerated Introductory Japanese Fall, 6 credits. Prerequisite: permission of instructor.

Lecls, M W F 10:10 (with Japanese 101); drills, M W F 12:20. E. H. Jordan and 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.

141-142 Introductory Japanese for Business Purposes 141, fall; 142, spring, 4 credits each term. Prerequisite for Japanese 142: Japanese 141 or permission of instructor. (For undergraduates only. Graduates see Japanese 541-542.)

M-F 1:25. E. H. Jordan and staff. Introductory Japanese for students interested in international business and economics.

201-202 Intermediate Japanese I 201, fall; 202, spring, 3 credits each term. Prerequisites: for Japanese 201, Japanese 102 or equivalent; for Japanese 202, Japanese 201 or 205 or equivalent.

Lecls, M W F 1:25; drill, W 10:10 or 2:30 (with Japanese 205-206). Staff. Reading of elementary texts with emphasis on expository style.

203-204 Japanese Conversation 203, fall; 204, spring, 4 credits each term. Prerequisites: for Japanese 203, Japanese 102 or equivalent; for Japanese 204, Japanese 203 or 205 or equivalent.

Lecls, M W F 1:25; drills, M T R F 10:10 or 2:30 (with Japanese 205-206). Staff.

Training in listening and speaking for students who have acquired a basic oral proficiency.

205-206 Intermediate Japanese I and Conversation 205, fall; 206, spring, 6 credits each term. Prerequisites: for Japanese 205, Japanese 102 or equivalent; for Japanese 206, Japanese 205 or equivalent.

Lecls, M W F 1:25; drill, M-F 10:10 or 2:30. Staff. A combination of Japanese 201-202 and 203-204, for students interested in developing both written and oral skills.

241-242 Intermediate Japanese for Business Purposes 241, fall; 242 spring, 4 credits each term. Prerequisites: for Japanese 241, Japanese 142 or equivalent; for Japanese 242, Japanese 241 or equivalent. (For undergraduates only. Graduates see Japanese 543-544.)

Hours to be arranged. E. H. Jordan and staff. Intermediate Japanese for students in international business and economics.

301-302 Intermediate Japanese II 301, fall; 302, spring, 4 credits each term. Prerequisites: for Japanese 301, Japanese 202 or 206 or equivalent; for Japanese 302, Japanese 301 or equivalent.

M W F 2:30. Staff. Reading of selected modern texts with emphasis on expository style.

303-304 Communicative Competence 303, fall; 304, spring, 3 credits each term. May be repeated for credit. Prerequisite for Japanese 303, Japanese 204 or 206 or equivalent; for Japanese 304, Japanese 303 or equivalent.

M W F 1:25. E. H. Jordan and staff. Drill in the use of spoken Japanese within the constraints set by Japanese social settings.

401-402 Advanced Japanese 401, fall; 402, spring, 4 credits each term. Prerequisites: for Japanese 401, Japanese 302 or equivalent; for Japanese 402, Japanese 401 or equivalent.

M W F 2:30. Staff. Reading of selected modern texts with emphasis on expository style.

[404 Linguistic Structure of Japanese Spring, 4 credits. Prerequisites: Japanese 102 or permission of instructor, and Linguistics 101. Not offered 1982-83. Hours to be arranged. E. H. Jordan.]

407-408 Oral Narration and Public Speaking

407, fall; 408, spring. 2 credits each term.
Prerequisite: Japanese 304 or permission of instructor.

T R 1:25. Staff.

Instruction in storytelling, lecturing, and speechmaking, with emphasis on both the construction of discourse and Japanese patterns of oral delivery.

421-422 Directed Readings 421, fall; 422, spring.

Credit to be arranged. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

Topics are selected on the basis of student needs.

541-542 Introductory Japanese for Business

Purposes For graduate students only; undergraduates register for Japanese 141-142.

M-F 1:25.

See Japanese 141-142 above.

543-544 Intermediate Japanese for Business

Purposes For graduate students only; undergraduates register for Japanese 241-242.

See Japanese 241-242 above.

FALCON**161-162 Intensive Japanese (FALCON)** 161, fall;

162, spring. 16 credits each term. Prerequisite: permission of instructor.

M-F, six hours each day. E. H. Jordan and staff.

Literature in Japanese**405 Introduction to Modern Literary Japanese**

Fall. 4 credits. Prerequisite: Japanese 302 or permission of instructor.

B. deBary.

Readings of selected works of modern Japanese literature.

406 Introduction to Classical Japanese Spring.

4 credits. Prerequisite: Japanese 405 or permission of instructor.

K. Brazell.

An introduction to the grammar and styles of premodern Japanese. Selected readings from literature of various periods.

421-422 Directed Readings 421, fall; 422, spring.

Credit to be arranged. Prerequisites: for Japanese 421, Japanese 402 or equivalent; for Japanese 422, Japanese 421 or equivalent.

Hours to be arranged. Staff.

Topics are selected on the basis of student needs.

For complete descriptions of courses numbered 600 or above, consult the appropriate instructor.

611 Seminar in Modern Literature Fall or spring

on demand. 2-4 credits. Prerequisite: permission of instructor.

Hours to be arranged. B. deBary.

612 Seminar in Classical Literature Fall or

spring on demand. 2-4 credits. Prerequisite: permission of instructor.

Hours to be arranged. K. Brazell.

621-622 Advanced Directed Readings 621, fall;

622, spring. Credit to be arranged. Prerequisite: permission of instructor.

Hours to be arranged. Staff.

See courses listed under Department of Asian Studies for Japanese literature courses in translation.

Javanese**131-132 Elementary Course** 131, fall; 132,

spring. 3 credits each term. Prerequisites: for Javanese 131, qualification in Indonesian; for Javanese 132, Javanese 131 or equivalent.

Hours to be arranged. J. U. Wolff.

An elementary language course for those who have had no previous experience in the language.

133-134 Intermediate Course 133, fall; 134,

spring. 3 credits each term. Prerequisites: for Javanese 133, Javanese 132 or equivalent; for Javanese 134, Javanese 133 or equivalent.

Hours to be arranged. J. U. Wolff.

203-204 Directed Individual Study 203, fall; 204,

spring. 3 credits. Prerequisite: Javanese 134 or equivalent.

Hours to be arranged. J. U. Wolff.

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.

Old Javanese

See Linguistics 651-652.

Linguistics

Linguistics, the systematic study of human speech, 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 Modern Languages and Linguistics span most of the major subfields of linguistics—phonetics and phonology, the study of speech sounds; syntax, the study of sentence structure; semantics, the study of meaning; historical linguistics, the study of language change in time; sociolinguistics, the study of language as a social and cultural artifact; and applied linguistics, which relates the results of linguistic research to problems of bilingual education, second-language learning, and similar practical concerns. In theory, the gulf between the study of language in general and the study of particular languages, such as Spanish or German, is very wide; in practice, however, the two are intimately connected, and a high proportion of the students who enroll in linguistics courses at Cornell owe their initial interest in the discipline to a period of exposure to a foreign language in college or high school.

There are two introductory course sequences in linguistics: 111-112, which stresses the relationship of linguistics to other disciplines in the humanities and social sciences, and 101-102, which is designed for language majors, linguistics majors, and others who think that they may wish to do further work in the subject. The Cornell Linguistic Circle, a student organization, sponsors weekly colloquia on linguistic topics; these meetings are open to the University public, and anyone wishing to learn more about linguistics is most welcome to attend.

The Major

The major in linguistics has three prerequisites: (1) completion of Linguistics 101-102, (2) qualification in two languages, one from the familiar European group (Latin, Greek, French, Italian, Portuguese, Spanish, German, Russian) and one from the other languages offered at Cornell, and (3) 6 credits of course work beyond qualification in one of the languages studied. Some students may be unable to attain qualification in a non-European language before entering the major, in which case the requirement may be completed after admission to the major.

Completion of the major requires:

- 1) Linguistics 301, 310, or 303 (Syntax I);
- 2) 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;
- 3) a course in historical method, such as Linguistics 404, 410, or the history of a specific language or family; and
- 4) a minimum of 8 additional credits in linguistics chosen in consultation with the student's adviser.

With the adviser's approval, 4 such credits may be in a course in a related discipline with a significant linguistic component, such as psycholinguistics, language-acquisition, or anthropological linguistics.

Prospective majors should see Professor Gair, 407 Morrill Hall. For other courses relevant to linguistics, see anthropology, psychology, human development and family studies, computer science, and philosophy.

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.

Distribution Requirement

The distribution requirement in the social sciences may be satisfied by taking either Linguistics 101 or 111 and (1) any other course in linguistics or (2) any other course offered by the Department of Modern Languages and Linguistics for which one of these introductory linguistics courses is a prerequisite.

See also Modern Languages, Literatures, and Linguistics, p. 146.

101-102 Theory and Practice of Linguistics

101, fall; 102, spring. 4 credits each term.

M W F 9:05; disc section to be arranged. C. Rosen. An introductory course designed primarily for those who intend to major in a language or in general linguistics. (See Linguistics 111-112 for a course designed for nonmajors.) Linguistics 101 plus any other course in linguistics or any DMLL course for which Linguistics 101 is a prerequisite satisfies the social science distribution requirement.

111 Themes in Linguistics Fall. 4 credits.

Intended primarily for nonmajors. (Prospective linguistics majors should see Linguistics 101-102.)

M W F 10:10. Staff.

Basic linguistic concepts are introduced; relationship of linguistics to other disciplines is explored; emphasis on biological, psychological, social, and cultural contexts of language use. This course together with any other linguistics course other than 101 satisfies the social science distribution requirement.

[112 Themes in Linguistics. Spring. 4 credits.

Prerequisite: Linguistics 111 or permission of instructor. Not offered 1982-83.

Special topics.]

113-114 English of Spanish-English Bilinguals

113, fall; 114, spring. 3 credits each term. Linguistics 113 is not a prerequisite for 114.

M W F 1:25. I. Almirall-Padamsee, D. F. Solá.

Freshman Seminar. An introductory sociolinguistics course on the English language as used in Spanish-English bilingual communities. Fall semester topics include linguistic interference, code-switching, generational differences, and variation related to social function. Spring semester topics concentrate on variation in the use of English in the different Spanish-English communities established in the United States.

201 Phonetics Fall. 3 credits.

T R 8:30-9:45. J. E. Grimes.

Introductory-level study of practical and theoretical aspects of phonetics; emphasis on identifying, producing, and transcribing speech sounds.

202 Instrumental Phonetics Spring, 3 credits.
Prerequisite: Linguistics 201.

Hours to be arranged. Staff.
Intermediate-level study of practical, experimental, and theoretical aspects of articulatory and acoustic phonetics.

205 Understanding the Language of Television Images Fall, 4 credits.

T R 9:05, M 2:30. L. Waugh and R. Goldsen.
TV images convey connotative and denotative meanings that are widely understood. How do we read these images? What is the underlying, grammar-like structure that arranges them as signs and symbols in a shared meaning system? Using the techniques and concepts of content analysis (from sociology) and semiotics (from linguistics), we will decode images in product commercials.

[244 Language and the Sexes (also Women's Studies 244)] Fall or spring, 4 credits. Prerequisites: Linguistics 101 or 111, or Psychology 215, or permission of instructor. Not offered 1982-83.

M W F 1:25. S. McConnell-Ginet.]

264 Language, Mind, and Brain. Spring, 4 credits. For nonmajors or majors.

T R 2:30-3:45. J. S. Bowers.
A survey of what is currently known about the structure and function of natural language, with emphasis on the following topics: the basic biology of language; language acquisition; processing models; theories of mental representation and universal grammar; language and cognition.

300 Multilingual Societies and Cultural Policy Spring, 4 credits.

T R 2:30-4. D. F. Solá.
An interdisciplinary analysis of the impact of bilingualism on society, particularly in education and communication arts. The FLEX model is used to suggest a method of evaluating policy and program alternatives.

301-302 Phonology I-II Fall, 4 credits.
Prerequisite: Linguistics 101 or 111 or 601 or the equivalent.

T R 2:30-3:45. L. R. Waugh, J. Bowers.
A general survey of phonemics and of Jakobsonian distinctive feature theory, as well as selected other topics in autonomous phonology.

303-304 Syntax I, II 303, fall; 304, spring, 4 credits each term. Prerequisite for Linguistics 304: Linguistics 303.

T R 10:10-11:25. J. S. Bowers.
303 introduces the theory of syntax within a generative-transformational framework. 304 is an advanced course on syntax and the relation of syntax to semantics.

306 Functional Syntax Fall, 4 credits.
Prerequisite: Linguistics 102 or permission of instructor.

M W F 9:05. D. F. Solá.
A general survey of syntactic theories that highlight grammatical function, and reveal its role in discourse structure.

308 Dialectology Spring, 4 credits. Offered alternate years.
Hours to be arranged. Staff.
Methods and procedures of dialectological study with introduction to the major dialect atlases.

310 Morphology Spring, 4 credits. Prerequisite: Linguistics 101 or 111 or 601 or the equivalent.

T R 8:30-9:45. L. R. Waugh.
A general survey focusing on the relationship of meaning and form in morphology.

311-312 The Structure of English 311, fall; 312, spring, 4 credits each term. Prerequisites: for Linguistics 311, Linguistics 102 or permission of instructor; for Linguistics 312, Linguistics 311 or permission of instructor.

M W F 11:15. J. S. Bowers.
311 provides an overview of the syntactic structure of English, drawing upon relevant theoretical approaches. 312 deals with phonology, morphology, and special problems of English structure and semantics.

313 English for Teachers of English Fall, 4 credits. Prerequisite: for undergraduate majors, Linguistics 101-102 or equivalent; for graduate students, concurrent registration in Linguistics 601.

T R 12:20-1:50. M. Martin.
A course in modern English for teachers of nonnative speakers. An analysis of the phonetics, grammar, and semantics of the language in terms applicable to both classroom teaching and materials development.

314 Teaching English as a Foreign Language Spring, 4 credits. Prerequisites: Linguistics 313.

T R 12:20-1:50. M. Martin.
Methods and techniques used in the teaching of English language skills to nonnative speakers are examined. Attention is given to materials design and to current issues and new trends in the fields.

318 Style and Language Spring 4 credits.
Prerequisite: Linguistics 101 or permission of instructor.

T R 1-2:15. G. M. Messing.

341 India as a Linguistic Area Fall 4 credits.

Prerequisite: Linguistics 102 or permission of instructor.
Hours to be arranged. J. W. Gair, G. Kelley.
Cross-family influences in an area of interaction over a long time span are considered. No knowledge of Indian languages is expected.

[400 Semiotics and Language Spring 4 credits.
Prerequisites: a background in linguistics, anthropology, or literary theory, or permission of instructor. Not offered 1982-83.

Monday 3:30-6. L. R. Waugh.
An introduction to the study of semiotics in general and to particular semiotic theories (for example, those of Saussure, Perrie, Jakobson) and to language as a semiotic system.]

401 Language Typology Fall, 4 credits.
Prerequisite: Linguistics 101-102 or 601-602 or equivalent.

M W F 1:25. 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 characterize the total repertory of constructions available to natural languages. Common morphological devices and their syntactic correlates. Emphasis on two approaches to universals: (1) relational grammar; (2) the work of Joseph Greenberg.

402 Languages in Contact Fall, 4 credits.
Prerequisite: Linguistics 101-102 or permission of instructor. Offered in alternate years.

M W F 9:05. H. L. Kufner.
Examination of a variety of areas where languages exhibit interference phenomena: diglossia, bilingualism, dialects, second-language acquisition.

403 Applied Linguistics and Second-Language Acquisition Spring, 4 credits. Prerequisite: a course in the structure of a language at the 400 level.
T R 10:10-11:25. J. S. Noblitt.
Examination of the theoretical bases of applied linguistics, including current language-teaching methodologies.

404 Comparative Methodology Fall, 4 credits.
Prerequisite: Linguistics 101 or 601 or permission of the instructor.

T R 2:30-3:45. R. B. Jones, Jr.
Exemplification of the methods of comparative reconstruction of proto-languages, using problems selected from a variety of language families; methods of evaluating reconstructions.

405-406 Sociolinguistics 405, fall; 406, spring, 4 credits each term. Prerequisites: Linguistics 101-102 or 111-112 or permission of instructor. Linguistics 405 is not a prerequisite to 406.

T R 2:30-3:45. J. U. Woff.
Social influences (ethnic, socioeconomic, educational) on linguistic behavior, shifts in register, style, dialect, or language in different speech situations.

[410 Historical Linguistics: Methods and Approaches. Spring, 4 credits. Linguistics 102 or permission of instructor. Not offered 1982-83.

Hours to be arranged. J. Jasanoff.
A survey of the basic mechanisms of linguistic change, with special attention to comparative and internal reconstruction.]

[415-416 Social Functions of Language 415, fall; 416, spring, 4 credits each term. Prerequisites: Linguistics 101 or 111, or permission of instructor. Not offered 1982-83.

G. Kelley.
The function of language in society; social constraints on linguistic behavior, including taboos, jargons, registers, social and socially perceived dialects.]

417 History of the English Language Fall, 4 credits. Prerequisite: permission of instructor.

M W F 1:25. G. Kelley.
Development of modern English; external history; phonological, grammatical, and lexical change. The English language in America.

[421 Linguistic Semantics Fall, 4 credits. Not offered 1982-83.

S. McConnell-Ginet.]

440 Dravidian Structures Fall or spring, according to demand, 4 credits. Prerequisite: Linguistics 102.

Hours to be arranged. G. Kelley.
A comparative and contrastive analysis of the structures of several Dravidian languages.

442 Indo-Aryan Structures Fall or spring, according to demand, 4 credits. Prerequisite: Linguistics 102.

Hours to be arranged. J. W. Gair.
Typological discussion of the languages of the subfamily, phonology and grammar.

493 Honors Thesis Research Fall, 4 credits.

Hours to be arranged. Staff.
May be taken before or after Linguistics 494, or may be taken independently.

494 Honors Thesis Research Spring, 4 credits.

Hours to be arranged. Staff.
May be taken as a continuation of, or before, Linguistics 493.

600 Field Methods Fall or spring, 4 credits.

Prerequisites: Linguistics 101 or 201.
Hours to be arranged. F. E. Huffman.
Elicitation, recording, and analysis of data from a native speaker of a language not generally known to students.

601-602 Proseminar: Introduction to Graduate Study 601, fall; 602, spring, 4 credits each term. Primarily for entering graduate students majoring in general linguistics, but, with permission of instructor, open to those minoring in linguistics or majoring in the linguistics of specific languages.

M W F 10:10 and M 3:35. Staff.
A survey of the major subareas of linguistics. Emphasis is on basic concepts, current issues and their background, and methodology, with discussions and data-oriented problems based on extensive readings.

603 History of Linguistics Fall, 4 credits.

T R 1-2:15. G. M. Messing.
The history of linguistics from early Greek and Sanskrit grammarians to the modern period.

607 Schools of Linguistics Fall. 4 credits.

Prerequisites: Linguistics 102 or 602 and permission of instructor.

Hours to be arranged. J. E. Grimes.

Readings and descriptions of major schools of linguistic thought in the twentieth century.

[608 Discourse Analysis Spring. 4 credits.

Prerequisite: permission of instructor. Not offered 1982-83. J. E. Grimes.

Linguistic theory applied to relationships beyond the sentence.]

610 Topics in Transformational Grammar Fall

or spring. 3 credits. Prerequisite: permission of instructor.

Hours to be arranged. J. S. Bowers.

A survey of the development and current state of generative grammatical theory.

621-622 Hitite 621, fall; 622, spring. 4 credits

each term. Prerequisites: for Linguistics 621, permission of instructor; for Linguistics 622, Linguistics 621 or permission of instructor. [621 not offered fall 1982.] 622 offered spring 1983.

Hours to be arranged. J. Jasanoff.

[631-632 Comparative Indo-European

Linguistics 631, fall; 632, spring. 4 credits each term. Prerequisites: for Linguistics 631, permission of instructor; for Linguistics 632, Linguistics 631 or permission of instructor. Not offered 1982-83.

J. Jasanoff.

Fall: Introduction to phonology, branches of the family. Spring: Grammar.]

640 Elementary Pali Fall or spring, according to demand. 3 credits.

Hours to be arranged. J. W. Gair.

An introduction to the language of the canonical texts of Theravada Buddhism. Reading of authentic texts, with emphasis on both content and grammatical structure.

[641-642 Elementary Sanskrit 641, fall; 642,

spring. 3 credits each term. Prerequisite for Linguistics 642: Linguistics 641. Not offered in 1982-83.

Hours to be arranged. G. Messing, fall; J. Jasanoff, spring.]

651-652 Old Javanese Fall or spring, according to demand. 4 credits.

Hours to be arranged. J. U. Wolff.

Grammar and reading of basic texts.

653-654 Seminar in Southeast Asian

Linguistics 653, fall; 654, spring. 4 credits each term. Prerequisite: Linguistics 303 or permission of instructor. Linguistics 653 is not a prerequisite for 654.

Hours to be arranged. R. B. Jones.

Languages of mainland Southeast Asia. Topics, chosen according to student interests, may include description, dialectology, typology, comparative reconstruction, and historical studies.

655-656 Seminar in Malayo-Polynesian

Linguistics 655, fall; 656, spring. 4 credits each term. Prerequisites: for Linguistics 655, Linguistics 102 and permission of instructor; for Linguistics 656, Linguistics 655.

Hours to be arranged. J. U. Wolff.

Descriptive and comparative studies of Malayo-Polynesian languages.

657-658 Seminar in Austroasiatic Linguistics

657, fall; 658, spring. 4 credits each term. Prerequisites: Linguistics 102 and permission of instructor.

Hours to be arranged. F. E. Huffman.

Descriptive and comparative studies of Austroasiatic languages.

[671 Comparative Slavic Linguistics Fall. 4

credits. Prerequisite: permission of instructor. Not offered 1982-83.

E. W. Browne.

Sounds and forms of the Slavic languages and of prehistoric common Slavic; main historical developments leading to the modern languages.]

[672 Comparative Slavic Linguistics Spring. 4

credits. Prerequisite: Linguistics 671 or permission of instructor. Not offered 1982-83.

E. W. Browne.]

700 Seminar Fall or spring, according to demand.

Credit to be arranged.

Hours to be arranged. Staff.

Seminars are offered according to faculty interest and student demand. Topics in recent years have included subject and topic; Montague grammar; speech synthesis; linguistic computation; classical and autonomous phonology; Japanese sociolinguistics; relational grammar; semantics and semiotics; and others.]

701-702 Directed Research 701, fall; 702, spring.

1-4 credits.

Hours to be arranged. Staff.

751 Thai Dialectology Fall. 4 credits.

Prerequisites: Linguistics 303 and permission of instructor.

Hours to be arranged. R. B. Jones, Jr.

Geographical distribution of the Thai languages and methods of classifying and subgrouping.

752 Comparative Thai Spring. 4 credits.

Prerequisites: Linguistics 404 or equivalent, and permission of instructor.

Hours to be arranged. R. B. Jones, Jr.

Comparative reconstruction of Proto-Thai, including various points of view and criteria for subgrouping.

753 Tibeto-Burman Linguistics Fall. 4 credits.

Prerequisites: Linguistics 404 or equivalent, and permission of instructor.

Hours to be arranged. R. B. Jones, Jr.

Comparative reconstruction of Tibeto-Burman, with emphasis on the Lolo-Burmese branch and historical study of Burmese.

Pali

See Linguistics 640.

Polish**131-132 Elementary Course** 131, fall; 132,

spring. 3 credits each term. Prerequisite for Polish 132: Polish 131 or equivalent.

M W F 9:05. Staff.

[133-134 Intermediate Course 133, fall; 134,

spring. 3 credits each term. Prerequisites: for Polish 133, Polish 132 or equivalent; for Polish 134, Polish 133 or equivalent. Not offered 1982-83.

E. W. Browne.]

Portuguese**121-122 Elementary Course** 121, fall; 122,

spring. 4 credits each term. Intended for beginners or for those who have been placed in the course by examination. Students may attain qualification upon completion of 122 by achieving a satisfactory score on a special examination.

Lec. W 12:20; drills, M T R F 12:20 or 1:25. Staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

203-204 Intermediate Composition and

Conversation 203, fall; 204, spring. 3 credits each term. Prerequisites: for Portuguese 203, qualification in Portuguese; for Portuguese 204, Portuguese 203 or permission of instructor.

M W F 10:10. Staff.

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.

303-304 Advanced Composition and

Conversation 303, fall; 304, spring. 4 credits each term. Prerequisite: for Portuguese 303, Portuguese 204 or equivalent; for Portuguese 304, Portuguese 303 or equivalent.

M W F 11:15. Staff.

[305-306 Readings in Luso-Brazilian Culture

305, fall; 306, spring. 4 credits each term. Prerequisites: Portuguese 204 or equivalent or permission of instructor. Not offered 1982-83.]

700 Seminar in Portuguese Linguistics Fall or

spring, according to demand. 4 credits.

Hours to be arranged. Staff.

Selected problems in the structure of Portuguese.

Quechua**131-132 Elementary Course** 131, fall; 132,

spring. 3 credits each term. Prerequisite: qualification in Spanish.

M W F 11:15. D. F. Solá.

A beginning conversation course in the Cuzco dialect of Quechua.

133-134 Intermediate Course 133, fall; 134,

spring. 3 credits each term. Prerequisites: for Quechua 133, Quechua 131-132 or equivalent; for Quechua 134, Quechua 133 or equivalent.

Hours to be arranged. D. F. Solá.

An intermediate conversation and reading course. Study of the Huarochiri manuscript.

700 Seminar in Quechua Linguistics Fall or

spring. Credit to be arranged. Prerequisite: permission of instructor.

Hours to be arranged. D. F. Solá.

Romanian**[131-132 Elementary Course** 131, fall; 132,

spring. Offered according to demand. 3 credits. Prerequisite for Romanian 132: Romanian 131 or equivalent. Not offered 1982-83.]

[133-134 Elementary Course II 133, fall; 134,

spring. Offered according to demand. 3 credits. Prerequisite for Romanian 134: Romanian 133 or equivalent. Not offered 1982-83.]

Romance Studies**Languages and Linguistics****321-322 History of the Romance**

Languages 321, fall; 322, spring. 4 credits each term. Prerequisite for Romance Studies 322: Romance Studies 321. Offered alternate years.

M W F 1:25. J. Herschensohn.

Diachronic development of the Romance languages from Latin, with emphasis on Spanish, French, Italian, and Romanian. 321 concentrates on external history and phonological changes; 322 concentrates on morphological and syntactic developments.

[323-324 Comparative Romance Linguistics

323, fall; 324, spring. 4 credits each term. Prerequisite for Romance Studies 324: Romance Studies 323. Not offered 1982-83; next offered 1983-84.

C. Rosen.

Basic characteristics of the Romance language family. Salient features of eight Romance languages; broad and localized trends in phonology, syntax, and the lexicon; elements of dialectology.]

620 Area Topics in Romance Linguistics Spring

4 credits. May be repeated for credit.

Hours to be arranged. J. S. Noblitt.
Topic for 1983: Old Provençal.

621 Problems and Methods in Romance Linguistics Spring, 4 credits. Prerequisite: Linguistics 401 or permission of instructor.

Hours to be arranged. C. Rosen.
Central topics in Romance syntax in the light of current theories of universal grammar.

[622 Romance Dialectology Spring, 4 credits. Offered every third year. Not offered 1982-83. Diachronic and synchronic survey of dialects of the Romance language areas.]

Literature

109 Freshman Seminar: An Introduction to Semiotics (also French 109) Fall and spring, 3 credits.

T R 10:00. Staff.
See description under French Literature.

[303 Isms: General Concepts in Modern Cultural History (also Comparative Literature 303) Not offered 1982-83.]

[355 The Picaresque Novel in a European Perspective (also Comparative Literature 355) Not offered 1982-83.]

459 Being, God, Mind: Key Terms of Western Thought from Plato to Vico (also Comparative Literature 359) Fall, 4 credits.

T R 12:20-1:35. C. M. Arroyo.
A reading of some basic philosophical and theological works from Plato's *Symposium* to Vico's *New Science* (1744) in order to explore (a) the development of western intellectual terminology; b) the intellectual background and axioms of the European literatures; c) the relation of ambiguous axioms and unambiguous legislation and social discrimination.

[480 Biology and Theology: Approaches to the Origin of Life, Evolution, Heritage and Freedom, Sexuality and Death (also Comparative Literature 480) Not offered 1982-83.]

Russian

L. H. Babby, E. W. Browne, P. Carden, C. Emerson, G. Gibian, R. L. Leed (director of undergraduate studies (language), 222 Morrill Hall, 256-5110), N. Perlina, S. Senderovich, A. Zholkovsky (director of undergraduate studies (literature), 194 Goldwin Smith Hall, 256-4047)

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 101-102, 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 102 or the equivalent. Students who elect to major in Russian should consult both Professor Zholkovsky and Professor Leed 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 language.

Honors. Students taking honors in Russian undertake individual reading and research and write an honors essay.

Russian and Soviet Studies Major

See Special Programs and Interdisciplinary Studies, which follows the department listings.

Languages and Linguistics

101-102 Elementary Courses 101, fall; 102, spring, 4 credits each term. Prerequisite for Russian 102, Russian 101 or equivalent. Intended for beginners or students placed by examination and those who wish to obtain qualification within two semesters or who wish to enter the 200-level sequence the following fall semester.

Lecs, T R 11:15 or T R 2:30; drills M-F 9:05, 12:20, or 1:25. R. L. Leed and staff.

A thorough grounding is given in all the language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar, reading, and cultural information.

121-122 Elementary Course 121, fall; 122, spring, 4 credits each term. Prerequisite for Russian 122: Russian 121 or equivalent. Intended for beginners or students placed by examination. Students who obtain a CPT achievement score of 560 after Russian 121-122 attain qualification and may enter the 200-level sequence; otherwise Russian 123 is required for qualification.

Lec, T; drills, M W R F 8 or 2:30. Staff
A thorough grounding is given in all the language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lectures cover grammar, reading, and cultural information.

123 Continuing Russian Fall, 4 credits. Limited to students who have previously studied Russian and have a CPT achievement score between 450 and 559. Satisfactory completion of Russian 123 fulfills the qualification portion of the language requirements.
M-F 3:35. Staff.

A prequalification course designed to prepare students for study at the 200 level. Passing this course is equivalent to qualification.

203-204 Composition and Conversation 203, fall; 204, spring, 3 credits each term. Prerequisite: qualification in Russian. Prerequisite for Russian 204: Russian 203 or equivalent.

Drills, M W R F 11:15, 1:25, or 3:35. J. Bosky.
Guided conversation, composition, reading, pronunciation, and grammar review, emphasizing the development of accurate and idiomatic expression in the language.
Note: Students placed in the 200-level courses also have the option of taking courses in introductory literature; see separate listings under Russian 200, 201, and 202 for descriptions of these courses, any of which may be taken concurrently with the 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 and Linguistics.

303-304 Advanced Composition and Conversation 303, fall; 304, spring, 4 credits each term. Prerequisites: for Russian 303, Russian 204 or equivalent; for Russian 304, Russian 303 or equivalent.

M W F 12:20. J. Bosky.

305-306 Directed Individual Study 305, fall; 306, spring, 2 credits. Prerequisites: for Russian 305, Russian 303-304 or equivalent; for Russian 306, Russian 305.

Hours to be arranged. J. Bosky.
This is a practical language course on an advanced level and is designed to improve oral control of colloquial Russian.

401-402 History of the Russian Language 401, fall; 402, spring, 4 credits each term. Prerequisites: for Russian 401, qualification in Russian; for Russian

402, Russian 401 or equivalent. Offered alternate years.

Hours to be arranged. L. H. Babby.
Phonological, morphological, and syntactic developments from Proto-Slavic to modern Russian.

[403-404 Linguistic Structure of Russian 403, fall; 404, spring, 4 credits each term. Prerequisite for Russian 403: qualification in Russian; Linguistics 101-102 recommended. Prerequisite for Russian 404: Russian 403 or equivalent. Offered alternate years. Not offered 1982-83; next offered 1983-84.

Hours to be arranged. L. H. Babby.
A synchronic study and analysis of Russian linguistic structure. Russian 403 deals primarily with phonology and morphology and 404 with syntax.]

405-406 Advanced Russian Morphology and Syntax (formerly 301-302), 405, fall; 406, spring, 4 credits each term. Prerequisites: for Russian 405, Russian 304 or permission of instructor; for Russian 406, Russian 405.

Hours to be arranged. L. H. Babby.
This course is intended primarily to increase the students active command of difficult Russian syntactic constructions. Special attention is paid to word order, impersonal sentences, negation, participles, gerunds, and also to building active vocabulary.

[601 Old Church Slavic Fall, 4 credits. This course is prerequisite to Russian 602. Offered alternate years. Not offered 1982-83.
E. W. Browne.
Grammar and reading of basic texts.]

[602 Old Russian Spring, 4 credits. Prerequisite: Russian 601. Offered alternate years. Not offered 1982-83; next offered 1983-84.

L. H. Babby.
Structural analysis of Old Russian, and close reading of texts.]

700 Seminar in Slavic Linguistics Offered according to demand. Variable credit.
Staff.

Topics chosen according to the interests of staff and students.

Literature

103 Freshman Seminar: Classics of Russian Thought and Literature Fall and spring, 3 credits each term.

M W F 11:15. Staff.
Emphasis is on connections between Russian literary masterpieces and their historical background. The seminar covers both nineteenth- and twentieth-century works. Readings in English translation of Dostoevsky, Solzhenitsyn, and others.

104 Freshman Seminar: Nineteenth-Century Russian Literary Masterpieces Fall and spring, 3 credits each term.

M W F 9:05 or 12:20. Staff.
Readings in English translation of works by Dostoevsky, Tolstoy, and others; limited to nineteenth-century authors. A slightly more literary and less historical course than Russian 103.

105 Freshman Seminar: Twentieth-Century Russian Literary Masterpieces Fall and spring, 3 credits each term.

T R 8:40-9:55. Staff.
Readings in English translation of works by Babel, Pasternak, Solzhenitsyn, and others, studied against the background of Soviet social and political developments.

201-202 Readings in Russian Literature 201, fall; 202 spring, 3 credits each term. Prerequisite: qualification in Russian. Open to freshmen. Formal requirements: daily homework sheets, occasional quizzes on vocabulary with questions on the texts in

Russian and English, a final exam, and one semester paper (10-12 pages) to be written in English on a topic of the student's choice.

M W F 10:10. C. Emerson.

Designed as the first literature course taken entirely in Russian—both readings and class discussions. But daily assignments are short and considerable guidance is provided; there is no presumption of fluency. The goals of the course are to introduce students to major genres (lyric poetry, fairy tale, drama, narrative prose); to sample widely-differing literary styles, and to accomplish both without recourse to English. Readings from the nineteenth century masters: Pushkin, Gogol, Tolstoy, Dostoevsky, supplemented by twentieth-century poetry. Whenever possible, selected texts are also studied in "transposed" form—first the original, then an illustrated film strip, poetic reading, musical setting, or excerpt from an opera libretto (Mussorgsky's *Boris Godunov*, Rimsky-Korsakov's *Tsar Saltan*, Prokofiev's *War and Peace*).

307 Themes from Russian Culture Fall. 4 credits. Formal requirements: regular attendance and class participation; two in-class midterms; one semester paper which may be rewritten in place of a take-home final exam.

M W F 1:25. C. Emerson.

Russia is a difficult culture to understand in part because she has been, at least until the 20th century, *two* cultures: a westernized elite and a conservative, Orthodox peasantry. Many of the greatest works of Russian culture are attempts to bring these two cultures together—Tolstoy and Dostoevsky in literature, Mussorgsky in music, Repin in visual arts. To appreciate this great flowering of Russian culture in the nineteenth century, some understanding of the traditional values of Old Russia (and the transitional values of New Russia) is essential. This course looks at the visual art of ancient Muscovy, the lives of its saints, the image of the city (Petersburg), and the cultural crisis that resulted from the collision of East with West. Developments in music are included if students express an interest. Works of moderate length by Pushkin, Gogol, Dostoevsky, Tolstoy, and Chekhov are read as cultural artifacts—with the goal of determining, by the end of the course, what constitutes a "Russian" theme.

308 Themes from Russian Culture Spring. 4 credits. Formal requirements: same as Russian 307.

M W F 1:25. C. Emerson.

Continuation of 307 into the Soviet period, although either course may be taken separately. Themes include the liberating (and later enslaving) effect of the Revolution, the politicization of Russian literature, and "socialist realism" vs. the realistic tradition of Tolstoy and Solzhenitsyn.

329 Eastern Europe Today: Economics, Government, Culture (also Government 326 and Economics 329) Spring. 4 credits. The course is meant as an eventual complement to Government/Economics/Russian 330.

T R 2:30-3:45. G. Gibian, K. Poznanski, J. Reppy. Introductory, interdisciplinary survey of Poland, Hungary, Czechoslovakia, and Yugoslavia since World War II, with emphasis on contemporary developments. The goals of the course are to examine differences (the variety of backgrounds) among East European countries; the common elements (for example, political relations with the USSR); and domestic situations, the economy, and culture.

[330 The Soviet Union: Politics, Economics, and Culture (also Economics and Government 330)] Not offered 1982-83; next offered 83-84]

331 Russian Poetry Spring. 4 credits.

Prerequisites: Russian 202 or the equivalent and permission of the instructor. This course may be counted towards the 12 credits of Russian literature in the original language for the Russian major.

T R 12:20. A. Zholkovsky.

A survey of Russian poetry with primary emphasis on analysis of individual poems by major poets.

332 Russian Theatre and Drama Spring. 4 credits.

T R 2:30-3:45. S. Senderovich.

A survey of Russian theatre and drama from the beginning to the present time. Reading and discussion of major plays in English translation.

[334 The Russian Short Story. Not offered 1982-83.]

349 Gogol's Posterity: Satire under the Soviets. Fall. 4 credits.

T R 2:30-3:45. A. Zholkovsky.

An introduction to an appreciation and analysis of some of the best satirical writing produced inside Russia since the Revolution. In English translation.

350 Tolstoy and the Disciplines (also College Scholar 350) Spring. 4 credits.

M 2:30-4:25 plus one hour to be arranged.

P. Carden.

"What he should do or be is . . . only a pedagogical question" (Lukacs). A central question for Western thought has been how worthy activity in the world (the program for the citizen, parent, spouse, friend, lover in their ideal relationships with others) and a worthy form of being (pursuit of happiness and fulfillment) could be fostered by self-development and in particular by the forms of pedagogy practiced by parents, teachers, circles of friends, and society. In this seminar we will examine this high tradition of philosophical pedagogy. The center of our inquiry will be Tolstoy's *War and Peace*, an exemplary novel of the complexities of finding a way to act and be. Other texts that we will study from this point of view will be Plato's *Phaedo*, Rousseau's *Emile*, Schiller's *On Naive and Sentimental Poetry*, Dostoevsky's *Notes from Underground*, and Flaubert's *Sentimental Education*.

[367 The Russian Novel Not offered 1982-83.]

[368 Soviet Literature Not offered 1982-83.]

[369 Dostoevsky Not offered 1982-83.]

373 Chekhov Fall. 4 credits.

A special section is offered for students who read Russian; this section may be used toward the 12 credits of Russian literature in the original language for the Russian major.

T R 12:20-1:35. S. Senderovich.

Reading and discussion of Chekhov's works in English translation, with main emphasis on the short story. The course is designed for nonspecialists as well as literature majors. A variety of approaches will be employed; informal lectures and discussions.

379 The Russian Connection (also Comparative Literature 379) Spring. 4 credits.

M W F 9:05. P. Carden.

Russian literature in its European context. We will discuss great works of the Russian prose tradition in their reciprocal relations with European prose. Among the Russian authors to be studied will be Pushkin, Gogol, Lermontov, Tolstoy, and Dostoevsky. Among the European authors whose work helped to shape or was in some degree shaped by Russian literature, we will look at Rousseau, Goethe, Constant, Sterne (*Tristram Shandy*), Hoffmann, and Stendhal (*The Charterhouse of Parma*). In English Translation.

[389 Modern Literature in Poland, Czechoslovakia, and Yugoslavia (also Comparative Literature 389)] Not offered 1982-83; next offered 1985.]

393 Honors Essay Tutorial Fall or spring. 4 credits.

Hours to be arranged. Staff.

431 Short Russian Prose Spring. 4 credits. Prerequisites: Russian 202 or the 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.

T R 9:05-9:55, plus one hour to be arranged.

G. Gibian.

[432 Pushkin Not offered 1982-83]

491 Reading Course: Russian Literature in the Original Language Fall or spring. 1 credit each term. Prerequisite: permission of instructor.

To be arranged. 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.

492 Supervised Reading in Russian Literature Fall or spring. 1-4 credits each term.

Hours to be arranged. Staff.

[493 Tolstoy's *War and Peace* and Children's Stories: Thematic Invariance and Plot Structure Not offered 1982-83.]

[494 Early Literary Semiotics, East and West Not offered 1982-83.]

498 The Age of Symbolism Fall. 4 credits.

M W 2:30-3:20. P. Carden.

This course will cover the period 1890-1910, focusing in particular on the developments associated with Symbolism. Among the authors to be read will be Sologub, Merezhkovsky, Gippius, Remizov, and the early work of Blok and Biely. Among phenomena from the other arts of the age, we will consider the contributions to the visual arts of Vrubel and Borisov-Musatov, and the contributions to theater of the Ballets-russe group, Stanislavsky and early Meyerhold. This course forms a sequence with Russian 499, though each course may be taken independently. A section for Russian readers can be arranged. In English translation.

[499 Russian Modernism Not offered 1982-83.]

611 Supervised Reading and Research Fall or spring. 2-4 credits. Prerequisite: permission of the department.

Hours to be arranged. Staff.

[617-618 Russian Stylistics Not offered 1982-83.]

[620 Studies in Modern Poetry Not offered 1982-83.]

621 Russian Literature from the Beginnings to 1700 Fall. 4 credits.

R 4-6. S. Senderovich.

622 Eighteenth-Century Literature Spring. 4 credits.

R 4-6. S. Senderovich.

[624 Russian Romanticism Not offered 1982-83.]

671 Seminar in Nineteenth-Century Russian Literature Spring. 4 credits.

W 2:30-4:30. G. Gibian.

Topic: Three hackneyed terms in Russian literary history: *narodnost'*, Realism, Formalism. (Various definitions and applications of the terms. Could they become meaningful if approached in fresh ways?)

672 Pasternak Fall. 4 credits.

T 4-6. A. Zholkovsky.

[701 Proseminar: Methods in Research and Criticism Not offered 1982-83.]

Courses in Russian

201-202 Readings in Russian Literature

331 Russian Poetry**431 Short Russian Prose****491 Reading Course: Russian Literature in the Original Language****492 Supervised Reading in Russian Literature****611 Supervised Reading and Research****621 Russian Literature from the Beginnings to 1700****622 Eighteenth-Century Literature****671 Seminar in Nineteenth-Century Russian Literature Courses in English****672 Pasternak****Courses in English****103 Freshman Seminar: Classics of Russian Thought and Literature****104 Freshman Seminar: Nineteenth-Century Russian Literary Masterpieces****105 Freshman Seminar: Twentieth-Century Russian Literary Masterpieces****307-308 Themes from Russian Culture****329 Eastern Europe Today: Economics, Government, Culture****332 Russian Theater and Drama****349 Gogol's Posterity: Satire under the Soviets****350 Tolstoy and the Disciplines****373 Chekhov****379 The Russian Connection****498 The Age of Symbolism****Sanskrit**

See Linguistics 641-642.

Serbo-Croatian

[131-132 Elementary Course] 131, fall; 132, spring. 3 credits each term. Prerequisite for Serbo-Croatian 132: Serbo-Croatian 131 or equivalent. Not offered 1982-83.
E. W. Browne.]

[133-134 Intermediate Course II] 133, 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. Not offered 1982-83.
E. W. Browne.]

Sinhala (Sinhalese)

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Sinhala 102: Sinhala 101 or equivalent.

Hours to be arranged. J. W. Gair.
A semi-intensive course for beginners. A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

201-202 Sinhala Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Sinhala 201, qualification in Sinhala; for Sinhala 202, Sinhala 201 or equivalent.

Hours to be arranged. J. W. Gair.

203-204 Composition and Conversation 203, fall; 204, spring. 3 credits each term. Prerequisites: for Sinhala 203, Sinhala 202 or permission of instructor; for Sinhala 204, Sinhala 203 or equivalent.

Hours to be arranged. J. W. Gair.

Related Courses

See also Linguistics 341, 442, 631, 640, 641.

Spanish

U. J. DeWinter, J. W. Kronik, C. Moron-Arroyo, C. Piera, M. Randel, E. M. Santí, M. Suñer (director of undergraduate studies (language), 218 Morrill Hall, 256-3384), J. Tittler (director of undergraduate studies (literature), 269 Goldwin Smith Hall, 256-5038), K. Vernon

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 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 Tittler (269 Goldwin Smith Hall), who will admit them to the major, and choose an adviser from the Spanish faculty of either the Department of Romance Studies or the Department of Modern Languages and Linguistics. 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.

Spanish 201 and 204 (or equivalent) are prerequisite to entering the major in Spanish. All majors will normally include the following core courses in their programs:

- 1) two literature courses of the 315-316-317 series.
- 2) 311 and 312 (or equivalent).

Spanish majors have great flexibility in devising their programs of study and areas of concentration. Some typical options of the major are:

- 1) Spanish literature, for which the program of study normally includes at least 24 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.
- 2) Spanish linguistics, for which the program normally includes Spanish 401, 407, 408, and at least 12 additional credits in general or Spanish linguistics. (Linguistics 101-102 are recommended before entering this program.) Students interested in including linguistics in their programs should consult with the coordinator of Spanish for the Department of Modern Languages and Linguistics (Professor M. Suñer).
- 3) A combination of literature and linguistics.
- 4) Any of the above options with certain courses in other disciplines counted towards 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.

Spanish majors are encouraged to spend all or part of the junior year in a Spanish-speaking country on one of the study-abroad programs organized by American universities that allow the transfer of grades and credits. 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 wish 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 from either the Department of Romance Studies or the Department of Modern Languages and Linguistics 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 copies of texts for course work.

Languages and Linguistics

121-122 Elementary Course 121, fall; 122, spring. 4 credits each term. Prerequisite for Spanish 122: Spanish 121. Special sections of this course are available for students with qualification in another language. Intended for beginners or students placed by examination. Students who obtain a CPT achievement score of 560 after Spanish 121-122 attain qualification and may enter the 200-level sequence; otherwise Spanish 123 is required for qualification.

Lec, R 12:20, R 2:30, F 11:15, or F 1:25; drills, M-R 8, 9:05, 10:10, 11:15, 12:20, 1:25, 2:30, 3:35. Evening prelims: fall, 7:30 p.m., Nov. 2.; spring, 7:30 p.m., April 5. C. Piera and staff.

A thorough grounding is given in all language skills: listening, speaking, reading, and writing. Language practice is in small groups. Lecture covers grammar, reading, and cultural information.

123 Continuing Spanish Fall or spring. 4 credits. Limited to students who have previously studied Spanish and have a CPT achievement score between 450 and 559. Satisfactory completion of Spanish 123 fulfills the qualification portion of the language requirement.

Fall: lec, M 11:15 or 1:25; drills, T-F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. Spring: lec, M 11:15 or 1:25; drills, T-F 9:05, 10:10, 11:15, or 12:20. Evening prelims: fall, 7:30 p.m., Oct. 5, Nov. 9; spring, 7:30 p.m., March 1, April 12. Staff.

An all-skills course designed to prepare students for study at the 200-level.

203 Intermediate Composition and Conversation Fall or spring. 3 credits. Prerequisite: qualification in Spanish.

Fall: M W F 8, 9:05, 10:10, 11:15, 12:20, 1:25, or 2:30. Spring: M W F 8, 9:05, 10:10, 12:20, 1:25, or 2:30. Evening prelims: fall, 7:30 p.m., Oct. 7; spring, 7:30 p.m., March 1. 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.

204 Intermediate Composition and Conversation Fall or spring. 3 credits. Prerequisite: Spanish 203 or permission of instructor.

Fall: M W F 12:20 or 1:25. Spring: M W F 9:05, 10:10, 11:15, 12:20 or 1:25. Evening prelims: Fall, 7:30 p.m., Oct. 26; Spring, 7:30 p.m., Mar. 22. 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.

310 Advanced Conversation and Pronunciation Spring. 2 credits. Prerequisite: Spanish 204 or equivalent.

M W F 9:05. Staff.

311 Advanced Composition and Conversation (formerly 303) Fall 4 credits. Prerequisite: Spanish 204 or equivalent.

M W F 12:20. M. Randel.

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.

312 Advanced Composition and Conversation Spring. 4 credits. Continuation of 311 but may be taken separately. Required of Spanish majors.

M W F 12:20. M. Randel.

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.

[401-402 History of the Spanish Language 401, fall; 402, spring. 4 credits each term. Prerequisites: Linguistics 101 and qualification in Spanish, or permission of the instructor. Not offered 1982-83. A historical analysis of the phonology, morphology, syntax, and lexicon of the Spanish language up to the seventeenth century. Selected medieval documents are read and discussed.]

407 Applied Linguistics: Spanish Fall. 4 credits. Prerequisites: qualification in Spanish and Linguistics 101, or permission of instructor.

M W F 1:25. M. Suñer.

Designed to equip the teacher of Spanish with the ability to apply current linguistic theory to second-language learning.

408 The Grammatical Structure of Spanish Spring. 4 credits. Prerequisites: qualification in Spanish and Linguistics 101 or permission of instructor.

M W F 11:15. C. Piera.

Survey of the salient morphological and syntactic characteristics of contemporary Spanish.

[601 Hispanic Dialectology Fall, according to demand. 4 credits. Not offered 1982-83. Survey of dialects to Latin America and the Caribbean.]

602 Linguistic Structure of Ibero-Romance. Fall or spring, according to demand. 4 credits.

M 2:30-4:30. C. Piera.

Phonological, morphological, and syntactic characteristics of the Romance languages (Catalan, Galician, Portuguese, Sephardic) and of the main dialects of the Iberian Peninsula, studied in relation to each other and to Castilian Spanish.

603 Contemporary Theories of Spanish Phonology Fall or spring, according to demand. 4 credits.

Hours to be arranged. Staff.

The sounds of Spanish analyzed according to Prague, structuralist, generative, and natural generative theory.

604 Contemporary Theories of Spanish Grammar Fall or spring, according to demand. 4 credits.

Hours to be arranged. M. Suñer.

Selected readings of contemporary Spanish linguists who exemplify different theoretical points of view.

700 Seminar in Spanish Linguistics Fall or spring, according to demand. Variable credit.

Hours to be arranged. Staff.

Topics in synchronic and diachronic Spanish linguistics.

Literature

201 Introduction to Hispanic Literature Fall or spring. 3 credits. Prerequisite: qualification in Spanish or permission of instructor. Conducted mainly in Spanish. (The literature course that normally follows Spanish 201 is 315, 316, or 317.)

Fall: M W F 9:05, 12:20, or T R 10:10-11:25.

Spring: M W F 9:05, 10:10, or 12:20-1:35. J. Kronik and staff.

An intermediate reading course in which texts from Spain and Spanish America are read and analyzed. The course is designed to increase reading and speaking facility in Spanish and to develop critical and analytical skills in the appreciation of literary texts.

205 Introduction to Hispanic Culture Spring. 3 credits.

M W F 1:25. DeWinter.

An intermediate reading course in which texts from Spain and Spanish America are read and analyzed. Texts have been selected primarily for their interpretations of unique aspects of Hispanic culture.

[313 Spanish Civilization Not offered 1982-83]

Note: Spanish 315, 316 and 317 can be taken in any order.

315 Readings in Sixteenth- and Seventeenth-Century Hispanic Literature Fall. 4 credits.

Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor. This course is not a prerequisite for Spanish 316 or 317.

M W F 10:10. M. Randel.

Readings and discussion of representative texts of the period from both Spain and her colonies in the New World: Garcilaso de la Vega, *Lazarillo de Tormes*, San Juan de la Cruz, Cervantes, Lope de Vega, Calderon, and others.

316 Readings in Modern Spanish Literature

Fall. 4 credits. Prerequisite: Spanish 201 or 4 years of high school Spanish or permission of instructor.

M W F 9:05. J. Tittler; T R 10:10. K. Vernon.

Readings and discussion of representative texts from Spain from the Romantic period to the present. Becquer, Galdos, Unamuno, Garcia Lorca, and others.

317 Readings in Spanish-American Literature Spring. 4 credits.

M W F 10:10. E. Santi; T R 10:10. J. Tittler.

Reading and discussion of representative texts of the nineteenth and twentieth centuries from Spanish America: Dario, Neruda, Borges, Paz, Garcia Marquez, Cortazar, and others.

323 Readings in Latin American Civilization Fall. 4 credits.

T R 10:10. E. Santi.

Readings and discussion in Spanish. The first half of the course will examine the historical development of Latin American society, its culture, and institutions; the second half will be devoted to oral presentations and in-depth discussion of topics of contemporary interest that students will have chosen and researched (for example, the political and economic crisis in Central America, Caribbean literature, Mexican muralism, etc.). The final paper will be based on that presentation. Class discussion in Spanish. Readings in Spanish and English.

Note: The prerequisite for the following courses, unless otherwise indicated, is Spanish 315 or 316 or 317 or permission of instructor.

331 The Modern Drama in Spanish America [Not offered 1982-83.]

[332 Modern Drama in Spanish America Not offered 1982-83.]

333 The Spanish-American Short Story Fall 4 credits.

M W F 12:20. J. Tittler.

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, Cortazar, Fuentes, Garcia Marquez, and Rulfo.

[335 The New Latin-American Narrative in Translation (also Comparative Literature 335 and General Education) Not offered 1982-83.]

[336 Popular Culture in Contemporary Spanish-American Prose Fiction Not offered 1982-83.]

[351 Spanish Drama of the Golden Age Not offered 1982-83; next offered 1983-84.]

[355 The Picaresque Novel in a European Perspective (also Comparative Literature 355) Not offered 1982-83.]

356 Spanish Lyric Poetry of the Golden Age Spring. 4 credits.

M W F 9:05. M. Randel.

Analysis of selected poetry of Garcilaso, Luis de Leon, San Juan de la Cruz, Gongora, Quevedo, and others. Discussion of the theoretical problems of poetry and the poetic tradition.

[368 The Birth of the Novel in Spain: Toward Don Quixote Not offered 1982-83.]

376 The Contemporary Spanish Novel Spring. 4 credits.

M W F 2:30. K. Vernon.

Reading and discussion of selected texts by today's major novelists: Marin-Santos, Goytisolo, Martin-Gaité, and Benet among others.

[386 The Nineteenth-Century Spanish Novel Not offered 1982-83.]

[389 Form and Formlessness in the Novel of the Generation of 1898 Not offered 1982-83.]

[390 Sociology and Literature in Twentieth-Century Spain Not offered 1982-83.]

[391 The Post-Civil War Drama in Spain Not offered 1982-83.]

392 Valle-Inclan and the Twentieth-Century Vanguard Theater in Spain Spring. 4 credits.

T R 10:10-11:25. J. Kronik.

A comprehensive study of Valle-Inclan as playwright, including the "esperpentos," with additional readings in the Spanish experimental theater (Unamuno, Azorin, Grau) and in its European background.

393 The Reader in the Novel (also Comparative Literature 369) Fall. 4 credits

T R 12:20. K. Vernon.

Devoted to an examination of the image of the reader and the act of reading as thematized in classic and contemporary texts, and the implications for our own reading experience. Works in translation by Cervantes, Fielding, Diderot, Nabokov, and others.

[394 Art and Politics in Latin America Not offered 1982-83.]

395 The Novel in Spain after the Civil War Fall. 4 credits.

M W F 1:25. J. Kronik.

A study of the Spanish novel of the 1940s and '50s as an instrument of protest against the social structure of Franco Spain and against traditional narrative forms. Among the novelists to be considered are Cela, Delibes, Laforet, Matute, Sanchez Ferlosio, with supplementary readings of Faulkner, Dos Passos, and Camus.

[396 Modern Latin American Poetry in Translation (also Comparative Literature 396) Not offered 1982-83.]

[398 Modern Hispanic Poetry Not offered 1982-83.]

399 Literature and Ideas in Modern Spain Fall.

T R 8:40-9:55 B. DeWinter.

The course will focus on the intellectual and literary achievements of the so-called Generations of 1898

and 1914. Among the topics to be discussed are Spanish perceptions of Spain and Europe; the concept of history and intrahistory; the problem of regionalism and universality; symbols of decadence and regeneration; the search for new forms of expression in the essay and the novel; the role of the intellectual in the political life of Spain. Authors to be read include Unamuno, Azorin, Valle-Inclan, Ortega y Gasset, Perez de Ayala, Manuel Azana, and others.

419-420 Special Topics in Hispanic Literature 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.

429-430 Honors Work in Hispanic Literature 429, fall; 430, spring. 4 credits each term. Limited to seniors. Prerequisite: permission of instructor. Staff.

[439 Medieval Literature Not offered 1982-83.]

[441 Medieval Literature 1300-1508 Not offered 1982-83.]

446 The Early Spanish Love Lyric: Origins to 1700 Not offered 1982-83.]

456 Figurative Landscapes in Spanish-American Fiction Spring. 4 credits. T 2:30-4:25 J. Tittler.

An investigation into the ways in which tropical scenery is depicted in the *novela de la tierra*, its precursors, and its descendants. Readings include *Maria*, *Dona Barbara*, *La voragine*, *Los pasos perdidos*, and *Pantaleon y las visitadoras*, among others.

[457 Readings from Don Quixote's Library (also Comparative Literature 358) Not offered 1982-83.]

459 Being, God, Mind: Key Terms of Western Thought from Plato to Vico (also Romance Studies 459 and Comparative Literature 359) Fall. T R 12:20 - 1:35. C. M. Arroyo.

A reading of some basic philosophical and theological works from Plato's *Symposium* to Vico's *New Science* (1744) in order to explore (a) the development of western intellectual terminology; (b) the intellectual background and axioms of the European literatures; (c) the relation of ambiguous axioms and unambiguous legislation and social discrimination.

[461 The Rhetoric of Honor Not offered 1982-83.]

466 Cervantes: Don Quixote Not offered 1982-83.]

[479 Colonial Spanish-American Literature Not offered 1982-83.]

[481 Eighteenth- and Nineteenth-Century Spanish Drama Not offered 1982-83.]

486 Realism and Naturalism in Spain: Clarin, Pardo Bazan, Blasco Ibanez Spring. 4 credits. R 2:30-4:25 J. Kronik.

An in-depth analysis of Clarin's *La Regenta* and an examination of the late nineteenth-century Spanish novel and short story in the context of the European narrative (Flaubert, Zola, Tolstoi).

489 Hispanic Romanticism Fall. 4 credits. T R 12:20. E. Santi.

A detailed study of the major texts of Hispanic Romanticism, its relationship to the broader European context, and the critical issues they pose, including lyricism, epistemology, the self, politics, history, and modernity. Authors to be studied will include Cadalso, Zorrilla, Espronceda, Larra, Becquer, Heredia, Isaacs, Marmol, Zorrilla de San Martin, and Villaverde.

639-640 Special Topics in Hispanic Literature 639, fall; 640, spring. 4 credits each term. To be taken by all new graduate students. Staff.

647 Studies in the Literature of Fifteenth-Century Spain Fall. 4 credits. T 2:30-4:25. C. Arroyo.

The poetry of the *Cancioneros* and *romanceros*; narrative prose, history, and chivalric literature. Italian influence, the new attention to the classics, and its impact on themes and style. The development of mysticism. The new sense of revival from 1474 on.

[689 Carlos Fuentes Not offered 1982-83.]

690 Graduate Seminar: Baroque and Neo-Baroque Spring. W 2:30-4:25. E. Santi.

The tensions and complications of Hispanic literary history will be examined through a broad spectrum of reading culled from three of its privileged moments: the baroque age in Europe and the Indies, the Spanish Generation of 1927, and the contemporary Neo-Baroque in Cuban literature. Following an intensive reading of a few representative early works (*Polifemo*, *Primero Suena, vida del Buscon*), we will discuss selected works by modern Peninsular and Cuban authors: Diego, Lorca, Alonso, Salinas, Carpentier, Lezama Lima, Cabrera Infante, Sarduy. Additional readings from the history and theory of the baroque problem (Ortega, D'Ors, Wolfliin, Wellek, Benjamin) will complement our discussions.

[696 The Contemporary Spanish-American Novel Not offered 1982-83.]

[699 Ortega y Gasset's *The Dehumanization of Art and Ideas of the Novel (1925)* (also Comparative Literature 690) Not offered 1982-83.]

Swahili

See Africana Studies and Research Center.

Tagalog

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Offered according to demand. Prerequisite: permission of instructor. Prerequisite for Tagalog 102: Tagalog 101. Hours to be arranged. J. U. Wolff.

201-202 Tagalog Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Tagalog 201, Tagalog 102 or equivalent; for Tagalog 202, Tagalog 201 or equivalent. Hours to be arranged. J. U. Wolff.

300 Linguistic Structure of Tagalog Fall or spring. 4 credits. Prerequisite: Linguistics 101. Hours to be arranged. J. U. Wolff.

Tamil

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Offered according to demand. Prerequisite for Tamil 102: Tamil 101 or equivalent. Hours to be arranged. J. W. Gair.

Telugu

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Telugu 102: Telugu 101 or equivalent. Hours to be arranged. G. Kelley.

[201-202 Telugu Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Telugu 201: qualification in Telugu; for Telugu 202, Telugu 201 or equivalent. Not offered 1982-83. G. Kelley.]

See also Linguistics 341, 440.

Thai

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Thai 102: Thai 101 or equivalent. Intended for beginners or students placed by examination.

Lecls, T R 11:15; drills, M-F 10:10. R. B. Jones, Jr. A thorough grounding is given in all the language skills: listening, speaking, reading, and writing.

201-202 Thai Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Thai 201, qualification in Thai; for Thai 202: Thai 201 or equivalent. M W F 2:30. R. B. Jones, Jr.

203-204 Composition and Conversation 203, fall; 204, spring. 3 credits each term. Prerequisites: for Thai 203, qualification in Thai; for Thai 204, Thai 203. Hours to be arranged. R. B. Jones, Jr.

301-302 Advanced Thai 301, fall; 302, spring. 4 credits each term. Prerequisite: Thai 201-202 or equivalent. M W F 12:20. R. B. Jones, Jr. Selected readings in Thai writings in various fields.

303-304 Thai Literature 303, fall; 304, spring. 4 credits each term. Prerequisite: Thai 301-302 or equivalent. Hours to be arranged. R. B. Jones, Jr. Reading of significant novels, short stories, and poetry written since 1850.

401-402 Directed Individual Study 401, fall; 402, spring. 4 credits each term. For advanced students. Prerequisite: permission of instructor. Hours to be arranged. R. B. Jones, Jr.

Turkish

131-132 Introduction to the Turkish Language 131, fall; 132, spring. 3 credits each term.

Hours to be arranged. L. Babby. This year-long introduction to structure of the Turkish language is intended primarily for linguists wishing to acquire a working knowledge of a syntactically complex non-Indo-European language. It can also be taken by students primarily interested in learning Turkish.

Ukrainian

[131-132 Elementary Course 131, fall; 132, spring. 3 credits each term. Prerequisite for Ukrainian 132: Ukrainian 131 or equivalent. Not offered 1982-83. E. W. Browne.]

Vietnamese

101-102 Elementary Course 101, fall; 102, spring. 6 credits each term. Prerequisite for Vietnamese 102: Vietnamese 101 or equivalent. Intended for beginners or students placed by examination. Hours to be arranged. F. E. Huffman.

201-202 Vietnamese Reading 201, fall; 202, spring. 3 credits each term. Prerequisites: for Vietnamese 201, qualification in Vietnamese; for Vietnamese 202, Vietnamese 201. Hours to be arranged. F. E. Huffman.

203-204 Composition and Conversation 203, fall; 204, spring. 3 credits each term. Prerequisites: for Vietnamese 203: qualification in Vietnamese; for Vietnamese 204, Vietnamese 203. Hours to be arranged. F. E. Huffman.

301-302 Advanced Vietnamese 301, fall; 302, spring. 4 credits each term. Prerequisite: Vietnamese 201-202 or equivalent. Hours to be arranged. F. E. Huffman.

401-402 Directed Individual Study 401, fall; 402, spring. 4 credits each term. Prerequisite: permission of instructor. Intended for advanced students.

Hours to be arranged. F. E. Huffman.

Yiddish

[171-172 **Elementary Yiddish.** Not offered 1982-83.]

Music

J. Webster, chairman; D. R. M. Paterson, director of undergraduate studies (213 Lincoln Hall, 256-3531); W. W. Austin, M. Bilson, L. Coral, M. Hatch, J. Hsu, K. Husa, S. Monosoff, E. Murray, R. Parker, D. M. Randel, T. A. Sokol, M. W. Stith, S. Stucky, B. Troxell, N. Zaslav

Musical Performance and Concerts

Musical performance is an integral part of Cornell's cultural life, and an essential part of its undergraduate academic programs in music. The department encourages music-making through its offerings in individual instruction and through musical organizations and ensembles, which 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:

Cornell Symphony Orchestra
Cornell Chamber Orchestra
Cornell Symphonic Band
Cornell Wind Ensemble
Small wind and brass ensembles
Collegium Musicum
Cornell Eighteenth-Century Orchestra
Cornell Gamelan Ensemble
Chamber music ensembles
Cornell Chorus
Cornell Glee Club
Chamber Singers
Sage Chapel Choir

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 department office, 125 Lincoln Hall (256-4097), can always supply up-to-date information.

The Department of Music and the Faculty Committee on Music sponsor nearly one hundred formal and informal concerts each year by Cornell's ensembles, faculty, and students, and by distinguished visiting artists. A special feature is the annual Cornell Festival of Contemporary Music. The great majority of these concerts are free and open to the public. These concerts are listed in special monthly posters and the usual campus media; further information is available from the department office.

Nonmajors

In addition to its performing, instructional, and concert activities, the department offers numerous courses for nonmajors, many of which carry no prerequisite and presuppose no previous formal training in music. Consult the following course listings, and for further information apply to the department office, 125 Lincoln Hall (256-4097), or to the director of undergraduate studies, Professor D. R. M. Paterson, 213 Lincoln Hall (256-3531).

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 wish to prepare for eventual 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 *during the orientation period of the freshman year, or earlier if at all possible.* Information is available from the department office, 125 Lincoln Hall (256-4097); from the director of undergraduate studies, Professor D. R. M. Paterson, 213 Lincoln Hall (256-3531); or from the chairman, Professor James Webster, 124 Lincoln Hall (256-3671). 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 Cornell. Prerequisites for admission to the major are the satisfactory completion of Music 152, at latest by the end of the sophomore year (the freshman year is preferable), with a final grade of C or better, including an average grade of C or better in all the musicianship components of Music 152, and failure in none of them; and the passing of a simple piano examination (details are available from the department office). Students must apply to the department for formal acceptance as a music major.

The requirements for the Bachelor of Arts degree with a major in music under Option I comprise the following:

- 1) in music theory:
 - a) Music 251-252, 351, and 352.
 - b) passing of a simple literacy test in music, normally by the end of the junior year (details are available in the department office);
- 2) in music history:

sixteen credits in courses numbered at the 300 level or above listed under Music History. At least two of these courses must be drawn from the three-course sequence Music 381-383;
- 3) in performance:

four semesters of participation in a musical organization or ensemble sponsored by the Department of Music.

Option II presupposes considerable musical study before entering Cornell. Prerequisites for admission into the Option II program are previous acceptance as an Option I major and satisfactory completion of Music 252, normally by the end of the sophomore year. Students must apply to the department for formal acceptance as an Option II major. An Option II 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:
 - (1) for two of the four semesters of participation in a musical organization or ensemble, Music 462 or 463 may be substituted;
 - (2) twelve additional credits in the 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. To become a candidate for honors in music, a student must be invited by the faculty at the beginning of the second semester of the junior year. As soon as possible thereafter, the student will form a committee of three faculty members to guide and evaluate the honors work. In the senior year the candidate will enroll in Music 401-402, with the chairperson of the honors committee as instructor. Candidates will be encouraged to formulate programs that will allow them to demonstrate their total musical ability. The level of honors conferred will be based on the whole range of the independent work in this program, of which a major part will culminate in an honors thesis, composition, or recital to be presented not later than April 1 of the senior year, and a comprehensive examination to be held not later than May 1.

Distribution Requirement

The distribution requirement in the expressive arts may be satisfied with 6 credits in music, except Freshman Seminars and Music 122. A maximum of 4 credits in Music 321-322 and a maximum of 3 credits in Music 331 through 338, and 441 through 450 may be used to satisfy this requirement.

Facilities

Music Library. The Music Library, in Lincoln Hall, has an excellent collection of the standard research tools. Its holdings consist of approximately ninety thousand books and scores and fifteen thousand records. Particularly noteworthy are the collections of opera scores, librettos, and recordings from all periods; twentieth-century scores and recordings; and the large microfilm collection of Renaissance sources, both theoretical and musical. In addition, the Department of Rare Books, in Olin Library, houses a collection of early printed books on music and musical manuscripts.

Musical Instruments. The Verne S. Swan collection of about thirty musical instruments is especially rich in old stringed instruments. A small Challis harpsichord and clavichord are available for practice; a Dowd harpsichord, a Hubbard harpsichord, and replicas of a Stein fortepiano and a Graf fortepiano are reserved for advanced students and concerts. Among the recital pianos available for use are Steinway and Mason & Hamlin concert grands, and a Boesendorfer Imperial. There is an Aeolian-Skinner organ in Sage Chapel, a Schlicker organ at Barnes Hall, and a Helmuth Wolff organ in Anabel Taylor Chapel. A studio for electronic music is housed in Lincoln Hall.

Freshman Seminars

111 Sound, Sense, and Ideas Fall or spring. 3 credits. Each section limited to 20 students. No prerequisites; students do not need to have studied music. May not be counted for the distribution requirement in the expressive arts.

Sec 1, M W F 10:10, P. Will; sec 2, M W F 11:15, C. Eisen.

Ways of listening, thinking, talking, and writing about music. Non-Western and popular music are considered, as well as Western classical music. Student performances in class are welcome.

113 Opera Fall. 3 credits. Limited to 20 students. No prerequisites; students do not need to have studied music. May not be counted for the distribution requirement in the expressive arts.

M W F 2:30, N. Zaslav.

An attempt to deepen understanding of and appreciation for opera through listening to operas, discussing them, and writing about them. Historical, dramatic, literary, and personal points of view will be considered as well as musical ones.

[114 Contemporary Music Spring. 3 credits. Limited to 20 students. No prerequisites; students do not need to have studied music. May not be counted

for the distribution requirement in the expressive arts. Not offered 1982-83.]

Introductory Courses

[101 (formerly 213) The Art of Music Fall. 3 credits. Not offered 1982-83.

T R 11:15, plus 1 hour to be arranged.
W. W. Austin.]

103 (formerly 101) Introduction to the Musics of the World Fall. 3 credits.

T R 9:05; 1 hour lab to be arranged. M. Hatch. The ingredients of music as they present themselves in folk, popular, and art musics, both in the West and in other cultural areas, especially Africa and Southeast Asia. Topics include pitch, scale, rhythm, meter, timbre, and forms of instrumental and vocal play with sound. Listening to and analyzing live and recorded musics.

105-106 (formerly 141-142) Introduction to Music Theory 105, fall; 106, spring. 3 credits each term.

Some familiarity with music is desirable. Prerequisite for Music 106: 105 with grade of B- or better. Music 106 is limited to 50 students.

M W 9:05; 2 disc hours to be arranged. 105:
D. Randel; 106: R. Parker.

An elementary, self-contained introduction to music theory, emphasizing fundamental musical techniques, theoretical concepts, and their application. Music 105: ear training; notation, pitch, meter; intervals, scales, triads; basic concepts of tonality; extensive listening to music in various styles; analysis of representative works of Bach, Mozart, Beethoven, and Debussy. 106: systematic introduction to counterpoint; original composition of four-part chorales or short keyboard pieces.

122 Elementary Musicianship Spring. 2 credits. Limited to 20 students. Prerequisite: permission of instructor. May not be counted for distribution in the expressive arts.

Sec 1: M W 3:35; sec 2: T R 3:35. Staff. Designed primarily to prepare freshmen and others who wish to enroll in Music 151 to meet its prerequisite in practical musicianship. Intensive drill in matching pitches, singing melodies at sight, melodic dictation, harmonic progressions at the keyboard, and reading treble and bass clefs together. A final grade of B- in Music 122, with failure in no individual component, satisfies the prerequisites for Music 151.

Music Theory

151-152 Elementary Tonal Theory 151, fall; 152, spring. 5 credits each term. Prerequisites for Music 151: a knowledge of the rudiments of music and some ability to perform; demonstration of adequate background and ability through proficiency tests given on the first two days of the term (registration is provisional, contingent on passing this test); or Music 122 with a grade of B- or better and failure in no individual component. Prerequisite for Music 152: 151 or equivalent. Intended for students expecting to major in music and other qualified students. Required for admission to the music major. All students intending to major in music, especially those intending to elect Option II, should if possible enroll in Music 151-152 during the freshman year.

M W F 9:05; 2 disc hours to be arranged. S. Stucky and staff.

Detailed study of the fundamental elements of tonal music; rhythm, scales, intervals, triads; melodic movement, two-part counterpoint, harmonic progression in the chorale style of J. S. Bach; and introduction to analysis of small forms. Drill in aural discrimination, sight singing, keyboard harmony, and elementary figured bass; rhythmic, melodic, and harmonic dictation; and score reading.

245-246 Theory and Practice of Gamelan 245, fall; 246, spring. 2 credits each term. Prerequisite:

concurrent enrollment in Music 445 or 446, and permission of instructor. Music 245 is not a prerequisite to 246.

M W F 12:20 (any two of these three hours) plus 1 disc hour to be arranged. M. Hatch. Readings, listening, and concentrated instruction in the literature, recordings, repertoires, and practices of Indonesian gamelan traditions. Related aspects of culture—drama, dance, literature, and oral poetry—will be studied in their influence on musical practice. Research into performance styles and the history of instruments.

251-252 Intermediate Tonal Theory 251, fall; 252, spring. 5 credits each term. Prerequisite for Music 251: 152 or the equivalent, or a suitable level of performance on a proficiency test given by the department during orientation each fall term. Prerequisite for Music 252: 251.

M W F 10:10; 2 disc hours to be arranged. 251:
S. Neff; 252: R. Parker.

Introduction to writing two- and three-part counterpoint in the style of J. S. Bach. Continuation of the study of harmony by composition and analysis, including seventh chords, secondary dominants, and chromatic harmony. Students are expected to write several short pieces in eighteenth- and nineteenth-century styles and forms, such as two-part inventions, and minuets scored for string quartet. Continuation of analysis of forms, with emphasis on large forms, e.g., sonata form. Ear training, keyboard harmony, figured bass, sight singing, dictation, and score reading.

351 Advanced Tonal Theory Fall. 4 credits. Prerequisite: Music 252 or equivalent.

M W F 9:05. S. Neff. Inventions, chromatic harmony, analysis of larger forms and nineteenth-century music, ear training, score reading, and advanced keyboard studies including figured bass.

352 Materials of Twentieth-Century Music Spring. 4 credits. Prerequisite: Music 351.

M W F 9:05. E. Murray. Introduction to some techniques of composers from 1900 to 1950, including expanded tonal resources, atonality, and new approaches to form and rhythm. Analysis of representative smaller works by Bartok, Hindemith, Schoenberg, Stravinsky, Webern, and some American composers. Writing assignments in various styles.

451 Counterpoint Spring. 4 credits. Prerequisite: Music 351 or equivalent.

M W F 11:15. S. Stucky. 1983: modal counterpoint. Study of the melodic and contrapuntal techniques characteristic of vocal music of the sixteenth century. Singing, analysis, and written exercises.

[452 Form and Analysis Spring. 4 credits. Prerequisite: Music 351 or equivalent. Not offered 1982-83.

M W F 10:10. D. R. M. Paterson.]

456 Orchestration Fall. 4 credits. Prerequisite: Music 252 or permission of instructor.

T 10:10-12:05. K. Husa. A study of the instruments of the orchestra and their use in representative works from 1700 to the present. Scoring for various instrumental groups including large orchestra. Students will occasionally attend rehearsals of Cornell musical organizations and ensembles.

[460 Electronic Music Composition Spring. 3 credits. Limited to 10 students. Prerequisites: Music 251 and permission of instructor. Not offered 1982-83.

M 1:25-4:25. M. Stith and staff.]

[462 Orchestral Conducting Fall. 2 credits. Prerequisite: Music 352. Not offered 1982-83.

T 10:10-12. K. Husa. See Music 662.]

[463 Choral Conducting Spring. 2 credits.

Prerequisite: Music 252 or permission of the instructor. Not offered 1982-83.
F 2:30-4:10. T. A. Sokol.]

[464 Choral Style Spring. 2 credits. Prerequisite: Music 252 or permission of the instructor. Not offered 1982-83.

F 2:30-4:10. T. A. Sokol.]

Music History

[218 Chopin, Chalkovski, Musorgskii Spring. 3 credits. Students may wish to register concurrently in Music 219. Not offered 1982-83.

T R 11:15; disc to be arranged. W. W. Austin, G. Gibian, and staff.]

[219 Chopin, Chalkovski, Musorgskii Spring. 1 credit. Prerequisite: reading knowledge of Russian. Limited to students concurrently enrolled in Music 218. Not offered 1982-83.]

[221 Popular Music Spring. 3 credits. No previous formal training in music is required. Not offered 1982-83.

M W F 12:20. Staff.]

222 History of Jazz Spring. 3 credits. No previous formal training in music is required.

M W 11:15; 1 disc hour to be arranged. B. Kernfeld. Lectures will be devoted to a musical survey of jazz from around 1900 to the 1970s. Sections will emphasize progressive exercises in the fundamental rhythmic, harmonic, and tone-coloristic aspects of jazz. Focus: the recorded anthology *Smithsonian Collection of Classical Jazz*.

274 Opera Fall. 3 credits. Prerequisite: Any 3- or 4-credit course in music, or permission of the instructor.

M W 11:15. N. Zaslaw.

A survey, based primarily on study of a few key works, of the history of opera, and its forms and conventions. Emphasis on the social, literary, and theatrical contexts of opera, as well as musical style. Composers to be studied may include Monteverdi, Handel, Mozart, Verdi, Wagner, Debussy, and Berg.

[277 Baroque Instrumental Music Fall. 3 credits. Prerequisite: Any 3- or 4-credit course in music, or permission of the instructor. Not offered 1982-83.]

281 Music of the Baroque Period Fall or spring, every third semester. 3 credits. Prerequisite: any 3- or 4-credit course in music, or permission of the instructor.

Spring 1983: M W 2:30. N. Zaslaw. The history of music from the rise of opera and instrumental art-music in the seventeenth century to the culmination of Baroque style in the music of Bach, Handel, and their contemporaries. Emphasis on the music of Monteverdi, Schutz, Purcell, Bach, and Handel.

[282 Music of the Classical Period Fall or spring, every third semester. 3 credits. Prerequisite: any 3- or 4-credit course in music, or permission of the instructor. Not offered 1982-83.

J. Webster.]

283 Music of the Romantic Era Fall or spring, every third semester. 3 credits. Prerequisite: any 3- or 4-credit course in music, or permission of the instructor.

M W 2:30. R. Parker. The history of music from Schubert to Mahler, with a preliminary consideration of Beethoven. The course will concentrate on major figures and focus attention on the following genres: solo song, piano music, chamber music, orchestral music, opera.

[369 Debussy to the Present Fall. 4 credits. Prerequisite: Music 152 or permission of the instructor. Not offered 1982-83.

W. W. Austin, with S. Stucky.]

[373 Music and Poetry in France: Late Middle Ages and Renaissance (also French 617) 4 credits. Not offered 1982-83.

D. Randel and E. P. Morris.]

374 Opera Fall. 4 credits. Prerequisite: Music 152 or equivalent.

M W F 11:15. N. Zaslav.

The same as Music 274, but with one additional meeting a week devoted to technical discussion of individual works.

[377 Mozart: His Life, Works, and Times (also German 387) 4 credits. Not offered 1982-83.

N. Zaslav and S. L. Gilman.]

381 Music of the Baroque Period Fall or spring, every third semester. 4 credits. Prerequisite: Music 152 or equivalent.

Spring 1983: M W F 2:30. N. Zaslav.

The same as Music 281, but with one additional meeting per week devoted to technical discussion of individual works.

[382 Music of the Classical Period Fall or spring, every third semester. 4 credits. Prerequisite: Music 152 or equivalent. Not offered 1982-83.

J. Webster.]

383 Music of the Romantic Era Fall or spring, every third semester. 4 credits. Prerequisite: Music 152 or equivalent.

M W F 2:30. R. Parker.

The same as Music 283, but with one additional meeting per week devoted to technical discussion of individual works.

[389 The Study of Non-Western Musics

4 credits. Prerequisite: Music 152 or permission of instructor. Not offered 1982-83.

M. Hatch.]

[474 Poetry and Music in the English Renaissance (also English 426) Spring. 4 credits. Not offered 1982-83.

M W F 12:20. E. Murray and B. Rosecrance.]

[481 Music in Western Europe to Josquin des Pres Fall. 4 credits. Prerequisite: Music 381, 382, or 383, or permission of the instructor. Not offered 1982-83.

T R 10:10-11:25. D. Randel.]

482 Josquin des Pres to Monteverdi Spring. 4 credits. Prerequisite: Music 381, 382, 383, or permission of the instructor.

T R 10:10-11:25. D. Randel.

A survey of the music of the principal composers, and of the principal styles and genres, of the high and late Renaissance in music (roughly, the sixteenth century).

Independent Study

301-302 Independent Study in Music 301, fall; 302, spring. Credit to be arranged. Prerequisite: departmental approval.

Hours to be arranged. Staff.

The Honors Program

401-402 Honors in Music 401, fall; 402, spring. 4 credits each term. Limited to honors candidates in their senior year.

Staff.

Musical Performance

321-322 Individual Instruction in Voice, Organ, Harpsichord, Piano, Strings, Woodwinds, Brass, and Guitar. The number of places is strictly limited. Prerequisite: successful audition with the instructor. Students may register only with the prior permission of the instructor. Students may register for this course

in successive years. For more information, consult the department office, 125 Lincoln Hall, 256-4097.

Without credit: basic fee for one half-hour lesson weekly during one term, \$90; fees for a practice schedule of six hours weekly during one term: \$45 for the use of a pipe organ, \$22 for a practice room with piano, \$7 for a practice room without piano.

For credit: Music 321-322 may be taken for credit only by advanced students, at the sole discretion of the instructor. One one-hour lesson weekly (or two half-hour lessons) and a double practice schedule earn 2 credits each term, provided that the student has earned, or is earning, at least 3 credits in courses listed under the rubrics Introductory Courses (except Music 122), Music Theory, or Music History for every 4 credits in Music 321-322 (except that the first 3 academic credits must be earned prior to, or simultaneously with, the first 2 credits in 321-322). The basic fees are multiplied by one and one-half (lesson fee becomes \$135; practice fees \$67.50, \$33, or \$10).

All fees are *non-refundable* once classes begin, even if registration is subsequently cancelled by the student. A music major receives a scholarship equal to the full lesson fee, and a member of a Cornell musical organization or ensemble sponsored by the Department of Music receives a scholarship of one-half the lesson fee when the lessons are taken in the student's primary performing medium. The department offers a very limited number of additional partial scholarships for lesson fees for cases of both need and special merit.

Students who wish to study instruments not taught at Cornell or who, because of limitations of space, cannot be admitted to Music 321-322, may, under certain conditions, receive credit for performance study outside Cornell by registering for Music 321h-322h.

321a-322a Individual Instruction in Voice 321a, fall; 322a, spring. 2 credits each term.

Hours to be arranged. B. Troxell.

321b-322b Individual Instruction in Organ 321b, fall; 322b, spring. 2 credits each term.

Hours to be arranged. D. R. M. Paterson.

321c-322c Individual Instruction in Piano 321c, fall; 322c, spring. 2 credits each term.

Hours to be arranged. M. Bilson and staff.

321d-322d Individual Instruction in Harpsichord 321d, fall; 322d, spring. 2 credits each term.

Hours to be arranged. D. R. M. Paterson.

321e-322e Individual Instruction in Violin or Viola 321e, fall; 322e, spring. 2 credits each term. [321e: not offered 1982-83.]

Hours to be arranged. S. Monosoff.

321f-322f Individual Instruction in Cello or Viola da Gamba 321f, fall; 322f, spring. 2 credits each term. [322f: not offered 1982-83.]

Hours to be arranged. J. Hsu.

321g-322g Individual Instruction in Brass 321g, fall; 322g, spring. 2 credits each term.

Hours to be arranged. M. Stith.

321h-322h Individual Instruction outside Cornell. 321h, fall; 322h, spring. 2 credits each term.

Hours to be arranged. Staff.

All the standard orchestral and band instruments and guitar 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 321a-g or 322a-g. Prior approval by a member of the faculty in the department is required. For information and a list of approved teachers, consult the department office, 125 Lincoln Hall, 256-4097.

391-392 Advanced Individual Instruction 391, fall; 392, spring. 4 credits each term. Open only to juniors and seniors who are majoring under Option II with concentration in performance, and to graduate students. Music 391 is not a prerequisite to 392.

Hours to be arranged. Staff.

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 6 credits in these courses. Membership in these musical organizations and ensembles is also open to qualified students who wish to participate without earning credit.

331-332 Sage Chapel Choir 1 credit. No audition for admission.

M 7-8:30 p.m., R 7-8:30 p.m., Sunday 9:30 a.m.

D. R. M. Paterson.

333-334 Cornell Chorus or Glee Club 1 credit. Prerequisite: permission of instructor.

Chorus: T 7:15-9:15 p.m., plus 2 hours to be arranged. Glee Club: W 7:15-9:15 p.m., plus 2 hours to be arranged. D. Conte and T. A. Sokol.

335-336 Cornell Orchestra 1 credit. Prerequisite: permission of the instructor. Chamber orchestra limited to more experienced players.

Rehearsals for the Cornell Symphony Orchestra: full orchestra, W 7:30-10 p.m.; sectional rehearsals, alternate T or R 7:30-10 p.m. Rehearsals for the Cornell Chamber Orchestra, R 7:30-10 p.m. T. A. Sokol and E. Murray.

337-338 University Bands 1 credit.

Symphonic band: fall or spring, T and W 4:30-5:45. Wind ensemble: fall, M 7:30-9:30 p.m.; spring, M 7:30-9:30 p.m. and R 4:30-5:45. M. Stith.

Students interested in participating in the Big Red Marching Band may inquire at the Department of Athletics, Teagle Hall.

441-442 Chamber Music Ensemble 1 credit. Prerequisite: permission of instructor.

J. Hsu, S. Monosoff, and staff.

Study and performance of chamber music literature; string and wind groups; piano trios and quartets, trio sonatas, etc. Emphasis on musical problems, with some practice in sight reading.

443-444 Chamber Singers 1 credit. Prerequisite: permission of instructor.

F 4:30-6. T. A. Sokol.

Study and performance of selected vocal music for small choir.

445-446 Cornell Gamelan Ensemble 1 credit. No previous knowledge of music notation or experience in music performance necessary. Attendance at all full rehearsals and one small group lesson per week required for credit.

Full ensemble: R 7:30-10 p.m. Small group lessons: M W F 12:20-1:10. M. Hatch.

Basic performance techniques and theories of central Javanese gamelan. Tape recordings of gamelan and elementary cypher notation are provided. Some instruction by Indonesian musicians is offered in most years.

447-448 Collegium Musicum 1 credit.

Prerequisite: permission of instructor.

447: hours to be arranged. S. Monosoff, J. Hsu.

Study and performance of medieval, Renaissance, and Baroque vocal and instrumental music, with recorders, crumhorns, sackbuts, viols, shawns, organ, harpsichord, and other early instruments.

[449-450 Eighteenth-Century Orchestra 1 credit. Prerequisite: permission of instructor. Not offered 1982-83.
R 7:30-10 p.m. S. Monosoff.]

Graduate Courses

Open to qualified undergraduates with permission of instructor.

601 Introduction to Bibliography and Research Fall. 4 credits.
M 1:30-4:25. L. Coral.

[653 Topics in Tonal Theory and Analysis Fall. 4 credits. Not offered 1982-83.]

654 Topics in Twentieth-Century Theory and Analysis Spring. 4 credits.
M 1:30-4:25. E. Murray.
1983: Various topics in the study of atonal contexts, including set theory, voice-leading models, and rhythmic analysis. Works of Berg, Boulez, Stravinsky, Varese, and Webern, among others.

657-658 Composition 657, fall; 658, spring. 4 credits.
W 2:30-4:25. S. Stucky.

659-660 Composition 659, fall; 660, spring. 4 credits.
T 2:30-4:25. K. Husa.

662 Orchestral Conducting Spring. 4 credits.
T 10:10-12:05. K. Husa.
Score-reading and conducting technique on intermediate and advanced levels, with emphasis on twentieth-century styles and repertory.

[669-670 Debussy to the Present 669, fall; 670, spring. 4 credits each term. Not offered 1982-83.
M W F 11:15; 1 disc hour to be arranged. 669: W. W. Austin, with S. Stucky; 670: S. Stucky, with W. W. Austin.]

[673 Music and Poetry in France: Late Middle Ages and Renaissance (also Music 373 and French 617) Fall. 4 credits. Not offered 1982-83.
D. M. Randel, E. P. Morris.]

[677 Mozart: His Life, Works, and Times (also German 757) Fall. 4 credits. Not offered 1982-83.
N. Zaslav, S. L. Gilman.]

680 Introduction to Ethnomusicology Spring. 4 credits. Open to graduate students in anthropology, linguistics, psychology, sociology, and other cognate fields with the permission of the instructor.
R 2:30-4:25, plus 1-hour lab to be arranged.
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. Past and present traditions of translation and transcription of words and tones in musical scholarship and the literatures of music.

681-682 Seminar in Medieval Music 681, fall; 682, spring. 4 credits each term. [681: not offered 1982-83.]
682: R 1:30-4:25. D. Randel.
1983: The secular works of Guillaume de Machaut.

683-684 Seminar in Renaissance Music 683, fall; 684, spring. 4 credits each term. [684: Not offered 1982-83.]
683: W 1:30-4:25. D. Randel.
1982: the *chanson* in the generation following Dufay, with special attention to Busnois and Ockeghem.

[685-686 Seminar in Baroque Music 685, fall; 686, spring. 4 credits each term. Not offered 1982-83, but see Music 692, below.]

687-688 Seminar in Music of the Classical Period 687, fall; 688, spring. 4 credits each term. [687: Not offered 1982-83.]
688: W 1:30-4:25. J. Webster.
1983: Haydn. Special attention will be paid to textual criticism and editorial practice.

689-690 Seminar in Music of the Romantic Era 689, fall; 690, spring. 4 credits each term. [690: not offered 1982-83.]
689: R 1:30-4:25. R. Parker.
1982: Verdi studies. General introduction to Verdi research on the professional level, including a bibliographical survey, the study of sketches (including unpublished material), and an assessment of various analytical approaches.

691-692 Performance Practice 691, fall; 692, spring. 4 credits each term. [691: not offered 1982-83.]
692: T 2:30-4:25. N. Zaslav.
1983: The practice of ornamentation in solo sonatas of the eighteenth century. Particular emphasis on Op. 5 of Corelli.

697-698 Independent Study and Research 697, fall; 698, spring.
Hours and credits to be arranged. Staff.

[785-786 History of Music Theory 785, fall; 786, spring. 4 credits each term. Not offered 1982-82.
J. Webster.]

[789 Liturgical Chant in the West Spring. 4 credits. Not offered 1982-83.
D. Randel.]

Near Eastern Studies

A. H. Bernstein, chairman (on leave 1982-83); M. F. Collins, J. Goldberg, E. Kadar, G. Korman, acting chairman (1982-83), C. Kronfeld, P. D. Molan, D. I. Owen, D. S. Powers (director of undergraduate studies), I. Rabinovich, N. Scharf

The Department

The Department of Near Eastern Studies offers courses in the archaeology, history, languages, and literatures of the Near East. Students are encouraged to take an interdisciplinary approach to the cultures of this region that has had such an important impact on the development of our own civilization and that plays so vital a role in today's world community. The department's course offerings treat the Near East from ancient times to the modern period and emphasize methods of historical and literary analysis. Near Eastern Studies also provides the basic courses in the Program of Jewish Studies.

The Major

The student who majors in Near Eastern Studies may concentrate in one of the following four areas:
I. Near Eastern Languages and Literatures
II. Ancient Near Eastern Studies
III. Judaic Studies
IV. Islamic Studies

The precise sequence and combination of courses chosen to fulfill the major is selected in consultation with the advisor; all majors, however, must satisfy the following requirements (S-U options not allowed):

- 1) Qualification in one of the languages offered by the department.
- 2) Eight NES courses (which may include intermediate and advanced language courses).
- 3) Four courses in subjects related to the student's concentration, which may, in some cases, be taken outside the department.

Prospective majors should discuss their plans with the director of undergraduate studies before formally

enrolling with the department. To qualify as a major, a cumulative grade average of C or better is required.

Study abroad. Near Eastern studies majors may choose to study in the Near East in their junior year. There are various academic programs in Israel and Egypt that are recognized by the Department of Near Eastern Studies and that allow for the transfer of credit. Archaeological fieldwork on Cornell-sponsored projects in the Near East or recognized field schools in Israel may also qualify for course credit.

Honors. Candidates for the degree of Bachelor of Arts with honors in Near Eastern languages and literatures, Ancient Near Eastern studies, Judaic studies, or Islamic studies must fulfill the requirements of the appropriate major study and enroll in the honors course, NES 499, in the first semester of their senior year. For admission to the honors program, candidates must have a cumulative average of B- or better and have demonstrated superior performance 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.

Program of Jewish Studies

The field of Jewish studies encompasses a broad spectrum of disciplines that includes language, literature, philology, and history. The Department of Near Eastern Studies offers students the opportunity to take a wide variety of courses in Jewish studies whose subjects are not represented in this department. Students interested in planning a program in Jewish studies should consult the Department of Near Eastern Studies.

Akkadian

333-334 Elementary Akkadian 333, fall; 334, spring. 4 credits each term.
T R 2:30-3:45. 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.

335 Readings in Akkadian Texts Fall or spring. 3 credits. Prerequisite: NES 333-334.
Hours to be arranged. D. I. Owen.
Selected readings in Akkadian texts.

Arabic

111-112 Elementary Arabic 111, fall; 112, spring. 6 credits each term. Prerequisite for NES 112: 111 or permission of instructor.

111: M-F 10:10, D. S. Powers. 112: M-F 10:10, P. D. Molan.
The fundamentals of literary Arabic are introduced through practice in reading, writing, listening, and speaking. Short selections from all periods of Arabic literature are studied.

[113-114 The Spoken Arabic of Egypt 113, fall; 114, spring. 6 credits each term. Not offered 1982-83.]

[211-212 Intermediate Arabic 211, fall; 212, spring. 3 credits each term. Not offered 1982-83.]

311 Advanced Arabic: The Short Story Fall. 4 credits. Prerequisites: NES 212 or permission of the instructor.
M W F 10:10. P. D. Molan.

The short story is the most important prose genre in modern Arabic literature. This course will examine

the short story from both literary and linguistic points of view and will include the review of grammar and syntax.

312 Advanced Arabic: Qur'an and *Tafsir*. Spring. 4 credits.

M W F 9:05. D. S. Powers.

Selected readings in the Qur'an, together with the *tafsir* ("commentary") of al-Jalalan. Review of grammar and syntax.

419 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. Staff.

Aramaic

[238 Aramaic Spring. 3 credits. Not offered 1982-83.]

Hebrew

101-102 Elementary Modern Hebrew I and II

101, fall; 102, spring. 6 credits each term.

Prerequisite for NES 102: 101 or permission of instructor. Satisfactory completion of 102 fulfills the qualification portion of the language requirement.

Sec 1, M-F 9:05; sec 2, M-F 10:10; sec 3, M-F 11:15; sec 4, M-F 1:25. N. Scharf, E. Kadar.

Intended for beginners. A thorough grounding is given in all the language skills: emphasizing reading, writing, grammar, listening, and speaking.

121-122 Elementary Classical Hebrew

See course descriptions under Hebrew Literature.

201-202 Intermediate Modern Hebrew I and II

201, fall; 202, spring. 3 credits each term.

Prerequisite for NES 201: 102 or permission of instructor. Prerequisite for NES 202: 201 or permission of instructor. Satisfactory completion of NES 202 fulfills the proficiency portion of the language requirement.

Sec 1, M W F 10:10; sec 2, M W F 11:15. N. Scharf, E. Kadar.

Second-year modern Hebrew. Continued development of reading, writing, composition, listening, and speaking skills.

221-222 Readings in Classical Hebrew Literature: The Art of Biblical Narrative

See course description under Hebrew Literature.

301-302 Advanced Modern Hebrew I and II

301, fall; 302, spring. 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 as literature to fulfill the humanities distribution requirement.

T R 10:10-11:25. C. Kronfeld.

Advanced study of Hebrew through the analysis of literary texts and expository prose. This course employs a double perspective: the language is viewed through the literature and the literature through the language. Students will develop composition skills by studying language structures, idioms, and various registers of style.

409 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. Staff.

Turkish

131-132 Introduction to the Turkish Language

(also Turkish 131-132) 131, fall; 132, spring. 3 credits each term.

Hours to be arranged.

Ugaritic

[337 Ugaritic Fall. 3 credits. Not offered 1982-83.]

Arabic Literature

[251 Studies in the Popular and Courtly Literatures of the Islamic Middle East Fall. 3 credits. Not offered 1982-83.]

254 Society, Politics, and the Modern Arabic Novel. Fall. 3 credits.

T R 12:20-1:35. P. D. Molan.

This undergraduate seminar will examine the place of the novel in modern Arabic literature and trace its development in the conflict between indigenous narrative forms and the European models admired by modernizing Arab elites. It will explore the aesthetics of the Arab novel as well as its impact on society and politics. Readings in English translation or in Arabic at the student's discretion. No prerequisites.

256 The Arabian Nights in the East and the West. Spring. 3 credits.

T R 12:20-1:35. P. D. Molan.

Some *Arabian Nights* tales, such as *Sinbad the Sailor* and *Aladdin and the Wonderful Lamp*, have become a part of our own childhood lore, but the whole work is less known or appreciated. In this undergraduate seminar, students will explore three aspects of the *Arabian Nights*: the aesthetics of the work as viewed from the perspectives of folkloric and literary criticism, the place of the *Nights* in Arabic literature at large, and the impact of the *Nights* on Western literature. Readings are from the major translations of the *Nights* and from works of medieval, Renaissance, and modern European authors from Chaucer to Jane Austen and Saul Bellow. There are no prerequisites.

Biblical Literature

[125 Freshman Seminar in Biblical Literature: Heroes and Heroines of the Bible Fall. 3 credits. Not offered 1982-83.]

221-222 Readings in Classical Hebrew Literature: The Art of Biblical Narrative.

See course description under Hebrew Literature.

[225 Judaic Literature in Late Antiquity: Dead Sea Scrolls and Sectarian Literature Spring. 3 credits. Not offered 1982-83.]

[291 Tradition and the Literary Imagination Fall. 3 credits. Not offered 1982-83. See NES 292 under Hebrew Literature.]

322 Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel

Spring. 4 credits. Prerequisite: one course in Bible or literature. M W F 1:25. M. Collins.

A study of the speeches of ancient Israel's famous rhetoricians (such as Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). The focus is on major issues that the prophets address (the human state and divine rule, man and society, freedom and responsibility, war and peace, exile and restoration) and on the poetics and rhetorics of these texts as literature. All readings in English translation. Students have the option of reading the texts in Hebrew.

429 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. M. Collins.

Related Courses in Other Departments

Comparative Literature 326 Christianity and Judaism Spring. 4 credits.

M W F 11:15. C. M. Carmichael.

Rabbinic Literature

[342 Biblical Interpretation in Rabbinic Literature Spring. 4 credits. Not offered 1982-83.]

448 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. Staff.

Hebrew Literature

121-122 Elementary Classical Hebrew 121, fall; 122, spring. 4 credits each term. Prerequisite for NES 122: 121 or equivalent with permission of instructor.

M W F 2:30. M. Collins.

An introduction to Biblical Hebrew that focuses on acquisition of basic language structures and vocabulary and on fluency in reading and translating. In the second term, readings include the Book of Ruth and selections from the Book of Genesis. This course provides the basis for understanding the role of Biblical Hebrew in shaping Modern Hebrew and for the study of the historical development of the Hebrew language.

207 Modern Hebrew Literature In Translation: Modern Hebrew Poetry Fall. 3 credits. Open to freshmen.

T 2:30-5. C. Kronfeld.

The dominance of poetry in modern Hebrew literature will be explored against the background of aesthetic, cultural, and political trends, and in the context of influential developments in European and American poetry. Readings will represent a variety of approaches to poetry, from the traditional and romantic tones of Bialik and Tchernichovsky to the contemporary irony of Amichai and Zach. Students with some background in Hebrew will be provided with bilingual texts whenever possible.

208 Modern Hebrew Literature in Translation: The Modern Hebrew Short Story Spring. 3 credits. Open to freshmen.

T 2:30-5. C. Kronfeld.

This course examines the emergence and development of modern Hebrew prose fiction through its most perfected genre, the short story. A close analysis of texts will be combined with an overview of the diverse heritage that these texts manifest: biblical norms of narration, traditions of storytelling and oral narration, Western aesthetics, and, in recent times, the overwhelming influence of one writer, S. Y. Agnon. In addition to Agnon, readings will include Mendele, Peretz, Bialik, Brenner, Gnessin, Yizhar, Oz, Orpaz, and Yehoshua.

221-222 Readings in Classical Hebrew Literature: The Art of Biblical Narrative

221, fall; 222, spring. 3 credits each term. Prerequisite for either NES 221 or 222: one year of Hebrew, modern or biblical. NES 221 is not a prerequisite for 222 as a humanities course. The sequence 221-222 may be used for language proficiency.

M W F 12:20. M. Collins.

Readings will include stories about Joshua, Deborah, Gideon, Samson, Samuel, Saul, David, Elijah, and Elisha, selected from the prose narratives in the Former Prophets: the Books of Joshua, Judges, Samuel and Kings. Emphasis will be on developing fluency in reading and translating, learning the Hebrew structures of storytelling, and understanding the language through the literature and the literature through the language. This course provides the basis for the analysis of narrative art throughout the history of Hebrew literature.

[292 The Hebrew Literary Imagination Spring. 3 credits. Not offered 1982-83.] See NES 291 under Biblical Literature.

301-302 Advanced Modern Hebrew I and II See course description under Hebrew.

[303 Seminar in Modern Hebrew Literature: The Short Story Fall. 4 credits. Not offered 1982-83.]

[304 Seminar in Modern Hebrew Literature: The Novel Spring. 4 credits. Not offered 1982-83.]

[308 Agnon and Hazaz Spring. 4 credits. Not offered 1982-83.]

405 Metaphor, Modernism, and Cultural Context: The Use of Metaphor in Modernist Hebrew,

Yiddish, English, and American Poetry (also Comparative Literature 405) Spring. 4 credits. Prerequisite: a 200-level or above course in one of the following: Hebrew or Yiddish language or literature, English, or comparative literature. R 2:30-4:25. C. Kronfeld.

This course investigates the issue of the typical modernist metaphor against the background of interdisciplinary theories of metaphor. Three groups of questions guide the investigation: a) What are metaphors and how do they work in poetry? b) What is the modernist poetic experience? c) How does a specific cultural context affect the production and reception of poetry? Examples are taken from three different literatures, and various branches of modernism are represented, such as Hebrew antiformalist poetry, the Yiddish introspectivists, English and American imagists, etc. Readings will include Fogel, Amichai, Glatstein, Sutzkever, Eliot, Stevens, Williams, and others. Discussions and readings in English; students will have the option of reading texts in Hebrew and/or Yiddish.

408 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. C. Kronfeld.

Yiddish Language and Literature

[171-172 Elementary Yiddish 171, fall; 172, spring. 4 credits each term. Not offered 1982-83.]

[375 The Shtetl in Modern Yiddish Fiction in English Translation (also German Literature 375) Fall. 4 credits. Not offered 1982-83.]

[377 Topics in Yiddish Literature (also German Literature 377) Spring. 4 credits. Not offered 1982-83.]

405 Metaphor, Modernism, and Cultural Context: The Use of Metaphor in Modernist Hebrew, Yiddish, English, and American Poetry (also Comparative Literature 405) See course description under Hebrew Literature.

479 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. C. Kronfeld.

Related Course in Another Department

[Yiddish Literature in Translation (German Literature 350) Not offered 1982-83.]

Islamic

151 Islamic Civilization Fall. 3 credits. May be used to satisfy the distribution requirement in history or the humanities, or the Freshman Seminar requirement.

M W F 9:05. P. D. Molan, D. S. Powers. An overview of Islamic civilization during the classical period (A.D. 600-1258), when Islam expanded both as a political structure and as a religious and intellectual community. The course will examine the social, economic, and intellectual forces that shaped the Muslim world and molded its interactions with the West. Readings of primary texts in translation.

[152 Islam in the Modern World. Spring. 3 credits. Not offered 1982-83.]

[251 Studies in the Popular and Courtly Literatures of the Islamic Middle East. See course description under Arabic Literature. Not offered 1982-83.]

[252 Islamic Law and Society Spring. 3 credits. Not offered 1982-83.]

258 Islamic History 600-1050 Spring. 3 credits. M W F 10:10. D. Powers. A survey of Islamic history from Muhammad and the rise of Islam to the middle of the Abbasid period. The

course will examine the process whereby, within a century after the Arab conquests of the Near East, the cultural and administrative legacy of the Byzantines and Persians was transformed into a new and dynamic, international Islamic civilization. Close reading of primary texts in translation.

355 Jews under Islam. Fall. 4 credits. M W F 12:20. D. Powers. The history of the Jews in the Islamic world from the seventh century A.D. to the present. Topics: the contribution of Judaism to the formation of Islamic civilization; the social, economic, and legal status of Jews living in Islamic countries; Jewish-Muslim polemics; Judeo-Islamic culture.

459 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor.

History of the Jewish People

[243 History of Ancient Israel to 450 B.C.E. Spring. 4 credits. Not offered 1982-83.]

449 Independent Study Fall or spring. Variable credit. Prerequisite: permission of instructor. D. I. Owen.

Directed readings on the history, culture, and civilization of ancient Israel and the Jewish people.

The Modern Middle East

294 Modern History of the Middle East: Changing Politics, Society, and Ideas (also Government 358) Fall. 4 credits. M W F 1:25. I. Rabinovich.

An introduction to the history of Turkey, the Arab lands, Israel, and Iran since the beginnings of modernization at the end of the eighteenth century to the present. The main focus is on the clash between traditional society and the West, and the changing social patterns, political systems, and ideologies in this context.

[394 Contemporary Egypt (also Government 450) 4 credits. Not offered 1982-83.]

398 Society and Politics in Saudi Arabia Spring. 4 credits. Enrollment limited to 25.

T R 2:30-3:45. J. Goldberg. The emergence of the Wahhabi state and its transformation into the present Saudi kingdom will be examined, as well as the structure of society in Saudi Arabia and the ways it was affected by modernization and oil, and the power structure of the state and its foreign policy.

451 Politics and Development in the Arabian Gulf (also Business and Public Administration NCE 451) Spring. 3 credits. Open to seniors with permission of instructor.

To be announced. F. Bent. This course will be focused on the Arabian Gulf sheikhdoms (Kuwait, Bahrain, Qatar, The United Arab Emirates, and Oman) and Saudi Arabia. The issues to be studied include the political processes and administrative characteristics of governance; the impact of oil on internal development and growth; the energy policies of the individual countries, OPEC and AOPEC; the relationships between multinational oil companies and host governments; and the external relations of these Arab states with other Middle Eastern countries, Europe, and the United States.

Near Eastern and Biblical History and Archaeology

243 The History and Archaeology of Ancient Israel to 450 B.C.E. Spring. 4 credits. T R 12:20-1:35. D. I. Owen.

A detailed survey of the history and archaeology of the land of Canaan from the traditional origins of the Israelite tribes in the early second millennium/middle Bronze Age (ca. 2000 B.C.E.) through the Babylonian

exile to the arrival of Ezra and Nehemia (ca. 450 B.C.E.). Lectures on, and discussions of, biblical and Near Eastern literary sources relating to the history of ancient Israel, as well as an analysis of the archaeological evidence, will form the basis of the course.

[261 Ancient Seafaring (also Archaeology 275) Fall. 3 credits. Not offered 1982-83. D. I. Owen.]

[262 Mediterranean Archaeology (also Classical 200) Fall. 3 credits. Not offered 1982-83.]

263 Introduction to Biblical Archaeology Summer. 3 credits.

D. I. Owen. 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 students planning to participate in excavations in Israel.

[361 Interconnections in the Eastern Mediterranean World in Antiquity Spring. 4 credits. Not offered 1982-83.]

[362 The History and Archaeology of Ebla Spring. 4 credits. Prerequisite: Archaeology 100 or any introductory course in ancient history or archaeology. Not offered 1982-83.]

364 Introduction to Field Archaeology in Israel Summer.

D. I. Owen. An introduction to archaeological fieldwork—excavation techniques, pottery analysis, and recording. Materials studied will range from the early Bronze Age to the Roman period. Emphasis also on the role archaeology plays in the reconstruction of biblical history and the various approaches used to achieve that reconstruction. On-site supervision will be supplemented by regular lectures on the history, culture, and literature of the peoples whose remains will be exposed. Requirements include regularly assigned readings and two papers. Graduate credit by special arrangement.

[365 History of the Ancient Near East in Biblical Times Fall. 4 credits. Not offered 1982-83.]

[366 Archaeology of the Ancient Near East (also Archaeology 310) Spring. Not offered 1982-83.]

367 The History and Archaeology of Ancient Egypt. Fall. 4 credits.

T R 12:20-1:35. D. I. Owen. A detailed survey of the history and archaeology of Egypt from prehistoric times to the end of the pharaonic period. Beginning with an introduction to the development of Egyptology, the course will then focus on the continuity of Egyptian history, with integrated discussions of the major archaeological excavations and their relationship to the reconstruction of Egyptian history and civilization. Aspects of Egyptian language, mythology and religion, and art and architecture will be discussed. The role of Egypt in the history and archaeology of Syro-Palestine will be highlighted.

[461 Seminar in Syro-Palestinian Archaeology: The Israelite Conquest of Canaan Fall. 4 credits. Not offered 1982-83.]

469 Independent Study Fall or spring. Variable credit. Staff.

Directed readings on the history, culture, and civilization of the ancient Near East.

Related Courses In Other Departments

Freshman Seminar in Classical Archaeology (Archaeology 121)

[Introduction to Medieval Latin (Classics 214) Not offered 1982-83.]

Introduction to Classical Archaeology (Classics 220)

Introduction to Classical Archaeology (Art History 220)

Minoan-Mycenaean Art and Archaeology (Classics 221)

Archaeology in Action (Archaeology 121)

New Testament (Classics 308)

Aegean Dendrochronology (Archaeology 309)

[The Archaeology of Cyprus (Classics 321) Not offered 1982-83.]

[Greeks and Their Eastern Neighbors (Classics 322) Not offered 1982-83.]

[Art and Archaeology of Archaic Greece (Classics 326) Not offered 1982-83.]

[Pagan and Christian at Rome (Classics 332) Not offered 1982-83.]

[Problems in Minoan-Mycenaean Archaeology (Classics 629) Not offered 1982-83.]

Honors Course

499 Independent Study: Honors Fall or spring. Variable credit.

Directed readings and conferences center on the candidate's honors thesis. The thesis topic must be approved by the honors adviser at the end of the second term of the junior year.

Philosophy

D. B. Lyons, chairman; J. G. Bennett, R. N. Boyd, M. Burnyeat, G. Fine, C. A. Ginet (director of undergraduate studies, [fall]), 224 Goldwin Smith Hall, 256-5000) H. Hodes, C. Hughes, T. H. Irwin, N. Kretzmann, R. W. Miller, R. Rynasiewicz, S. Shoemaker, R. C. Stalnaker (director of undergraduate studies [spring]), 228 Goldwin Smith Hall, 256-5000) N. L. Sturgeon, A. W. Wood

The study of philosophy provides students with an opportunity to become familiar with some of the great ideas and great works 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 fascinating and important intellectual problems. The curriculum includes substantial offerings in history of philosophy, logic, philosophy of mathematics and science, ethics, social and political philosophy, metaphysics, and theory of knowledge. Any philosophy course numbered in the 100s or 200s is suitable for beginning study in the field. Sections of Philosophy 100 are part of the Freshman Seminar program; they are taught by various members of the staff on a variety of philosophical topics, and because of their small size (twenty students at most), they provide ample opportunity for discussion. Students who want a broad introduction to philosophy may take Philosophy 101, Philosophical Classics, which focuses on recognized classics in the principal areas of philosophy. Philosophy 131, Logic, Evidence and Argument, deals with the analysis and evaluation of arguments of all sorts. It is not a general introduction to philosophy, but the skills it develops are useful in all areas of study, including philosophy. Many students with special interests 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. Eight philosophy courses of at least three credits each are required for the major. They must include at least one course in ancient philosophy, at least one course in the history of philosophy other than ancient philosophy, and a minimum of three courses of at least 3 credits each, numbered above 300, at least one of which must be numbered above 400 (with the exception of Philosophy 490).

A course in mathematical logic (either Philosophy 231 or 331), while not required, is especially recommended for majors or prospective majors.

Philosophy majors must also complete at least 8 credits of course work in related subjects approved by their major 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 a B- or better for all work in the College of Arts and Sciences and an average of B or better for all work in philosophy. In either or both 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. Prospective candidates should apply at the Department of Philosophy 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.

100 Freshman Seminar in Philosophy Fall or spring. 3 credits. Limited to freshmen who have not taken Philosophy 101. Independent sections, each limited to 20 students. Letter grade only.

Fall: M W F 9:05, staff; M W F 11:15, C. Ginet; M W F 1:25, R. Boyd; M W F 2:30, staff; T R 8:40-9:55, staff; T R 10:10-11:25, staff; T R 12:20-1:35, staff; T R 2:30-3:45, staff. Spring: M W F 9:05, staff; M W F 11:15, staff; M W F 1:25, staff; M W F 2:30, staff; T R 10:10-11:25, H. Hodes; T R 12:20-1:35, staff; T R 2:30-3:45, R. Miller.

101 Introduction to Philosophy Fall or spring. 3 credits. Fall: T R 10:10-11:25, A. Wood. Spring: M W F 9:05, S. Shoemaker.

Readings in classic works of philosophy (such as Plato, Aquinas, Descartes, Hume, Mill, Russell) concerned with any of several central philosophical issues—foundations of knowledge, reality and illusion, the basis of morality, the existence of God.

131 Logic: Evidence and Argument Spring 3 credits.

T R 8:40-9:55. A. Kronfeld.

An introduction to the fundamental principles of inference, intended to systematize and develop skills in evaluating arguments. Both deductive and inductive arguments will be considered. The course is not a general introduction to philosophy, but develops skills useful in all areas of study, including philosophy.

[201 Philosophical Problems Spring. 4 credits. Not offered 1982-83.]

211 Ancient Philosophy Fall. 4 credits.

T R 12:20-1:35. M. Burnyeat.

An introduction to the major arguments and theories of ancient Greek and some Roman philosophy: the pre-Socratics, Plato and Aristotle, the Stoics and Epicureans. Questions to be considered include What is the nature of the universe, and how can it be known? What are the nature and limits of human knowledge? Is there any rational basis for moral beliefs? Has man free will?

212 Modern Philosophy Spring. 4 credits.

T R 12:20-1:35. A. Wood.

A survey of some major philosophical problems in the Rationalists, Empiricists, and Kant. Typical problems include the nature and limits of knowledge; perception; the existence of God; free will and determinism; mind and body. Readings from Descartes, Spinoza, Locke, Berkeley, Hume, and Kant.

213 Existentialism Spring. 4 credits.

T R 2:30-3:45. A. Wood.

A study of selected writings, literary as well as philosophical, by four major thinkers to whom the term existentialist has often been applied: Soren Kierkegaard, Friedrich Nietzsche, Fyodor Dostoevsky, Jean-Paul Sartre.

[214 Philosophical Issues in Christian Thought Not offered 1982-83.]

215 Medieval Philosophy Spring. 4 credits.

T R 8:40-9:55. N. Kretzmann.

An introduction to medieval philosophy, concentrating on such topics as the relationship of faith and reason, the nature of truth, the existence of God, universals in knowledge and reality, and the freedom of the will, as discussed by such writers as Augustine, Boethius, Anselm, Aquinas, Scotus, and Ockham. Some attention to the historical development of philosophy from the end of antiquity through the fourteenth century.

231 Formal Logic Fall. 4 credits.

M W F 10:10. H. Hodes.

Analysis and evaluation of deductive reasoning in terms of formalized languages. The logic of sentences, predicates, and quantifiers. (This course, rather than 331, is the recommended introductory formal logic course for students unsure of their mathematical aptitude or without mathematical background.)

241 Ethics Spring. 4 credits.

M W F 10:10. D. Lyons.

Introduction to the philosophical study of moral problems and ethical theories through both historical and contemporary sources. Topics typically include relativism and scepticism; egoism and utilitarianism; and one or more specific moral issues such as abortion, rules or war, or reverse discrimination.

242 Social and Political Theory Fall. 4 credits.

T R 2:30-3:45. R. Miller.

A historical survey of philosophical thinking about the nature and norms of human society, including such questions as the nature and limits of liberty, the function and justification of state authority, the origins of inequality, and the rationale for revolution. Classic works in social and political theory will be discussed in detail in an effort to analyze their main arguments, determining the views of psychology, society, and ethics on which they rest.

243 Aesthetics Fall. 4 credits.

M W F 11:15. J. Bennett.

An introduction to philosophical questions about the arts. For example, What is art? Are there correct principles for the interpretation of works of art? Does art have any special relation to the emotions? What makes good art good? What is the value of art? The course emphasizes the connections between these questions about the arts and traditional philosophical issues.

245 Biomedical Ethics (also Biological Sciences 205) Fall. 3 credits. Primarily for sophomores, juniors, and seniors; permission of instructor required for graduate students.

M W F 1:25. C. Hughes.

Critical analysis of the conceptual framework in which ethical problems in biology and medicine are to be understood, debated, and solved. Problems include experimentation on living subjects; reproductive technologies (eugenics, population control); contraception, abortion, and infanticide; euthanasia and suicide; the allocation of scarce medical resources; physician-patient relationships; and health care systems.

246 Environmental Ethics (also Biological Sciences 206) Spring. 3 credits. Open to sophomores, juniors, and seniors; permission of instructor required for graduate students.

M W F 1:25. C. Hughes.

Critical analysis of the conceptual framework in which environmental policies are formulated and judged. Problems include private interest versus the public good; the relation of individual rights to the collective welfare with respect to property, compensation, regulation, and the exercise of eminent domain; moral obligations to the poor and to future generations; and the ideas of diversity, balance, and stability in the natural environment.

262 Philosophy of Mind Fall. 4 credits.

T R 8:40-9:55. S. Shoemaker.

Discussion of a number of problems about the nature of mind. For example, can thoughts and feelings be physical events in the brain? Might computers or robots be conscious beings? What is it that constitutes a person's identity—the unity of his consciousness? Is there a conflict between free will and determinism?

263 Religion and Reason Fall. 4 credits.

T R 10:10-11:25. N. Kretzmann.

Recent and traditional literature will be taken into account in the examination of such topics as evidence for and against the existence of a god, philosophical problems associated with the attributes of God as described in the great monotheistic religions, and philosophical problems associated with the relationship of God to the physical universe and to man.

286 Science and Human Nature Spring 4 credits.

M W F 11:15. K. Guyot.

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. Topics vary and may include issues in psychology such as behaviorism, Freudianism, and artificial intelligence, or issues in the foundations of historical theory such as methodological individualism and economic determinism, as well as relevant issues in the biological sciences. Topic for 1982-83: Darwin, social Darwinism, and sociobiology.

Intermediate Courses

Some of these courses have prerequisites.

[309 **Plato** Not offered 1982-83.]

[310 **Aristotle** Not offered 1982-83.]

311 Modern Rationalism Fall. 4 credits.

M W F 2:30. C. Ginet.

Topic for 1982-83: the philosophy of Leibniz.

[312 **Modern Empiricism** Not offered 1982-83.]

[314 **Topics in Ancient Philosophy** Not offered 1982-83.]

315 Special Topics in the History of Philosophy Spring. 4 credits.

T R 12:20-1:35. N. Kretzmann.

Topic for 1982-83: fate, the future, foreknowledge, and freedom.

[316 **Kant** Not offered 1982-83.]

[317 **Hegel** Not offered 1982-83.]

318 Twentieth-Century Philosophy Fall. 4 credits.

T R 2:30-3:45. S. Shoemaker.

Topic for 1982-83: the philosophy of Wittgenstein: the *Tractatus Logico-Philosophicus* and the *Philosophical Investigations*.

319 Philosophy of Marx Spring. 4 credits.

W 7:30-10:30 p.m. R. Miller.

An investigation of Marx's theories of economics, politics, and ideology in modern societies, his materialist framework for explaining social change, and his view of postcapitalist society. Attention will be paid to the philosophy of science implicit in Marx's arguments, their implications for issues in moral philosophy, and their relevance to contemporary moral and political controversies concerning war, racism, nationalism, political repression, and social inequality. Readings will be from all periods in Marx's development, including the early writings, *Capital*, and the writings on French political history.

331 Introduction to Formal Logic Spring. 4 credits.

M W F 11:15. R. Stalnaker.

Sentential logic and first-order quantification theory. Covers the same material as 231, but in more depth and with additional metatheory. This is the recommended course, of the two, for students with good mathematical background or aptitude.

[341 **Ethical Theory** Not offered 1982-83.]

342 Law, Society, and Morality (also Law 666) Fall. 4 credits.

M W F 2:30. J. Bennett.

An introduction to legal philosophy, concentrating on the nature of law. Law has been conceived as divine command, as command of an earthly sovereign, as exercise of power by the state, as rule-governed social behavior, and as the process of discovering the moral relations between citizens. The course looks at these views as expressed in the writings of Thomas Aquinas, Jeremy Bentham, John Austin, John Gray, Oliver Wendall Holmes, H. L. A. Hart, and Ronald Dworkin.

361 Metaphysics and Epistemology Spring. 4 credits.

M W F 1:25. R. Stalnaker.

Topic for 1982-83: foundationalism in the theory of knowledge.

[363 **Topics in the Philosophy of Religion** Not offered 1982-83.]

381 Philosophy of Science Fall. 4 credits.

M 7-9:30 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 theories, models and paradigms, the character of scientific revolutions. In addition to the contemporary literature in the philosophy of science, readings are also drawn from the history of science and from the works of modern philosophers such as Locke, Hume, and Descartes.

382 Philosophy and Psychology Spring. 4 credits.

M 7:30-10:30 p.m. R. Boyd.

Philosophy of psychology as a special case of the philosophy of science: problems of measurement, theory construction, experimental design, and the relation of psychology to other sciences.

[383 **Philosophy of Choice and Decision** Not offered 1982-83.]

[387 **Philosophy of Mathematics** Not offered 1982-83.]

[388 **Social Theory** Not offered 1982-83.]

390 Informal Study Fall or spring. To be taken only in exceptional circumstances. Credit to be arranged. Must be arranged by the student with his or her adviser and the faculty member who has agreed to direct the study.
Staff.

Advanced Courses and Seminars

These courses are offered primarily for majors and graduate students.

395 Majors Seminar Spring. 4 credits. Limited to junior and senior philosophy majors. S-U grades only.

T 2:30-4:25. R. Stalnaker.

An examination of some contemporary discussions of three or four classical philosophical issues: for example, free will versus determinism, personal identity, the objectivity of moral claims, problems in the philosophy of language.

[412 **Medieval Philosophy** Not offered 1982-83.]

413 Plato and Aristotle Fall. 4 credits.

T 3:45-5:40. M. Burnyeat.

Topic to be announced.

414 German Philosophy after Kant Fall. 4 credits.

T R 12:20-1:35. A. Wood.

Topic for 1982-83: Between Kant and Hegel. The course will study writings of post-Kantian idealism and speculative philosophy. Texts will include Kant, *Prolegomena* (1783); Herder, *God* (1787); Fichte, *Science of Knowledge* (1795); Schelling, *System of Transcendental Idealism* (1800); Schelling, *Exposition of My System of Philosophy* (1801); Hegel, *Phenomenology of Spirit*. Preface (1807).

[431 **Deductive Logic** Not offered 1982-83.]

[433 **Philosophy of Logic** Not offered 1981-82.]

[436 **Intensional Logic** Not offered 1982-83.]

437 Problems in the Philosophy of Language Fall. 4 credits.

M W F 1:25. H. Hodes.

Topic for 1982-83: Intentionality.

441 Contemporary Ethical Theory Spring. 4 credits.

T 3:45-5:40. J. Bennett.

A thorough study of two recent views of social ethics: that of Robert Nozick, in *Anarchy, State, and Utopia*, and that of John Rawls in *A Theory of Justice* and elsewhere.

[442 **Ethics and the Philosophy of Mind** Not offered 1982-83.]

[443 **Topics in Aesthetics** Not offered 1982-83.]

444 Contemporary Legal Theory (also Law 720) Fall. 4 credits. Limited enrollment: preference given to law students; others must apply to the instructor. This is a Law School seminar, scheduled according to the Law School calendar. The first meeting will be August 26.

R 3:45-5:25. D. Lyons.

Recent work on the nature of law and its relations to morality, with an emphasis on the writings of H. L. A. Hart and Ronald Dworkin.

[461 **Metaphysics** Not offered 1982-83.]

[462 **Theory of Knowledge** Not offered 1982-83.]

481 Problems in the Philosophy of Science

Spring. 4 credits.

Hours to be announced. R. Rynasiewicz.

Topic for 1982-83: The philosophy of space and time.

490 Special Studies in Philosophy

Fall or spring. 4 credits. Open only to honors students in their senior year.

Staff.

[611 Ancient Philosophy Not offered 1982-83.]**612 Medieval Philosophy**

Spring. 4 credits.

W 3:45-5:40. N. Kretzmann.

Topic: to be announced.

[613 Modern Philosophers Not offered 1982-83.]**[619 History of Philosophy** Not offered 1982-83.]**[631 Logic** Not offered 1982-83.]**[632 Semantics** Not offered 1982-83.]**[633 Philosophy of Language** Not offered 1982-83.]**[641 Ethics and Value Theory** Not offered 1982-83.]**[661 Theory of Knowledge** Not offered 1982-83.]**662 Philosophy of Mind**

Spring. 4 credits.

M 3:45-5:40. S. Shoemaker.

Topic for 1982-83 to be announced.

664 Metaphysics

Fall. 4 credits.

W 3:45-5:40. R. Miller.

Topic for 1982-83: Justification in science, ethics, and aesthetics.

[665 Metaphysics Not offered 1982-83.]**681 Philosophy of Science**

Fall. 4 credits.

Hours to be announced. R. Rynasiewicz.

Topic for 1982-83: Ether and relativity.

[682 Philosophy of Social Science Not offered 1982-83.]

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.

Staff.

Related Courses in Other Departments**Issues in Biology and Society: Professional Ethics (Biology and Society 311)****Eighteenth-Century Scottish Moral Science (Society for the Humanities 417)****Self-Interest and Social Theory (Society for the Humanities 418)****Physics**

D. F. Holcomb, chairman and director of undergraduate studies (109 Clark Hall, 256-7561); V. Ambegaokar, N. W. Ashcroft, K. Berkelman, H. A. Bethe (emeritus), D. G. Cassel, G. V. Chester, R. M. Cotts, J. W. DeWire, M. J. Feigenbaum, M. E. Fisher, D. B. Fitch, R. Galik, M. Gilchriese, B. Gittelman, K. Gottfried, S. Gregory, K. Greisen, L. N. Hand, D. L. Hartill, W. Ho, T. Kinoshita, J. A. Krumhansl, D. M. Lee, G. P. Lepage, R. M. Littauer, B. D. McDaniel, N. D. Mermin, J. Orear, R. O. Pohl, J. D. Reppy, R. C. Richardson,

E. E. Salpeter, R. H. Siemann, A. J. Sievers, E. Siggia, R. H. Silsbee, A. Silverman, P. C. Stein, R. M. Talman, S. A. Teukolsky, M. Tigner, J. W. Wilkins, K. G. Wilson, T. M. Yan, D. R. Yennie

Research in the Department of Physics centers on two major resources, the Laboratory of Atomic and Solid State Physics (LASSP) and the Laboratory of Nuclear Studies (LNS). LASSP has achieved national eminence both in solid-state and in low-temperature physics. LNS has concentrated on high-energy particle physics. Presently it operates, on campus, an electron-positron colliding-beam storage ring and the world's largest electron synchrotron. Students who are advanced and interested enough have access to the latest and most exciting developments through a full schedule of seminars and colloquia. There are opportunities for research participation and summer jobs.

Three introductory physics sequences are open to freshmen: 101-102, 112-213-214-315, and 207-208. In addition, there is a cluster of general-education courses, Physics 200 through 205. Physics 101-102, a self-paced audiotutorial course, is designed for students who do not intend to go into physics 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 sequence. Physics 101-102 or 207-208 may be taken as terminal physics courses. The three- or four-term sequence 112-213-214 (-315) is recommended for physics majors and engineers.

For those who wish to pursue some physics beyond the introductory level, several courses may be appropriate: Physics 330, Modern Experimental Optics; Physics 360, Introductory Electronics.

Advanced placement and credit are offered as outlined in Advanced Placement of Freshmen, or students may consult Professor Cotts, 522 Clark Hall. Transfer students requesting credit for physics courses taken at another college should consult the department office.

The Major

Various options permit the student to concentrate heavily on physics or to take less physics and pursue an accompanying constellation of courses in a related area. Those desiring a physics concentration as preparation for professional or graduate work should complete Physics 112-213-214 or 112-217-218 (and preferably 315) by the end of the sophomore year. A basic preparation for a less intensive physics program may include Physics 112-213-214 or 207-208. In either case, it is necessary to complete a concurrent sequence of mathematics courses.

Mathematics 191-192-293-294 or 193-194-295-296 are normally recommended, except for students especially interested in continuing the study of pure mathematics, for whom Mathematics 111-122-221-222 (or equivalent) may be preferred.

Prospective majors are urged to make an early appointment at the physics office for advice in planning their programs. Acceptance into the major is normally granted after completion of a year of physics and mathematics at a satisfactory level; the student should propose a tentative plan for completing his or her graduation requirements as well as those for the major. The plan may change from time to time, but it must be approved by the major adviser. The major requirements have two components—a core and a concentration.

Core requirements for the major include:

- 1) Physics 112-213-214 (or 112-217-218) or 207-208.
- 2) an intermediate physics course in each of four areas: (a) mechanics—Physics 318 or 431, (b) electricity and magnetism—Physics 325 or 432, (c) modern physics—Physics 315 or 443, and (d) laboratory physics—Physics 330, 360, or 410.

Mathematics courses prerequisite for these physics courses are also necessary. The choice of core is influenced by the intended concentration. For a concentration in physics, Physics 112-213-214 (or 112-217-218), 318, 325, 315, or 443, and 410 is appropriate, while for concentrations outside physics, part (2) of the core might consist of, for example, Physics 315, 360, 431, 432. Concentration reflects the student's interest in some area related to physics; the array of courses must have internal coherence. The concentration must include at least 15 credits, with at least 8 credits in courses numbered above 300. Students have chosen to concentrate in physics, biophysics, chemical physics, astrophysics; geophysics; natural sciences; history and philosophy of science; computational physics; physics and business.

The concentration in physics is recommended as preparation for professional or graduate work in physics or a closely related discipline. Twelve credits from physics courses above 300, in addition to those selected for part (2) of the core, are required; the program must include Physics 410. The following courses are strongly recommended: Physics 443; Mathematics 421, 422, and 423; and at least one of Physics 341, 444, 454, Applied and Engineering Physics 401, Astronomy 431-432, or Geological Sciences 485. Students with a concentration in physics who wish to emphasize preparation for astronomy or astrophysics should consult the Astronomy section of this Announcement. A combined biology-chemistry concentration is recommended for premedical students or those who wish to prepare for work in biophysics. The concentration in natural science is particularly appropriate for teacher preparation.

Foreign language requirement. Students interested in eventual graduate work in physics are advised to meet this requirement with 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.

Distribution Requirement

The requirement in physical sciences is met by any two sequential courses such as Physics 101-102 or 207-208, or by any two general-education courses from the group 200-205.

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 instructors in the course. In many cases an appropriate individual program can be worked out without exact adherence to the stated prerequisites.

Courses

101-102 General Physics 101, fall, except by special permission; 102, spring (may also be offered during summer session). 4 credits each term. Prerequisites: three years of high school mathematics, including some trigonometry. Prerequisite for Physics 102: Physics 101 or 112 or 207. Includes more modern physics and less mathematical analysis than Physics 207-208 or 112-213-214, but more mathematics than Physics 200 to 205. (Students planning to major in a physical science should elect Physics 207-208 or 112-213-214.) A self-paced, mastery-oriented audiotutorial format; students work in a learning center at hours of their own choice. Repeated tests on each unit are given until mastery is demonstrated. One large orientation meeting on R Sept. 2, 10:10 or 12:20, or T Feb. 2, 7:30 p.m. Staff.

Basic principles treated quantitatively but without calculus. Major topics for 101: Particle structure of matter; kinematics; forces and fields (including electric fields); momentum, angular momentum, energy (including nuclear energy); relativity; sound waves. 102: Electricity and magnetism; optics; thermal physics; quantum physics. Laboratory emphasizes instrumentation, measurement and interpretation of data. Text: *Physics for College Students—with Applications to the Life Sciences*, by Tilly and Thumm.

112 Physics I: Mechanics and Heat Fall or spring (may also be offered during summer 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 193 or 113).

Lecs, M W F 10:10 or 12:20; 2 recs each week; one 2-hour lab alternate weeks. Evening exams: fall, Oct. 14, Nov. 30; spring, Mar. 3, Apr. 5. Fall, staff; spring, R. Littauer.

Mechanics of particles: kinematics, dynamics, special relativity, conservation laws, central force fields, periodic motion. Mechanics of many-particle systems: center of mass, rotational mechanics of a rigid body, static equilibrium. Introduction to thermodynamics. At the level of *Fundamentals of Physics*, 2nd edition, extended, by Halliday and Resnick.

200 Relativity Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite to further science courses. Assumes no scientific background but will use some high school algebra and plane geometry.

Lecs, M W F 2:30; disc, T 12:20 or 2:30. N. D. Mermin.

For most people, the special theory of relativity calls to mind Einstein's famous equation $E=mc^2$. Many students have heard of other results from the theory, notions that seem to challenge common sense: "moving yardsticks shrink in length," "moving clocks run slowly," etc. Nevertheless, the theory that yields these extraordinary conclusions—largely a logical analysis of the nature of time—is little known to those without a professional interest in science, even though literally no mathematics beyond elementary high school algebra is required for its formulation. The challenge in learning special relativity lies not in mastering arcane mathematical skills, but in shedding some prejudices about the nature of time that are so deeply held as to be unrecognized as assumptions that might, in fact, be false.

201-202 Great Ideas of Physics Fall, spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite to further science courses. Assumes no scientific background but may use some high school mathematics.

Lecs, M W F 2:30; disc, T 12:20 or 2:30. J. Vrieslander.

The Physics 201 and 202 courses have in recent semesters focused on a topic (or group of topics) of particular interest for nonscientists. Among the recent choices: energy and thermodynamics, the nature of light, aerodynamics, and the measurement and meaning of time. Consult the instructor for updated information. Either term may be taken separately, although they do form a pair.

203 The Physics of Space Exploration Spring. 3 credits. Intended for nonscientists; does not serve as a prerequisite to further science courses. Assumes no scientific background, but may use some high school mathematics.

Lec, M W F 2:30. E. Salpeter.

The principles of physics (plus simple mathematics) are applied to gain knowledge about planets, stars, and galaxies. The physics behind space probes (and their limitations) is discussed. Interpretation of data from astronomical observations are described. The level of the course will be that of a typical article in *Scientific American* and of Pasachoff's *Astronomy Now*.

[204 Physics of Musical Sound Not offered 1982-83.]

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 some high school algebra.

Lecs, M W F 2:30; disc to be arranged. V. Ambegaokar.

An attempt to explain how and when natural scientists can cope rationally with chance. Starting from simple questions (such as how one decides if an event—meeting someone with the same birthday, being dealt a bridge hand all in one suite—is likely, unlikely, or just incomprehensible), the course will attempt to reach an understanding of more subtle points: why it is, for example, that in large systems likely events can become overwhelmingly likely. From these last considerations, it may be possible to introduce the interested students in a nontrivial way to 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—may be touched on.

207-208 Fundamentals of Physics 207, fall; 208, spring. 4 credits each term. Prerequisites for Physics 207: high school physics plus coregistration in Mathematics 192 or 112, or substantial previous contact with introductory calculus, combined with coregistration in Math 193 or 113. Prerequisites for Physics 208: Physics 207 (or 112 or 101) and at least coregistration in Mathematics 192 or 112. Physics 207-208 is intended as a two-semester introduction for students majoring in a physical science, mathematics, or an analytically oriented biological science.

Lecs, M W 9:05 or 11:15; 2 recs each week; one 3-hour lab alternate weeks. Evening exams: fall, Oct. 14, Nov. 18; spring, Mar. 3, Apr. 5. Fall, R. Cotts; spring, R. Pohl.

Core-plus-branch plan. The first nine weeks of each semester are devoted to core material (lec/discussion/lab format): 207, particle mechanics and waves; 208, electromagnetic fields and circuits. For the last five weeks each term, each student selects one branch topic, and the work on this topic is done on an unstructured, self-paced basis. Possible branches: 207, thermodynamics, acoustics and the physics of music, special relativity, gravitation; 208, optics, introduction to quantum mechanics, nuclear physics, electronics. Core at the level of *Physics*, by P. A. Tipler.

213 Physics II: Electricity and Magnetism Fall or spring (may also be offered during summer 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 112.

Lecs, T R 9:05 or 11:15; 2 recs each week; one 3-hour lab alternate weeks. Evening exams: fall, Oct. 7, Nov. 2, Nov. 23; spring, Feb. 22, Mar. 17, Apr. 14. Fall, J. Orear; spring, M. Isaacson.

Electrostatics, behavior of matter in electric fields, magnetic fields, Faraday's law, electromagnetic oscillations and waves, magnetism. At the level of *Fundamentals of Physics*, by Halliday and Resnick. Laboratory covers electrical measurements, DC and AC circuits, resonance phenomena.

214 Physics III: Optics, Waves, and Particles

Fall or spring (may also be offered during summer session). 3 or 4 credits. Primarily for students of engineering and for prospective physics majors. Prerequisites: Physics 213 and coregistration in the continuation of the mathematics sequence required for 112. (Physics 310 may be taken, with permission of the instructor, in place of the Physics 214 lab, and credit for 214 is reduced to 3 credits.)

Lecs, T R 9:05 or 11:15; 2 recs each week; one 3-hour lab alternate weeks. Evening exams: fall, Oct. 7, Nov. 2, Nov. 23; spring, Feb. 22, Mar. 17, Apr. 14. Fall, K. Berkelman; spring, staff.

Wave phenomena; electromagnetic waves; optics; quantum effects, matter waves; uncertainty principle; introduction to wave mechanics.

217 Physics II: Electricity and Magnetism Fall or spring. 4 credits. Intended for students who have done very well in Physics 112 and desire a more analytic treatment than that of Physics 213.

Prospective physics majors are encouraged to select Physics 217. Prerequisites: permission of instructor and approval of student's adviser before course enrollment. Prerequisites also include a knowledge of the fundamentals of electricity and magnetism and a good mathematical background, including the use of vector calculus.

Lecs, T R S 11:15; rec, T 3:35; lab, R 1:30-4:30.

Evening exams may be scheduled. Fall, R. Littauer; spring, D. Cassel.

A more rigorous version of Physics 213, at the level of *Electricity and Magnetism* by Purcell (Vol. II, Berkeley Physics Series).

218 Physics III: Optics, Waves, and Particles

Fall or spring. 3 or 4 credits. A special section of Physics 214. Conditions governing enrollment are similar to those of Physics 217. Students are required to do the lab work offered in Physics 214 or to enroll concurrently in Physics 310 (in which case credit for Physics 218 is reduced to 3 credits).

Lecs, T R S 11:15; sec, T 2:30; lab, see Physics 214 or 310. Evening exams may be scheduled. Staff.

A more rigorous version of Physics 214.

310 Intermediate Experimental Physics Fall or spring. 3 credits. Prerequisite: Physics 208 or 213.

May be taken concurrently with Physics 214 or 218 in place of the lab work offered in Physics 214, with permission of student's adviser.

Labs, R F 1:25-4:25. Fall, P. Hartman; spring, J. Reppy.

Students select from a variety of experiments and may work on experiments of their own design if equipment is available. An individual, independent approach is encouraged. Facilities of the Physics 410 lab are available for some experiments.

315 Phenomena of Microphysics Fall or spring. 3 credits. Primarily for students of engineering and prospective majors in physics. Prerequisites: Physics 214 and Mathematics 294.

Fall: lec, M W F 9:05; spring: T R S 11:15. Fall, M. Feigenbaum; spring, D. Lee.

Introduction to the physics of atoms, solids, and nuclei, emphasizing the description of phenomena using the results of elementary quantum and statistical physics. At the level of *Introduction to Modern Physics*, by Richtmyer, Kennard, and Cooper.

318 Analytical Mechanics Spring. 4 credits.

Prerequisites: Physics 208 or 214 plus one of Mathematics 421, 422, or 423, or permission of instructor. Intended for physics majors concentrating in physics. Similar material is covered in Physics 431 at a less demanding analytical level. (Applied and Engineering Physics 333 is approximately equivalent.)

Lecs, M 11:15-1:15, W F 11:15.

Newtonian mechanics of particles and systems of particles including rigid bodies; oscillating systems; gravitation and planetary motion; moving coordinate systems, relativistic kinematics; wave propagation; Euler's equations; Lagrange's equations; Hamilton's equations; normal modes and small vibrations. At the level of *Classical Dynamics*, by Marion.

325 Electricity and Magnetism Fall. 4 credits.

Prerequisites: Physics 208 or 214 plus coregistration in one of Mathematics 421, 422, or 423, or permission of instructor. Intended for physics majors concentrating in physics. Similar material is covered in Physics 432 at a less demanding analytical level.

Lecs, T R S 11:15, T 3:35. J. Wilkins.

Electrostatics: electric charge and fields, potential, multipoles, conductors, Laplace equation and formal solutions, field energy, dielectric materials, polarization. Magnetostatics: currents, magnetic fields

and vector potential, magnetic materials, field energy. Maxwell's equations. At the level of *Lectures on Physics*, Vol. II, by Feynman, and *Foundations of Electromagnetic Theory*, by Reitz and Milford.

326 Electromagnetic Waves and Physical Optics Spring. 4 credits. Prerequisite: Physics 325. Lecs, T R S 9:05, W 1:25.

Electrodynamics: applications of Maxwell's equations, wave equation, transmission lines, wave guides, radiation, special relativity. Physical optics: reflection, refraction, dispersion, polarization, Fresnel and Fraunhofer diffraction. At the level of *Classical Electromagnetic Radiation*, by Marion.

330 Modern Experimental Optics Spring. 3 credits. Prerequisite: one year of physics.

Lec, M 2:30; lab, T W R or F 1:25-4:15. L. Hand. A practical, laboratory-based course for students of physical and biological sciences. Students select four or five subject units to match their interests and backgrounds. The units include physics of lasers, image formation, holography, spectroscopy, light pulses, coherence and correlation, diffraction and interference, light sources and detectors. Each unit involves one or more experiments from a set of varying difficulty and sophistication, and readings, supplementary notes, and problems. An introduction to modern optical techniques and equipment used in current research in such fields as biology, chemistry, physics, and astronomy.

341 Thermodynamics and Statistical Physics Fall. 4 credits. Prerequisites: Physics 214 and Mathematics 294.

Lecs, M W F 10:10, T 2:30. J. Reppy. 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 Fermi-Dirac statistics with applications. Elementary transport theory. At the level of *Fundamentals of Statistical and Thermal Physics*, by Reif, or *Thermal Physics*, by Morse.

360 Introductory Electronics (also Applied and Engineering Physics 363) Fall or spring. 4 credits. Prerequisite: Physics 208 or 213 or permission of instructor. No previous experience with electronic circuits is assumed; however, the course moves through the introductory topics (DC and AC circuits, basic circuit elements) rather quickly. Students wishing a somewhat slower-paced treatment might consider taking Electrical Engineering 210 before Physics 360.

Lec, M 2:30-4:25; labs, T R or W F 1:25-5:25. Fall, D. Holcomb; spring, staff. An experimental survey of some devices and circuits in two general areas: analog and digital electronics. In analog circuits, the major emphasis is on operational amplifiers and their applications. Discrete devices (diodes, bipolar transistors, and field-effect transistors) are covered briefly. In digital circuits, some time is spent on combinatorial logic devices. This experience is then applied to problems in programming and interfacing a simple microcomputer.

400 Informal Advanced Laboratory Fall or spring (may also be offered during summer session). Variable credit. Prerequisite: two years of physics and permission of instructor.

Lab, see Physics 410. 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.

410 Advanced Experimental Physics Fall or spring. 4 credits. Limited to seniors except by special permission. Prerequisites: Physics 214 (or 310 or 360) plus 318 and 325, or permission of instructor.

Lec, M 2:30-4:25; labs, T W 1:25-4:25. R. Siemann and staff.

Selected topics in experimental concepts and techniques. About seventy 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.

431-432 Introductory Theoretical Physics I and II 431, fall; 432, spring. 4 credits each term.

Prerequisites: Physics 431: Physics 207-208 or equivalent and mathematics 294 or equivalent; Physics 432: Physics 431 or equivalent. Primarily for physics majors with concentrations outside physics, and for graduate students in a science other than physics (such as chemistry, engineering, biology, geology). Physics 318 and 325 cover similar material at a higher analytical level and are intended for physics majors concentrating in physics.

Lecs, M W F 10:10 and F 1:25. Fall, R. Talman; spring, D. Yennie.

431: Mechanics. Includes Newtonian mechanics, Lagrange's and Hamilton's equations, central forces, rigid-body motion, and small oscillations. At the level of *Classical Dynamics*, by Marion. 432: Electricity and magnetism. Includes electrostatics, magnetostatics, boundary value problems, dielectric and magnetic media, circuit theory. Maxwell's equations and electromagnetic waves. At the level of *Electricity and Magnetism*, third ed., by Bleaney and Bleaney.

443 Introductory Quantum Mechanics Fall. 4 credits. Prerequisites: Physics 318 and 325, or 431-432; Physics 315 and Mathematics 421; or permission of instructor.

Lecs, M W F 9:05, M 3:35.

Introduction to concepts and techniques of quantum mechanics, at the level of *Introduction to Quantum Mechanics*, by Dicke and Wittke.

444 Nuclear and High-Energy Particle Physics Spring. 4 credits. Prerequisite: Physics 443 or permission of instructor.

Lecs, M W F 9:05, F 1:25. M. Gilchriese. Behavior of high-energy particles and radiation; elementary particles; basic properties of nuclei; nuclear reactions; nuclear forces; cosmic rays; general symmetries and conservation laws. At the level of *Subatomic Physics*, by Frauenfelder and Henley.

454 Introductory Solid-State Physics Spring. 4 credits. Prerequisite: Physics 443 or Chemistry 793, or permission of instructor.

Lecs, T R S 10:10, R 3:35. R. Silsbee. An introduction to modern solid-state physics, including lattice structure, lattice vibrations, thermal properties, electron theory of metals and semiconductors, magnetic properties, and superconductivity. At the level of *Introduction to Solid State Physics*, fifth edition, by C. Kittel.

[464 Physics of Macromolecules Spring. Not offered 1982-83.]

481-489 Special Topics Seminar Spring. 2 credits. Limited to senior physics majors and those who receive permission of instructor. S-U grades only.

Hours to be arranged. One selected topic of current interest is studied. Students participate in organization and presentation of material.

490 Independent Study in Physics Fall or spring. 1-3 credits. Ordinarily limited to seniors. Prerequisite: permission of professor who will direct proposed work. Individual project work (reading or laboratory) in any branch of physics.

500 Informal Graduate Laboratory Fall or spring. Variable credit.

506 Design of Electronic Circuitry Spring. 3 credits.

M W 9:05. D. Hartill.

Circuit techniques and design in electronic measurement and instrumentation, with emphasis on applications to physics experiments. At the level of *Integrated Electronics*, by Millman and Halkias.

510 Advanced Experimental Physics Fall or spring. 3 credits.

Labs, T W 1:25-4:25. R. Siemann and staff. About seventy 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.

520 Projects In Experimental Physics Fall or spring. 1-3 credits. To be supervised by faculty member. 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.

551 Classical Mechanics Fall. 3 credits.

Lecs, T R S 10:10. E. Siggia. Lagrangian and Hamiltonian formulation of classical mechanics and modern applications in nonlinear dynamics. The foundations will be taught at the level of the Landau and Lifshitz's tract on mechanics, together with selected portions from V. I. Arnold, *Mathematical Methods of Classical Mechanics*. Approximately the latter third of the course will be directed at questions of stability and stochasticity in nonlinear systems and nonlinear waves such as solitons.

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. Offered alternate years.

Fall: lec, T R 1:25-2:40. Spring: lec, T R 10:10-11:35. S. Shapiro.

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.

561 Classical Electrodynamics Fall. 3 credits.

Lecs, M W F 9:05. S. Teukolsky. Maxwell's equations, electromagnetic potentials, electrodynamics of continuous media (selected topics), special relativity, radiation theory. At the level of *Classical Electrodynamics*, by Jackson.

562 Statistical Mechanics (also Chemistry 796)

Spring. 4 credits. Primarily for graduate students. Prerequisite: Chemistry 793 or equivalent.

Lecs, T R 8:30-9:55. M. E. Fisher. Thermodynamic assemblies; Legendre transformation. Ergodic and information theory ideas. Ensembles and partition functions; equivalences and fluctuations; indistinguishability. Thermodynamic properties of ideal gases and crystals; Third Law; chemical equilibria. Imperfect gases; correlation functions and their applications. Ideal quantum gases; Bose-Einstein condensation. Ideal paramagnets. Ising-models and lattice gases. At the level of Kubo's *Statistical Mechanics*.

572 Quantum Mechanics I Fall or spring. 4 credits.

Lecs, M W F 11:15. Fall, P. Lepage; spring, K. Wilson.

The formulation of quantum mechanics in terms of states and operators. Symmetries and the theory of angular momentum. Stationary and time-dependent perturbation theory. Fermi's golden rule, and variational methods. The elements of scattering theory. At a level between *Quantum Mechanics*, by Merzbacher, and *Quantum Mechanics*, by Landau and Lifshitz. Familiarity with elementary aspects of the Schrodinger equation is assumed, including its application to simple systems such as the hydrogen atom.

574 Quantum Mechanics II Spring. 4 credits. Required of all Ph.D. majors in theoretical physics. Lec, M W F 11:15.

Discussion of various applications of quantum mechanics, such as collision theory, theory of spectra of atoms and molecules, theory of solids, emission of radiation, relativistic quantum mechanics. At the level of *Intermediate Quantum Mechanics*, by Bethe and Jackiw.

612 Experimental Atomic and Solid-State Physics Fall. 3 credits.

Lec, M W F 1:25. S. Gregory. Lectures on techniques and design principles. Emphasis on study of solids by their interactions with electromagnetic fields. Topics: sources and detectors, scanning and resonance techniques, signal processing, sample characterization, environmental control.

614 Experimental High-Energy Physics Spring. 3 credits. Not offered 1982-83.]

635 Solid-State Physics I Fall. 3 credits. First semester of a two-semester sequence of solid-state physics for graduate students who have had the equivalent of Physics 572 and 562 and some prior exposure to solid-state physics, such as Physics 454. Lec, T R S 11:15. A. Sievers.

Electronic and phonon properties of metals and insulators, including transport processes. Discussions at the level of *Solid State Physics*, by N. W. Ashcroft and N. D. Mermin.

636 Solid-State Physics II Spring. 3 credits. Lec, M W F 10:10. J. Wilkins.

Concepts developed in Physics 635 are extended and applied in a survey of the following: band theory and Fermi surface in metals, localized states, magnetism, neutron and light scattering, phenomenological superconductivity, and other topics of current interest in condensed-matter physics.

645 High-Energy Particle Physics Fall. 3 credits. Lec, M W F 11:15. K. Gottfried.

Introduction to the physics of nucleons and mesons. Strong, electromagnetic, and weak interactions. Relevance of symmetry laws to particle physics. Introduction to the quark model. Unification of weak and electromagnetic interactions. At the level of *Introduction to High Energy Physics*, by Perkins.

646 High-Energy Particle Physics Spring. 3 credits.

Lec, T R 11:15-12:45, T 2:30. K. Berkelman. Topics of current interest, including hadron electroproduction, electron positron annihilation and high-energy neutrino reactions, are surveyed. Lectures and reading material are at the level of *High Energy Hadron Physics*, by Perl. Students share in leading the discussions.

Note: Only S-U grades will be given in courses numbered 650 or above.

651 Advanced Quantum Mechanics Fall. 3 credits.

Lec, M W F 10:10, T 2:30. D. Yennie. Relativistic quantum mechanics with emphasis on perturbation techniques. Extensive applications to quantum electrodynamics. Introduction to renormalization theory. At the level of *Relativistic Quantum Mechanics*, by Bjorken and Drell.

652 Quantum Field Theory Spring. 3 credits.

Lec, M W F 11:15. T. Kinoshita. Canonical field theory, model field theories. Green's functions, renormalization. Introduction to analytic properties of scattering amplitudes and dispersion relations. Applications to strong interactions. At the level of *Relativistic Quantum Fields*, by Bjorken and Drell.

653 Statistical Physics Fall. 3 credits. Normally taken by students in their second or later years. Prerequisites: competence in the basic principles of quantum mechanics, statistical mechanics, and thermodynamics.

Lec, M W F 9:05. N. Ashcroft. Survey of topics in modern statistical physics, including the theory of simple classical and quantum fluids; the theory of ordered systems such as superfluids and superconductors; kinetic theory and the Boltzmann equation; phenomenological Fermi liquid theory and hydrodynamics; theories of inhomogeneous systems. The contents of the course vary with the current interests of the instructor. There is rarely any set text, though *Statistical Physics*, by Landau and Lifshitz, gives an idea of the level.

654 Theory of Many-Particle Systems Spring. 3 credits. Prerequisites: Physics 562, 574, 635, 636, and 653.

Lec, T R 10:10-11:35. V. Ambegaokar. Equilibrium and transport properties of microscopic systems of many particles studied at zero and finite temperatures. Thermodynamic Green's function techniques introduced and applied to such topics as normal and superconducting Fermi systems, superfluidity, magnetism, insulating crystals.

661 High-Energy Phenomena Fall. 3 credits.

Lec, M R F 3:35. Not offered 1982-83.]

665 Topics in Theoretical Astrophysics (also Astronomy 555) Fall. 4 credits.

Lec, M W F 2:30. E. Salpeter. Usually concentrates on the theory of the interstellar medium.

667 Theory of Stellar Structure and Evolution (also Astronomy 560) Not offered 1982-83.]

681-689 Special Topics

Offerings are announced each term. Typical topics are group theory, analyticity in particle physics, weak interactions, superfluids, stellar evolution, plasma physics, cosmic rays, general relativity, low-temperature physics, x-ray spectroscopy or diffraction, magnetic resonance, phase transitions, and the renormalization group.

690 Independent Study in Physics Fall or spring. Variable credit.

Special graduate study in some branch of physics, either theoretical or experimental, under the direction of any professional member of the staff.

Portuguese

See Modern Languages, Literatures, and Linguistics, p. 146.

Psychology

D. Bem, S. Bem, U. Bronfenbrenner, W. Collins, J. P. Cunningham, J. Cutting, R. Darlington, T. DeVogd, H. M. Feinstein, B. L. Finlay, L. Fitzgerald, E. J. Gibson, T. D. Gilovich, B. P. Halpern, D. Irwin, R. E. Johnston, F. Keil, C. Krumhansl, W. W. Lambert, H. Levin, D. Levitsky, J. B. Maas, R. D. Mack, L. Meltzer, U. Neisser, D. T. Regan, E. Regan, T. A. Ryan, K. E. Weick

The major areas of psychology represented in the department are human experimental 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. Human experimental psychology includes such courses as cognition, perception, memory, and psycholinguistics. Personality and social psychology is represented by courses and fieldwork in psychopathology as well as courses in social psychology and personality (such as theories of personality, beliefs and attitudes, and sex roles). 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

Prerequisites for admission to the major are:

- 1) any three courses in psychology (students often begin with Psychology 101);
- 2) no grade below C+ in any psychology course; and
- 3) acceptance by the Majors and Advising Committee of the Department of Psychology.

Application forms may be obtained at the department office and should be filed two weeks before the course enrollment period.

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.

- 1) Human experimental psychology,
- 2) Biopsychology,
- 3) 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.

- 1) **Human experimental psychology:** Psychology 190, 205, 207, 209, 214, 215, 305, 307, 308, 309, 313, 314, 316, 345, 411, 416, 436, or 464.
- 2) **Biopsychology:** Psychology 123, 322, 324, 326, 361, 396, 422, 425, 491. Note: Courses in the biopsychology area other than 123 all have 123 and/or introductory biology among their prerequisites.
- 3) **Social, personality, and abnormal psychology:** Psychology 206, 275, 277, 280, 284, 325, 327, 328, 381, 383, 384, 385, 402, 426, 467, 468, 469, 480, 481, 482, 483, 486, 488 or 489.

The major adviser determines to which group, if any, the following courses may be applied.

- 4) **Other courses:** Psychology 101, 103, 201, 347, 350, 386, 410, 440, 443, 451, 465, 470, 471, 472, 473, 475, 476, 477, 478, 479, 490, 494, 498, 499.

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.

- 1) Undergraduates may not serve as teaching assistants for psychology courses if they are serving as teaching assistants for any other course during the same semester.

- 2) An undergraduate psychology major cannot apply more than 12 of the credits earned in independent study (including honors work) and fieldwork toward the 40 credits required by the major.

Statistics requirement. Proficiency in statistics can be demonstrated in any one of the several ways listed below:

- 1) Passing Psychology 350 or Psychology 471.
- 2) 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 Education 352-353, Industrial and Labor Relations 210-311, and Sociology 325. An up-to-date list is posted outside of 278 Uris Hall. Requests that a particular course be added to this list may be made to Professor Gilovich.
- 3) 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.
- 4) 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. Sample examination questions are posted outside of 278 Uris Hall.

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 introductory 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, organic chemistry, 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 in the 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.

Honors Program. This program is intended to give students an opportunity to examine selected problems in depth and to carry out independent research under the direction of a faculty member. During the spring term of the junior year, an honors student will enroll in Psychology 494 and will develop a proposal and begin work on a research project. The student will arrange a meeting with an honors adviser and a faculty sponsor. At the end of the spring term, a report of the semester's work will be submitted for faculty review.

By the fall term of the senior year, honors students will have begun work in their final research projects. They will also enroll in a senior honors seminar, Psychology 498, in which research projects will be discussed. Thesis research will continue in the spring with enrollment in Psychology 499, Senior Honors Dissertation. Final honors standing is based on a written thesis and an oral defense of the thesis as well as on general academic performance.

Prospective applicants are advised to file applications early in the fall term of their junior year. Decisions on these applications will be made by the faculty at the end of the fall semester. It is possible for a student who has satisfactorily completed independent study or research to be admitted to the program at the end of the junior year. For consideration by the honors committee of the Department of Psychology, applicants must have a minimum cumulative grade average of at least a B+ in all courses in psychology.

Distribution Requirement

The distribution requirement in the social sciences is satisfied by any two courses in psychology with the exception of Psychology 123, 322, 324, 326, 350, 361, 396, 422, 425, 451, 471, 472, 473, 476, 477, 479, 491, and 693.

Courses

101 Introduction to Psychology: The Frontiers of Psychological Inquiry Fall. 3 credits. Students may not receive credit for both Psychology 101 and Education 110. Students who would like to take a discussion seminar should also enroll in Psychology 103.

M W F 10:10. J. Maas.

The study of human behavior. Topics include brain functioning and mind control, psychophysiology of sleep and dreaming, psychological testing, perception, learning, 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.

103 Introductory Psychology Seminars Fall. 1 credit. Limited to 400 students. Prerequisites: concurrent enrollment in Psychology 101.

Hours to be arranged; 32 different time options. Staff.

A weekly seminar that may be taken in addition to Psychology 101 to provide an in-depth 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.

123 Introduction to Psychology: Biopsychology

Fall. 3 credits. May not be taken for credit by students who are registered in or have completed one or more courses offered by the Section of Neurobiology and Behavior of the Division of Biological Sciences, or two or more biopsychology courses.

M W F 10:10. E. Adkins Regan and staff.

A survey of behavior emphasizing evolutionary and physiological approaches, designed to introduce students to the interface between biology and psychology. Both human and nonhuman behavior is included, together with theoretical issues pertaining to the application of biological principles to human behavior.

190 Thought and Intelligence Spring. 4 credits.

Open to juniors and seniors in any field, or to freshmen and sophomores who have had a course in psychology.

M W F 9:05. U. Neisser.

The concepts underlying the measurement of intelligence and the problems involved in interpreting such measurements are considered in the context of psychological studies of problem solving and thinking. Topics include introspective accounts of thought, experiments on problem solving and concept

formation, cross-cultural studies of thinking, the history of the concept of intelligence, reliability and validity of tests, heritability of intelligence, and recent relevant research.

[201 Introduction to Psychology as a Laboratory Science Fall. 3 credits. Prerequisite: one course in psychology (normally Psychology 101, 123, or 190). High school credit in psychology may meet this prerequisite with permission of instructor. Not offered 1982-83.

Staff.]

205 Perception Fall. 3 credits. Open to first-year students. Limited to 50 students.

T R 12:20-2:15. J. Cutting.

Basic concepts and phenomena in the psychology of perception, with emphasis on stimulus variables and sensory mechanisms. All sensory modalities are considered; visual and auditory perception are discussed in detail.

206 Psychology in Business and Industry (also Hotel Administration 314) Spring. 3 credits

Limited to 35 psychology students. Prerequisites: Psychology 101, 123, or 190, or permission of instructor. Not recommended for upperclass students in ILR.

T 12:20, R 12:20-2. S. Davis.

The principles of psychology applied to industrial and business systems; personnel selection; placement and training; problems of people at work, including evaluation, motivation, efficiency, and fatigue; and the social psychology of the work organization.

[207 Motivation Theory: Contemporary

Approaches and Applications Spring. 4 credits. Prerequisite: an introductory psychology course. Not offered 1982-83.

M W F 11:15. Staff.

Models and research in human motivation are examined and integrated. Traditional approaches are used as departure points for the study of more current themes, such as intrinsic motivation and achievement motivation. Attention is given to how pertinent various themes are to real-life behavioral settings.]

209 Developmental Psychology Spring. 4 credits. Prerequisite: an introductory psychology course.

T R 12:20-1:45; sec to be arranged. F. Keil.

A comprehensive introduction to current thinking and research in developmental psychology. Topics include perceptual and cognitive development in infancy and childhood, attachment, language development, Piagetian theory and research, moral development, cross-cultural perspectives, and socialization.

214 Introduction to Cognitive Psychology

Spring. 3 credits. Prerequisite: one course in psychology.

T R 12:20-1:35. C. Krumhansl.

An introduction to psychology, emphasizing the perceptual and cognitive processes that underlie human behavior. The course is designed to introduce the student to topics such as perception, memory, language, thinking, development, problem solving, and decision making. Techniques for investigating problems in these areas are discussed.

215 Language and Communication Spring. 3 or 4 credits; the 4-credit option involves a term paper or project. Open to first-year students. Limited to 40 students.

M W F 1:25. J. Cutting.

Topics include the nature of language, its origin and acquisition, the relation between language structures and psychological processes; also animal communication, sign language, aphasia, black English, and reading.

275 Introduction to Personality Psychology Fall. 3 or 4 credits; the additional (or fourth) credit is given for attendance at the optional section meeting, and the term paper. Prerequisite: an introductory psychology course.

T R 12:20-2:15; sec to be arranged. D. Bem.
An introduction to research and theory in personality psychology, emphasizing contemporary approaches. Topics include the dynamics, structure, and assessment of personality as well as personality development and change. Biological and sociocultural influences on personality are also considered.

277 Psychology of Sex Roles (also Women's Studies 277 and Sociology 277) Spring. 3 or 4 credits; the additional (or fourth) credit is given for an optional term paper. Prerequisite: an introductory psychology course.

T R 2:30-4. S. Bem.

The course addresses the question of why and how adult women and men come to differ in their overall life styles, work and family roles, personality patterns, cognitive abilities, etc. This broad question is examined from five perspectives: (a) the psychoanalytic perspective, (b) the biological perspective, (c) the historical and cultural evolutionary perspective, (d) the child development perspective, and (e) the social-psychological and contemporaneous perspective. Each of these perspectives is also brought to bear on more specialized phenomena relating to the psychology of sex roles, including psychological androgyny, women's conflict over achievement, the male sex role, equalitarian marriage relationships, gender-liberated child-rearing, female sexuality, homosexuality, and transsexualism.

280 Introduction to Social Psychology (also Sociology 280) Spring. 3 or 4 credits; the additional (or fourth) credit is given for attendance at the optional section meeting, and the term paper. Prerequisite: an introductory psychology course.

T R 10:10-11:25. T. Gilovich.

An introduction to research and theory in social psychology. Topics include human processing of social information; social influence, persuasion, and attitude change; social interaction and group phenomena. The application of social psychological knowledge to current social problems will also be discussed.

284 Social-Psychological Theories and Applications (also Sociology 284) Fall. 3 credits.

T R (S) 9:05. (S) indicates cancellation of the Saturday class at the discretion of the instructor.

L. Meltzer.

Emphasis is given to those aspects of personality and social psychology that have led to effective practical applications or that provide reasonable insights into the genesis and/or amelioration of social and personal problems.

[305 Visual Perception Spring. 3 or 4 credits, depending on whether the student elects to do an independent laboratory project. Prerequisite: Psychology 205 or permission of instructor.

T R 10:10. C. Krumhansl.

A detailed examination of theories and processes in visual perception. Topics will include the perception of color, space, and motion; perceptual constancies; adaptation; pattern perception; and aspects of perceptual learning and development.]

[307 Chemosensory Perception Fall. 3 or 4 credits; the optional (or fourth) credit is for an independent laboratory project. Not offered 1982-83; next offered 1983-84.

T R 9:05. B. P. Halpern.

An examination of basic theory, data, and processes for perception of the chemosensory environment. Students will read, analyze, and discuss difficult original literature in the areas covered. Topics include psychophysical methods for human and nonhuman studies, stimulus control, chemosensory function and development in neonates, role of chemosensory function in food choices, chemosensory communication, effects of pollution of the chemosensory environment, possible consequences of chemosensory dysfunctions, and use of chemosensory systems as neural model.]

[308 Perceptual Learning Fall. 3 credits. Prerequisite: Psychology 205, 209, 305, or permission of instructor. Not offered 1982-83.]

309 Development of Perception and Attention Spring. 3 credits. Prerequisite: Psychology 205, 209, 214, 305, or permission of instructor.

M W F 10:10. Staff.

An ecological view of perceptual development: development of perception of objects, events, the spatial layout, pictures, and symbols. The level of the course is that of E. J. Gibson, *Perceptual Learning and Development*.

313 Perceptual and Cognitive Processes Fall. 3 credits. Prerequisite: Psychology 205 or 214, or permission of instructor.

M W F 9:05. D. Irwin.

Survey of research and theory in the area of perceptual and higher mental processes. Emphasis is on the human as an information processing system. Topics include visual information processing, pattern recognition, cognition, memory, and artificial intelligence.

314 The Social Psychology of Language Spring. 4 credits. Prerequisite: a course in linguistics or psycholinguistics and in social or personality psychology, or permission of instructor.

T R 2:30-4:25. H. Levin.

We are aware that one talks differently to children than to adults, to foreigners than to native speakers, to people we like than to those we detest, to people whose intelligence we respect compared to those we think are idiots. Speech varies by social setting, by the relationships between people and by formality, friendship, affection; and by purposes of the communication: deception, persuasion, propaganda, etc. What are the rules of social language? How do we acquire the abilities to vary language appropriately and to understand the meanings of such variations? We will attend not only to what is said but to the style of the language: for example, to paralinguistic (e.g., intonation, hesitations, etc.) and to the structure (grammar and semantics) of speech.

[316 Auditory Perception Spring. 3 or 4 credits; the 4-credit option involves a laboratory project or paper. Prerequisites: Psychology 205, 209, 214, or 215 (other psychology, linguistics, or biology courses could serve as prerequisite with permission of the instructor).

Lecs, T R 2:30-4:25; lab, hours to be arranged. Staff.

Basic approaches to the perception of auditory information, with special consideration of complex patterns such as speech, music, and environmental sounds.]

322 Hormones and Behavior (also Biological Sciences 322) Spring. 3 or 4 credits; the 4-credit option involves a one-hour section once a week. Students will be expected to participate in discussion and read original papers in the field. Limited to juniors and seniors; open to sophomores only by permission. Prerequisites: one year of introductory biology plus a course in psychology or Biological Sciences 321. S-U grades optional.

T R 10:10-11:30. E. Adkins Regan, R. Johnston.

The relationship between endocrine and neuroendocrine systems and the behavior of animals, including humans. Major emphasis is on sexual, parental, and aggressive behavior.

324 Biopsychology Laboratory (also Biological Sciences 324) Spring. 3 credits. Limited to 25 juniors and seniors. Prerequisites: Psychology 201 or Biological Sciences 103-104 or Psychology 123 or Biological Sciences 321, and permission of instructor. S-U grades optional.

T R 1:25-4:25. Staff.

Experiments designed to provide research experience in animal behavior (including learning) and its neural and hormonal mechanisms. A variety of techniques, species, and behavior patterns are included.

325 Introductory Psychopathology Fall. 3 or 4 credits; the 3-credit option entails lectures, readings, and two exams; the 4-credit option requires an additional seminar-recitation meeting and a term paper. Prerequisite: a course in introductory psychology. May be taken concurrently with Psychology 327 (for 3 credits in 325 and 2 credits in 327) with permission of instructor. Enrollment in Psychology 327 is limited.

T R 2:30-4:25 R. Mack.

A survey of the various forms of psychopathology, child and adult, as they relate to the experiences of human growth and development. Presents a description of the major syndromes, investigations, theories of etiology, and approaches to treatment. A film series based on topics in Psychology 325 will be offered in conjunction with Cornell Cinema.

326 Evolution of Human Behavior Fall. 4 credits. Prerequisite: Psychology 123, an introductory biology course, or junior or senior status.

T R 2:30-4:25. R. Johnston.

A broad comparative approach to the behavior in animals, with special emphasis on mammals and the evolution of human behavior. Topic areas may include courtship and mating systems, aggression and territoriality, parental behavior, communication, language, learning, and intelligence. Theories of the evolution of human behavior will be evaluated, especially sociobiological theories.

327 Fieldwork in Psychopathology and the Helping Relationship Fall. 2 credits. Prerequisites: Psychology 325 or concurrent registration in 325 and permission of the instructor. Students do not enroll in advance for this course. Field placement assignments are made in Psychology 325 during the first two weeks of the semester. Students who have already taken Psychology 325 must contact the instructor during the first week of the semester. Enrollment is limited by the fieldwork placements available. Fee, \$20.

Hours to be arranged. R. Mack.

An introductory fieldwork course for students currently enrolled in, or who have taken, Psychology 325. In addition to fieldwork, weekly supervisory-seminar meetings are held to discuss fieldwork issues and assigned readings.

328 Continuing Fieldwork in Psychopathology and the Helping Relationship Fall or spring. 2 credits each term. Prerequisites: Psychology 325, 327, and permission of instructor. S-U grades only. May not be taken more than twice. Students do not enroll in advance for this course. Students in Psychology 327 should inform their teaching assistant before the end of the semester of their desire to take Psychology 328. Students not currently in a field placement who want to take Psychology 328 should contact the instructor during the first week of the semester. Field placement assignments will be made during the first two weeks of the semester. Enrollment is limited by the fieldwork placements available. Fee, \$20.

Fieldwork and supervisory times to be arranged.

R. Mack and staff.

Designed to allow students who have begun fieldwork as part of Psychology 327 to continue their field placements, under supervision and for academic credit. A limited number of students may be allowed to begin their fieldwork with Psychology 328 but only with permission of the instructor.

[345 Afro-American Perspectives in Experimental Psychology (also African Studies and Research Center 345) Spring. 3 or 4 credits. Prerequisite: introductory course in psychology or AS&RC 171. Not offered 1982-83.

T R 2:30-4:25, plus one hour to be arranged if taken for 4 credits. Staff.

Designed to examine crucial conceptual, empirical, and philosophical issues in experimental psychology that are directly relevant to Afro-Americans. Traditional approaches are probed and evaluated. Alternative thrusts from a black perspective are

entertained and critiqued. Finally, the research process is evaluated as a potential tool for analysis and action in black communities.]

347 Psychology of Visual Communications

Spring. 4 credits. Limited to 12 students.

Prerequisites: Psychology 101 and permission of instructor.

T 10:10-12:05; lab to be arranged. J. Maas.
An exploration of theories of perception, attitude, and behavior change as they relate to the effectiveness of visually based communication systems. Emphasis is on an empirical examination of the factors that determine the nature and effectiveness of pictorial representations of educational messages in nonprint media.

350 Statistics and Research Design

Fall. 4 credits. Prerequisite: a course in the behavioral sciences.

M W F 10:10. T. Gilovich.
Acquaints the student with the elements of statistical description (measures of average, variation, correlation, etc.) and, more importantly, develops an understanding of statistical inference. Emphasis is placed on those statistical methods of principal relevance to psychology and related social sciences.

361 Biochemistry and Human Behavior (also Nutritional Sciences 361)

Fall. 3 credits.

Prerequisites: Biological Sciences 101-102, Chemistry 103-104, Psychology 123, or permission of instructor.

M W F 11:15. D. Levitsky.
The course is intended to survey the scientific literature on the role of the brain and body biochemical changes as determinants of human behavior. The topics covered include action and effects of psychopharmacologic agents, biochemical determinants of mental retardation, biochemical theories of psychosis, effects of nutrition on behavior. A fundamental knowledge of human biology and chemistry is essential.

381 Person Perception and Expression (also Sociology 381)

Spring. 4 credits. Prerequisite: one course in social psychology or personality, or one course in psychology and one course in sociology, or permission of instructor.

T R 1-2:15. L. Meltzer.
An intermediate course in social psychology, focusing on people's judgments of one another and on their attempts to manipulate how others judge them. Impressions, attributions, biases, self-concept, self-disclosure, self-presentation, deception, body language, conversational style, and facial expressions are relevant topics.

383 Social Interaction (also Sociology 383)

Spring. 4 credits. Prerequisite: a course in social psychology.

T R 2:30-4:25. D. Hayes.
Fine-grain analyses of social behavior, its structure, changes, and determinants. Extensive practice in analysis of filmed and taped interactions. Student research is required throughout the course.

384 Cross-Cultural Psychology (also Sociology 384)

Spring. 4 credits. Prerequisites: a course in psychology and one in either sociology or social or cultural anthropology; or permission of instructor.

M W F 11:15. W. W. Lambert.
A critical survey of approaches, methods, discoveries, and applications in emerging attempts to study human nature, experience, and behavior cross-culturally. Focus on studies of cognition, values, socialization, sociolinguistics, personality, attitudes, stereotype, ideology, sociocultural development, and mental illness. Problems of how one can learn another culture will also be dealt with.

385 Theories of Personality (also Sociology 385)

Fall. 4 credits. Prerequisite: Psychology 101, 214, or 275, or permission of instructor.

T R 1-2:15. W. W. Lambert.

An intermediate analysis of comparative features of the historically and currently important theories of personality, with an evaluation of their systematic empirical contribution to modern personality study, to psychology, and to other behavioral sciences.

396 Introduction to Sensory Systems (also Biological Sciences 396)

Spring. 3 credits. No auditors. 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. S-U grades optional for graduate students only.

M W F 9:05. 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 that represent adaptations of animals to particular habitats or environments. The principles and limitations of major methods used to examine sensory systems will be considered. For Spring 1983, general principles of sensory systems, and auditory, visual, and somesthetic systems will be covered. One aspect of each system, e.g., localization of objects in space by sound, color vision, thermoreception, will be selected for special attention. At the level of *Neurons without Impulses*, edited by Roberts and Bush, and *Recognition of Complex Acoustic Signals*, edited by Bullock.

[402 Current Research on Psychopathology

Spring. 4 credits. Prerequisite: Psychology 325. Not offered 1982-83.

T R 12:05-2:15; sec to be arranged. Staff.
Current research and theory on the nature and etiology of schizophrenia, the affective disorders, and psychopathy. Approaches from various disciplines are considered. Minimal attention to psychotherapy.]

410 Undergraduate Seminar in Psychology

Fall or spring. 2 credits. Written permission of section instructor required for registration. 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.

411 Memory and Human Nature

Fall. 4 credits. Limited to 20 students. Prerequisite: several courses in psychology or permission of instructor. Non-psychology majors with backgrounds in literature or anthropology are encouraged to apply.

T R 2:30-4. U. Neisser.
The human activity of remembering is considered from various perspectives: personal, developmental, experimental, cross-cultural, etc. The focus is on the natural and social context of memory; laboratory studies are considered when they help clarify ordinary remembering. Specific topics include memory for remote events and childhood; for controversial and unacceptable material; for stories and conversations and events; individual, developmental, and cultural differences in remembering and thinking; mnemonics and memorists. Class periods are devoted to seminar discussions.

416 Psychology of Language

Fall. 4 credits. Prerequisite: Psychology 215 or permission of instructor.

T R 12:20-1:45. F. Keil.
An advanced treatment of the nature of the human capacity of language. Topics include the nature of linguistic theory, syntax and semantics, aspects of language use (comprehension, memory and knowledge, thought and action, communication), and language acquisition.

422 Developmental Biopsychology Spring. 4 credits. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or Biological Sciences 321).

M W F 9:05. B. Finlay.
We will discuss the relationship of the development and evolution of the brain to the development of behavior. Topics include normal neuroembryology; 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.

425 Brain and Behavior Fall. 3 or 4 credits; 4-credit option includes a discussion section and requires an additional paper. Prerequisites: a course in introductory biology and a course in biopsychology or neurobiology (such as Psychology 123 or Biological Sciences 321.)

M W F 9:05. B. Finlay.
We will study the relation between structure and function in the central nervous system. Human neuropsychology and the contribution of work in animal nervous systems to the understanding of the human nervous system will be stressed. Some topics to be discussed include visual and somatosensory perception, the organization of motor activity, emotion and motivation, psychosurgery, and memory and language.

426 Seminar and Practicum in Psychopathology

Spring. 4 credits. Limited to 16 students. Prerequisites: Psychology 325; permission of instructor required in all cases. Students should apply to the course during preregistration in fall semester. Acceptance into the course will be announced before the end of the fall semester.

T R 2:30-4:25; fieldwork to be arranged. R. Mack.
A seminar and fieldwork course for advanced students who have mastered the fundamental concepts of personality and psychopathology. An opportunity to explore in depth the various forms of psychopathology, etiology, and treatment; to discuss these in seminar; and to work with mental health professionals and those who seek their help. The course includes an experiential component that will be described when applying for the course.

[436 Language Development (also Human Development and Family Studies 436)

Spring. 3 or 4 credits. Prerequisites: at least one course in cognitive psychology, cognitive development, or linguistics. Offered in alternate years. Not offered 1982-83; next offered 1983-84.

T R 10:10-12:05. B. Lust.
A survey of basic literature in language development. Major theoretical positions in the field are considered in the light of studies in first-language acquisition of phonology, syntax, and semantics from infancy onward. The fundamental issue of relations between language and cognition will be discussed. The acquisition of communication systems in nonhuman species such as chimps, and problems of language pathology will also be addressed, but main emphasis will be on normal language development in the child.]

[440 Sleep and Dreaming

Spring. 4 credits. Limited to 15 students. Prerequisites: advanced undergraduate or graduate standing and permission of instructor. Not offered 1982-83.

J. Maas.]
443 The Politics of I.Q. Fall. 3 credits. Limited to 20 students. Prerequisites: elementary knowledge of theories and measurement of intelligence from prior courses or independent reading, and permission of instructor.

T R 2:30-4. H. Levin.
The research on the ethnic, racial, and sexual bases of intelligence will be taken as the primary example with which to discuss political and social influences on the choice of research topics, the methods of investigation, and the interpretation of results. Some

insights about these issues are available from historical changes in the research and by the comparison of research in various countries, particularly the United States and Great Britain. The writings of Jensen, Herrnstein, Burt, Eysenck, Kamin, and their critics will be studied. The genetics of intelligence will not be covered.

451 Quasi Experimentation. Spring, first seven weeks only. 1 credit. Prerequisite: Psychology 350 or equivalent. Offered in odd-numbered years.

T R 10:10-12:05. R. Darlington
Methods for approximating the rigor of laboratory experiments in field settings.

465 Mathematical Psychology Spring, 4 credits. Prerequisites: one year of college mathematics (finite mathematics or calculus), a course in probability or statistics, and a course in psychology.

T R 10:10-11:40. J. Cunningham.
Mathematical approaches to psychological theory are discussed. Possible topics include choice and decision, signal detectability, measurement theory, scaling, stochastic models, and computer simulation.

467 Seminar: The Examined Self—A Psychohistorical View Spring, 4 credits

Prerequisites: 9 credits of psychology including Psychology 325 or equivalent, and permission of instructor before course enrollment.

T 12:20-2:15. H. Feinstein.
Based primarily on American autobiographies dating from the seventeenth century to the twentieth century, this seminar will explore the shifting interface between self and historical context. Students should be prepared to write and talk about their own lives as well as the historical figures selected for study.

[468 American Madness Spring, 4 credits. Limited to 15 students. Prerequisites: Psychology 325 and permission of instructor. Not offered 1982-83.

T 12:20-2:15. H. Feinstein.
The seminar will be devoted to an analysis of insanity as a psychological and historical phenomenon. Selected writings by the mentally ill and their definers will be studied.]

469 Psychotherapy: Its Nature and Influence Spring, 4 credits. Limited to senior psychology majors. Prerequisites: Psychology 325 or equivalent and permission of instructor before course enrollment.

W 7:30-10:30 pm. R. Mack.
A seminar on the nature of psychotherapy. Issues related to therapeutic goals, differing views of the nature of man, ethical concerns, and research problems also are considered. Presentations by therapists of differing orientations, and experiential and role-play exercises may be an integral part of the seminar experience.

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.

471 Statistical Methods in Psychology I Fall, 4 credits. Prerequisite: Psychology 201 or equivalent, or permission of instructor.

M W F 11:15. J. Cunningham.
Basic probability, descriptive and inferential statistics. Topics include parametric and nonparametric tests of significance, Bayesian inference, correlation, and simple linear regression. The level of the course is that of W. L. Hays, *Statistics for Psychologists*.

472 Statistical Methods in Psychology II Spring, first seven weeks only. 2 credits. Prerequisites: Psychology 471 or 350 or permission of instructor.

M W F 10:10. J. Cunningham.
Analysis of variance, experimental design, and related topics. The level of the course is that of G. Keppel, *Design and Analysis: a Researcher's Handbook*.

473 Statistical Methods in Psychology III Spring, last seven weeks only. 2 credits.

Prerequisites: Psychology 472 or permission of instructor.
M W F 10:10. R. Darlington.
Multiple regression, at the level of *Multiple Regression in Behavioral Research*, by F. Keigler and E. Pedhazur.

[475 Analysis of Nonexperimental Data Fall, first seven weeks only. 2 credits. Prerequisite: Psychology 473 or permission of instructor. Not offered 1982-83; next offered 1984-85.

T R 10:10-12:05. R. Darlington.
Factor analysis and other multivariate correlational methods.]

[476 Representation of Structure in Data Spring, 3 credits. Prerequisite: one year of college mathematics (finite mathematics or calculus) and a course in the social sciences. Not offered 1982-83.

T R 10:10-11:40. J. Cunningham.
Representations of preferences, dominance data, psychological distances, and similarities will be discussed. Topics include unidimensional and multidimensional scaling, unfolding, individual-differences scaling, hierarchical clustering, and graph-theoretic analysis.]

[477 The General Linear Model Fall, last seven weeks only. 2 credits. Prerequisite: 473 or equivalent. Not offered 1982-83; next offered 1983-84.

T R 10:10-12:05. R. Darlington.
Applications of multiple regression to problems in analysis of variance, analysis of covariance and nonlinear relationships.]

478 Psychometric Theory Fall, first ten weeks only. 3 credits. Prerequisite: Psychology 473 or permission of instructor. Offered 1982-83; next offered 1985-86.

T R 10:10-12:05. R. Darlington.
Statistical methods relevant to the use, construction, and evaluation of psychological tests.

479 Multisample Secondary Analysis Fall, last four weeks only. 1 credit. Prerequisite: 350 or equivalent. Offered 1982-83; next offered 1985-86.

T R 10:10-12:05. R. Darlington.
Statistical methods for analyzing and integrating the results of many independent studies on related topics.

480 Seminar: Attitude Theory (also Sociology 480) Fall, 4 credits. Prerequisites: some familiarity with the topic of attitudes from prior courses, or permission of instructor.

R 2-4:25. L. Meltzer.
Attitudes are viewed as emotionally charged thoughts, which underlie ideologies, values, interpersonal feelings, and religion. The seminar will analyze the historical roots and current status of three approaches to the systematic analysis of attitudes: (1) the reasoned action theory of Fishbein and Ajzen; (2) the balance theory of Fritz Heider, and its many derivatives; (3) the functional theories in psychology (Daniel Katz), psychoanalysis (Freud and others), and cultural anthropology (Marvin Harris). Students will read original source material rather than textbooks.

481 Advanced Social Psychology (also Sociology 481) Fall, 4 credits. Limited to 30 students. Prerequisite: a course in social psychology or permission of instructor.

T R 2:30-3:45 D. Regan.
Selected topics in social psychology are examined in depth, with heavy emphasis on experimental research. Readings are usually original research reports. Topics discussed may include social comparison theory, social and cognitive dissonance, attribution processes, interpersonal attraction, and research methods in social psychology.

482 Death and Dying Spring, 4 credits. Limited to 40 juniors and seniors. Prerequisites: 6 credits in sociology or psychology.

Sec 1, T 2:30-4:25; sec 2, R 2:30-4:25. W. Collins.
Issues of death and dying in modern American society are explored from the perspectives of psychology, sociology, and the health-related professions. Possible inadequacies in current practice are examined and alternatives discussed.

[483 Socialization and Maturity (also Sociology 483) Spring, 4 credits. Limited to upperclass and graduate students or those who receive permission of instructor. Prerequisite: some work in psychology, sociology, or anthropology; some background in statistics is assumed. Not offered 1982-83; next offered 1983-84.

T R 12:20-2:15. W. Lambert.
Representative theories of research on socialization at different ages are analyzed, focusing particularly on the underlying processes. The newer topic of personal and sociocultural maturity is also analyzed, and its relation to socialization processes is evaluated in terms of recent evidence.]

[486 Interpersonal and Social Stress and Coping (also Sociology 486) Spring, 4 credits. Limited to 25 upperclass students. Prerequisites: background in psychology and introductory statistics, or permission of instructor. Not offered 1982-83; next offered 1983-84.

M W F 12:20. W. W. Lambert.
A critical review of work in intrapersonal, interpersonal, situational, and sociocultural sources of stress, and the major psychophysiological concomitants of such stress; resultant coping strategies and aids to coping. Data from laboratory, industry, and other cultures will be analyzed.]

488 Research Practicum In Socialization (also Sociology 488) Spring, 4 credits. Prerequisites: two courses in social psychology or human development and one course in statistics, or permission of instructor.

R 2:30-4:25. U. Bronfenbrenner.
Supervised participation in field and experimental studies bearing on the impact of family support systems on socialization practices and outcomes. The work concentrates on the American phase of a project being conducted cooperatively in five industrialized societies.

[489 Seminar: Selected Topics in Social Psychology and Personality (also Sociology 489) Fall, 4 credits. Prerequisites: one course in psychology and one course in sociology or permission of instructor.

T 2:30-4:25. Staff.
The specific topics of discussion vary, but the general emphasis is on a critical examination of the study of individuals in social contexts.]

490 History and Systems of Psychology Fall, 4 credits. Intended for juniors, seniors, graduate students, majors, and nonmajors. Prerequisites: at least three courses in psychology or related fields or permission of the instructor.

M W F 2:30. H. Levin.
The course aims to acquaint students with the recent history of psychology and to help them to identify important trends and underlying assumptions in contemporary writings. After a discussion of relevant nineteenth-century developments, a number of the major historical systems will be surveyed: the introspectionist, functionalist, behaviorist, and Gestalt

psychologies. Emphasis will be on the ideas that have shaped modern psychology.

491 Principles of Neurobiology, Laboratory (also Biological Sciences 491) Fall. 4 credits. Limited to 24 students. Prerequisite: Biological Sciences 396 or Psychology 396, or Biological Sciences 496, or written permission of instructors.

M W or T R 12:20-4:25, plus additional hours to be arranged. B. Land and staff.

Laboratory practice with neurobiological preparations and experiments, designed to teach the techniques, experimental designs, and research strategies used to study biophysical and biochemical properties of excitable membranes, sensory receptors, and the central nervous system transformations of afferent activity, as well as the characteristic composition and metabolism of neural tissue. Theoretical content at the level of Aidley's *The Physiology of Excitable Cells*.

494 Junior Honors Spring. 4 credits. Prerequisite: admission to the department honors program. Staff.

498 Senior Honors Dissertation Fall. 4 credits. Prerequisite: admission to the departmental honors program. Staff.

499 Senior Honors Dissertation Spring. 4 credits. Prerequisite: admission to the departmental honors program. Staff.

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. Except where indicated, the following courses may be offered either term, and carry 4 credits unless otherwise indicated.

502 Professional Writing in Psychology Spring. 1 credit. Limited to 15 students. Prerequisite: permission of instructor.

R 2:30-4:25. D. Bem.

A practicum for advanced undergraduate and graduate students in writing reports in psychology and other behavioral and social sciences, with the emphasis on the reporting of empirical research in journal format.

510-511 Perception

512-514 Visual Perception

513 Learning

515 Motivation

517 Language and Thinking

518 Psycholinguistics

519-520 Cognition

521 Psychobiology

522 Topics in Perception and Cognition

523 Physiological Psychology

525 Mathematical Psychology

531 History of Psychology

535 Animal Behavior

541 Statistical Methods

543 Psychological Tests

544 Topics in Psychopathology and Personality

545 Methods in Social Psychology

547 Methods of Child Study

561 Human Development and Behavior

[571 Proseminar in Human Experimental Psychology Fall or spring. 4 credits. Not offered 1982-83; next offered 1983-84.

W F 11:10-12:40. J. Cutting.

Research and theory will be surveyed in the areas of perception, memory, attention, language development, cognition, and quantitative methods, with the goal of providing the graduate student with a broad framework of issues in contemporary human experimental psychology.]

573 Proseminar in Biopsychology Fall or spring. 4 credits. Offered every 1½ years. First offered spring 1983; next offered 1984-85.

Hours to be arranged. Staff

Survey of research and thought on the evolution and mechanisms of behavior.

580 Experimental Social Psychology (also Sociology 580)

582 Sociocultural Stress, Personality, and Somatic Pathology (also Sociology 582)

583-584 Proseminar in Social Psychology (also Sociology 583-584)

[585 Social Structure and Personality (also Sociology 585)]

586 Interpersonal Interaction (also Sociology 586)

587 Personality (also Sociology 587)

588 Social Change, Personality, and Modernization (also Sociology 588)

591 Educational Psychology

595 Teaching of Psychology

[596 Improvement of College Teaching]

600 General Research Seminar 0 credit.

[613 Seminar on Obesity and Weight Regulation (also Nutritional Sciences 613) 3 credits.

Prerequisites: a fundamental knowledge of psychology, physiology, and nutrition is essential. Offered in alternate years. Not offered 1982-83; next offered spring 1984.

T R 10:10-12:05. D. Levitsky.

This lecture-seminar surveys the literature on feeding behavior, body weight regulation and eating disorders. The course attempts to cover the biological, psychological, and sociological factors involved in human feeding behavior and people's concern about their body weight.]

682 Social Psychology (also Sociology 682)

683 Seminar in Interaction (also Sociology 683)

684 Seminar: Self and Identity (also Sociology 684)

[685 Sex Differences and Sex Roles (also Sociology and Women's Studies 685) Fall. Not offered 1982-83; next offered 1983-84.

Hours to be arranged. S. Bem.]

690 Nutrition and Behavior (also Nutritional Sciences 690) Spring. 3 credits. Prerequisites: a fundamental knowledge of psychology, physiology, and nutrition is essential. Offered alternate years.

M W F 1:25. D. Levitsky.

This lecture-seminar surveys the literature of the possible role nutrition may play as a determinant of human behavior. Topics covered include hypoglycemia, food additives and hyperkinesis, ketogenic diets, malnutrition and intellectual development, megavitamin therapy, choline and memory. Emphasis is placed on the analysis of the arguments raised, their history, and review of studies advocating and refuting claims.

700 Research in Biopsychology

710 Research in Human Experimental Psychology

720 Research in Social Psychology and Personality

730 Research in Clinical Neuropsychology Limited to Clinical Neuropsychology Program trainees.

800 Master's Thesis Research in Biopsychology

810 Master's Thesis Research in Human Experimental Psychology

820 Master's Thesis Research in Social Psychology and Personality

900 Doctoral Thesis Research in Biopsychology

910 Doctoral Thesis Research in Human Experimental Psychology

920 Doctoral Thesis Research in Social Psychology and Personality

930 Doctoral Thesis Research in Clinical Neuropsychology Limited to Clinical Neuropsychology Program trainees.

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.

101 Introduction to Psychology: The Frontiers of Psychological Inquiry

124 Introduction to Psychology: The Cognitive Approach

128 Introduction to Psychology: Personality and Social Behavior

209 Developmental Psychology

215 Introduction to Linguistics and Psychology

281 Interpersonal Relations and Small Groups (also Sociology 281)

286 Nonverbal Behavior and Communication (also Sociology 286)

325 Introductory Psychopathology

381 Social Psychology

385 Theories of Personality

469 Psychotherapy: Its Nature and Influence

543 Psychological Testing

Quechua

See Modern Languages, Literatures, and Linguistics, p. 146.

Romance Studies

The Department of Romance Studies (J. Béraud, chairman) offers courses in French literature, Italian literature, and Spanish literature. In addition, the department's program includes courses in French and Spanish languages and courses in French, 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.

See Modern Languages, Literatures, and Linguistics, p. 146, for further information about majors and courses.

Romanian

See Modern Languages, Literatures, and Linguistics, p. 146.

Russian Literature

L. H. Babby, E. W. Browne, P. J. Carden, C. Emerson, G. Gibian, R. L. Leed (director of undergraduate studies (language), 207 Morrill Hall, 256-3554), N. Perlina, S. Senderovich, A. Zholkovsky (chairman and director of undergraduate studies (literature), 193 Goldwin Smith Hall, 256-4047)

The Department of Russian Literature offers a variety of courses. In some courses the reading is done in translation and in others it is in the original Russian. In studying Russia, the connection between history, society, and literature is particularly close, and for that reason instruction and discussion in class often include a variety of topics, such as culture and intellectual history, instead of being limited strictly to literature. Several courses are interdisciplinary in character. Students interested in majoring in Russian are very strongly urged to take Russian 101 and 102 as soon as they can, preferably in the first year, at least in the second year. They then proceed with the language by taking Russian 203 and 204, offered by the Department of Modern Languages and Linguistics, and Russian 201-202, offered by the Department of Russian Literature. After Russian 202 there is a further sequence of Russian literature courses in Russian.

For more information about majors and courses, see Modern Languages, Literatures, and Linguistics, p. 146.

Sanskrit

See Modern Languages, Literatures, and Linguistics, p. 146.

Serbo-Croatian

See Modern Languages, Literatures, and Linguistics, p. 146.

Sinhala

See Modern Languages, Literatures, and Linguistics, p. 146.

Sociology

S. Caldwell, chairman; L. Meltzer, director of undergraduate studies (348 Uris Hall, 256-4266); R. Avery, S. Bacharach, B. Bowser, R. Breiger, D. P. Hayes, B. Edmonston, G. Elder, D. P. Hayes, C. Hirschman, J. Jacobs, J. A. Kahl, W. W. Lambert, R. McGinnis, L. Meltzer, D. Nelkin, B. C. Rosen, R. Stern, J. M. Stycos, H. Trice, R. M. Williams, Jr.

Sociology is concerned with the way individuals are organized into groups, networks, classes, institutions, and communities of varying influence and power. Its specialties include analyses of social conflict and accommodation, population trends, organizational and institutional change, and the structure of the family, law, religion, medicine, and science. All public policy, local or national, is affected by these sociological issues.

The Department of Sociology offers the opportunity to develop fundamental theoretical insight and practical research skills appropriate for the study of social life. Graduates of the department take up careers in social science (in university, government, and private settings) and in law, business, applied engineering, public policy planning, architecture, education, and other professions seeking men and women who demonstrate a disciplined understanding of society and social issues. The department office has a list of course offerings for each semester.

The Major

The director of undergraduate studies will consult with each student to discuss a specific course of studies relevant to the individual's interests as well as to the requirements of the major, and will select a faculty adviser for each student who is accepted into the program.

The following are the minimum requirements for a major in sociology: (1) the introductory course, Sociology 101; (2) four courses in the foundations of sociological analysis: Sociology 201, 301, 311, and one 400-level theory-type course such as Sociology 401, 429, or 441; (3) 22 additional credits in sociology, including at least 4 credits in small seminars offered by the department to its advanced students. These 22 credits may include up to 12 credits in courses at the 300 level or above offered by related departments if approved by the director of undergraduate studies.

The Department of Sociology has particular strengths in: (a) research methods; (b) American institutions and public policy; (c) personality and social psychology; (d) population studies; and (e) social relations, offered jointly with the Department of Anthropology. Courses in these subjects may be grouped together in an area of concentration. More detailed descriptions of these concentrations along with recommended courses of study are available in the department office, 323 Uris Hall.

The director of undergraduate studies may waive or modify specific requirements for students who present evidence of substantially comparable preparation.

Cornell-in-Washington program. Sociology majors have an opportunity to apply to the Cornell-in-Washington program, in which students take courses and undertake a closely supervised internship during a fall or spring semester.

Internships. The department seeks to aid sociology majors in locating and participating in structured, off-campus field experiences or internships. Interested sociology majors should speak with the director of undergraduate studies.

Supervised research. A small number of exceptionally qualified sociology majors are invited to participate with faculty members in conducting research supported by the social science research centers at the University: the Center for International Studies, the International Population Program, and the Cornell Institute for Social and Economic Research.

Honors. The honors program provides sociology majors with an opportunity to study selected problems in depth and to carry out independent research under the guidance of a faculty member. Application for the honors program should be made late in the junior year. To qualify for a Bachelor of Arts degree with honors in sociology a student must maintain a cumulative average of at least B+ in all sociology courses and earn a grade of *cum laude* or higher on the honors essay.

Courses

101 Introduction to Sociology Fall and spring. 3 credits.

Fall: M W 12:20. Spring: M W 11:15, plus one hour to be arranged. One midterm evening prelim each term. Staff.

Virtually the entire professorial staff of the Department of Sociology participates in teaching this course, each professor lecturing on his or her own specialty. Topics covered include most of the following: socialization, culture, deviance, social control, interpersonal interaction, small groups, organizations, bureaucracy, family, inequality, mobility, race and ethnic relations, population dynamics, urbanization, public opinion, social change, social movements, modernization, methods of research, applications. Weekly section meetings actively involve students in the practical utilization of sociology. Case histories and application exercises are analyzed concerning social problems such as urban tensions, cultural differences, racial conflict, gender identity, expanding populations, and high rates of crime.

107 Introduction to Sociology: Conflict and Cooperation Spring. 3 credits. Limited to freshmen and sophomores.

M W F 10:10. R. M. Williams, Jr.

Are human societies fundamentally cooperative or conflictful? In what ways? Why? And with what consequences? Examination of contemporary sociological analyses and the views of such precursors as Hobbes, Marx, Sumner, and Simmel. Data from recent studies of conflict and conflict reduction are discussed.

120 Society, Industry, and the Individual I (also Industrial and Labor Relations 120) Fall. 3 credits.

M W 2:30, plus one hour to be arranged.

S. Bacharach.

The relationship between industry and the economy as a whole and its implications for other social institutions in American society (including stratification, politics, and American values) is discussed. The nature of industrial organization and of complex organizations in general, emphasizing authority relations, goals, the division of labor, and bureaucracy.

[141 Introduction to Sociology: Applications to Policy] Fall. 3 credits. Not offered 1982-83.

M W F 10:10. S. Caldwell.

Concentrates on sociology applied to actual decisions by regulatory commissions, executive agencies, courts, Congress, and other public policy makers. How does sociology become useful? Who makes it useful? What effects do personal values have on its uses? How well does expert knowledge coexist with political process? The course will cover topics such as welfare reform, teenage pregnancies, Social Security, day-care school effectiveness, a national family policy, and energy.]

172 Introduction to Sociology: Urban Society Spring. 3 credits.

M W F 9:05. B. Bowser.

The sociological analysis of urbanism and urbanization. Alternative explanations of industrial urban development are assessed with a specific focus on historical and contemporary urban community studies that serve as models of social structure and group (class, ethnic, race) divisions. Trends in the United States and in other countries are also examined, using such information as a basis for considering contemporary problems and the urban future.

201 Sociological Analysis of Contemporary Issues Fall. 3 credits.

M W F 1:25. R. Breiger and staff.
With its focus on the evaluation of case studies and research reports, this course aids in the development of analytical skills and critical abilities. An introduction to the foundations of sociological analysis is followed by student participation in two modules (from a choice of four offered). Each module concentrates on one social issue of vital concern while illustrating the distinctive ways in which sociologists define questions, evaluate the answers, and build upon previous research. The course offers opportunities for computer experience and for the close reading of original monographs both classic and contemporary. Module topics for 1982-83: Inequality in Schools, Solving the Population Problem, (possibly) Work and the Family, and International Development.

205 Understanding the Language of Television Images (also Linguistics 205) Fall. 4 credits.

T R 9:05 and M 2:30. L. Waugh, R. Goldsen.
Images coming to us through the television screen convey connotative and denotative meanings that are widely understood, quite apart from the verbal language of dialogue and narration. How do we read these images? What is the underlying grammar-like structure that arranges them as signs and symbols in a shared meaning system? The course addresses these questions, using the techniques and concepts of content analysis (from sociology) and semiotics (from linguistics) to decode images in television's most ubiquitous, repetitive, and stylized content—product commercials. Readings include works in semiotics as well as in the social sciences. Students are encouraged to prepare their own projects. Extensive use of visual materials, class discussions, and frequent short papers.

207 Ideology and Social Concerns Fall. 3 credits (4-credit option available).

M W F 11:15. R. M. Williams, Jr.
Analysis of social and cultural bases of public policies at national, state, and local levels. Relates demographic, social, and cultural factors to the changing recognition of problems and to shifting modes of collective action, such as direct mobilization, legislation, administration, and adjudication. Public issues examined include affirmative action, civil rights, environmental regulation, military affairs, social security and income maintenance, health, medicine, bioethics, centralization, and local control. Deals with two basic dilemmas of social choice: the problem of the commons and the problem of collective action.

222 Studies in Organizational Behavior: Regulating the Corporation (also Industrial and Labor Relations 222) Fall. 3 credits.

M W 2:30-3:45. R. Stern.
Public and private power from an organizational perspective. The resource dependence approach to organization-environment relations provides a framework for interpreting government attempts at the regulation of corporate behavior. Topics cover the structure and functioning of government regulatory agencies and corporate responses to regulation, including strategy, change, and political influence. The role of interest groups such as consumer or citizens' organizations is also considered. Research and case materials focus on the implementation of environmental protection, occupational health and safety, equal opportunity, antitrust, and rate-setting regulations.

230 Population Problems Spring. 3 credits (4-credit option available).

T R 10:10-11:25, plus one hour to be arranged.
J. M. Stycos.
The practical and scientific significance of population growth and composition. Fertility, migration, and mortality in relation to social and cultural factors and in relation to questions of population policy. National and international data receive equal emphasis.

238 American Women and the Female Professions, 1815 to the Present (also Women's Studies 238 and Human Development and Family Studies 258) Fall. 3 credits.

T R 2:30-4. J. Brumberg.
The historical evolution of the female professions in America, including prostitution, midwifery, nursing, teaching, librarianship, social work, and medicine. Lectures, readings, and discussions are geared to identifying the cultural patterns which fostered the conception of gender-specific work and the particular historical circumstances which created these different work opportunities. The evolution of professionalism and the consequences of professionalism for women, family structure, and American society are also discussed.

240 Personality and Social Change Spring. 3 credits (4-credit option available).

T R 2:30-3:45. B. C. Rosen.
An analysis of social and psychological factors that affect and reflect social change. Topics to be examined will include models of man and society, national character, modern melancholy, feminism, family and sex roles, industrialism, economic development, and psychocultural conflict.

[242 Social Welfare in Europe and North America Spring. 3 credits. Prerequisite: at least one course in sociology. Not offered 1982-83.

M W F 9:05. S. Caldwell.
This course will examine the nature and origin of the welfare state and some of its problems. Drawing on historical, comparative, and statistical evidence, we ask how particular welfare state programs (such as Social Security, health, housing, income maintenance, et al.) affect individuals, families, communities, and eventually the entire economy and society. How would life be different without welfare state programs? How serious are the problems facing the Western welfare states? What social choices face the welfare states, and what are the most likely directions in the future?

243 Family Fall and summer. 3 credits (4-credit option available).

T R 10:10, plus one hour to be arranged. Fall:
B. C. Rosen.
A social and historical analysis of the family both in the West and cross-culturally. Specific areas examined include sex roles, socialization, mate selection, sex and sexual controls, internal familial processes, divorce, disorganization, and social change.

245 Inequality in America Fall. 3 credits (4-credit option available).

M W F 1:25. J. Kahl.
Recent trends in the unequal distribution of income, occupation, and education in the United States; inheritance of riches and poverty; importance of ethnic membership; sex differences; deliberate attempts by government policy to alter these trends; evaluation of the war on poverty.

[248 Politics In Society Spring. 3 credits (4-credit option available). Not offered 1982-83.

T R 2:30-4. Staff.
An examination of the relations between economic, social, and political structures in industrial societies, with particular emphasis on the United States. Topics included are democratic forms of participation in organizations and society at large, social movements, party systems, the structure of power and its legitimation, and voting behavior.]

252 Public Opinion Spring. 4 credits.

T R 9:05, plus one hour to be arranged.
R. Goldsen.
Analysis of the impact of communications systems on the institutional habitat within which public opinion forms. New communications techniques and their social significance are analyzed.

[255 Sociology of Science and Technology Fall. 3 credits (4-credit option available). Not offered 1982-83.

T R 2:30, plus one hour to be arranged.
How the growth of knowledge is facilitated and impeded by the social behavior of scientists, including competition, teamwork, communication, secrecy, conformity, and deviance; causes and consequences of scientific revolutions; factors affecting scientific careers; history of science as a social institution.]

264 Race and Ethnicity Fall. 3 credits (4-credit option available).

T R 10:10-11:25. C. Hirschman.
An examination of the dynamics of race and ethnic relations in the United States and other societies. Alternative explanations—melting pot assimilation theories, internal colonialism, and Marxist perspectives—are compared and evaluated. Topics include an historical comparison of black and white immigrants, the case of Asian-Americans, the causes and consequences of residential segregation, and women as a minority group. Other multiethnic societies, such as South Africa and Malaysia, are also studied.

265 Hispanic Americans Spring. 3 credits (4-credit option available).

T R 2:30-4. H. Velez.
Analysis of the present-day Hispanic experience in the United States. An examination of sociohistorical backgrounds as well as the economic, psychological, and political factors that converge to shape and influence a Hispanic group-identity in the United States. Perspectives are developed for understanding the diverse Hispanic migrations, the plight of Hispanics in urban and rural areas, and the unique problems faced by the different Hispanic groups. Groups studied include Dominicans, Chicanos, Cubans, and Puerto Ricans.

277 Psychology of Sex Roles (also Psychology 277 and Women's Studies 277) Spring. 3 credits (4-credit option available). Prerequisite: an introductory psychology course.

T R 2:30-4. S. Bem.
This course addresses the question of why and how adult women and men come to differ in their overall life styles, work and family roles, personality patterns, cognitive abilities, etc. This broad question is examined from five perspectives: (a) the psychoanalytic perspective, (b) the biological perspective, (c) the historical and cultural evolutionary perspective, (d) the child development perspective, and (e) the social-psychological and contemporaneous perspective. Each of these perspectives is also brought to bear on more specialized phenomena relating to the psychology of sex roles, including psychological androgyny, women's conflict over achievement, the male sex role, egalitarian marriage relationships, gender-liberated child-rearing, female sexuality, homosexuality, and transsexualism.

280 Introduction to Social Psychology (also Psychology 280) Spring. 3 or 4 credits; the additional (or fourth) credit is given for attendance at the optional section meeting, and the term paper. Prerequisite: an introductory psychology course.

T R 10:10-11:25. T. Gilovich.
An introduction to research and theory in social psychology. Topics include human processing of social information; social influence, persuasion, and attitude change; social interaction and group phenomena. The application of social psychological knowledge to current social problems will also be discussed.

284 Social-Psychological Theories and Applications (also Psychology 284) Fall. 3 credits.

T R S 9:05 (S class is held at discretion of instructor). L. Meltzer.
Emphasis is given to those aspects of personality and social psychology which have led to effective practical applications or which provide reasonable insights into the genesis and/or amelioration of social and personal problems.

301 Evaluating Statistical Evidence Spring. 4 credits.

M W F 11:15. R. Breiger.
A first course in the use of statistical evidence in the social sciences. Theory is supplemented with numerous applications. Includes an introduction to multivariate causal analysis.

[307 Collective Behavior and Social Movements (also Human Development and Family Studies 307)] Fall. 3 credits (4-credit option available). Not offered 1982-83.

T R 2:30-4. G. Elder.
An inquiry into social behavior that breaks with institutionalized or conventional forms, such as acting crowds, riots, social movements, and revolution. Analysis of antecedent conditions, emergent forms, processes, and consequences. Historical and contemporary studies are covered.]

310 Sociology of War and Peace Spring. 4 credits.

M W F 9:05. 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.

311 Primary Data Collection and Design Fall. 4 credits. Prerequisite: a course in sociology.

T R 2:30-4:30. D. 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.

[324 Organizations and Deviant Behavior (also Industrial and Labor Relations 324)] Spring. 3 credits. Limited to 40 students. Prerequisite: one or more courses in both sociology and psychology. Not offered 1982-83.

H. Trice.
Focus is on the relationship between organizations and deviant behavior. Covers (1) the nature and etiology of psychiatric disorders, particularly schizophrenia, the psychoneuroses, and psychosomatic disorders; (2) organizational factors related to these disorders and to the more general phenomena of role conflict and stress; (3) an examination of alcoholism as a sample pathology, in terms of personality characteristics and precipitating organizational factors; (4) evaluation of organizational responses to deviance; (5) the nature of self-help organizations such as Alcoholics Anonymous; and (6) the structure and functioning of the mental hospital.]

[329 Sociological Analysis of Organizations (also Industrial and Labor Relations 329)] Fall. 3

credits. Prerequisites: I&LR 120 and 121 or equivalent. Not offered 1982-83.

S. Bacharach.
This course attempts to introduce students to the basic issues involved in the sociological analysis of organizations. It traces organizational theory from Max Weber to the most recent research. Among the themes to be discussed are internal structure of organizations, communication in organizations, decentralization, organizational change, organizational technology, and organizational environment.]

[348 Sociology of Law Fall. 4 credits. Not offered 1982-83.

M W 1:25, plus one hour to be arranged. J. Jacobs.
The subject matter and course materials vary. In 1979 the course focused on civil rights and civil liberties in the context of institutions of social control. The main theme is that the extension of constitutional rights to such "marginal" citizens as prisoners, mental patients, students, and soldiers has created something of a crisis in the authority for the institutions with which these groups are associated. The basis of institutional authority and order is explored in light of the drive to expand personal rights. Readings consist of a casebook of legal decisions and excerpts from legal and sociological studies.]

[352 Prisons and Other Institutions of Coercion Spring. 4 credits. Prerequisite: a course in the social sciences. Not offered 1982-83.

J. Jacobs.]
355 Social and Political Studies of Science (also Science, Technology, and Society 355) Spring. 3 credits.

W 2:30-4:30. D. Nelkin.
A view of science, less as an autonomous activity than as a social and political institution. The focus is on its relationship to government, the media, religion, and education. Drawing from recent controversies over science, such questions as ethics and social responsibility in science, struggles to maintain internal control over research and over the teaching of science, and the concept of limits to inquiry are discussed.

[356 Contemporary Sociology for Scientists and Engineers Spring. 4 credits. Prerequisite: elementary finite mathematics or consent of the instructor. Not offered 1982-83.

R. McGinnis.]
357 Medical Sociology Fall. 4 credits. Prerequisite: a course in the social sciences.

M W F 9:05. B. Edmonston.
Health, illness, death, and the health institutions from a sociological perspective. Factors affecting health care; organization of the medical professions; health and illness behavior; social epidemiology; and key issues in policies affecting the administration and delivery of medical care in the United States.

[365 Criminology Spring. 4 credits. Not offered 1982-83.

M W 2:30, plus one hour to be arranged. J. Jacobs.
This course examines crime as a social phenomenon. It takes both a historical and cross-cultural approach in order to investigate the processes by which different societies generate different crime problems. Attention is paid to the historical evolution of criminology as a discipline and to the most prevalent theories of criminology and crime causation. Special attention is also placed on such topics as white-collar crime, organized crime, and youth gangs. In light of the analysis of crime as a social phenomenon, various strategies of crime control are considered critically.]

367 After the Revolution: Mexico and Cuba Spring. 4 credits. Prerequisites: two courses in the social sciences.

M W F 1:25. J. Kahl.

A comparison of the economic, political, and social development of Mexico and Cuba following their revolutions. Assigned readings will be in English.

[368 Twentieth-Century Brazil (also History 348)] Spring. 4 credits. Prerequisites: two courses in the social sciences. Not offered 1982-83.

M W F 1:25. J. Kahl, T. Holloway.
A study of the style of development in economy, polity, and society followed by contemporary Brazil and an analysis of the contradictions that led to the military coup of 1964 and its aftermath. Some comparisons with other Latin American countries are made. Assigned readings are in English.]

378 Economics, Population, and Development (also Economics 378) Fall. 4 credits.

M W F 10:10. R. Avery.
An introduction to population from an economic perspective. Particular attention is paid to economic views of population size, fertility, mortality, and migration, and to the impact of population change on development, modernization, and economic growth.

379 The Social Psychology of Social Movements Fall. 4 credits.

T R 1:15-2:30. B. Rosen.
An analysis of the social and psychological factors that give rise to social movements, affect how they function, and cause them to change. Examples will be drawn from political, religious, commercial, psychoanalytic, and women's movements in various parts of the world.

381 Person Perception and Expression (also Psychology 381) Spring. 4 credits. Prerequisite: a course in social psychology or personality, or one course in psychology and one course in sociology, or permission of instructor.

T R 1-2:15. L. Meltzer.
An intermediate course in social psychology, focusing on people's judgments of one another and on their attempts to manipulate how others judge them. Impressions, attributions, biases, self-concept, self-disclosure, self-presentation, deception, body language, conversational style, and facial expressions are relevant topics.

383 Social Interaction (also Psychology 383) Spring. 4 credits. Prerequisite: a course in social psychology.

T R 2:30-4:30. D. Hayes.
Fine-grain analyses of social behavior, its structure, changes, and determinants. Extensive practice in analysis of filmed and taped interactions. Student research is required throughout the course.

384 Cross-Cultural Psychology (also Psychology 384) Spring. 4 credits. Prerequisites: a course in psychology and one in either sociology or social or cultural anthropology; or permission of instructor.

M W F 11:15-12:05. W. W. Lambert.
A critical survey of approaches, methods, discoveries, and applications in emerging attempts to study human nature, experience, and behavior cross-culturally. Focus on studies of cognition, values, socialization, sociolinguistics, personality, attitudes, stereotypy, ideology, sociocultural development, and mental illness. Problems of how one can learn another culture will also be dealt with.

385 Theories of Personality (also Psychology 385) Fall. 4 credits. Prerequisite: Psychology 101 or 275, or permission of the instructor.

T R 1-2:15. W. W. Lambert.
An intermediate analysis of comparative features of the historically and currently important theories of personality, with an evaluation of their systematic empirical contribution to modern personality study, to psychology, and to other behavioral sciences.

401 Intermediate Sociological Theory (also Rural Sociology 404) Fall. 4 credits.

T R 10:10-12:05. P. Eberts.

An advanced undergraduate seminar for senior majors in sociology and rural sociology. The course will focus on (1) the central concepts of the sociological tradition; (2) major classical theorists (Marx, Weber, Durkheim, de Tocqueville) and contemporary counterparts; (3) application of the classical ideas in contemporary research.

420 Mathematics for Sociologists (also City and Regional Planning 520) Fall. 1-4 credits.

M W 2:25-4:30; lab, F 2:25-4:30. R. McGinnis. Elementary matrix algebra, probability theory, and calculus.

422 Sociology of Industrial Conflict (also Industrial and Labor Relations 425) Spring. 4 credits.

R. Stern.
The focus is on the variety of theoretical and empirical evidence available concerning social, economic, and political causes of industrial conflict. The manifestations of conflict such as strikes, labor turnover, absenteeism, and sabotage, and the influence of the environments in which they occur is emphasized.

423 Evaluation of Social Action Programs (also Industrial and Labor Relations 423) Fall. 3 credits. Not offered 1982-83.

Hours to be arranged. H. Trice.
A consideration of the principles and strategies involved in evaluation research; experimental research designs, process evaluation, and adaptations of cost benefits and cost efficiency to determine the extent to which intervention programs in fields such as training and therapy accomplish their goals. The adaptation of these strategies to large social contexts such as child guidance clinics, mental health clinics, and programs in the poverty areas such as Head Start is considered. Includes fieldwork and emphasizes assessment of program implementation.]

424 Multivariate Analysis with Quantitative Data Spring. 4 credits. Prerequisite: a college course in statistics (such as Sociology 301) and matrix algebra.

M W F 10:10-11:40. R. McGinnis.
The general linear regression model with interval scaled variables. Detecting violations of assumptions of the model in real data and providing remedies. Both single and multiple equation models (including path analysis).

425 Categorical and Longitudinal Data Analysis Fall. 4 credits. Prerequisite: Sociology 424 or equivalent.

T R 2:30-4. S. Caldwell.
Techniques for including categorical (discrete) variables in multivariate models and for analyzing longitudinal data. Linear probability, log-linear, logit, probit, and dummy variable forms are covered. Real and simulated data exercises are used to examine the relationship of research design to analysis and also to demonstrate the advantages of longitudinal data. Emphasis on applications.

426 Policy Research (also Rural Sociology 426) Spring. 3 credits. Prerequisite: a course in multivariate statistics. Not offered 1982-83.

Hours to be arranged. S. Caldwell.
Case studies of recent research sponsored and carried out with the explicit purpose of affecting policy. Since policy research often requires unusually rigorous evidence, we assess the strength and weaknesses of alternative research designs: experimental versus observational; aggregate versus micro; longitudinal versus cross-sectional; large samples versus case studies. Since policy research often faces strong pressures, we examine the politics of putting research questions on the agenda, preserving the investigator's independence, and interpreting research results. Other topics include academic and nonacademic settings for policy research; policy research and the disciplines; forecasting; simulations; careers in policy research.]

427 The Professions: Organization and Control (also Industrial and Labor Relations 427) Fall. 4 credits. Not offered 1982-83.

M W F 10:10. R. Stern.
The professions (including medicine, law, and several others) are the cases used in this course to examine issues of occupational organization and control. Professional associations attempt to set standards of ethics and practice, regulate educational programs, maintain specific images, and control the supply of entrants to professions. How do such associations function and how successful is their attempt at regulation of professional conduct? How might the potential transformation of some professional associations into union-style organizations be interpreted? These issues are considered in the context of the role of professions in contemporary society.]

429 Theories of Industrial Society (also Industrial and Labor Relations 426) Fall. 4 credits. Prerequisites: I&LR 120 or any 100- or 200-level sociology course, and permission of instructor. Not offered 1982-83.

Hours to be arranged. S. Bacharach.
Some of the critical issues in social theory to be found in the works of Durkheim, Marx, Pareto, and Weber. Their views of man's relation to society are compared to the views of such literary figures as Balzac, Beckett, Camus, Flaubert, Goethe, Sartre, Stendhal, and Zola.]

430 Social Demography Spring. 4 credits. Prerequisites: junior class standing or permission of instructor. Not offered 1982-83.

T R 2:30-3:45. C. Hirschman.
A survey of the methods, theories, and problems of contemporary demography. Special attention is directed to the social determinants and consequences of fertility, mortality, and migration. The populations of both developed and developing areas are examined.]

431 Techniques of Demographic Analysis Fall. 4 credits. Prerequisite: Sociology 230 or 330.

T R afternoons. B. Edmonston.
A description of the nature of demographic data and the specific techniques used in their analysis. Mortality, fertility, migration, and population projection are covered, as well as applications of demographic techniques to other types of data.

434 Human Fertility in Developing Nations Spring. 4 credits. Prerequisite: sociology 230 or permission of instructor. Offered alternate years.

W 3:30-6. J. M. Stycos. *
A review of the major literature dealing with the social causation of variation in human fertility. Emphasis will be on international comparisons and on the methodology of field research.

439 Social and Demographic Changes in Southeast Asia Fall. 4 credits.

R 2:30-5. C. Hirschman.
Survey of population trends including fertility, mortality, marriage, migration, and urbanization in Southeast Asia. Demographic patterns are studied as determinants and consequences of changes in social, economic, and familial institutions in different societies. General demographic theory and methods will be introduced as necessary to understand contemporary studies of demographic change in Southeast Asia.

440 Educational Institutions Spring. 4 credits. Not offered 1982-83.

T R 10:10-11:35. Staff.
The role of educational institutions in industrialized societies is studied. The primary focus will be on the debate between those who see educational institutions as extending opportunity and assimilating marginal groups and others who see them as arenas of conflict in which privileged groups successfully struggle to maintain their advantages.]

441 Structure and Functioning of American Society Fall. 4 credits. Prerequisite: a course in sociology or permission of instructor. Not offered 1982-83.

M W F 9:05. R. M. Williams, Jr.
Analysis of a total societal system. Critical study of the institutions of kinship, stratification, the economy, the polity, education, and religion. Special attention is given to values and their interrelations, and to deviance and evasion. A survey of the groups and associations making up a pluralistic nation is included.]

443 Seminar: Community Studies Spring. T 2:30-4:30. J. Kahl.

Reading and discussion, in a seminar style, of some classic studies of small towns and urban districts in the United States. Some likely selections will be *Middletown*, *Yankee City*, *Street Corner Society*, *Urban Villagers*, *Talley's Corner*, *Behind Ghetto Walls*, *Small Town in Mass Society*.

444 Contemporary Research in Social Stratification Fall. 4 credits.

T 2:30-5. R. Breiger.
Stratification and mobility as paired concepts requiring mutual articulation. The interplay of structure (occupational groups, labor markets, organizations, classes) and process (tracking, career trajectories, socioeconomic attainment).

445 Law and Social Theory Spring. 4 credits. Prerequisite: Sociology 348 or permission of instructor, or graduate standing. Not offered 1982-83.

T 3:35-5:30. J. Jacobs.
Major intellectual traditions contributing to what is loosely called the sociology of law. Attention is paid to the classical theorists—Weber, Durkheim, and Marx—as well as to contemporary American and European legal and sociological scholars. The underlying theme is the relationship of law to social order.]

445 Religion and Secularism in Western Society Spring. 4 credits. Prerequisite: Sociology 101 or permission of instructor. Not offered 1982-83.

M W F 9:05. Staff.
The interrelationship of culture, society, and religion. Religion and social stratification, religion and economic and political institutions, and social change and religion. The major emphasis will be on American society and American religious institutions.]

462 Society and Consciousness Spring. 4 credits. Limited to 15 students. Prerequisite: permission of instructor.

Hours to be arranged. R. Goldsen.
An examination of the role of communications systems in the formation of human consciousness.

480 Seminar: Attitude Theory (also Psychology 480) Fall. 4 credits. Prerequisite: some familiarity with the topic of attitudes from prior courses, or permission of instructor.

R 2-4:25. L. Meltzer.
Attitudes are viewed as emotionally charged thoughts, which underlie ideologies, values, interpersonal feelings, and religion. The seminar will analyze the historical roots and current status of three approaches to the systematic analysis of attitudes: (1) the reasoned action theory of Fishbein and Ajzen; (2) the balance theory of Fritz Heider, and its many derivatives; (3) the functional theories in psychology (Daniel Katz), psychoanalysis (Freud and others), and cultural anthropology (Marvin Harris). The historical roots and current status of each approach will be analyzed. Students will read original source material rather than textbooks.

481 Advanced Social Psychology (also Psychology 481) Fall. 4 credits. Limited to 30 students. Prerequisite: a course in social psychology or permission of instructor.

T R 2:30-3:45. D. Regan.
Selected topics in social psychology are examined in depth, with heavy emphasis on experimental

research. Readings are usually original research reports. Topics discussed may include social comparison theory, social and cognitive determinants of the emotions, cognitive dissonance, attribution processes, interpersonal attraction, and research methods in social psychology.

[483 Socialization and Maturity (also Psychology 483)] Spring. 4 credits. Limited to upperclass and graduate students or those who receive permission of instructor. Prerequisite: some work in psychology, sociology, or anthropology; some background in statistics is assumed. Not offered 1982-83.

T R 12:20-2:15. W. W. Lambert.
Representative theories of research on socialization at different ages are analyzed, focusing particularly on the underlying processes. The newer topic of personal and sociocultural maturity is also analyzed and its relation to socialization processes is evaluated in terms of recent evidence.]

[486 Interpersonal and Social Stress and Coping (also Psychology 486)] Spring. 4 credits. Limited to 25 upperclass students. Prerequisite: background in psychology and introductory statistics, or permission of instructor. Not offered 1982-83.

M W F 12:20. W. W. Lambert.
A critical review of work in intrapersonal, interpersonal, situational, and sociocultural sources of stress; the major psychophysiological concomitants of such stress; resultant coping strategies and aids to coping. Data from the laboratory, industry, and other cultures will be analyzed.]

488 Research Practicum in Socialization (also Psychology 488) Spring. 4 credits. Prerequisites: two courses in social psychology or human development and one course in statistics, or permission of instructor.

R 2:30-4:25. U. Bronfenbrenner.
Supervised participation in field and experimental studies bearing on the impact of family support systems on socialization practices and outcomes. The work concentrates on the American phase of a project being conducted cooperatively in five industrialized societies.

491 Selected Topics in Sociology Fall or spring. 2-4 credits. Prerequisite: permission of instructor. Hours to be arranged.

495 Honors Research: Senior Year Fall or spring. 4 credits. Limited to sociology majors. Prerequisite: permission of instructor. Hours to be arranged. D. Hayes and staff.

496 Honors Thesis: Senior Year Fall or spring. 4 credits. Prerequisite: Sociology 495. Hours to be arranged. D. Hayes and staff.

497 Social Relations Seminar (also Anthropology 495) Spring. 4 credits. Limited to seniors majoring in social relations. Staff.

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. Lists and descriptions of seminars are available from the department well in advance of each semester. The list below indicates seminars that are likely to be offered 1982-1983, but others may be added. Students should check with the department before each term. All seminars are offered for 4 credits unless otherwise specified. Graduate students may enroll in courses numbered 400 or above where appropriate, for example, Sociology 420, 424, and 425.

515 The Politics of Technical Decisions (also Science, Technology, and Society 541; City and Regional Planning 541, and Business and Public Administration NPA 515) Fall. 4 credits.

W 2:30-4:30. D. Nelkin.
This is a seminar dealing with the relationship between knowledge and power, between technology and democratic political institutions in modern society. Our focus will be on decision making in areas often defined as "technical" and best resolved by experts. We shall examine the origins of "technocratic politics," the politics of expertise, and the questions of political versus professional control that are raised by controversial technology choices. Our central concern will be the clash between technological and democratic values.

521 Organizational Behavior II (also Industrial and Labor Relations 521) Spring. 3 credits.

R. Stern.
Formal organizations are studied from the perspectives of classical organization theory, human relations theory, and comparative and cross-cultural analysis. Contemporary theories and quantitative approaches to organizational structure are also considered in some detail. Intended to be preliminary to more intensive work in organizational behavior.

[523 Analysis of Data with Measurement Error] Fall. 4 credits. Prerequisite: Sociology 424 or equivalent. Not offered 1982-83.

Hours to be arranged. Staff.
Multivariate statistical methods with explicit treatment of measurement error. Classical test theory, path analysis of unmeasured variables, econometric "errors-in-variables" models, confirmatory factor analysis, and Joreskog's general model for estimating linear structural relations (LISREL). Introduction to latent structure analysis. Emphasis on applications.]

[531 Population Policy (also Biology and Society 403)] Fall. 4 credits. Prerequisite: graduate standing or permission of instructor. Not offered 1982-83.

W 3:35-5:30. J. M. Stycos.
The ways in which societies try to affect demographic trends. Special focus is on government policies and programs to influence fertility.]

541 Social Organization and Change Fall. 4 credits. Prerequisite: graduate standing or permission of instructor.

M W 1:25-3:20. R. M. Williams, Jr.
Systematic review of theory and research, with emphasis on substantive knowledge and testable hypotheses. Subjects included are social processes, social structures, cultural content, and social and cultural change. Attention is given to the nature and size of the social system (small groups, communities, large organizations, societies) and also to both macro- and micro-social processes and properties (integration, authority, conformity, and deviance).

[585 Social Structure and Personality (also Psychology 585)] Fall. 4 credits. Not offered 1982-83.

R 2:30-4:25. B. C. Rosen.
An analysis of the ways in which social and psychological factors interact to affect the development of personality, the rates of individual and group behavior, and the functioning of social systems.]

603 Seminar: Marx, Durkheim, Weber Fall. 4 credits.

T 2:30-4:30. J. Kahl.

632 Research Seminar in Population Spring. Hours to be arranged. B. Edmonston.

[645 Social Networks] Spring. 4 credits. Not offered 1982-83.

Hours to be arranged. Staff.
An examination of the patterns of linkage between people, organizations, and institutions as constituting the foundation of social structure. These patterns and

their implications are explored in areas such as the sociology of science and the study of power and influence. Theoretical and methodological issues receive equal attention.]

[646 Seminar: Social Stratification. Spring. Not offered 1982-83.
R 2:30-4:30. J. Kahl.]

658 The Course of Life: Developmental and Historical Perspectives (also Human Development and Family Studies 686) Spring. 3 credits.

Enrollment limited to 15. Prerequisite: permission of instructor. S-U grades optional. College of Human Ecology students must register for HDFS 686.

Hours to be arranged. G. Elder.
An introduction to the life course as a theoretical orientation, methodology, and field of study. Special emphasis is devoted to multidisciplinary convergence on life course problems; to theory and research on the interaction of social, psychological, and biological processes from birth to death; and to historical influences.

[670 Community, Housing, and Local Political Processes (also Consumer Economics and Housing 670)] Spring. 3 credits. S-U grades optional. Offered alternate years. Not offered 1982-83; next offered 1983-84.

T 1:25-4:25. A. Shlay.
A seminar linking local political processes, housing, and community change. Focus is on the social costs of fiscal and physical planning and the mechanisms producing power differentials through the nexus of property ownership. Values underlying the perceived desirability of particular housing patterns and the construction and implementation of local policies are considered. The prospects and possibilities for eliminating social and spatial barriers that impede local equality are explored.]

671 Power, Participation, and Public Policy (also Consumer Economics and Housing 671) Spring. 3 credits. S-U grades optional. Offered alternate years.

T 1:25-4:25. A. Shlay.
This course seeks to explore the sources of American political stability by concentrating on the ways in which political power and participation are managed within the public policy arena. The first part of the course will be theoretical. It will focus on competing theories of political stability and legitimacy as represented by pluralist, democratic elitist, mass society, power elitist, bureaucratic-rationalization, and class conflict perspectives; on political processes and modes of political action; and will examine power structuration, focusing on the empirical literature that examines the link between the activity of power wielding and class structure. The consequences of the structuring of power within particular social groups and the particular (i.e., policy) outcomes will be examined within the context of the reproduction of the larger political order.

[677 Seminar in Field Research (also Industrial and Labor Relations 677)] Spring. 3 credits. Enrollment limited. Prerequisite: permission of instructor. Not offered 1982-83.

H. Trice.
Recent research efforts are examined and the dynamic nature of the research process is emphasized. The realities of field research are explored, including problems of gaining and sustaining rapport, the initial development of research interviews and observation data, and their conversion to quantitative instruments. Participants to share in the exploration of appropriate theories and concepts, and the possibility of actual field participation in an ongoing research project is explored.]

683 Social Interaction (also Psychology 683) Spring.

Hours to be arranged. D. Hayes, L. Meltzer.

[685 Sex Differences and Sex Roles (also Psychology 685 and Women's Studies 685)] Fall. 4 credits. Not offered 1982-83. Hours to be arranged. S. Bem.]

691-692 Directed Research Fall or spring. Up to 4 credits, to be arranged. Prerequisite: permission of instructor.

695 Thesis Research Fall or spring. Up to 6 credits, to be arranged. Prerequisite: permission of thesis director.

Swahili

See Africana Studies and Research Center, p. 190.

Tagalog

See Modern Languages, Literatures, and Linguistics, p. 146.

Tamil

See Modern Languages, Literatures, and Linguistics, p. 146.

Telugu

See Modern Languages, Literatures, and Linguistics, p. 146.

Thai

See Modern Languages, Literatures, and Linguistics, p. 146.

Theatre Arts

Drama, Dance, Film

D. L. Frederickson, chairman; R. Archer, V. A. Becker, S. R. Cole, P. J. Curtis, R. Dressler, P. Gaither, R. Gross, M. Hays, E. Johnson, U. Kummer, M. Lawler, J. Morgenroth, S. Perkins, M. Rivchin, P. Saul (dance administrator, Helen Newman Hall), R. C. Shank, J. Thorp, A. Van Dyke, S. Williams

Through its courses and production laboratories, the department provides students with a wide range of opportunities in drama, dance, and film. It offers a major in theatre arts with a concentration in drama or film, and a major in dance. These majors provide students with an education in theatre, dance, and film that is in accordance with the general liberal arts ethic of the college, and they also provide some measure of preprofessional training in these arts. The department also provides the Cornell community with opportunities to participate in productions on an extracurricular basis.

Theatre Arts Major

Prerequisites for admission to the major (to be completed by the end of the sophomore year):

- 1) Theatre Arts 240.
- 2) Either Theatre Arts 250 or 280.
- 3) A grade of C or better in the above courses.
- 4) Consultation with the department's director of undergraduate studies.

Drama Concentration

Requirements:

- 1) Theatre Arts 240, 250, 280.
- 2) A minimum of four laboratory courses chosen from Theatre Arts 151, 155, 251, 351, 451, and 551. At least one term of 151 and 155 must be taken. Majors are required to take at least one laboratory course a year in their junior and senior years.
- 3) Two courses in theatre studies chosen from Theatre Arts 325, 326, 327, 333, 334, 335, 336, 424, 434, 436, 442.
- 4) Four courses (at least 12 credits) in other departmental courses.
- 5) Two courses in related areas outside the department.
- 6) Courses in which a student receives a grade below C cannot be used to fulfill the requirements for the major.

Film Concentration

Requirements:

- 1) Theatre Arts 240, 250, 280.
- 2) Theatre Arts 374 with a grade of C+ or better.
- 3) 16 credits in film that should include:
 - a) two courses chosen from Theatre Arts 375, 376, 378, and 379.
 - b) Theatre Arts 377.
 - c) either Theatre Arts 475 or 477.
- 4) 8 credits in other theatre arts courses.
- 5) 12 additional credits of related work outside the department.
- 6) An average of C+ or better in all theatre arts courses.

Dance Major

The dance program is housed in Helen Newman Hall. To be admitted to the major, students must have completed or shown competence in intermediate modern technique by the beginning of the junior year.

Requirements:

- 1) A minimum of one technique class each term chosen from Theatre Arts 304, 306, or 308, one credit each term for four terms.
- 2) Theatre Arts 210, 211, 312 or 316, 314, 315.
- 3) 20 additional credits in related fields chosen in consultation with advisers.

Departmental Honors Program. Candidates for the degree of Bachelor of Arts with honors in theatre arts must fulfill the requirements of the major and maintain an average of B+ in departmental courses and an average of B in all courses. Any such student may, at the beginning of the second semester of the junior year, form a committee of three faculty members to guide and evaluate the honors work. The work will culminate in an honors thesis or practicum to be presented not later than April 1 of the senior year, and an examination to be held not later than May 1.

Theatre Colloquium

On announced dates during the year, the entire department—faculty, undergraduate and graduate students—meets on Fridays, 12:20-2:00 p.m. in 101 Lincoln Hall. These sessions, which take the form of guest lectures, demonstrations, research presentations, and critiques of major Theatre Cornell productions, are designed to encourage a broad, coherent understanding of the integration of all components of theatre in its various forms.

Theatre Laboratories

Theatre Cornell, the department's producing organization, annually presents a season of classic and modern dramas, dance concerts, and experimental theatre. This organization functions as the department's principal laboratory for developing actors, directors, dancers, playwrights, designers, technicians, stage managers, and arts administrators.

Production experiences are under the direct supervision of the department's staff and are organized into laboratory courses according to the skill and level of involvement. Students may register for the laboratories most appropriate for their participation.

- 1) Design and Technology Laboratories: Students may enroll either term in Theatre Arts 151, 152, 251, 351, and 451. These courses progress from elementary crew participation to full design, technical, and stage management assignments. Laboratories should be scheduled along with allied content courses when possible.
- 2) Rehearsal and Performance Laboratory: Students may enroll in Theatre Arts 155 after being assigned roles through auditions in theatre or dance productions.

All production laboratory courses listed above may be repeated for credit and may be added without penalty at any time during the term with the permission of the instructor. They may be dropped only with the permission of the instructor. Students are also encouraged to participate in Theatre Cornell productions at any time on an extracurricular basis.

The Dance Program

In addition to courses in composition, history, and movement sciences, courses in dance technique are offered each semester: four levels of modern and three of ballet. Registration takes place in Teagle Hall. Technique classes are intended to develop strength, flexibility, coordination, and the ability to perceive and reproduce phrases of dance movement with rhythmic accuracy, clarity of body design, and fullness of expression. The more advanced classes require the mental, physical, and emotional flexibility to perform more complex phrases in various styles. Tai Chi, a Chinese system of movement for health, self-defense, and meditation, and other dance styles and forms such as jazz, Japanese Noh, and Indian and Javanese dance are offered on a rotating basis. Students may satisfy the physical education requirement by taking any of these courses. Up to four academic credits may be earned (one each semester) for enrollment in intermediate or advanced technique only (see Theatre Arts 304, 306, 308). The schedule for technique classes is available in the Dance Office, Helen Newman Hall.

Students may receive credit for performance in student-faculty concerts. Repertory and performance workshops are offered, in which staff choreograph and conduct rehearsals for performance of original dance works. Admission is with permission of the instructor. Hours are arranged through the Dance Office, Helen Newman Hall. One academic credit (S-U grades only) may be earned for such work (see Theatre Arts 155, Rehearsal and Performance).

Film Study Abroad

The College of Arts and Sciences, through this department and in consort with seventeen other colleges and universities, offers up to a full year's study at the Inter-University Center for Film and Critical Studies. The center's program is theoretical, critical, and historical. It is most useful to students pursuing an independent major in film studies and serves as an intensive supplement to their Cornell film courses. Fluency in French is required, and Theatre Arts 374, 375, and 376 are prerequisites. Inquiries should be addressed to Professor Frederickson, Cornell's liaison with the center.

Scholarship

The Charles B. Moss Scholarship is administered by the department. The recipient is chosen from among those majors in the department who demonstrate exceptional ability.

Freshman Seminar Requirement

The Freshman Seminar requirement may be satisfied by Theatre Arts 108, 120, 130, or 140.

Freshman Seminars

108 Writing about Film (also English 108) Fall and spring. 3 credits.

T R 12:20-1:35. U. Kummer.

This course is meant to serve not as an introduction to film analysis, but as a writing seminar that takes cinema as its primary object of attention. Some attempt will be made to explore the usefulness of basic aspects of film, such as framing or montage, as illustrative analogies to principles of writing and to examine cinema's rhetorical power as a way of raising questions about our own use of persuasion in writing. Students will view a wide range of popular and art films (some of them silent and/or foreign), including *Citizen Kane*, *October*, and *The Rules of the Game*. They will be required to attend a two-hour screening outside of class approximately once a week. The writing requirement comprises five papers, averaging five pages in length, and eight to ten short writing assignments. No familiarity with film history or analysis is expected.

120 Writing about the Modern Theatre Fall and spring. 3 credits.

T R 12:20-1:35. Staff.

In this course works by major European and American playwrights from 1880 to the present provide the basis for training in the art of essay writing. Readings will be taken from the plays of Ibsen, Chekhov, Pirandello, Ionesco, Stoppard, Pinter, and modern American dramatists.

130 Writing about the American Myth in the Theatre Fall and spring. 3 credits

M W F 12:20. Staff.

This course examines the images of America presented on the twentieth-century stage. How do Americans view themselves? How are they seen by foreign dramatists? To what ends do dramatists use the American myth?

140 From Script to Stage: Writing about the Theatrical Process Fall and spring. 3 credits.

M W F 9:05. Staff.

In this course students will explore and write about the process through which drama becomes theatre, how the methods of playwright, actor, director, and designer dovetail to create the theatrical piece. Students will be asked to apply the rhetorical strategies of theatre to their own essay writing. Texts will include Theatre Cornell productions.

Rehearsal and Performance Laboratory

155 Rehearsal and Performance Fall and spring. 1-2 credits; 1 credit per production experience per term up to 2 credits per term. 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.

Staff.

The study, development, and performance of roles in departmental theatre or dance productions.

Acting

280 Introduction to Acting Fall or spring. 3 credits. Each section limited to 16 students. Prerequisite: registration only through department roster in 104 Lincoln Hall.

Sec 1, T R 2:30-4:25 (primarily for prospective majors and those interested in extended study in acting), A. Van Dyke; sec 2, M W 10:10-12:15, staff; sec 3, T R 12:20-2:15, B. Gilles; sec 4, T R 12:20-2:15, V. Hardy; sec 5, T R 12:20-2:15, L. Lonergan; sec 6, T R 12:20-2:15, D. Shock; sec 7, T R 12:20-2:15, C. Ventress.

Introduction to the problems and techniques of acting through history, theory, and practice. Appreciation of the actor's function as a creative artist and social interpreter through selected readings, lectures, and

play attendance. Examination of the actor's craft through improvisation and exercises in physical, emotional, and intellectual skills.

281 Acting I—Basic Technique Fall or spring. 3 credits. Each section limited to 14 students.

Prerequisites: Theatre Arts 280 and audition; registration only through department roster in 104 Lincoln Hall.

Sec 1, M W 12:20-2:15, A. Van Dyke; sec 2, M W 12:20-2:15, J. Thorp.

Practical exploration of the actor's craft through improvisation, exercises in physical and psychological action; problems in the use of imagination, observation, and research as tools for exploring the script.

282 Introduction to Voice and Speech for Performance Fall. 2 credits. Limited to 12 students.

Primarily for department majors. Prerequisite: registration only through department roster in 104 Lincoln Hall.

T R 8:05-9:55. E. Johnson.

Study and practice in the correct physical use of the voice through exercises in relaxation, alignment, breath control, support, and freedom in exploring range and resonance potential.

283 Voice and Speech for Performance Spring. 2 credits. Limited to 12 students. Primarily for department majors. Prerequisite: Theatre Arts 282.

Registration only through department roster in 104 Lincoln Hall.

T R 8:05-9:55.

Development of vocal technique with additional emphasis on articulation and basics of standard American pronunciation.

380 Acting II—Characterization Fall or spring. 3 credits. Limited to 12 students. Prerequisites: Theatre Arts 281 and permission. Registration only through department roster in 104 Lincoln Hall.

T R 10:10-12:05. Fall, J. Thorp; spring, S. Cole.

Scene study and improvisational work designed to develop consistency in the student's use of communicative action and emotional support in creating a role. Emphasis on text analysis, use of imagery in handling dramatic language, and exercises in emotional and sense memory.

381 Acting III—Styles Fall. 3 credits. Limited to 10 students. Prerequisites: Theatre Arts 380 and permission; registration only through department roster in 104 Lincoln Hall.

T R 10:10-12:05. S. Cole.

Practice and application of skills and methods to various styles of dramatic literature; practical exploration of historical and social influences as determinants of style.

575 American Mime Orientation I Fall. 2 credits.

Prerequisite: Theatre Arts 280. Students enrolled in American Mime must contact the Department of Theatre Arts about supplies one month before the beginning of classes. Registration only through department roster in 104 Lincoln Hall.

F 2-4:25. P. Curtis and other teachers from the American Mime Theatre.

American Mime is a unique performing art created by a particular balance of playwriting, acting, moving, pantomime, and theatrical equipment. It is a complete theatre medium defined by its own aesthetic laws, terminology, techniques, script material, and teaching methods, in which nonspeaking actors, in characterization, perform the symbolic activities of American Mime plays through movement that is both telling and beautiful.

576 American Mime Orientation II Spring. 2 credits. Prerequisite: Theatre Arts 575 or permission of instructor. Registration only through department roster in 104 Lincoln Hall.

F 2-4:25. P. Curtis and other teachers from the American Mime Theatre.

A continuation of Theatre Arts 575.

701 Stage Movement and Combat Fall and spring. 2 credits. May be repeated for credit. Limited to students in M.F.A. professional actor training.

M-F 9:05-10:30. Staff.

Development of the physical body for expression through various techniques and practice, including effort-shape; improvisation; composition; modern dance and ballet; period dance; stage combat technique in foil, epee, sabre, and dagger; tumbling; aikido and stage fighting; combat choreography.

730 Dramatic Text Analysis Fall and spring. 2 credits. May be repeated for credit. Limited to students in M.F.A. professional actor/director training program. Others by permission of instructor.

M W F 1:15-2:15. Fall, R. Shank; spring, E. Johnson.

An examination of selected works of dramatic literature for theatre artists. Intensive study of the play's text for techniques in interpretation, character development, plot articulation, and the aesthetics of prose and poetry for performance.

751 Rehearsal and Performance Fall. 2 credits. Limited to students in M.F.A. professional actor training. May be repeated for credit.

R. Shank.

Study, development, and performance of assigned roles.

752 Rehearsal and Performance Spring. 2 credits. Limited to students in M.F.A. professional actor training. May be repeated for credit.

R. Shank.

Study, development, and performance of assigned roles.

780 Acting Technique I Fall and spring. 2 credits. May be repeated for credit. Limited to students in first-year M.F.A. professional actor training.

M T W R 2:30-4:25. S. Cole.

Study and practice of fundamental techniques and methods. Exploration and use of the basic dynamics of the actor's organism.

781 Acting Technique II Fall and spring. 2 credits. Prerequisite: Theatre Arts 780. Limited to students in second-year M.F.A. professional actor training. May be repeated for credit.

M T W R 2:30-4:25. J. Thorp.

Development and integration of the personal dynamic into the total acting process.

782 Voice Technique I Fall and spring. 2 credits. May be repeated for credit. Limited to students in the first-year M.F.A. professional actor/director training.

M W F 10:45-12:30, T R 1:15-2:15. E. Johnson.

Emphasis on correct use of the vocal instrument through exercises designed to achieve the freedom, flexibility, control, and power required for the professional actor.

783 Voice Technique II Fall and spring. 2 credits. May be repeated for credit. Prerequisite: Theatre Arts 782. Limited to students in second-year M.F.A. professional actor training.

T R 10:45-12. E. Johnson.

Practice, development, and expansion of work presented in Theatre Arts 782. Use of text to explore vocal action and voice as an integral part of developing characterization.

784 Speech Technique I Fall and spring. 2 credits. May be repeated for credit. Limited to students in first-year M.F.A. professional actor/director training.

T R 10:45-12. A. Van Dyke.

Ear training; sound designation of vowels, consonants, and diphthongs through exercises; sound symbolization through use of the International Phonetic Alphabet (IPA); eradication of regionalisms; development of standard American speech.

785 Speech Technique II Fall and spring. 2 credits. Prerequisite: Theatre Arts 784. May be

repeated for credit. Limited to students in second-year M.F.A. professional actor training.

M W 10:45-12. A. Van Dyke.

Refinement of sound distinction and execution; study of dramatic texts in prose and poetry to develop techniques in scansion, emphasis, rhythm, range, and melody.

Cinema

374 Introduction to Film Analysis: Meaning and Value Summer or fall. Not offered fall 1982; next offered summer 1983. 4 credits.

T R 10:10-11:30. D. Fredericksen.

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 types.

375 History and Theory of the Commercial Narrative Cinema Fall. 4 credits. Fee for screening expenses, \$10. (this fee is paid in class).

T R 2-4:25. D. Fredericksen.

Consideration of the broad patterns in the history of the commercial narrative film, viewed as an artistic medium and as a system requiring the massive consumption of artifacts. Emphases include the early articulation of a cinematic language, realism as an artistic style, the nature and functions of popular film, and modernism. Major figures include Griffith, Eisenstein, Murnau, Von Stroheim, Dreyer, Chaplin, Renoir, Ford, Hitchcock, Welles, Antonioni, Fellini, Bergman, Bunuel, Resnais, Godard, and Herzog.

[376 History and Theory of Documentary and Experimental Film Fall. 4 credits. Not offered 1982-83; next offered 1983-84. Fee for screening expenses, \$10. (this fee is paid in class).

T R 2-4:30. D. Fredericksen.

Documentary figures covered include Vertov, Flaherty, Grierson, Ivens, Lorentz, Riefenstahl, Capra, and Jennings. Within the history of the experimental and personal film, emphases are the avant-garde of the twenties, the movement toward documentary in the thirties, and American experimental and personal film from the forties to the present.]

377 Fundamentals of 16-mm Filmmaking Fall or spring. 4 credits. Limited to 12 students each semester. Prerequisite: permission of instructor. Fee for maintenance costs, \$10 (this fee is paid in class). The average cost to each student for materials and processing is \$150.

M W F 2-4:25. M. Rivchin.

The mechanics and expressive potential of 16-mm filmmaking, including nonsynchronous sound. Each student makes two short films and retains ownership of them. No prior filmmaking experience is assumed.

[378 Russian Film of the 1920s and French Film of the 1960s Spring. 4 credits. Prerequisite: Theatre Arts 375. Not offered 1982-83; next offered 1984-85. Fee for screening expenses, \$10 (this fee is paid in class).

T R 2-4:30. D. Fredericksen.

An intensive treatment of two distinct periods of innovation in film theory and history. Emphases on the relationship between theory and practice. Major figures include Eisenstein, Pudovkin, Vertov, Dovzhenko, Godard, Truffaut, Resnais, Robbe-Grillet, Eustache, Rivette, and Bresson.]

[379 International Documentary Film from 1945 to the Present Spring. 4 credits. Prerequisite: Theatre Arts 376. Not offered 1982-83; next offered 1983-84. Fee for screening expenses, \$10 (this fee is paid in class).

T R 2-4:30. 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. Major figures, structures, and movements covered include Jennings, Rouquier, Leacock, Malle, Rouch, Solanas, national film boards, Challenge for Change, direct cinema, cinema verite, and revolutionary documentary of the Third World.]

475 Seminar in the Cinema I Spring. 4 credits.

T R 10:10-11:30. D. Fredericksen.

Topic for spring 1983: Jungian psychology and film analysis. Consideration of the mutual relevance of Jungian/archetypal/imaginal psychology on one hand, and filmmaking and film analysis on the other. Readings include Jung's *Two Essays in Analytical Psychology* and *Archetypes and the Collective Unconscious*, Hillman's *Revisioning Psychology*, and Watkins' *Waking Dreams*. Films discussed include Bergman's *Persona*, Roeg's *Walkabout*, Fellini's *8½*, Brakhage's *Anticipation of the Night*, and G. Nelson's *Moon's Pool*.

477 Intermediate Film Projects Spring. 4 credits. Limited to 4 students. Prerequisites: Theatre Arts 377 or equivalent, and permission of instructor. Fee for maintenance costs, \$10 (this fee is paid in class). The average cost to each student for materials and processing is \$150; students retain ownership of their films.

Hours to be arranged. M. Rivchin.

The development and completion of individual projects, with emphases on personal and documentary modes. Includes preparation of an original script or storyboard, direction, cinematography, synchronous-sound recording, editing, and follow-through to a composite print.

Related Courses in Other Departments

The Japanese Film (Asian Studies 313)

Documenting the Depression: Film, Literature, and Memory (History 476)

Inter-University Center for Film and Critical Studies in Paris

Cornell is part of a consortium supporting the center. Cornell students may earn full Cornell credit for study at the center. For course listings and other information, contact Professor Don Fredericksen, 104 Lincoln Hall.

Dance

See description of Theatre Laboratories for information concerning credit for participation in dance productions.

200 Introduction to Dance I Fall or summer. 3 credits. Prerequisite: registration only through department roster in 302 Helen Newman Hall. Concurrent enrollment in a dance technique class at the appropriate level is required.

T R 12:20-1:50. J. Morgenroth.

Movement improvisation and composition, readings in dance aesthetics and twentieth-century dance history. Film and video tapes are used.

201 Introduction to Dance II Spring. 3 credits. Prerequisite: Theatre Arts 200 or permission of instructor.

T R 12:20-1:50. J. Morgenroth.

Continuation of Theatre Arts 200.

[205 Contemporary Composers and Choreographers 3 credits. Not offered 1982-83.]

210 Beginning Dance Composition and Music Resources (also Physical Education 210) Fall. 4 credits. Prerequisites: intermediate technique level, or permission of instructor. Registration only through department roster in 302 Helen Newman Hall. Prerequisites for dance majors only: Music 141. Concurrent enrollment in a technique class at the appropriate level is required.

M W 6:30-8 p.m. P. Gaither, D. Borden.

This course is designed to develop resources in movement and in music as it relates to dance. Students will prepare studies concerned with use of space, time, body design, and dynamics. Various approaches to the structuring of these elements will be the basis for the study of form as it applies to dance and music.

211 Beginning Dance Composition and Music Resources (also Physical Education 211) Spring. 4 credits. Prerequisite: Theatre Arts 210.

M W 6:30-8 p.m. M. Lawler, D. Borden.

Continuation of Theatre Arts 210.

304 Intermediate Ballet Technique (also Physical Education 134) Fall or spring. 1 credit. May be repeated for up to 4 credits. Prerequisite: Physical Education 131 or permission of instructor.

M W F 2:30-4. P. Saul.

Study and practice of traditional training exercises and the classical ballet vocabulary; work is done on strengthening the body and using it as an expressive instrument.

306 Intermediate Modern Dance Technique (also Physical Education 136) Fall or spring. 1 credit. May be repeated for up to 4 credits. Prerequisite: Physical Education 136 or permission of instructor.

M W F 4:40-6:10. J. Morgenroth.

Study and practice of training exercises and an expressive contemporary movement vocabulary; work is done on strengthening the body and using it as an expressive instrument.

307 Asian Dance and Dance Drama (also Asian Studies 307) Fall. 3 credits. May be repeated for credit.

M W F 10:10-11. D. Sudan.

Section 1: Indian dance. Historical background and performance technique of East Indian dance. The particular dance technique that will be taught will be Odissi, which is related to Bharata Natyam, one of the four classical dance forms of India. The M W classes will be Odissi movement technique. The F class will be lecture, film, and discussion based on reading assignments and papers prepared by students. The M W classes may be taken without the F class, in which case physical education credit may be earned, but not academic credit. Students who attend all three classes and do all work may earn both physical education credit and 3 units of academic credit. [Section 2: Japanese Noh Theatre. Not offered 1982-83. Section 3: Javanese Dance. Not offered 1982-83.]

308 High-Intermediate Modern Dance Technique (also Physical Education 138) Fall or spring. 1 credit; may be repeated for up to 4 credits.

Prerequisite: Theatre Arts 306 or permission of instructor.

T R 4:40-6:10. P. Gaither.

Continuation of Theatre Arts 306.

310 Advanced Dance Composition (also Physical Education 311) Spring. 4 credits. Prerequisite: Theatre Arts 310 or permission of instructor.

P. Gaither.

Further problems in composition for groups.

[312 Physical Analysis of Movement 3 credits. Not offered 1982-83.]

[314 History of Dance 3 credits. Not offered 1982-83.]

[315 History of Dance 3 credits. Not offered 1982-83.]

[316 Human Biology for the Performing Arts 5 credits. Not offered 1982-83.]

318 Historical Dances Spring. 2 credits.

Prerequisite: Ballet II or Modern Dance II.

M W F 9-10:30. M. Lawler

A sampling of the social dances from the Renaissance to the present, with emphasis on pinpointing basic differences in movement styles and customs in the various periods. A major part of class time will be spent learning and performing the dances.

410 Individual Problems in Composition (also Physical Education 410) Fall or spring. 3 credits. Prerequisite: Theatre Arts 311 or permission of instructor.

Hours to be arranged. Staff.
Individual problems in composition.

[418 Seminar in History of Dance] Spring. 3 credits. Prerequisite: Theatre Arts 315 or permission of instructor. Not offered 1982-83.]

Directing

398 Directing I Fall. 3 credits. Prerequisites: Theatre Arts 250, 280, and permission of instructor. M W 2:30-4:25. R. Shank.

An exploration of the role of the director through study and exercises; the process of conceptualization, use of visual, temporal, and dramatic values for interpretation of the script; directorial text analysis; applied projects.

498 Directing II Spring. 4 credits. Prerequisite: Theatre Arts 398 or permission of instructor. M W F 2:30-4:25. R. Shank.

Use of movement and space; character development techniques; rehearsal process; production procedures; applied project in performance.

499 Projects in Directing Fall or spring. Credit to be arranged. Prerequisite: permission of instructor. R. Shank.

The planning and execution of directing projects by advanced students in the public performance facilities of the Department of Theatre Arts.

698 Directing Technique Fall and spring. 4 credits. May be repeated for credit. Limited to students in the M.F.A. professional director training; others by permission of the instructor. R. Shank.

Approaches to directorial controls for text, actors, time, structure, movement, space, and design, towards the development of a production concept from script to stage to audience. Practicums include work with actors, assistant director assignments, and the directing of complete short works.

798 Form and Style in Directing Fall and spring. 4 credits. May be repeated for credit. Limited to students in the M.F.A. professional director training; others by permission of instructor. R. Shank.

An exploration of major dramatic forms through analytical, interpretative, psychological, and technical methods for the director's realization of inherent values towards a coherent production style. Practicums include the direction of full-length works each term.

Playwriting

348 Playwriting Fall and spring. 4 credits. Prerequisite: permission of instructor. T 2-4:25. Staff.

A laboratory for the discussion of student plays. Following exercises in dramatic structure and technique, students will be expected to write two or three one-act plays.

349 Advanced Playwriting Fall and spring. 4 credits. May be repeated for credit. T 2-4:25. Staff.

A continuation of Theatre Arts 348.

Theatre Design and Technology Laboratories

151 Production Laboratory I Fall and spring. 1-2 credits. May be repeated for credit. Orientation meeting in Willard Straight Theatre at 7:30 p.m. on the second day of classes. Staff.

Instruction and practice at the introductory level on the basic techniques of construction and operation of

scenery, costumes, lighting and/or sound. Instruction is supervised by the design/technology faculty and is directed towards the production of plays for the Theatre Cornell season.

251 Production Laboratory II Fall and spring. 1-3 credits. May be repeated for credit. Prerequisite: Theatre Arts 151 or permission of the instructor. Orientation meeting in Willard Straight Theatre at 7:30 p.m. on the second day of classes. Staff.

Practical production experience that involves specialized instruction and specific responsibilities in positions such as light board operator, wardrobe mistress, set or properties crew head, and assistant stage manager. There is also preparatory work in specific areas of more advanced construction in scenery, costumes, lighting, sound and management. Instruction and practice is supervised by the design/technology faculty and is directed towards the production of plays for the Theatre Cornell season.

351 Production Laboratory III Fall and spring. 1-3 credits. May be repeated for credit. Prerequisite: Theatre Arts 251 or permission of the instructor. Orientation meeting in Willard Straight Theatre at 7:30 p.m. on the second day of classes. Staff.

Practical production experience that offers an opportunity for advanced positions in design, technology, and stage management. These include full responsibility for an aspect of a smaller production, major responsibilities as an assistant on a major production, or significant responsibilities as stage manager, major crew head, or similar position. All work is guided and supervised by appropriate faculty and is an active part of the Theatre Cornell season.

451 Production Laboratory IV Fall and spring. 1-4 credits. May be repeated for credit. Prerequisite: Theatre Arts 351 or permission of the instructor. Orientation meeting in Willard Straight Theatre at 7:30 p.m. on the second day of classes. Staff.

Practical production experience requiring full design, technical, or management responsibility of an aspect of a play produced within the Theatre Cornell season. Student designer, technician, or stage manager will be assigned an appropriate faculty supervisor.

551 Production Laboratory V Fall and spring. 1-6 credits. May be repeated for credit. Prerequisite: permission of the instructor. Hours by arrangement. Staff. Production design, technical, or management responsibilities for graduate students.

Theatre Design and Technology

250 Fundamentals of Theatre Design/Technology Fall or spring. 4 credits. Not offered to first-term freshmen. Lec-lab, M W F 2:30-4:25. Staff.

An introduction to the design and technical experience in the theatre, with particular attention to the unique collaboration of director, designer, and technician. Lectures, discussions, and extensive project work will relate the visual principles of designing scenery, costumes, and lighting to the production techniques by which designs are realized on the stage. This course is prerequisite to all higher level courses in design and technology for the theatre.

260 Visual Concepts for the Theatre Spring. 3 credits. T R 10:10-12:05. V. Becker.

A studio examination of the visual expression of ideas and concepts that focuses on developing the creative design process. Begins with the translation of simple thoughts and emotions into the visual language by which a designer can communicate with an audience. Concentrates on practical application of this process to the complex objectives of design and directing in the theatre.

261 Production Concepts for the Theatre Fall. 3 credits. T R 10:10-12:05. R. Archer.

A studio examination of the physical expression of environment within the theatre, which focuses upon the personal understanding and application of spatial and structural concepts. Material, scale, proportion, texture, and other elements are explored as techniques for achieving the design and technical objectives of theatre production.

362 Lighting Design and Technology Fall. 4 credits. For both majors and qualified nonmajors in related fields. Prerequisite: Theatre Arts 250 or permission of the instructor. T R 12:20-2:15. R. Dressler.

An exploration of the role of light as an expressive design medium for the interpretation of plays in the theatre. Will explore the visual nature and dramatic impact of light, the design process and its associated communication techniques, and lighting practices in the professional world.

364 Scene Design and Technology Fall and spring. 4 credits. For both majors and qualified nonmajors in related fields. Prerequisite: Theatre Arts 250 or permission of the instructor. M W 12:20-2:15. Staff.

A study of the basic problems of design and technology of scenery for the stage. Will explore the design process, use of research and imagery, techniques of design communication, materials and associated tools for the realization of designs on the stage.

366 Costume Design/Technology Fall. 4 credits. For both majors and qualified nonmajors in related fields. Prerequisite: Theatre Arts 250 or permission of the instructor. T R 10:10-12:05. S. Perkins and staff.

An introduction to costume design and technology which includes: the analysis of the play and its characters, the use of period research as a source of style and construction techniques, and the application of materials, tools and techniques to the process by which literary characters are given visual dramatic form on the stage.

370 Theory and Practice of Stage Management Spring. 1-4 credits. Prerequisite: Theatre Arts 250 or permission of the instructor. T R 4:40-6. Staff.

An introduction to the concepts and techniques of stage management. The course will explore the collaborative nature of theatre production, the development of communication skills by which the central artistic vision of a production is defined and executed, and the centrality of the stage manager in these processes.

462 Advanced Lighting Design and Technology Spring. 4 credits. May be repeated for credit. Prerequisite: Theatre Arts 362 and permission of the instructor. T R 10:10-12:05. R. Dressler.

An exploration of lighting design/technology on a more advanced level, with particular stress upon project work and occasional production assignments.

464 Advanced Scene Design/Technology Fall. 4 credits. May be repeated for credit. Prerequisite: Theatre Arts 364 and permission of the instructor. M W 12:20-2:15. Staff.

An exploration of scene design and technology on a more advanced level, with particular stress upon project work and occasional production assignments.

466 Advanced Costume Design/Technology Spring. 4 credits. May be repeated for credit. Prerequisite: Theatre Arts 366 and permission of the instructor. T R 10:10-12:05. S. Perkins and staff.

An exploration of costume design/technology on a more advanced level, with particular stress upon project work and occasional production assignments.

550 Design Studio I Fall and spring. 1-6 credits. May be repeated for credit. Prerequisite: permission of the instructor.

M W 9:05-10:45. Staff.

Lecture and studio work in the principles of production design for graduate students and advanced undergraduates with professional-level interest. Focuses upon the development of personal design processes for the profession.

560 Design Techniques Studio I Fall and spring. 1-4 credits. May be repeated for credit. Prerequisite: permission of the instructor.

M W 11-1, F 9:05-12:05. Staff.

Advanced studio work in the language of design: the representation of environments for the stage in both two- and three-dimensional form. Will include selected topics in drafting, painting, perspective, and color theory.

562 Lighting Techniques I Spring. 4 credits. May be repeated for credit. Prerequisite: permission of the instructor.

T R 2:30-4:25. Staff.

Lecture and studio work in the principles of lighting, for graduate students and advanced undergraduates with professional-level interest. Focuses upon professional practices and standards.

564 Scenic Techniques I Spring. 4 credits. May be repeated for credit. Prerequisite: permission of the instructor.

T R 10:10-12:05. Staff.

Lecture and studio work in the principles of scenery for graduate students and advanced undergraduates with professional-level interest. Focuses upon development of a personal design process for the profession.

566 Costume Techniques I Fall. 4 credits. May be repeated for credit. Prerequisite: permission of the instructor.

M W 9:05-10:45.

Lecture and studio work in principles of costumes for the stage. For graduate students and advanced undergraduates with professional-level interest. Will focus upon the relationship of design to the skills by which designs are visualized and realized on the stage.

650 Design Studio II Fall and spring. 1-6 credits. May be repeated for credit. Prerequisite: permission of the instructor.

M W 10:10-12:05. V. Becker and staff.

750 Design Studio III Fall and spring. 1-6 credits. May be repeated for credit. Prerequisite: permission of the instructor.

F 9:05-12:05. Staff.

Theatre History, Literature, and Theory

240 Introduction to the Theatre Fall, spring, and summer. 3 credits.

M W F 11:15. Staff.

A survey of the elements of drama and theatre, intended to develop appreciation and rational enjoyment of the theatre in all its forms. Not a production course.

300 Independent Study Fall or spring. 1-4 credits; no more than 4 credits each semester. May be repeated for credit. Limited to upperclass students. Prerequisite: permission of the department staff member directing the study.

Staff.

Individual study of special topics.

325 Classic and Renaissance Drama (also Comparative Literature 352) Spring. 4 credits.

M W F 11:15. W. Cohen.

Readings in world drama from the Greeks to Shakespeare, including dramatists such as Aeschylus, Sophocles, Euripides, Aristophanes, Plautus, Seneca, Calderon, Kyd, Marlowe,

Shakespeare, Jonson, and Webster, with emphasis on the Greek and Elizabethan periods.

[326 European Drama, 1660 to 1900 (also Comparative Literature 353)] Spring. 4 credits. Not offered 1982-83; next offered 1983-84.

T R 10:10-11:25. Staff.

Readings from major dramatists from Moliere to Ibsen, including such authors as Racine, Congreve, Sheridan, Schiller, Goethe, Hugo, Buchner, Gogol, Turgenyev, Zola, Hauptmann, and Chekhov.]

327 Modern Drama (also Comparative Literature 354) Spring. 4 credits.

M W F 1:25. A. Caputi.

Readings from major dramatists of the twentieth century, including Ibsen, Chekhov, Strindberg, Shaw, Pirandello, Ionesco, Brecht, Beckett, and Pinter.

[333 History of the Theatre I] Spring. 4 credits. Not offered 1982-83; next offered 1983-84.

M W F 11:15. S. Williams.

A survey of the characteristics of primitive theatre and of theatrical styles and production modes in Classical Greece and Rome, medieval Europe, Renaissance England, France, Italy, and Spain.]

334 History of the Theatre II Fall. 4 credits.

T R 10:10-11:25. S. Williams.

A survey of theatrical styles and production modes from 1660 to 1914. Among the periods considered are the English Restoration, the eighteenth and nineteenth centuries in England, France and Germany, and the international modernist theatre. The course will conclude with a brief survey of the Oriental Theatre, with particular reference to its influence on European symbolism.

335 History of the Theatre III: 1918 to the Present Spring. 4 credits.

T R 10:10-11:25. M. Hays.

A survey of the modern and contemporary theatre, from expressionism to the present day. Particular emphasis will be placed on the question of formal experimentation and its relation to the modern theatre as a cultural institution.

336 American Drama and Theatre Fall. 4 credits.

M W F 9:05-9:55. E. Johnson.

A study of the American theatre and representative American plays, with emphasis on drama from O'Neill to the present.

372 English Drama (also English 372) Spring. 4 credits.

M W F 10:10. S. McMillin.

Important events in the English theatre from the beginning to the twentieth century. Plays by Marlowe, Shakespeare, Jonson, Webster, Dryden, Wycherly, Behn, Congreve, Sheridan, Shelley, Shaw, and others. Relationships between playhouses, dramatic texts, and politics.

424 Dramaturgy: Play and Period Spring. 4 credits. Prerequisites: permission of instructor and some upper-level work in literary analysis or theatre history.

T R 2:30-3:45. M. Hays.

An intensive study of the theatrical and cultural background of Shaw's early plays.

434 Theatre and Society Fall. 4 credits. Prerequisite: permission of the instructor. Students will be expected to have had some upper-level experience in one of the following areas: literary analysis, theatre history, sociology, psychology, history, anthropology, or philosophy.

M W F 11:15. M. Hays.

An examination of the role theatre has played in Western civilization. Topics for Fall 1982: Medieval and Renaissance theatrical structures.

436 Theory of the Theatre and Drama Fall. 4 credits. Prerequisite: permission of instructor.

M W F 10:10. M. Hays.

A survey of various theories of dramatic form and presentation from Aristotle and Horace to Goethe and Schiller.

442 Ibsen and Chekhov (also Comparative Literature 472) Fall. 4 credits. Prerequisite: permission of instructor.

T 2:30-5. S. Williams.

A study of selected minor and major plays by Ibsen and Chekhov, with particular attention being paid to how the playwrights evolved a dramaturgy that suitably expressed the artistic problems of their time. Aspects of performance and staging will also be discussed.

452 English Renaissance Drama and Its European Contexts (also Comparative Literature 652) Fall. 4 credits.

M 3:35-5:30. W. Cohen.

A study of Shakespeare's leading contemporaries in relation to sixteenth and seventeenth century drama in France, Spain, and Italy. The aim of the course is to define and assess the specificity of the Elizabethan and Jacobean stage by viewing it against the background of European Renaissance theatre as a whole. Considerable attention will be given to the connections among dramatic genre, theatrical institution, ideology, and social and political history, primarily from a Marxist point of view. Complementary or opposing perspectives are welcome. Readings from Marlowe, Jonson, Marston, and Webster; Conneille, Moliere, and Racine; Lope de Vega and Calderon; and others. All texts available in English.

495 Honors Research Tutorial Fall or spring. 1-4 credits. Prerequisites: senior standing and departmental acceptance as an honors candidate.

Hours to be announced. Staff.

Methods and modes of research for honors project.

496 Honors Thesis Project Fall or spring. 1-4 credits. Prerequisites: senior standing and departmental acceptance as an honors candidate.

Hours to be announced. Staff.

Preparation and presentation of honors thesis or practicum.

[633 Seminar in Theatre History] Fall. 4 credits.

T 2:30-4:30. Not offered 1982-83; next offered 1983-84.]

636 Seminar in Dramatic Criticism Fall. 4 credits.

T 2:30-5. S. Williams.

Subject: Ibsen and Chekhov.

637 Seminar in Dramatic Theory Spring. 4 credits.

T R 9:05-10:55.

Phenomenology and hermeneutics for the theatre. Key texts of hermeneutic and phenomenological critics will be discussed and applied to the drama and theatrical productions. Texts by Ditley, Gadamer, and Ingarden will be discussed and applied to a study of Sophocles, Racine, and Kleist.

638 Seminar in Theory of the Theatre Spring.

T 2:30-5. Staff.

Subject to be announced.

672 Tragedy: Philosophy and Theory (also English 672) Spring. 4 credits.

T. Murray.

Hours to be announced.

[699 Seminar in the Theories of Directing] Not offered 1982-83.]

700 Introduction to Research and Bibliography in Theatre Arts Fall. 1 credit. Enrollment restricted to students in 636.

T 2:30-5. S. Williams.

A study of methods and materials relevant to the solution of problems in theatre arts, including

introduction to standard research sources, problems of translation, and preparation of theses and publications.

880 Master's Thesis

990 Doctoral Thesis and Special Problems

Related Courses in Other Departments

The Greek Experience (Classics 211)

The Roman Experience (Classics 212)

Comedy (Comparative Literature 312)

Japanese Noh Theatre (Comparative Literature 400 and Asian Studies 400)

Shakespeare (English 227)

Introduction to Drama (English 272)

Shakespeare (English 327)

Seminar in Shakespeare (English 427)

Schiller (German Literature 354)

Russian Theatre and Drama (Russian 332)

The Age of Symbolism (Russian 498)

Ukrainian

See Modern Languages, Literatures, and Linguistics, p. 146.

Vietnamese

See Modern Languages, Literatures, and Linguistics, p. 146.

Special Programs and Interdisciplinary Studies

Africana Studies and Research Center

J. Turner, director; Y. ben-Jochannan, W. Cross (director of undergraduate studies, 310 Triphammer Road, 256-4625), R. Harris, C. Mbata, A. Nanji

The Africana Studies and Research Center has a unique and specialized program of study that offers an undergraduate degree through the College of Arts and Sciences and a graduate degree (Master of African and African-American Studies) through the University's Graduate School.

The purpose of the program is to prepare students for professional careers relevant to the learning and leadership of the African-American community. It envisions that the knowledge and methodology of various fields and disciplines will be brought to bear upon the history, present state, and dynamics of the black people and cultures in the Americas, Africa, and the Caribbean. The curriculum is designed to reflect a multidisciplinary approach to the experience of African peoples throughout the world. Africana Center courses are open to both majors and nonmajors.

The Africana Major

The undergraduate major offers interdisciplinary study of the fundamental dimensions of the Afro-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 Afro-American) 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 231, 290, 360, 431. Beyond the core courses, the student must take 8 credits of center courses numbered 200 or above and 15 credits numbered 300 or above. Within this selection the student must take at least one of the following AS&RC courses: 203, 204, 283, or 301. 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 Cross, 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.

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 B- cumulative average in all courses and a B+ cumulative average in the center's courses. Each student accepted into the honors program will have an honors faculty committee 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 one of the following distribution requirements:

Social Sciences: AS&RC 171, 172, 190, 231, 290, 301, 302, 344, 345, 346, 351, 352, 410, 420, 460, 484, 485, 495, 550.
History: AS&RC 203, 204, 231, 283, 344, 350, 360, 361, 370, 381, 405, 460, 475, 483, 490.
Humanities: AS&RC 219, 422, 431, 432, 465, 492.
Expressive Arts: AS&RC 137, 138, 285, 303, 465.
Freshman Seminars: AS&RC 137, 138, 171, 172, 203, 204, 231, 290.

Note: Students who are not AS&RC majors may petition to satisfy a second requirement with center courses if they are carrying a heavy program at the center.

Language Requirement

Swahili fulfills the College of Arts and Sciences language requirement. Successful completion of AS&RC 131, 132, 133, and 134 provides qualification in Swahili. Successful completion of AS&RC 202 gives proficiency in Swahili. Africana majors are not required to take Swahili, but the center recommends the study of Swahili to complete the language requirement.

131 Swahili Fall. 4 credits.

T W 10:10. A. Nanji.
Beginning Swahili; grammar, part 1.

132 Swahili Spring. 4 credits. Prerequisite: Swahili 131 or previous study of the language.

T W 12:20. A. Nanji.
Elementary reading and continuation of grammar.

133 Swahili Fall. 4 credits. Prerequisites: Swahili 131 and 132.

A. Nanji.
Advanced study in reading and composition.

134 Swahili Spring. 4 credits. Prerequisites: Swahili 131, 132, and 133 or permission of the instructor.

A. Nanji.
Advanced study in reading and composition.

137 Afro-American Writing and Expression Fall. 4 credits.

T R 10:10.
Designed to promote clear and effective communication skills, using black-oriented materials as models for writing assignments and oral discussions.

138 Applied Writing Methods on Afro-American Topics Spring. 3 credits.

Hours to be arranged.
A writing skills course that explores traditional and nontraditional research sources, using Afro-American experiences as the primary subject matter.

171 Infancy, Family, and the Community Fall. 4 credits.

T R 3:10. W. Cross.
Survey of key psychological dimensions of the black experience, covering such issues as (1) race and intelligence; (2) black identity; (3) black family structure; (4) black English; (5) black middle class; and (6) nature of black psychology.

172 Teaching and Learning in Black Schools Spring. 4 credits. Intended for freshmen and sophomores.

T R 3:10. W. Cross.
A course designed for freshmen and sophomores that will be devoted to the history and contemporary issues of black education, such as the struggle for black studies, the development of independent black grammar; and problems of public schools in black communities.

190 Introduction to Modern African Political Systems Fall. 4 credits.

M W 1:25-2:15.
This course directs attention to the salient characteristics of Africa's political systems and assesses the way the systematic characteristics impinge on development efforts. It is particularly concerned with the responses of the systems of the legacy of colonialism imposed constitutions, the efforts of post colonial constitutional engineering, the creation of integrative institutions in answer to the problem of multiethnic fragmentation, the place of traditionalism in the modern political context, the locus of power in the systems, and the level of institutionalizations reached, if any, to ensure stable continuity into the future.

202 Swahili Literature Fall. 4 credits. Prerequisite: Swahili 134. Offered on demand.

A. Nanji.

Students gain mastery over spoken Swahili and are introduced to the predominant Swahili literary forms.

203 History and Politics of Racism and Segregation Spring. 4 credits.

T R 12:20-1:25. C. Mbata.

The patterns of racism and segregation are dealt with in a historical context, using southern Africa and North America as case histories. Study is undertaken within a theoretical framework that broadly defines racism and segregation and their implications.

[219 Issues in Black Literature Fall. 4 credits. Not offered 1982-83.

An examination of literature written for black children, including an analysis of the literature as it pertains to black life from 1960 to the present. Students write a pamphlet containing their essays, fiction, and poetry, and compile a bibliography of literature for black children.]

231 Black Political Thought in the United States Fall. 3 credits.

M W F 12:20-1:10.

This is an introductory course that will review and analyze the major political formulations developed and espoused by black people in the struggle for liberation. Such themes as slave resistance, nationalism, Pan-Africanism, emigration, anti-imperialism, socialism, and the political thought of black women will be discussed. Black political thought will be viewed in its development as responses to real conditions of oppression and exploitation.

[283 Black Resistance: South Africa and North America Fall. 4 credits. Not offered 1982-83.

C. Mbata.

A study of black political movements in South Africa and North America and their responses to the situations of race relations that formed the contexts of their operations.]

[285 Black Drama Spring. 3 credits. Not offered 1982-83.

This course is intended to serve as an introduction to the history of black drama and to provide the means through which students can cultivate their interests in dramaturgical criticism and production techniques. Each student in the course will read a number of black plays, write a critical paper on black drama, and participate in the production of a play.]

290 The Sociology of the Black Experience Fall. 3 credits.

M W 3:10. J. Turner.

An introductory course to the sociology of the black experience and to the field of Afro-American studies. Required for all undergraduate students majoring at the Africana Center.

301 Seminar: Psychological Aspects of the Black Experience Spring. 4 credits. Prerequisite:

permission of the instructor.

W 10:10. W. Cross.

Existing research is used to raise specific questions about new cultural political awareness in the black community. The focus is on individual conversion experiences within the context of social movements. The transformations of political groups (for example, Black Panther Party) and outstanding activists and intellectuals (such as Malcolm X) are used as reference points for analytical discussion of theory.

[302 Social and Psychological Effects of Colonialization and Racism Spring. 4 credits.

Offered in alternate years; not offered 1982-83.

Staff.]

[303 Blacks in Communication Media and Film Workshop Spring. 3 credits. Not offered 1982-83.

The focus is on the general theory of communications, the function of media in an industrialized society, and the social, racial, and class values implied in the communication process. There

are group writing projects, a term paper, and the screening of significant American and Third World films.]

[344 Neocolonialism and Government in Africa (The Politics of Public Administration) Fall. 4 credits.

T R 1:25-2:15. Not offered 1982-83.

The course is designed to explain why Africa's public administrations in the postcolonial era have generally failed to move from the colonialist ethos to becoming primary instruments for initiating and guiding the processes of development. The reality of colonialism was bureaucratic centralism—the closest approximation to the ideal type of a pure administrative state specializing in law and order. Colonial administrations resembled armies in their paramilitary formation and ethos and were, indeed in a number of cases, the instruments of military men. Much attention focuses on the internal characteristics of bureaucratic organizations in Africa and of their relationship to their social and political environments.]

345 Afro-American Perspectives in Experimental Psychology (also Psychology 345) Spring. 3 or 4 credits. Prerequisite: an introductory course in psychology or AS&RC 171. Offered alternate years.

W. Collins.

346 African Socialism and Nation Building

Spring. 4 credits.

An exploration and critical analysis of the various theories of African socialism as propounded by theorists and practitioners. Those ideas, extending from Nyerere's Ujamaa (for example, traditional social and economic patterns of African society) to Nkrumah's Scientific Socialism (such as the desirability and practicality of the Marxian type of socialism in Africa) are compared.

350 The Black Woman: Social and Political History Spring. 3 credits.

T R 1:20-2:30.

This course will address the social organizations, political protests, and political ideologies written by or about black women in the United States, from slavery to the 1980s. Topics will include the special role of black women in slavery, the political-protest thought of black women writers in the nineteenth and twentieth centuries (e.g. Ida B. Wells, Mary Church Terrell, Ella Baker, Mary McLeod Bethune, Eleanor Holmes Norton, Angela Davis), the emergence of black feminism, and the various social political controversies surrounding the relationship between black women to both the Civil Rights and Black Power Movements.

351 Politics in the Afro-Caribbean World: An Introduction Fall or spring, according to demand. 4 credits.

A study of the social, political, economic, and psychological forces that have shaped Caribbean societies.

[352 Pan-Africanism and Contemporary Black Ideologies Spring. 4 credits. Not offered 1982-83.

A historical study of Pan-Africanism that reviews and analyzes the literature and activities of early black Pan-African theorists and movements.]

360 Ancient African Nations and Civilizations Fall. 3 credits.

M W F 1:25-3:20. C. Mbata.

An introduction to African history beginning with early civilizations in pre-European Africa.

361 Afro-American History (from African Background to the Twentieth Century) Fall. 3 credits.

M W F 10:10. R. Harris.

Designed to explore major themes of the black historical experience in America from African origin to the twentieth century. A major concern is the changing status of black people over time and their attempts to cope with bondage, racism, circumscription, and oppression.

370 Afro-American History: The Twentieth Century Spring. 3 credits.

M W F 12:20-1:10. R. Harris.

An exploration of major themes of the black historical experience in America during the twentieth century. The socioeconomic, political, and cultural condition of Afro-Americans is assessed, after their presence in this country for more than three hundred fifty years.

381 Contemporary African History Spring. 3 credits.

M W 12:20-1:25. C. Mbata.

A survey of the present problems on the African continent as they appear from 1500 to the present time. Important topics include the impact of the Atlantic slave trade, the European Scramble of 1884, various forms of African resistance to colonial occupation in 1914, and the prospects of protracted social unrest in Africa south of the Zambezi River.

382 Comparative Slave Trade of Africans in the Americas Fall. 3 credits.

T R 1:25-2:30.

The focus is on eighteenth- and nineteenth-century slave societies in Virginia and South Carolina in North America and the eighteenth-century slave societies in San Domingue or Haiti and to some extent in Jamaica. The slave society in Cuba during the latter part of the nineteenth century is studied.

[400 Political Economy of Ideology and Development in Africa Spring. 4 credits. Not offered 1982-83.

T R 11:15.

This course explores the processes of the historical underdevelopment of Africa, drawing upon the assumptions of the underdevelopment theory. It then takes up the problems of development by examining the different ideologies and strategies extant and by highlighting the interaction of political and economic forces. Case studies are drawn from Ghana, Kenya, and Tanzania.]

[405 Political History of the Age of Booker T. Washington and W. E. B. DuBois Spring. 4 credits. Not offered 1982-83.

A review of the intellectual and political history of the black United States experience from 1890 to the eve of World War II. Although the course concentrates on two of the outstanding black historical figures of the period, Booker T. Washington and W. E. B. DuBois, other personalities and leaders within Black social and political history will be examined—including Marcus Garvey, T. Thomas Fortune, A. Philip Randolph, Charles S. Johnson, William Monroe Trotter, and James Weldon Johnson. Major black issues, such as the intellectual debates between DuBois and Washington, and DuBois versus Garvey, will constitute a critical part of the discussion.]

410 Black Politics and the American Political System Fall. 4 credits.

T 2:30. J. Turner.

The course is designed to engage students in a survey and analysis of the theoretical and empirical basis of black politics in America. It is a socio-historical investigation and evaluation of the variety of practical political activities among black people in the United States.

420 Social Policy and the Black Community in the Urban Economy Spring. 4 credits. Offered alternate years.

J. Turner.

Examination of the social, political, and economic factors contributing to the development and perpetuation of the so-called ghetto, principally in urban areas. Particular emphasis will be placed on the current conditions in black communities.

[422 African Literature Spring. 4 credits. Not offered 1982-83.

The main focus is on the basic themes in the twentieth-century literature produced by Africans south of the Sahara.]

[425 Advanced Seminar in Black Theatre Fall. 4 credits. Not offered 1982-83. The course involves the study and production of the total black theatre.]

431 History of Afro-American Literature Fall. 4 credits.

An extensive examination of the impact that Afro-American literature has had on describing, explaining, and projecting the Afro-American experience from 1619 to the present.

432 Modern Afro-American Literature Spring. 4 credits.

A study of fiction by black writers, focusing on the political and sociological component that influenced the development and growth of black writing in relationship to literary themes and attitudes current in specific periods and movements from post-World War I to the present.

460 History of African Origins of Major Western Religions Fall or spring. 4 credits. Prerequisite: sophomore status or permission of instructor.

Y. ben-Jochannan.

The course is designed to develop an understanding of the basic origins of the philosophical, theological, and magical-religious teachings responsible for Judaism, Christianity, and Islam.

475 Black Leaders and Movements in Afro-American History Spring. 4 credits.

T R 3:35-4:25. R. Harris.

A comprehensive analysis of the personalities, ideas, and activities central to the struggle for Afro-American liberation, ranging from eighteenth-century figures to the present time. Rebellion, emigration, assimilation, nationalism, accommodation, protest, cultural pluralism, separation, integration, and revolution are some of the central issues.

[483 Themes in African History Fall. 4 credits. Not offered 1982-83.

A study of selected themes in African history, making use of work done in related disciplines. Until further notice, the selected topics will be Women in African History.]

[484 Politics, Conflict, and Social Change in South Africa Spring. 4 credits. Not offered 1982-1983.

M W 1:24-4:25.

The course examines the history of the African liberation movement from the post-World War II era to the present, focusing as much on the areas already liberated through "revolutionary violence" (Guinea, Mozambique, Angola, Zimbabwe) as on the remaining "stronghold" of domination (South Africa and Namibia).]

485 Racism, Social Structure, and Social Analysis Seminar Spring. 4 credits.

W 2-4:25. J. Turner.

An examination of the social structure of American society and the relationship of racial and class categories to social stratification. An analysis of power structures and the social salience of socioeconomic connections of government decision makers and the corporate structure is developed.

490 Advanced Reading and Research Seminar in Black History Spring. 4 credits.

M W 1:25. C. Mbata.

Designed to help students acquaint themselves with the available sources of information and materials in black history, as well as make the maximum use of their own inclinations and interests in unearthing the material and creating a body of comprehensible conclusions and generalizations out of it. Note: May be taken to fulfill requirements for a major in African or Afro-American studies.

495 Political Economy of Black America Spring. 4 credits.

M W 10:30-12:05.

An examination of the role that black labor has played in the historical development of United States monopoly, capitalism, and imperialism. Emphasis is on the theory and method of political economy and a concrete analysis of the exploitation of black people as slave labor, agricultural labor, and proletarian labor.

498-99 Independent Study 498, fall; 499, spring.

Hours to be arranged. 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.

[500 Political Theory, Planning, and Development in Africa Spring. 4 credits. Not offered 1982-83.

T R 11:15-12:45.

The course explores the processes of underdevelopment of Africa from the epoch of slavery through colonial and neocolonial phases of domination, drawing on the assumptions of "underdevelopment" theory à la G. Frank, Walter Rodney, and others. It then takes up the differential content and emphasis on socialistic and capitalistic strategies by highlighting the interaction of political and economic forces. Case studies are drawn from Ghana, Kenya, and Tanzania.]

505 Workshop in Teaching About Africa 4 credits. Prerequisites: AS&RC 203 and 204 or AS&RC 360 and 361 or permission of the instructor.

Offered alternate years.

C. Mbata.

510 Historiography and Sources: The Development of Afro-American History Fall. 4 credits. Prerequisite: upperclass or graduate standing or permission of the instructor.

T 9:30-12:05. R. Harris.

Through a critical examination of the approach, methodology, and philosophy of major writers in this field, such as James W. C. Pennington, George Washington Williams, W. E. B. DuBois, Carter G. Woodson, John Hope Franklin, Benjamin Quarles, Lerone Bennett, Jr., and Vincent Harding, the evolution of Afro-American history is traced from its origin to the present. The nature and purpose of Afro-American history, especially the role of the black historian in the context of a racist and oppressive society, is analyzed. Attention is given to sources for studying black history, and each participant fashions a conceptual framework for application to the materials and evidence of the black experience in America.

[515 Comparative Political History of the African Diaspora 4 credits. Prerequisites: upperclass or graduate standing or two of the following courses:

AS&RC 203, 204, 283, 360, 361, 475, 484, 490. Offered alternate years. Not offered 1982-83.]

[520 Historical Method, Sources, and Interpretation Fall. 4 credits. Prerequisite:

upperclass or graduate standing or two of the following courses: AS&RC 203, 204, 361, 475, 484, 490. Offered alternate years. Not offered 1982-83.

C. Mbata.]

[550 Transnational Corporations in Africa and Other Developing Countries Spring. 4 credits.

Prerequisites: upperclass or graduate standing or permission of the instructor. Not offered 1982-83.

Examines the role of transnational enterprises as an economic and political factor in the Third World, their relations with the host government, and their interaction with both the private and public sectors of the economy of the host country. Special emphasis on Africa and Latin America.]

[551 Political History of Social Development in the Caribbean Offered according to demand. 4 credits. Prerequisite: upperclass or graduate standing or permission of the instructor. Not offered 1982-83.]

571 Seminar: Psychological Issues in the Black Community Fall. 4 credits. Prerequisite: permission of the instructor

R 9:05-12:05. W. Cross.

A critical examination of existing theory and research on identity development and identity transformation in Afro-American life, including black identity metamorphosis that occurs within the context of social movements. Particular attention is given to (1) the interface between social systems and identity development and maintenance; (2) dual consciousness; (3) functions of identity in daily life; (4) conversion and deconversion within the contexts of the contemporary black-movement; (5) the psychohistorical implications of unidimensional theories of black self-concept; (6) the relationships among identity, behavior, and ideology.

698-99 Thesis 698, fall; 699, spring. Limited to Africana Studies and Research Center graduate students.

Africana Center faculty.

Biology and Society

Prof. Davydd J. Greenwood, chairperson, 632 Clark Hall, 256-3810

Biology and Society is a multidisciplinary program for students with special interests in such problems as genetic engineering, environmental quality, food and population, the right to medical care, and the relation between biology, society, and ethics and public policy, as well as for students who plan postgraduate study in management, health, medicine, law, or other related fields.

The Major

Because the biology and society major is multidisciplinary, students must attain a basic understanding of each of the several disciplines it comprises, including introductory courses in the fields of biochemistry, chemistry, mathematics, genetics, ecology, ethics, and history. In addition, majors are required to take a two-semester core sequence in biology and society, a set of electives, and a special senior seminar. Programs incorporating these required courses are designed in consultation with faculty advisers to accommodate each student's individual goals and interests. For further information on the major, including courses of related interest, specific course requirements, and application procedures, contact Professor Davydd J. Greenwood, Program on Science, Technology, and Society, 632 Clark Hall.

Honors (for students in the College of Arts and Sciences only)

Basic requirements. The basic requirements for a Bachelor of Arts with honors for students majoring in biology and society shall be: 1) a seminar (4 credits) taken during the first semester of the senior year; 2) a tutorial (4 credits) taken during the second semester of the senior year; and 3) a satisfactory honors thesis, written in conjunction with the seminar and the tutorial, and satisfactorily defended. Students wishing to do honors work must make formal application at the time of registering for their first-semester honors seminar. The honors seminar may be one of the regular biology and society senior seminars specially adapted for the development of an honors thesis.

Candidates for the degree of Bachelor of Arts with honors in biology and society must 1) submit an application to the chairperson of the major, explaining how the honors thesis is expected to fit into the candidate's undergraduate program, and 2) have an average of B in all subjects and B+ in biology and society courses.

The honors thesis. Work on the honors thesis shall begin in the honors seminar with the preparation of an outline and bibliography and shall be completed in the honors tutorial. An honors thesis outline and

bibliography shall be submitted prior to the beginning of the final examination period of the first semester; a polished first draft at least five weeks prior to the final examination period of the second semester.

The honors thesis shall be written under the direction of two honors thesis faculty advisers. Candidates for honors shall first find a member of the Biology and Society Major Committee willing to serve as an adviser, and the student and this adviser shall then find a second adviser from among the faculty at large. The purpose of the second adviser is to guarantee expertise in the subject matter covered by the thesis.

When a thesis has been completed in a form generally satisfactory for purposes of evaluation, the candidate shall meet with the thesis advisers and formally defend it.

Evaluation and recommendation. Following the formal defense of the thesis, the thesis advisers shall submit to the chairman of the Major Committee a recommendation regarding the level of honors to be awarded. This recommendation shall include: 1) an evaluation of the thesis; 2) an evaluation of the student's academic record in the biology and society major; and 3) a justification for the level of honors proposed.

This recommendation shall be circulated to the members of the Biology and Society Major Committee for information and ratification. Unless there is serious disagreement, the recommendation of the advisers shall stand. If there is serious disagreement, the chairperson of the committee shall make the decision after consultation with the interested parties.

Courses

287 History of Biology (also History 287 and Biological Sciences 201) Fall. 3 credits.

Prerequisite: one year of introductory biology. S-U grades optional.

Lecls, T R 10:10-11:30. W. Provine.
An examination of the history of biology, emphasizing the interaction of biology and culture. Covers the period from Charles Darwin to the present.

[288 History of Biology (also History 288 and Biological Sciences 202) Spring. 3 credits

Prerequisite: one year of introductory biology. S-U grades optional. Not offered 1982-83.
W. Provine.]

301 Biology and Society I: The Biocultural Perspective (also Anthropology 301 and Biology and Society 301) Fall. 3 or 4 credits (4 credits with discussion section). Prerequisite: one year of introductory biology. S-U grades optional. This is part of the two-semester core sequence for the biology and society major and is also available to other students who have fulfilled the necessary prerequisite.

Lecls, M W F 9:05. D. Greenwood, S. Risch.
Human biology, behavior, and institutions are viewed as the ongoing products of the interactions between human biological evolution and cultural change. These interactions are documented with reference to the evolution of the capacity for culture; human groups and institutions; language, meaning, and cultural realities; and major models of human nature and human institutions.

302 Alternative Food Production Systems (also Biological Sciences 302) Spring. 3 or 4 credits (4 credits by arrangement with instructor). Prerequisite: Anthropology/Biology and Society/Biological Sciences 301 or permission of instructor. S-U grades optional. This is one of two courses fulfilling the second-semester core sequence requirement for the biology and society major and is also available to other students who have taken 301.

Lecls and discs, T R 10:10-11:30. S. Risch.
Substantiation is presented for the claim that significant changes in our food production system are

needed. The inadequacies in our current system are examined from a multidisciplinary perspective, with consideration of the relevant scientific, social, public policy, and ethical issues. Current controversies on such issues as energy use in agriculture, crop breeding programs, soil conservation, chemicals in agriculture, and international food policy are considered. Emphasis is placed on developing alternatives to current practices. Lectures covering assigned readings are followed by discussion sessions.

310 Issues in Biology and Society: Chemicals, Enzymes, and Maladies Fall. 3 or 4 credits (4 credits by arrangement with instructor). Prerequisite: Anthropology/Biology and Society/Biological Sciences 301 and a biochemistry course or permission of instructor. This is one of two courses fulfilling the second-semester core course requirement for the biology and society major and is also available to other students who have taken Biology and Society 301.

Lecls and discs, T R 10:10-11:30. J. Fessenden-Raden.
The biochemical effects of toxic chemicals as potential health hazards will be examined from a multidisciplinary perspective. Scientific, social, public policy, and ethical issues will be critically analyzed. Topics include occupational and environmental chemical hazards within a biochemical examination of the role of specific chemicals such as carcinogens, allergens, mutagens or teratogens. Chemical diseases will also be discussed. Lectures with assigned readings will be followed by a discussion period.

311 Issues in Biology and Society: Professional Ethics Spring. 4 credits. Limited to 20 students.

R 2:30-4:30. S. Brown, Jr.
An examination of the role of professions in our society and a comparison of the setting of professional standards and problems of professional ethics in medicine, engineering, law and other professions.

375 Independent Study Fall or spring. Credit to be arranged.

Hours to be arranged. Staff.

Biology and Society Senior Seminars (Biology and Society 400-405)

400 Seminar in the History of Biology (also History 447) Fall. 4 credits. No prerequisites.

T 2:30-4:25 W. Provine.
Mechanism, design, and ethics in relation to modern biology.

401 Human Fertility in Developing Nations (also Sociology 434) Spring. 4 credits. Prerequisite: Sociology 230 or permission of instructor.

W 3:30-6. J. M. Stycos.
A review of the major literature dealing with the social causation of variation in human fertility. Emphasis will be on international comparisons and on the methodology of field research.

402 The Ecological Consequences of Nuclear War (also Peace Studies 402) Fall. 4 credits.

Prerequisite: Biological Sciences 260 or 360, or Government 312 or 384 or permission of the instructor.
Hours to be arranged. M. Harwell.
This course will examine the most serious environmental problem that exists today: the total consequences for humans of nuclear war. This course will concentrate on the long-term effects on humans that are mediated through ecosystems (e.g., ozone depletion, climatic changes, pest outbreaks, shortages in subsistence necessities, genetic alterations, ecosystems alterations).

403 Seminar in the History of Biology (also History 448) Spring. 4 credits. Prerequisite: knowledge of elementary genetics.

T 2:30-4:25. W. Provine.

An examination of geneticists' attitudes toward race differences and race crossing in the twentieth century, emphasizing the period 1950 to the present.

404 Energy and Ecological Systems Fall. 3 credits. Prerequisite: permission of instructor.

T 2:30-4:25. C. Hall.
This seminar examines energy utilization in ecological systems, including human-dominated systems. An attempt to understand them and the organisms within as a series of energy investments that contribute, more or less successfully, to the well-being and survival of these systems is the focal point. Each week Professor Hall and a student will lead a discussion and critique of the week's readings.

405 Special Problems in the Anthropology of Sex and Gender (also Anthropology 422 and Women's Studies 422) Spring. 4 credits.

Prerequisite: permission of instructor. Recommended: Women's Studies 321 (Anthropology 321).
R 2:30-4:25. K. March.

Each year this seminar focuses upon a particular area of concern within the anthropology of sex and gender, building upon the work done in Women's Studies and Anthropology 321. The topic for 1983 is gender symbolism.

For related multidisciplinary courses, see Program on Science, Technology, and Society p. 8.

China-Japan Program

T. J. Pempel, director; S. Cochran, associate director; R. Barker, M. Barnett, M. G. Bernal, K. Biggerstaff, R. Birnbaum, N. C. Bodman, K. Brazell, A. Cook, B. deBary, A. G. Grapard, E. M. Gunn, E. H. Jorden, V. Koschmann, L. C. Lee, D. McCann, J. McCoy, T. L. Mei, V. Nee, J. Nickum, C. A. Peterson, C. Ross, P. S. Sangren, H. Shadick, R. J. Smith, M. W. Young

The China-Japan Program includes faculty members who have a commitment to teaching and research on China and Japan. The program is interdisciplinary and is organized to encourage and assist students in the study of the two great civilizations of East Asia. In addition to offering a substantial number of courses in the languages of China and Japan, program faculty members cover most of the major disciplines by means of courses given in several departments. The program is especially rich in courses that deal with the history, literature, society, culture, and art of East Asia. Undergraduates who wish to concentrate their studies on China or Japan may do so by declaring a major in the Department of Asian Studies and selecting an adviser from the faculty members listed above. Students interested in Chinese and Japanese studies should consult the *Announcement of the Graduate School*. For further information, contact the director or any staff member in the China-Japan Program Office, 140 Uris Hall.

College Scholar Program

Dean Lynne Abel, director, 134 Goldwin Smith Hall, 256-3386

The College Scholar program is described in the introductory section, pp. 92-93.

397 Independent Study Fall or spring. 1-4 credits. Prerequisite: permission of program office.

499 Honors Research Fall or spring. 4-8 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

This full-time, noncredit, nondegree program is designed to meet the requirements of foreign students who need to acquire proficiency in English in order to pursue university-level studies in the United States, as well as for visitors, businessmen, and others seeking competence in the language.

The intensive nature of the program leads to a command of the language in all its aspects—listening, speaking, reading, and writing—in the shortest possible time.

Integrated courses are offered both fall and spring semesters at three levels: beginning (Test of English as a Foreign Language [TOEFL] score below 370), intermediate (TOEFL score below 450), and advanced.

Students who have gained full admission to, or who already are registered in, degree-granting programs at Cornell should consult the section Modern Languages, Literatures, and Linguistics for information regarding courses in English as a second language.

The Intensive English Program is administered by the Department of Modern Languages and Linguistics, Cornell University, Morrill Hall, Ithaca, New York 14853, U.S.A. Application materials and information are available directly from the program or by calling 607/256-4863.

Independent Major Program

Dean Lynne Abel, director, 134 Goldwin Smith Hall, 256-3386

The Independent Major Program is described in the introductory section, p. 92.

351 Independent Study Fall or spring, 1-4 credits. Prerequisite: permission of the program office.

499 Honors Research Fall or spring, 4-8 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.

International Relations

One of the University's strongest, most diverse fields is international relations. Cornell offers dozens of courses in many departments and several colleges that provide a strong education in the field, including courses in government, economics, history, anthropology, rural sociology, nutrition, modern languages and literatures, international comparative labor relations, and many others too numerous to list and keep current.

The Concentration

The purpose of a concentration is to provide a structure for students who have a general interest in the field or who plan to specialize in careers in international law, economics, agriculture, foreign trade, international banking, government service, international organizations, or another cultural or scholarly activity. Some students will major in one of the traditional departments: history, government, economics, foreign literature, and so on. Others will design an independent major. Still others will major in a different discipline, perhaps altogether unrelated, but would like to have a basic understanding of international problems.

For students in any of these categories, the requirements for a concentration in international relations are the following six courses or options:

- 1) Government 181, Introduction to International Relations
- 2) One appropriate 300-level government course, either in international relations or in the foreign policy of a particular nation
- *3) Economics 361, International Trade Theory
- *4) Economics 362, International Monetary Theory
- 5) History 314, History of American Foreign Policy II
- 6) Any history course dealing with a modern nation

*Numbers 3 and 4 can be replaced by choosing two courses from the following:

- a) Economics 371, Public Policy and Economic Development
- b) Economics 372, Applied Economic Development
- c) Economics 373, International Specialization and Economic Development
- d) Economics 374, National and International Food Economics

The typical choices among the sequences listed above would be to study European history and government with Economics 361-362 or Third World history and government with Economics 371-374. Reasonable substitutions can also be arranged.

Students are also urged as strongly as possible to acquire full proficiency in, not merely a passing acquaintance with, a modern foreign language. Studying the literature as well as the language of a culture is important. Since, however, students will begin the concentration with varying backgrounds in language and since proficiency is the minimal expectation, no required number of courses is specified.

Students electing the international relations concentration will be assigned an adviser in that field, if appropriate, in addition to their departmental adviser. They should see Prof. Richard Rosecrance, Center for International Studies, 170 Uris Hall.

Center for International Studies

See Interdisciplinary Centers and Programs, p. 8.

Program of Jewish Studies

D. I. Owen, director (Near Eastern and ancient Jewish history and archaeology); M. F. Collins, (Bible, Dead Sea Scrolls, apocryphal and rabbinic literature); W. J. Dannhauser (Jews and Germans, contemporary Jewish thought, Gershom Scholem), S. L. Gilman (Yiddish literature, German-Jewish history and literature), A. G. Korman (Holocaust studies, Jewish labor movements), C. Kronfeld (Hebrew language, Hebrew and Yiddish literature), A. S. Lieberman (physical geography and natural history of Israel), D. S. Powers, (History of Jews in Islamic lands), E. Rosenberg (Jews in modern European and Anglo-American literature), M. A. Zober (community development and social policies in Israel)

The Program of Jewish Studies is included in the framework of the Department of Near Eastern Studies. 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 Hebrew language and literature have been considerably expanded, and courses in ancient, medieval, and modern Jewish history have been added to the program.

Although further expansion of the program is anticipated, it presently enables students to obtain basic instruction and specialization in the fields of Semitic languages; the Hebrew Bible; the Apocryphal and Tannaitic literatures; medieval Hebrew literature; modern Jewish thought; modern Hebrew literature; ancient, medieval, and modern Jewish history; and Yiddish language and literature. In some of these fields students may take courses both on graduate and undergraduate levels. Faculty in other departments provide additional breadth to the program by offering courses in related areas of study.

Courses offered 1982-83:

Modern Hebrew Literature in Translation: Modern Hebrew Poetry (Near Eastern Studies 207)

Modern Hebrew Literature in Translation: The Modern Hebrew Short Story (Near Eastern Studies 208)

Readings in Classical Hebrew Literature: The Art of Biblical Narrative (Near Eastern Studies 221-222)

The History and Archaeology of Ancient Israel to 450 B.C.E. (Near Eastern Studies 243)

Undergraduate Seminar in Biblical Literature: Prophecy in Ancient Israel (Near Eastern Studies 322)

Jews under Islam (Near Eastern Studies 355)

Jewish Workers in Europe and America, 1789-1948 (Industrial and Labor Relations 381)

Metaphor, Modernism, and Cultural Context: The Use of Metaphor in Modernist Hebrew, Yiddish, English, and American Poetry (Near Eastern Studies 405 and Comparative Literature 405)

Courses that are not offered 1982-83:

Freshman Seminar in Biblical Literature: Heroes and Heroines of the Bible (Near Eastern Studies 125)

Jews of the Ancient and Muslim Near East: 450 B.C.E.-1204 C.E. (Near Eastern Studies 244)

The Emergence of the Modern Jew: 476-1948 (Near Eastern Studies 245)

Tradition and the Literary Imagination (Near Eastern Studies 291)

Seminar in Modern Hebrew Literature: The Short Story (Near Eastern Studies 303)

Seminar in Modern Hebrew Literature: The Novel (Near Eastern Studies 304)

Folklore in the Ancient Near East (Near Eastern Studies 336)

Evolution of Jewish Law (Near Eastern Studies 341)

The Jewish Community throughout History (Near Eastern Studies 343)

Age of the Patriarchs (Near Eastern Studies 344)

Judaism and Christianity in Conflict (Near Eastern Studies 347)

The History and Culture of Ancient Mesopotamia (Near Eastern Studies 363)

History of the Ancient Near East in Biblical Times (Near Eastern Studies 365)

Tolerance and Intolerance: The Image of the Jew in Western Civilization (Comparative Literature 320)

Literature of the Holocaust (Comparative Literature 323)

Yiddish Literature in Translation (German Literature 350)

The Shtetl in Modern Yiddish Fiction in English Translation (German Literature 375 and Near Eastern Studies 375)

Topics in Yiddish Literature (German Literature 377 and Near Eastern Studies 377)

The Jewish Problem as Political Problem (Government 371)

Latin American Studies

T. H. Holloway, director; S. Barraclough, T. Davis, B. Edmonston, D. Freebairn, P. Garrett, R. Goldsen, W. Goldsmith, C. Greenhouse, J. Haas, D. Hazen, J. Henderson, B. J. Isbell, J. Kahl, E. Kenworthy, T. Lynch, R. McDowell, O. Mitchell, C. Morris, T. Poleman, B. Rosen, D. Sanjur, E. M. Santí, D. Solá, J. M. Stycos, M. Suárez, H. D. Thurston, J. Tittler, A. Van Wambeke, W. Whyte, L. Williams, F. Young

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. Undergraduate students may arrange a Latin American concentration or an independent major in Latin American studies, and graduate students may pursue a minor in Latin American studies while majoring in the graduate field of their choice. The College of Arts and Sciences offers Latin American studies courses in anthropology, economics, government, history, and sociology. In addition, there is a varied language, literature, and linguistics curriculum in Spanish, Portuguese, and Quechua. The student may also pursue Latin American studies in the College of Agriculture and Life Sciences; the College of Architecture, Art, and Planning; the College of Human Ecology; and the School of Industrial and Labor Relations.

For further information contact the program office, 190 Uris Hall.

Law and Society

C. Greenhouse (anthropology), director; J. Bennett (philosophy), C. Carmichael (comparative literature), G. Hay (economics), C. Holmes (history), J. Jacobs (sociology), J. Rabkin (government), D. B. Lyons (philosophy), M. B. Norton (history), D. Powers (Near Eastern studies), D. T. Regan (psychology)

The Law and Society Program is 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, and sociology. Students who wish to graduate with a concentration in law and society should consult one of the advisers listed above to develop a coherent program of study, including at least four courses from the law and society list of courses.

Anthropology 328 Law and Culture

Anthropology 329 Politics and Culture

Classics 340 Ancient Greek Constitutions

Economics 354 Economics of Regulations

Government 313 The Nature, Functions, and Limits of Law

Government 328 Constitutional Politics: The United States Supreme Court

Government 353 The Feminist Movement and Public Policy

History 275 Crime and Punishment: From the Puritans to Mickey Spillane

History 359 The Early Development of Anglo-American Common Law

History 430 Law and Authority in America: Freedom, Restraint, and Judgment

Philosophy 342 Law, Society, and Morality

Philosophy 441 Contemporary Ethical Theory

Philosophy 444 (also Law 720) Contemporary Legal Theory

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, contact the director of the Center for Applied Mathematics, 275 Olin Hall.

There is no special undergraduate degree program in applied mathematics. Undergraduate students interested in an application-oriented program in mathematics may select an appropriate program in either the Department of Mathematics, the Department of Computer Science, or some department of the College of Engineering.

Medieval Studies

A. B. Groos, director; B. B. Adams, F. M. Ahl, V. T. Bjarnar, R. G. Calkins, A. M. Colby-Hall, R. T. Farrell, J. C. Harris, T. D. Hill, J. H. Jasanoff, J. J. John, R. E. Kaske, N. Kretzmann, G. Mazzotta, G. M. Messing, P. D. Molan, C. Moron-Arroyo, J. M. Najemy, D. S. Powers, D. M. Randel, B. Tierney, F. van Coetsem

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, and medieval Irish and Welsh; Old Provençal and medieval French; medieval Spanish and Italian; Old Saxon, Old High German, Middle High German, Gothic, Old Norse (Old Icelandic), and Old Russian; comparative literature; medieval art and architecture; medieval history; Latin paleography; medieval philosophy; musicology; comparative Slavic linguistics, comparative Romance linguistics, and comparative Germanic linguistics.

Undergraduates who wish to undertake an independent major or a concentration in medieval studies should consult the director of the program, Professor Groos, 180 Goldwin Smith Hall.

Information for prospective graduate students is contained in the *Announcement of the Graduate School* and in a brochure on medieval studies, which can be obtained from the director.

101 The Literary Adventure of the Middle Ages

Fall and spring. 3 credits.

Hours to be arranged. Staff.

The legendary figures of medieval literature and the fantastic worlds in which they realize their destinies have entranced audiences throughout the centuries. Readings in English translation will explore works of the heroic and courtly ages, investigating such themes as the nature of the epic hero and his society (*Beowulf*, Icelandic sagas, the *Nibelungenlied*), the development of the courtly hero and lover (Arthurian romances of Chretien de Troyes or the *Mabinogion*), and the sophisticated treatment of the human comedy in *Sir Gawain and the Green Knight* or Chaucer's *Canterbury Tales*. A "medieval" work by a modern author (J. R. R. Tolkien, C. S. Lewis, or John Gardner) will also be included.

102 King Arthur and His Knights

Fall and spring. 3 credits.

Hours to be arranged. Staff.

King Arthur and the knights of the round table inspired the best-selling literature of medieval Europe and have remained a popular subject down to our own times. This course explores the various treatments of the Arthurian legend in medieval literature and at least one modern work (usually Mark Twain's *Connecticut Yankee* or a romance of T. H. White). Medieval readings in English translation are chosen from works such as the *Lais* of Marie de France; romances of Chretien de Troyes; the quest for the Holy Grail (Wolfram's *Parzival*); a version of the legend of Tristan and Isolde; *Sir Gawain and the Green Knight*; Chaucer's *Canterbury Tales*; and Malory's *Morte d'Arthur*. Discussions will investigate fundamental human problems raised by these stories: the relation of the individual to society, the development of the hero, the nature of love, and the dilemma of religious ideals in a secular world.

103 Drama and Music from the Middle Ages through the Renaissance

Fall and spring. 3 credits.

Hours to be arranged. Staff.

European drama developed as part of the sung liturgy of the church in the early Middle Ages. Drama and music gradually separated but later became reunited in Renaissance experiments that culminated in opera. Short reading and listening assignments will explore liturgical plays on Biblical subjects; secular dramas ranging from satirical farce to tales of daring-don't (*Robin and Marian*); cycle plays and morality plays (*Everyman*); a Renaissance madrigal cycle, and the music dramas of Monteverdi (*The Return of Ulysses*, *The Coronation of Poppea*). Discussion will focus on dramatic dialogue, characterization, problems of theme or structure, and ways that music serves dramatic purposes. Knowledge of music not required.

Related Courses

Courses in various aspects of medieval studies are offered each year in numerous cooperating departments, including Classics, Comparative Literature, English, History, History of Art, Modern Languages and Literatures (including German Literature, Romance Studies, and Russian Literature), Music, Near Eastern Studies, Philosophy, and the Society for the Humanities. An up-to-date listing of the courses offered in each term will be made available at the office of the Department of German Literature (185 Goldwin Smith Hall) as soon as the *Course and Time Roster* is published. For further information about the courses offered or about the program for independent majors in medieval studies, students should contact the program director, Professor A. Groos, 180 Goldwin Smith Hall.

Religious Studies

N. Kretzmann, chairman; C. M. Arroyo, R. Baer, J. Bishop, J. Boon, R. Calkins, C. Carmichael, K. Clinton, M. Colacurcio, M. Collins, A. Grapard, J. John, T. Kirsch, S. O'Connor, D. Owen, D. Powers, D. Randel, C. Strout, B. Tierney, A. Wood

Religious studies is an interdisciplinary program reflecting a wide variety of academic interests and disciplines. The intention of the program is to provide a formal structure for the study of the religions of mankind at the undergraduate level. A student may fulfill the requirement for a concentration in religious studies by completing a minimum of four courses that have been approved by an adviser in the area of concentration. The program is administered by a committee. The chairman is Professor Kretzmann, 320 Goldwin Smith Hall.

Courses in religious studies offered in 1982-83 include the following:

Natural Resources 407 Religion, Ethics and the Environment

Spring. 3 credits.

R. Baer.

Comparative Literature 429 Readings in the New Testament

Fall. 4 credits.

J. Bishop.

Comparative Literature 326 Christianity and Judaism

Spring. 4 credits.

C. Carmichael.

Near Eastern Studies 322 Undergraduate Seminar in Biblical Literature

Spring. 4 credits.

M. Collins.

Asian Studies 250 Dimensions of Religious Experience

Fall. 3 credits.

A. Grapard.

Asian Studies 351 Early Buddhism

Fall. 4 credits.

A. Grapard.

Philosophy 263 Reason and Religion Fall. 4 credits.
N. Kretzmann.

Near Eastern Studies 243 History and Archaeology of Ancient Israel Spring. 4 credits.
D. Owen.

Near Eastern Studies 355 Jews under Islam Fall. 4 credits.
D. Powers.

Near Eastern Studies 258 Islamic History Spring. 4 credits.
D. Powers.

History 368 Francis of Assisi and the Franciscans Fall. 4 credits.
B. Tierney.

Philosophy 213 Existentialism Spring. 4 credits.
A. Wood.

Russian and Soviet Studies Major

W. M. Pintner, chairman; A. Senkevitch (architectural history); M. G. Clark, W. Galenson, G. J. Staller, J. Sveinar, J. Vasek (economics); M. Rush, (government); W. M. Pintner (history); W. W. Austin (music); U. Bronfenbrenner (psychology); P. Carden, C. Emerson, G. Gibian, S. Senderovich, A. Zholkovsky (Russian Literature); L. H. Babby, E. W. Browne III, R. L. Leed, (Slavic linguistics)

The major in Russian and Soviet studies has the following requirements:

- 1) Qualification in Russian.
- 2) At least one course relating to Russia, at the 200 level or above, in each of the following departments: government, economics, history, and Russian literature. (A course in another department may be substituted for one of the above with the consent of the major adviser.)
- 3) At least three additional courses, at the 300 level or above, in one of the following departments: government, history, economics, or Russian literature. These courses shall be selected in consultation with the student's adviser and shall be approved as appropriate for a major in Russian and Soviet studies.

Each student majoring in Russian and Soviet studies may choose a major adviser from any department in which the student's area of interest is represented.

Social Relations Major

R. M. Williams, Jr., director of undergraduate studies, 342 Uris Hall, 256-4266

The major in social relations is offered jointly by the Department of Anthropology and the Department of Sociology. It provides the student with basic competence in cultural anthropology, social psychology, and sociology, and gives particular emphasis to the common methods of research in these disciplines. The student is expected to obtain a grasp of the common interests and unique insights of the three disciplines, and in the senior Social Relations Seminar is expected to integrate aspects of their theory and data.

Students seeking admission to the program should apply to the Social Relations Committee, 323 Uris Hall. Candidates should have completed the following prerequisites: (a) either a course in sociology or Anthropology 201; (b) either Psychology 101 or 128 or Sociology 280; and (c) either Sociology 325 or Industrial and Labor Relations 210 or an equivalent course.

The Major

The major calls for a minimum of 36 credits of course work as follows:

- 1) three pairs or other combinations of related courses at the 300 level or above, to be selected in consultation with the major adviser (these six

courses must include two courses from each of the following disciplines: anthropology, social psychology, sociology);

- 2) at least one course in methods, to be selected from the following: anthropological methods, techniques of experimentation (psychology), methods in sociology, advanced psychological statistics, philosophy of science or of social science, or advanced statistics (such as Industrial and Labor Relations 311);
- 3) at least one course in theory related to social relations; and
- 4) the senior seminar in social relations (Sociology 497 or Anthropology 495).

A list of the courses that may be used to satisfy the requirements for a major in social relations is available from any of the major advisers.

Society for the Humanities

(A. D. White Center for the Humanities)
Norman Kretzmann, acting director, fall 1982;
Eric A. Blackall, director, spring 1983. Fellows for 1982-83: Barbara J. Bono (University of Michigan), Susan Buck-Morss (Cornell University), David Lieberman (St. Catharine's College, Cambridge), Mary Lydon (University of Wisconsin), John Najemy (Cornell University), Barbara J. Reeves (Harvard University)

The Society awards annual fellowships for research in the humanities in three categories: senior fellowships, faculty fellowships, and junior postdoctoral fellowships. The Fellows offer, in line with their research, informal seminars intended to be exploratory or interdisciplinary. Unlike other courses, the seminars offered by the Society begin the second week of each semester. These seminars are open to graduate students and suitably qualified undergraduates. Students wishing to attend should telephone the Society (256-4725) early in the first week of the term to arrange a short interview with the Fellow offering the course. There are no examinations, and it is at the discretion of the Fellow whether to require only oral reports or, in addition, a research paper. Students wishing credit for the course should formally register in their own college. Persons other than those officially enrolled may attend as visitors with permission of the Fellow.

All seminars are held in the A. D. White Center for the Humanities, 27 East Avenue.

Frederick G. Marcham Scholar Program. Each year the Frederick G. Marcham Scholar Program supports a special seminar program. For information contact Anne-Marie Garcia, Society for the Humanities (256-4086).

101 Freshman Seminar. Science as Literature: Science as Metier Fall and spring. 3 credits.

T R 10:10-11:25. J. Lumley.
Robert Ornstein claims that science turns the impossible into the boring. Einstein contends that science, in its purest form, "uncovers the grandeur of reason incarnate in existence." In readings ranging from Darwin to Einstein to Asimov, we shall try to discover how a discipline can be so variously defined and described.

102 Freshman Seminar. Science as Literature: The Impact of Science on Self-Image Spring. 3 credits.

M W F 9:05. J. Lumley.
Man's rational perception of his place in nature frequently clashes with his emotional need to elevate himself above nature. In the last three hundred fifty years, science has had the uncomfortable habit of dethroning him as master of the universe. In this course, with readings from Galileo, Darwin, Freud, and others, we shall follow man's journey from a position of dominance in a geocentric, divinely ordered universe to that of a genetically programmed organism in a decaying biosystem. We shall examine how well, or how completely, he has accommodated his dreams to the new worlds born of science.

381-382 War as Myth and History in Postwar Japan (The Frederick G. Marcham Seminar) 381, fall; 382 spring. 4 credits per term.

Fall: T R 1:25-2:15. Spring: irregular class meetings; students will pursue independent work in consultation with the instructors, and the class will meet for special events and presentations by class members. B. deBary, J. V. Koschmann.

How is the "war story" told in postwar Japan? The course will examine persisting manifestations of the war memory in contemporary Japanese cultural life, with emphasis on ways in which the story of World War II has been retold, reinterpreted, and given new symbolic and factual significance in light of changing historical circumstances. Class discussion will focus on the interpretation of texts, ranging from political thought and history to fiction, film, and poetry.

413-414 "The Heart of My Mystery": The Alliance of Sexuality and Power in the Principal Plays of William Shakespeare. 413, fall; 414, spring. 4 credits each term.

M 3:35-5:20. B. Bono.

In the first term we will consider ten to twelve plays that focus on the efforts of male authority figures to control the world of their play. In the second term we will complement this analysis with a study of ten to twelve plays that speak more centrally to the implied sexual crisis at the heart of the problem of authority, and illustrate it with particular attention to male-female relationships. Principal methods: historical criticism, genre criticism, metacriticism, in support of exploratory ventures into psychoanalytic, feminist, and audience/reader response criticism. Students may enroll in either semester or both.

415-416 Scientists and Political Revolutions 415, fall; 416, spring. 4 credits each term.

T 3:35-5:20. B. Reeves.

Through the study of the involvement of scientists in political revolutions in the modern era we will explore the relationships between science and political institutions, ideologies, and values. The course will consider the role of scientific knowledge and institutions in guiding or limiting the search for new foundations for the political order. We will also focus on contrasts between revolutionary scientific ideologies intended to promote change, and restoration scientific ideologies concerned to reestablish and maintain order. In the fall, topics will include the English Civil War and the Glorious Revolution, the American Revolution, and the French Revolution; in the spring, the Revolution of 1848, the Russian Revolution, and the Nazi revolution. Students may enroll in either semester or in both.

417 Eighteenth-Century Scottish Moral Science Fall. 4 credits.

R 3:35-5:20. D. Lieberman.

The social speculation of the eighteenth-century Scottish moralists provides a leading example of the Enlightenment attempt to treat now-independent intellectual disciplines—politics, economics, history, religion, scientific discovery, aesthetics and literary criticism—within a unified science of human nature. The seminar will examine the contributions of Francis Hutcheson, David Hume, Adam Smith, Henry Home, and John Millar, as well as the social and cultural conditions that helped to frame their philosophic enterprises.

418 Self-Interest and Social Theory Spring. 4 credits.

R 3:35-5:20. D. Lieberman.

The model of the individual social actor as a rational utility-maximizer motivated by self-interest continues to inform micro-economics and economic theories of politics. The seminar will examine some of the earliest attempts to utilize the model for systematic social analysis in the works of Claude Helvetius, Jeremy Bentham, and James Mill. It will consider the psychological theory on which the model was grounded, the programs for political and legal reform it was claimed to sanction, and its related impact on the emerging discipline of political economy.

419 Feminist Theory: Franco-American**Currents** Fall, 4 credits.

T 1:25-3:10. M. Lydon.

The aim of this course will be to explore the complex relationships that both unite and separate American and French feminisms. Our itinerary will inevitably lead us round that great promontory, Freud: safe anchorage for some feminists (mostly continental), treacherous reef for others (mostly American). One of the main questions the course will address is: What is the position of the feminist scholar in relation to the Franco-American currents that now create such a powerful undertow in literary theory and in the academic world at large? This is simply a localised version of the questions posed by Virginia Woolf in *Three Guineas* (1938): What is this "civilisation" in which we find ourselves? What are these ceremonies, and why should we take part in them? What are these professions, and why should we make money out of them? Where in short is it leading, the procession of the sons of educated men?

420 On the Bias: New Designs on Literary Criticism.

Spring, 4 credits.

T 1:25-3:10. M. Lydon.

"Tell all the Truth but tell it slant—Success in circuit lies." Literary criticism has always had its work cut out for it, but the complexity of its task has rarely been so apparent as it is today. Should the critic adopt Dickinson's strategy, or should she repudiate obliquity in favour of straight confession? Both styles are currently in vogue. We will examine the fashion in which they cross and overlap with the objective not only of tracing a pattern but of producing new designs. Reading for the course, which will take up some of the threads of Feminist Theory: Franco-American Currents (Semester 1), will include literary, philosophical, and psychoanalytical texts as well as literary criticism.

423 Cultural History as a Subversive Activity

Fall, 4 credits.

W 1:25-3:10 S. Buck-Morss.

If the past cultural treasures have become the inheritance of the rulers, how might a critical humanist read the bourgeois intellectual tradition against the grain of its collusion with domination? Subversive strategies of interpretation will include Theodor Adorno on Bach and Wagner, Walter Benjamin on Baudelaire, Roland Barthes on Balzac, John Berger on Rembrandt and Picasso, Michel Foucault on Velasquez, Adorno and Max Horkheimer on Odysseus and Kant, Adrienne Rich on Bronte and Dickinson.

424 A Case Study in Materialist Pedagogy: Nineteenth-Century Paris

Spring, 4 credits.

W 1:25-3:10 S. Buck-Morss.

Benjaminian approaches to the images and texts of Paris in the era of high capitalism. Cultural documents will include architecture, city planning, commercial art, political cartoons, and photographs, as well as historical and literary texts.

425-426 The Language(s) of Politics in the Renaissance.

425, fall; 426, spring, 4 credits each term.

W 3:35-5:20. J. M. Najemy.

The political experience of the Italian city-republics was represented and transformed through a variety of "foreign" idioms, or languages: in particular, those of the Aristotelian polis; of Roman rhetoric, *virtus*, and law; and of Christian sin and redemption. This seminar will explore the creative tensions generated by the adaptation of these languages to a political culture whose roots lay in the communal and corporate traditions of the Italian middle ages. The objectives will be 1) to test the hypothesis of a language of political experience existing apart from (or prior to the imposition of) these idioms; 2) to sample the reception of foreign idioms into republican discourse; and 3) to investigate this confrontation of political languages (which took place in two actual languages, Latin and Italian) in selected texts. The

fall term will deal with the period 1250-1400, focusing on the generation of Dante and Marsilius of Padua. The spring term will cover the period 1400-1530, from the Florentine civic humanists to Machiavelli and his contemporaries. Students may enroll in either semester or both.

433-434 Guided Reading

Fall and spring, 2 credits each term.

435-436 Guided Research

Fall and spring, 4 credits each term.

South Asia Program

G. B. Kelley, director; R. D. Colle, A. T. Dotson, E. C. Erickson, J. W. Gair, M. D. Glock, C. Holmberg, M. Katzenstein, F. Kayastha, K. A. R. Kennedy, G. B. Kelley, R. D. MacDougall, K. March, G. W. Messing, S. J. O'Connor, T. T. Poleman, N. Uphoff

The South Asia Program exists to encourage and correlate teaching and research in South Asian studies dealing with Bangladesh, India, Nepal, Pakistan, and Sri Lanka (Ceylon). The program faculty includes members from a number of disciplines. Undergraduates with a special interest in South Asia may major in Asian studies with a concentration in South Asia. Languages regularly offered are Hindi, Sinhalese, Tamil, Telugu, and Urdu. Cornell is a charter member of the American Institute of Indian Studies (AIIS), and undergraduates as well as graduate students are eligible for AIIS three-month summer or nine-month intensive language programs in India. For courses available in South Asia and details on the major, see the Department of Asian Studies listing in this volume. Students wishing further information should see the director, South Asia Program, 130 Uris Hall.

Southeast Asia Program

S. J. O'Connor, director; B. R. Anderson, R. Barker, M. L. Barnett, J. A. Boon, E. W. Coward, A. B. Griswold, M. Hatch, C. Hirschman, F. E. Huffman, R. B. Jones, Jr., G. McT. Kahin, A. T. Kirsch, J. T. Siegel, J. U. Wolff, O. W. Wolters, D. K. Wyatt

Southeast Asia studies at Cornell is included within the framework of the Department of Asian Studies. Seventeen full-time faculty members in the Colleges of Arts and Sciences 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. Courses are offered in such fields as agricultural economics, anthropology, and rural sociology. Instruction is also offered in a wide variety of Southeast Asian languages: Burmese, Cebuano (Bisayan), Indonesian, Javanese, Khmer (Cambodian), Tagalog, Thai, and Vietnamese. Intensive instruction is offered in the Full-year Asian Language Concentration (FALCON) in Indonesian at the beginning and intermediate levels. The formal program of study is enriched by a diverse range of extracurricular activities including an informal weekly luncheon seminar, the concerts of the Gamelan Ensemble, and public lectures. The John M. Echols Collection on Southeast Asia in Olin 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 15 credits of course work. Students interested in exploring these opportunities should consult the director, Southeast Asia Program, 120 Uris Hall.

Women's Studies Program

S. Bem, director; F. Berger, J. Blackall, R. Boyd, L. Brown, J. Brumberg, S. Buck-Morss, J. Condry, W. Cross, I. Ezergailis, J. Farley, J. Fortune, N. Furman, J. Gerner, D. Holmberg, B. J. Isbell,

M. Jacobus, M. Katzenstein, B. Koslowski, I. Kramnick, S. McConnell-Ginet, K. March, M. B. Norton, E. Regan, N. Salvatore, S. Siegel, J. Sweeney, L. Waugh

Staff and community members: L. Abel, Z. Eisenstein, L. Lavine, J. T. McHugh, N. Meltzer, A. Neisser, M. Rivchin, R. Siegel, C. Williams, C. York, I. Zahava

Student members: K. Allen, L. Berlant, V. Cole, N. Glazener, L. Joichin, P. Moessner, E. Polakoff, E. Seyler, C. Widmer

Women's Studies, a University program in the College of Arts and Sciences, has three goals: to encourage the development of teaching about women and sex roles for women and men; to examine assumptions about women in various disciplines and to develop, systematize, and integrate back into the disciplines new knowledge about women; and to cooperate in public service activities with the extension divisions of the University.

The program is guided by a board composed of faculty and students at Cornell and members of the Cornell and Ithaca communities who have an intellectual interest in women's studies. Program facilities in Uris Hall, including reading room, informal lounge, and seminar room, are open to all interested students and faculty.

Program Offerings

Undergraduate students in the College of Arts and Sciences wishing to major in women's studies can design their own major through the College Scholar or Independent Major Programs. Any graduate student in the University may elect a women's studies minor. Students interested in either major or minor should obtain further information from the Women's Studies office, 332 Uris Hall.

The program typically sponsors a biweekly noncredit seminar for students and faculty to facilitate sharing of knowledge across disciplinary lines. During the academic year the program also sponsors frequent public lectures dealing with social, political, and intellectual issues in women's studies.

The Concentration

Undergraduate students who wish to graduate with a concentration in women's studies should consult with the director of undergraduate studies in women's studies to select an adviser. In collaboration with that adviser, students will design a coherent program in women's studies to complement their major. Before graduation, students will submit a final summary to their adviser on their completed work in women's studies. The concentration is open to students in all colleges of the university.

The concentration in women's studies consists of four courses. Typically, two courses are selected from the list of general courses and two from the list of specialized courses (see below). Freshman seminars, related courses, or independent study in women's studies may be substituted for specialized courses in the concentration with the prior approval of the adviser.

For further information or to meet with the director of undergraduate studies to select an adviser, contact the Women's Studies office, 332 Uris Hall, 256-6480.

Distribution Requirement

Distribution requirements are satisfied by any two Women's Studies courses in any of the following categories.

Social Sciences: any two of 238, 244, 277, 321, 353, 422, 671, 685, plus courses that have been taken previously, with the department's approval.

History: any two of 227, 238, 326, 363, 426, plus courses that have been taken previously, with the department's approval.

Humanities: any two of 248, 249, 251, 399, 451, 467, 478, 479, 493, plus courses that have been taken previously, with the department's approval.

Courses

Keeping in mind that women's studies is interdisciplinary, it is useful to distinguish six core areas or foci within the program: ideology and culture, institutions and society, history, literature and the arts, psychology and human development, and natural sciences.

The program offers undergraduate and graduate courses in all of the core areas, both independently and in cooperation with other departments. Women's studies courses are grouped into four categories to assist students in selecting the level or degree of specialization suited to their program:

- I) Freshman seminars.
- II) General courses (which provide a general introduction to a broad subject area or core focus within Women's Studies).
- III) Specialized courses and seminars (which have smaller enrollments and focus upon more specialized topics within each of the core areas).
- IV) Related courses and seminars (which need not focus exclusively upon Women's Studies issues, but include significant consideration of sex differences, feminist criticism, or gender).

I. Freshman Seminars

103 Writing as Women (also English 104) Fall and spring, 3 credits.

M W F 12:20. B. Schwartz.
Students explore their experience as girls and women through introspective, autobiographical writing. In seminars and individual conferences we stress development of a clear, individual writing style. Students critique each other's papers and discuss a variety of writing—short fiction, essays, poetry, journals, interviews—from a wide selection of twentieth-century women writers, including Adrienne Rich, Virginia Woolf, Toni Morrison, Tillie Olsen, and Maxine Hong Kingston, among others.

[104 Women and Social Transitions in the Twentieth Century (also Asian Studies 101)] Spring, 3 credits. Not offered 1982-83.

B. deBary.]

[105 Feminine and Masculine Ideals in Japanese Culture (also Asian Studies 105)] Fall, 3 credits. Not offered 1982-83.

K. Brazell.]

106 Reading about Women (also English 106) Fall and spring, 3 credits.

T R 10:10-11:25. L. Bertant.
This course develops analytical skills in reading and composition by studying women writers. The focus is on literature, especially fiction, augmented by relevant essays drawn from related disciplines. Class time will include discussions of problems raised by feminism, specifically about representations of women and the significance of writing for women. The themes of the course will encompass the home, the world, and the text. The writing—journals, expository imitations, interpretive evaluations, and small-scale research essays—will be critical and self-critical responses to the reading.

[107 The Family in American History (also History 107)] Spring, 3 credits. Not offered 1982-83.

M. B. Norton.]

II. General Courses

214 Biological Basis of Sex Differences (also Biological Sciences 214) Prerequisite: one year of introductory biology.

Lecs, T R 8:35-9:55, and occasional discs to be arranged. J. E. Fortune.
The structural and functional differences between the sexes are examined. Emphasis is placed on mechanisms of mammalian reproduction and, where possible, special attention is given to studies of humans. Current evidence on the effects of gender

on nonreproductive aspects of life (behavior, mental and physical capabilities) is discussed. The course is intended to provide students with a basic knowledge of reproductive endocrinology and with a basis for objective evaluation of sex differences in relation to contemporary life.

227 Modern American Sex Roles in Historical Perspective (also History 227) Fall, 4 credits. Intended primarily for sophomores; limited to 20 students.

T 2:30-4:30. M. B. Norton.
A reading and discussion course. The class will begin by examining sex roles in the United States in the 1980s, looking at a variety of sources like popular magazines and contemporary commentaries. We will then move backwards in time in an attempt to uncover the roots of current attitudes. The students will help to determine which topics the class will investigate in detail.

[244 Language and the Sexes (also Linguistics 244)] Spring, 4 credits. Prerequisites: Linguistics 101 or 111, or Psychology 215, or permission of instructor. Not offered 1982-83.

S. McConnell-Ginet.]

249 Feminist Issues in Nineteenth- and Twentieth-Century Literature (also English 249) Spring, 4 credits.

M W F 1:25. M. Jacobus.
An introductory course in writing by and about women, exploring the relation between women, literature, and feminism. There will be five main areas of concern: work and home; education and marriage; sexuality; motherhood; and the woman artist or writer herself. Readings will include novels by Elizabeth Gaskell, Charles Dickens, George Eliot, Thomas Hardy, Virginia Woolf, Sylvia Plath, and Margaret Atwood, as well as a variety of texts drawn from writers on women and feminism from Mary Wollstonecraft to Adrienne Rich.

277 Psychology of Sex Roles (also Psychology and Sociology 277) Spring, 3 or 4 credits. Prerequisite: an introductory psychology course.

T R 2:30-4. S. Bem.
Addresses the question of why and how adult women and men come to differ in their overall life styles, work and family roles, personality patterns, cognitive abilities, etc. This broad question is examined from five perspectives: (a) the psychoanalytic perspective; (b) the biological perspective; (c) the historical and cultural evolutionary perspective; (d) the child development perspective; and (e) the social-psychological and contemporaneous perspective. Each of these perspectives is also brought to bear on more specialized phenomena relating to the psychology of sex roles, including psychological androgyny, women's conflict over achievement, the male sex role, egalitarian marriage relationships, gender-liberated childrearing, female sexuality, homosexuality, and transsexualism.

321 Sex and Gender in Cross-Cultural Perspective (also Anthropology 321) Fall, 4 credits.

M W F 2:30. K. S. March, D. H. Holmberg.
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.

326 Women in the American Society, Past and Present (also History 326) Spring, 4 credits.

M W F 11:15. 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, and contemporary feminism.

353 The Feminist Movement and Public Policy (also Government 353) Fall, 4 credits.

T R 10:10-11:25. M. Katzenstein.
The course examines aims and strategies of the feminist movement in the United States and the response of both society and the state to feminist claims. It is, thus, a course about political protest and the capacity of American political institutions to promote, shape, as well as to counter social change. In examining the law and public policy on such issues as job discrimination, wife battery, rape, abortion, etc., the course explores the contradictions between and the congruence of the dual ideals of individual choice and group equality.

III. Specialized Courses and Seminars

238 The Historical Development of Women as Professionals, 1800-1980 (also Sociology 238 and Human Development and Family Studies 258) Fall, 3 credits. Students in endowed units must register for Women's Studies or Sociology 238.

T R 2:30-4. F. Dudden.
The historical evolution of the female professions in America (midwifery, nursing, teaching, librarianship, prostitution, home economics, and social work) as well as women's struggles to gain access to medicine, law, the clergy, the academy. Lectures, reading, and discussion are geared to identifying the cultural patterns that fostered the conception of gender-specific work and the particular historical circumstances that created these different work opportunities. The evolution of professionalism and the consequences of professionalism for women, family structure, and American society is also discussed.

[248 Major Nineteenth-Century Women Novelists (also English 247)] Fall, 4 credits. Not offered 1982-83.

J. Blackall.]

251 Twentieth-Century Women Novelists (also English 251) Fall, 4 credits.

M W F 1:25. M. Hite.
In this course we will be especially concerned with self-consciously experimental novels and with the questions such novels raise about vision or style. Novels we will be reading include Virginia Woolf's *The Waves*, Gertrude Stein's *Three Lives*, Djuna Barnes's *Nightwood*, Doris Lessing's *The Golden Notebook*, and Margaret Atwood's *Surfacing*.

[363 Women in Classical Greece and Rome (also Classics 363)] Spring, 4 credits. Not offered 1982-83.

L. Abel.]

399 The Divided Self in Women's Writing (also Comparative Literature 399) Spring, 4 credits.

T R 10:10-11:25. I. Ezergailis.
A thematic and structural investigation of women's writing to explore the tension between the highly developed self-awareness of narrator and/or heroine and the desire for wholeness. We will trace some of the ways in which women writers have tried to resolve or transcend this problem of identity by retreat, acceptance, or new synthesis. The list of authors includes Virginia Woolf, Doris Lessing, and Sylvia Plath, as well as translations of contemporary German women novelists.

422 Special Problems in the Anthropology of Women and Gender (also Anthropology 422 and Biology and Society 406) Spring, 4 credits.

Prerequisite: Women's Studies/Anthropology 321 or permission of instructor.

R 2:30-4:25. K. S. March.
Each year this seminar focuses on a particular area of concern within the anthropology of women, building on work done in Anthropology 321. The topic for Spring 1983 will be gender symbolism. Primary attention will be directed to the meaningfulness of gender cross-culturally, simultaneously drawing on

theories of symbolism in anthropology and exploring how the study of sex and gender can inform these theories.

451 Twentieth-Century Women Writers (also English 451) Fall. 4 credits.

Hours to be arranged. B. Rosecrance.
A consideration of selected fiction by British women writers from the turn of the century to the present day, including writers of English, Irish, Australian, Canadian, and South African origin. Critical study of stories and novels will emphasize evolutions in the craft and artistic consciousness of women writers in this period. We will draw upon works of such writers as Sarah Grand, Olive Schreiner, Ada Levenson, Dorothy Richardson, Virginia Woolf, Katherine Mansfield, Elizabeth Bowen, Jean Rhys, Barbara Pym, Rebecca West, Christian Stead, Iris Murdoch, Doris Lessing, Nadine Gordimer, Margaret Atwood, Margaret Drabble, Antonia (Drabble) Byatt, and Susan Hill. The emphasis will be on lesser-known novelists within the earlier period and on both well- and lesser-known contemporary writers.

467 Poetry of the 60s and 70s: The Feminine Sensibility (also English 466) Fall. 4 credits.

T R 10:10-11:25. P. Janowitz.
This seminar will attempt to define what is meant by a feminine sensibility: can it be differentiated from a masculine one in poetry of the 1960s and 70s? We will consider problems relating to theme, voice, language, style, imagery, distancing, and subjectivity, while reading the works of poets such as Levertov, Bishop, Piercy, Swenson, Gluck, Plath, Kumin, Ammons, Ashbery, Lowell, Ginsberg, Stand, Merwin, and other, younger poets. One long paper and several oral reports.

[478 Women and Writing (also English 478)] Fall. 4 credits. Not offered 1982-83.

M. Jacobus.]

479 On Reading Women Poets (also Women's Studies 479) Spring. 4 credits.

T R 12:20-1:35. S. Siegel.
An examination of the traditional controversy over whether or not reading, writing, and gender are related to one another. Detailed study of the autobiographical, critical, and poetic writings of such authors as Amy Lowell, Hilda Doolittle, Marianne Moore, Sylvia Plath, Audre Lorde, June Jordan, and Adrienne Rich. The seminar will consider salient departures from conventional poetic modes and themes, and the pressures each poet has felt to be significant in her attempt to shape herself, her esthetic, and her poetry. Discussion will begin with a specific question which will recur throughout the semester: How would Virginia Woolf have read these poets?

[493 French Feminisms (also French 493)] Fall. 4 credits. Not offered 1982-83.

N. Furman.]

499 Directed Study Fall or spring. Variable credit.
Prerequisite: one course in women's studies and permission of a faculty member of the Women's Studies Executive Board.

Hours to be arranged. Staff.

[826 Graduate Seminar in the History of American Women] Fall. Not offered 1982-83.

M. B. Norton.]

[827 Graduate Seminar in the History of American Women] Spring. Not offered 1982-83.

M. B. Norton.]

[871 Toward a Feminist Social Theory (also Government 670)] Spring. 4 credits. Not offered 1982-83.

S. Buck-Morss.]

[885 Seminar in Sex Differences and Sex Roles (also Psychology and Sociology 685)] Fall. 4

credits. Prerequisite: permission of instructor. Not offered 1982-83.

S. Bem.]

IV. Related Courses and Seminars

[305 Psychological Anthropology (also Anthropology 305)] Fall. 4 credits. Not offered 1982-83.

B. J. Isbell.]

329 Race, Gender, and Politics (also Government 329) Fall. 4 credits. Open to sophomores and juniors. Limited to 5 students.

Hours to be arranged. M. Katzenstein.

A writing workshop for sophomores and juniors that focuses on readings about gender, class, and race in American society. This is a class in how to read analytically and in how to write clear, organized analytical papers. It will be taught in individual tutorials of about an hour-long meeting each week with a paper due every other week.

357 American Families in Historical Perspective (also Sociology and Human Development and Family Studies 359) Spring. 3 credits. Prerequisite: Human Development and Family Studies 150 or one 200-level social science or history course. Students in endowed units must register for Women's Studies 357 or Sociology 359.

T R 2:30-4. F. Dudden.

An introduction to and overview of, problems and issues in the historical literature on American families and the family life cycle. Reading and lectures will demonstrate the pattern of American family experience in past time, focusing on class, ethnicity, sex, and region as important variables. Analysis of the private world of the family in past time will deal with changing cultural conceptions of sexuality, sex roles, generational relationships, stages of life, and life events. Students will be required to do a major research paper on the history of their family, covering at least two generations, and demonstrating their ability to integrate life-course development theory, data drawn from the social sciences, and historical circumstances.

[456 Edith Wharton, Willa Cather, and Eudora Welty (also English 456)] Spring. 4 credits. Not offered 1982-83.

J. Blackall.]

[463 The Repressed Feminine in the Writings of Marx (also Government 466)] Fall. 4 credits. Not offered 1982-83.

S. Buck-Morss.]

[467 Current Topics in Political Philosophy (also Government 467)] Fall. 4 credits. Not offered 1982-83.

D. Meyers.]

759 Virginia Woolf (also English 759) Fall. 5 credits. Prerequisite: permission of instructor.

Hours to be arranged. S. Siegel.

Readings of the novels, letters, diaries, and essays against the turn of the century background and in the context of the emergence of modernism. Topics will include Woolf as a critic; the reception of her work; the autobiographical strain in her fiction; and the vexed question of her feminism. Members of the seminar will prepare papers that will be distributed in advance of weekly meetings.

Related Courses in Other Departments

Time as a Human Resource (Consumer Economics and Housing 411) Fall. 3 credits.

R. Heck.

Design: A Reflection of American Women's Roles (Design and Environmental Analysis 245) Fall. 3 credits.

A. Racine.

The Family in Modern Society (Human Development and Family Studies 150) Fall. 3 credits.

Staff.

Human Sexuality: A Biosocial Perspective (Human Development and Family Studies 315)

Fall and spring. 3 credits.

Staff.

Theories of Adult Interpersonal Relationships (Human Development and Family Studies 358) Fall. 3 credits.

H. Feldman.

Families and Social Policy (Human Development and Family Studies 456) Fall. 3 or 4 credits.

P. Moen.

Women at Work (Industrial and Labor Relations 366) Spring. 4 credits.

F. Miller.

The Heart of my Mystery: The Alliance of Sexuality and Power in the Principal Plays of William Shakespeare (Society for the Humanities 413-414) 413, fall; 414, spring. 4 credits each term. M 3:35-5:20. B. Bono.

Feminist Theory: Franco-American Currents (Society for the Humanities 419) Fall. 4 credits.

M. Lydon.

On the Bias: New Designs on Literary Criticism (Society for the Humanities 420) Spring. 4 credits.

M. Lydon.

Cultural History as a Subversive Activity (Society for the Humanities 423) Fall. 4 credits.

S. Buck-Morss.

Faculty Roster

- Abrams, Meyer H., Ph.D., Harvard U. Class of 1916
*Professor of English, English
Adams, Barry B., Ph.D., U of North Carolina. Prof., English
Ahl, Frederick M., Ph.D., U. of Texas at Austin. Prof., Classics
Albrecht, Andreas C., Ph.D., U. of Washington. Prof., Chemistry
Ambegaokar, Vinay, Ph.D., Carnegie Inst. of Technology. Prof., Physics/Laboratory of Atomic and Solid State Physics
Ammons, Archie R., B.S., Wake Forest Coll. Goldwin Smith Professor of Poetry, English
Anderson, Benedict R., Ph.D., Cornell U. Prof., Government
Archer, Richard J., M.A., U. of Missouri at Kansas City. Asst. Prof., Theatre Arts
Arroyo, Ciriaco M., Ph.D., U. of Munich (Germany). Emerson Hinchliff Professor of Spanish Literature, Romance Studies
Ascher, Robert, Ph.D., U. of California at Los Angeles. Prof., Anthropology
Ashcroft, Neil W., Ph.D., Cambridge U. (England). Prof., Physics/Laboratory of Atomic and Solid State Physics
Austin, William W., Ph.D., Harvard U. Goldwin Smith Professor of Musicology, Music
Babby, Leonard H., Ph.D., Harvard U. Prof., Modern Languages and Linguistics
Bacharach, Samuel B., Ph.D., U. of Wisconsin. Assoc. Prof., Industrial and Labor Relations/Sociology
Bahti, Timothy H., Ph.D., Yale U. Asst. Prof., Comparative Literature
Baird, Barbara, Ph.D., Cornell U. Asst. Prof., Chemistry
Baugh, Daniel A., Ph.D., Cambridge U. (England). Prof., History
Becker, Victor, M.F.A., Brandeis U. Asst. Prof., Theatre Arts
Beckwith, Steven V.W., Ph.D., California Inst. of Technology. Asst. Prof., Astronomy/Center for Radiophysics and Space Research

- Bem, Daryl J., Ph.D., U. of Michigan. Prof., Psychology
- Bem, Sandra L., Ph.D., U. of Michigan. Prof., Psychology / Women's Studies
- Bennett, John G., Ph.D., U. of Michigan. Asst. Prof., Philosophy
- Béreaud, Jacques, Doctorat d'Univ., U. of Lille, (France). Prof., Romance Studies
- Berkelman, Karl, Ph.D., Cornell U. Prof., Physics/Laboratory of Nuclear Studies
- Bernal, Martin G., Ph.D., Cambridge U. (England). Assoc. Prof., Government
- Bernstein, Alvin H., Ph.D., Cornell U. Assoc. Prof., History
- Bernstein, Israel, Candidate in Physico-Mathematical Sciences, Roumanian Academy. Prof., Mathematics
- Bethe, Hans, Ph.D., U. of Munich (Germany). John Wendell Anderson Prof. of Physics Emeritus, Physics
- Bilson, Malcolm, D.M.A., U. of Illinois. Prof., Music
- Bishop, Jonathon P., Ph.D., Harvard U. Prof., English
- Blackall, Eric A., Litt.D., Cambridge U. (England). Jacob Gould Schurman Professor of German Literature, German Literature
- Blackall, Jean F., Ph.D., Harvard U. Prof., English
- Blumin, Stuart M., Ph.D., U. of Pennsylvania. Assoc. Prof., History
- Boon, James A., Ph.D., U. of Chicago. Prof., Anthropology
- Bowers, John S., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Modern Languages and Linguistics
- Boyd, Richard N., Ph.D., Massachusetts Inst. of Technology. Prof., Philosophy
- Bramble, James H., Ph.D., U. of Maryland. Prof., Mathematics
- Brazell, Karen W., Ph.D., Columbia U. Prof., Japanese Literature (Asian Studies)
- Breiger, Ronald L., Ph.D., Harvard U. Prof., Sociology
- Bronfenbrenner, Urie, Ph.D., U. of Michigan. Jacob Gould Schurman Professor, Human Ecology/Psychology
- Brown, Kenneth S., Ph.D., Massachusetts Inst. of Technology. Prof., Mathematics
- Brown, Laura, Ph.D., U. of California at Berkeley. Asst. Prof., English
- Brown, Lawrence D., Ph.D., Cornell U. Prof., Mathematics
- Brown, Stuart M., Jr., Ph.D., Cornell U. Prof. Emeritus, Philosophy/Science, Technology, and Society
- Brown, Theodore M., Ph.D., U. of Utrecht (Netherlands). Prof., History of Art
- Browne, E. Wayles, III, Ph.D., U. of Zagreb (Yugoslavia). Assoc. Prof., Modern Languages and Linguistics
- Brumberg, Joan Jacobs, Ph.D., U. of Virginia. Asst. Prof., Human Ecology/Women's Studies
- Buck-Morss, Susan F., Ph.D., Georgetown U. Asst. Prof., Government
- Burdett, Kenneth, Ph.D., Northwestern U. Assoc. Prof., Economics
- Burlitch, James M., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Chemistry
- Caldwell, Steven B., Ph.D., Cornell U. Assoc. Prof., Sociology
- Calkins, Robert G., Ph.D., Harvard U. Prof., History of Art
- Caputi, Anthony F., Ph.D., Cornell U. Prof., English
- Carden, Patricia J., Ph.D., Columbia U. Prof., Russian Literature
- Carmichael, Calum M., B. Litt., Oxford U. (England). Prof., Comparative Literature/Biblical Studies
- Carpenter, Barry K., Ph.D., U. College, London (England). Assoc. Prof., Chemistry
- Cassel, David G., Ph.D., Princeton U. Prof., Physics/Laboratory of Nuclear Studies
- Chase, Cynthia, Ph.D., Yale U. Asst. Prof., English
- Chase, Stephen U., Ph.D., U. of Chicago. Prof., Mathematics
- Chester, Geoffrey V., Ph.D., King's Coll., London (England). Prof., Physics/Laboratory of Atomic and Solid State Physics
- Chirinko, Robert, Ph.D., Northwestern U. Asst. Prof., Economics
- Clardy, Jon C., Ph.D., Harvard U. Prof., Chemistry
- Clark, M. Gardner, Ph.D., Harvard U. Prof., Industrial and Labor Relations/Economics
- Clinton, Kevin M., Ph.D., Johns Hopkins U. Prof., Classics
- Cochran, Sherman G., Ph.D., Yale U. Assoc. Prof., History
- Cohen, Marshall M., Ph.D., U. of Michigan. Prof., Mathematics
- Cohen, Walter I., Ph.D., U. of California at Berkeley. Asst. Prof., Comparative Literature
- Colacurcio, Michael J., Jr., Ph.D., U. of Illinois. Prof., English
- Colby-Hall, Alice M., Ph.D., Columbia U. Prof., Romance Studies
- Cole, Stephen R., B.A., U. of Iowa. Assoc. Prof., Theatre Arts
- Coleman, John E., Ph.D., U. of Cincinnati. Prof., Classics
- Collins, Marilyn F., Ph.D., Yale U. Asst. Prof., Near Eastern Studies
- Connelly, Robert, Ph.D., U. of Michigan. Assoc. Prof., Mathematics
- Cook, Margaret, Ph.D., U. of Washington. Asst. Prof., Classics
- Cooke, W. Donald, Ph.D., U. of Pennsylvania. Prof., Chemistry
- Collum, David B., Ph.D., Columbia U. Asst. Prof., Chemistry
- Cordes, James M., Ph.D., U. of California at San Diego. Asst. Prof., Astronomy/National Astronomy and Ionosphere Center
- Corson, Dale R., Ph.D., U. of California at Berkeley. Prof. Emeritus, Physics
- Cotts, Robert M., Ph.D., U. of California at Berkeley. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Culler, Jonathon D., D. of Phil., Oxford U. (England). Prof., English/Comparative Literature
- Cunningham, James P., Ph.D., U. of California at San Diego. Asst. Prof., Psychology
- Cutting, James E., Ph.D., Yale U. Assoc. Prof., Psychology
- Dannhauser, Werner J., Ph.D., U. of Chicago. Prof., Government
- Darlington, Richard B., Ph.D., U. of Minnesota. Prof., Psychology
- Davis, Tom E., Ph.D., Johns Hopkins U. Prof., Economics
- deBary, Brett, Ph.D., Harvard U. Asst. Prof., Japanese Literature (Asian Studies)
- Deinert, Herbert, Ph.D., Yale U. Prof., German Literature
- Dennis, Roger K., Ph.D., Rice U. Prof., Mathematics
- DeWine, John W., Jr., Ph.D., Ohio State U. Prof., Physics/Laboratory of Nuclear Studies
- Dotson, Arch T., Ph.D., Harvard U. Prof., Government
- Dotson, Esther G., Ph.D., New York U. Assoc. Prof., History of Art
- Drake, Frank C., Ph.D., Harvard U. Goldwin Smith Professor of Astronomy, Astronomy/National Astronomy and Ionosphere Center
- Dressler, Ralph, M.F.A., Brandeis U. Asst. Prof., Theatre Arts
- Dynkin, Eugene B., Dr. of Sci., Moscow U. (USSR). Prof., Mathematics
- Dyson-Hudson, V. Rada, D. Phil., Oxford U. (England). Assoc. Prof., Anthropology
- Earle, Clifford J., Ph.D., Harvard U. Prof., Mathematics
- Easley, David, Ph.D., Northwestern U. Asst. Prof., Economics
- Ebrill, Liam P., Ph.D., Harvard U. Asst. Prof., Economics
- Eddy, Donald D., Ph.D., U. of Chicago. Prof., English/University Libraries
- Edmonston, Barry, Ph.D., U. of Michigan. Asst. Prof., Sociology
- Ehrenberg, Ronald, Ph.D., Northwestern U. Prof., Industrial and Labor Relations/Economics
- Elder, Glen, Ph.D., U. of North Carolina. Prof., Human Ecology/Sociology
- Elledge, Scott B., Ph.D., Cornell U. Goldwin Smith Professor of English Literature, English
- Emerson, Caryl G., Ph.D., U. of Texas at Austin. Asst. Prof., Russian Literature
- Esman, Milton J., Ph.D., Princeton U. John S. Knight Professor of International Relations, Government
- Ezergailis, Inta M., Ph.D., Cornell U. Assoc. Prof., German Literature
- Ezra, Gregory S., Ph.D., Oxford U. Asst. Prof., Chemistry
- 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
- Feigenbaum, Mitchell J., Ph.D., Massachusetts Inst. of Technology. Prof., Physics
- Fine, Gail J., Ph.D., Harvard U. Assoc. Prof., Philosophy
- Finlay, Barbara L., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Psychology
- Fisher, Michael E., Ph.D., Kings Coll., London (England). Horace White Professor of Chemistry, Physics, and Mathematics, Chemistry/Physics/Laboratory of Atomic and Solid State Physics
- Fitchen, Douglas B., Ph.D., U. of Illinois. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Fogel, Ephim G., Ph.D., Ohio State U. Prof., English
- Fortune, Joanne E., Ph.D., Cornell U. Asst. Prof., Physiology/Women's Studies
- Frank, Robert H., Ph.D., U. of California at Berkeley. Assoc. Prof., Economics
- Fredericksen, Donald L., Ph.D., U. of Iowa. Assoc. Prof., Theatre Arts
- Freed, Jack H., Ph.D., Columbia U. Prof., Chemistry
- Fuchs, Wolfgang H., Ph.D., Cambridge U. (England). Prof., Mathematics
- Furman, Nelly, Ph.D., Columbia U. Assoc. Prof., Romance Studies
- Gair, James W., Ph.D., Cornell U. Prof., Modern Languages and Linguistics
- Galik, Richard S., Ph.D., Cornell U. Asst. Prof., Physics
- Ganem, Bruce, Ph.D., Columbia U. Prof., Chemistry
- Gelbart, Stephen S., Ph.D., Princeton U. Prof., Mathematics
- Gibian, George, Ph.D., Harvard U. Goldwin Smith Professor of Russian Literature, Russian 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/Center for Radiophysics and Space Research
- Gilchriese, Murdock G. D., Ph.D., Stanford U. Asst. Prof., Physics/Laboratory of Nuclear Studies
- Gilman, Sander L., Ph.D., Tulane U. Prof., German Literature
- Gilovich, Thomas, Ph.D., Stanford U. Asst. Prof., Psychology
- Ginet, Carl A., Ph.D., Cornell U. Prof., Philosophy
- Ginsburg, Judith R., Ph.D., U. of California at Berkeley. Asst. Prof., Classics
- Gittelman, Bernard, Ph.D., Massachusetts Inst. of Technology. Prof., Physics/Laboratory of Nuclear Studies
- Golay, Frank H., Ph.D., U. of Chicago. Prof. Emeritus, Economics
- Gold, Thomas, Ph.D., Cambridge U. (England). John L. Wetherill Professor of Astronomy, Astronomy/Engineering
- Goldsen, Rose K., Ph.D., Yale U. Prof., Sociology
- Goldstein, Melvin J., Ph.D., Yale U. Prof., Chemistry
- Gottfried, Kurt, Ph.D., Massachusetts Inst. of Technology. Prof., Physics/Laboratory of Nuclear Studies
- Grant, Edward R., Ph.D., U. of California at Davis. Asst. Prof., Chemistry
- Grapard, Allan, Ph.D., National Inst. of Oriental Languages. Asst. Prof., Asian Religions (Asian Studies)
- Green, Leonard, Ph.D., Cornell U. Asst. Prof., English
- Greene, William H., Ph.D., U. of Wisconsin, Asst. Prof., Economics
- Greenhouse, Carol J., Ph.D., Harvard U. Asst. Prof., Anthropology
- Greenwood, Davydd J., Ph.D., U. of Pittsburgh. Prof., Anthropology/Science, Technology, and Society
- Gregory, Stephen, Ph.D., U. of Waterloo. Asst. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Greisen, Kenneth I., Ph.D., Cornell U. Prof., Physics
- Grimes, Joseph E., Ph.D., Cornell U. Prof., Modern Languages and Linguistics

- Grinols, Errol L., III, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Economics
- Groos, Arthur B., Jr., Ph.D., Cornell U. Assoc. Prof., German Literature
- Gross, Leonard, Ph.D., U. of Chicago. Prof., Mathematics
- Grossvogel, Anita V., Ph.D., Cornell U. Assoc. Prof., Romance Studies
- Grossvogel, David I., Ph.D., Columbia U. Goldwin Smith Professor of Comparative Literature and Romance Studies, Romance Studies
- Gunn, Edward M., Jr., Ph.D., Columbia U. Asst. Prof., Chinese Literature (Asian Studies)
- Hagfors, Tor, Ph.D., U. of Oslo (Norway). Prof., Astronomy
- Halpern, Bruce P., Ph.D., Brown U. Prof., Psychology/Biological Sciences
- Hamilton, Richard S., Ph.D., Princeton U. Prof., Mathematics
- Hammes, Gordon G., Ph.D., U. of Wisconsin. Horace White Professor of Chemistry and Biochemistry, Chemistry/Biological Sciences
- Hañd, Louis N., Ph.D., Stanford U. Prof., Physics
- Harbert, Wayne E., Ph.D., U. of Illinois. Asst. Prof., Modern Languages and Linguistics
- Harris, Joseph C., Ph.D., Harvard U. Prof., English and Icelandic, English
- Hartill, Donald L., Ph.D., California Inst. of Technology. Prof., Physics/Laboratory of Nuclear Studies
- Hartman, Paul L., Ph.D., Cornell U. Prof., Physics/Applied and Engineering Physics/Laboratory of Atomic and Solid State Physics
- Harwit, Martin O., Ph.D., Massachusetts Inst. of Technology. Prof., Astronomy/Center for Radiophysics and Space Research
- Hatch, Martin, Ph.D., Cornell U. Asst. Prof., Music
- Hay, George A., Ph.D., Northwestern U. Prof., Economics/Law
- Hayes, Donald P., Ph.D., U. of Washington. Prof., Sociology
- Henderson, David W., Ph.D., U. of Wisconsin. Prof., Mathematics
- Henderson, John S., Ph.D., Yale U. Assoc. Prof., Anthropology
- Herrin, W. Lamar, Ph.D., U. of Cincinnati. Asst. Prof., English
- Herschensohn, Julia R., Ph.D., U. of Washington. Asst. Prof., Modern Languages and Linguistics
- Hertz, Neil H., M.A., Harvard U. Prof., English
- Hildebrand, George H., Ph.D., Cornell U. Maxwell M. Upson Professor of Economics and Industrial Relations Emeritus, Economics/Industrial and Labor Relations
- Hill, Thomas D., Ph.D., Cornell U. Prof., English/Medieval Studies
- Hirschman, Charles, Ph.D., U. of Wisconsin. Assoc. Prof., Sociology
- Hite, Molly, Ph.D., U. of Washington. Asst. Prof., English
- Ho, Wilson, Ph.D., U. of Pennsylvania. Asst. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Hobbs, Robert C., Ph.D., U. of North Carolina. Asst. Prof., History of Art
- Hockett, Charles F., Ph.D., Yale U. Goldwin Smith Professor of Linguistics and Anthropology Emeritus, Modern Languages and Linguistics/Anthropology
- Hodes, Harold, Ph.D., Harvard U. Asst. Prof., Philosophy
- Hoffmann, Roald, Ph.D., Harvard U. John A. Newman Professor of Physical Science, Chemistry
- Hohendahl, Peter U., Ph.D., Hamburg U. (Germany). Prof., German Literature/Comparative Literature
- Holcomb, Donald F., Ph.D., U. of Illinois. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Holdheim, W. Wolfgang, Ph.D., Yale U. Frederic J. Whiton Professor of Liberal Studies, Comparative Literature
- Holloway, Thomas H., Ph.D., U. of Wisconsin. Assoc. Prof., History
- Holmberg, David H., Ph.D., Cornell U. Asst. Prof., Anthropology/Women's Studies
- Holmes, Clive A., Ph.D., Cambridge U. (England). Prof., History
- Houck, James R., Ph.D., Cornell U. Prof., Astronomy/Center for Radiophysics and Space Research
- Houston, Paul L., Ph.D., Massachusetts Inst. of Technology. Assoc. 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). Assoc. Prof., Mathematics
- Huffman, Franklin E., Ph.D., Cornell U. Prof., Modern Languages and Linguistics
- Hull, Isabel V., Ph.D., Yale U. Asst. Prof., History
- Husa, Karel, Diploma, Conservatory in Paris (France). Kappa Alpha Professor of Music, Music
- Hwang, Jiunn, Ph.D., Purdue U. Asst. Prof., Mathematics
- Irwin, David E., Ph.D., Michigan U. Asst. Prof., Psychology
- Irwin, Terence H., Ph.D., Princeton U. Prof., Philosophy
- Isard, Walter, Ph.D., Harvard U. Prof., Economics
- Isbell, Billie J., Ph.D., U. of Illinois. Assoc. Prof., Anthropology
- Jackson, Linda C., Ph.D., Cornell U. Asst. Prof., Anthropology
- Jacobus, Mary L., D. Phil., Oxford U. (England). Prof., English/Women's Studies
- Jananoff, Jay H., Ph.D., Harvard U. Prof., Modern Languages and Linguistics
- John, James J., Ph.D., U. of Notre Dame. Professor of Paleography and Medieval History, History
- Johnson, Evamarie, Ph.D., U. of Washington. Asst. Prof., Theatre Arts
- Johnston, Robert E., Ph.D., Rockefeller U. Assoc. Prof., Psychology
- Jones, Robert B., Jr., Ph.D., U. of California at Berkeley. Prof., Modern Languages and Linguistics
- Jorden, Eleanor H., Ph.D., Yale U. Mary Donlon Alger Professor of Linguistics, Modern Languages and Linguistics
- Joyeux, Roselyne, Ph.D., U. of California at San Diego. Asst. Prof., Economics
- Kahn, George McT., Ph.D., Johns Hopkins U. Aaron L. Binenkorb Professor of International Studies, Government
- Kahn, H. Peter. M.A., New York U. Prof., History of Art
- Kahn, Peter J., Ph.D., Princeton U. Prof., Mathematics
- Kammen, Michael G., Ph.D., Harvard U. Newton C. Farr Professor of American History and Culture, History
- Kaplan, Steven L., Ph.D., Yale U. Prof., History
- Kaske, Carol V., Ph.D., Johns Hopkins U. Asst. Prof., English
- Kaske, Robert E., Ph.D., U. of North Carolina. Avalon Foundation Professor in the Humanities, English
- Katzenstein, Mary F., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Government
- Katzenstein, Peter J., Ph.D., Harvard U. Prof., Government
- Keil, Frank C., Ph.D., U. of Pennsylvania. Assoc. Prof., Psychology
- Kelley, E. Wood, Ph.D., Indiana U. Assoc. Prof., Government
- Kelley, Gerald B., Ph.D., U. of Wisconsin. Prof., Modern Languages and Linguistics
- Kennedy, William J., Ph.D., Yale U. Prof., Comparative Literature
- Kenworthy, Eldon G., Ph.D., Yale U. Assoc. Prof., Government
- Kesten, Harry, Ph.D., Cornell U. Prof., Mathematics
- King, Ronald F., Ph.D., U. of Chicago. Asst. Prof., Government
- Kinoshita, Toichiro, Ph.D., Tokyo U. Prof., Physics/Laboratory of Nuclear Studies
- Kirkwood, Gordon M., Ph.D., Johns Hopkins U. Frederick J. Whiton Professor of Classics, Classics
- Kirsch, A. Thomas, Ph.D., Harvard U. Prof., Anthropology
- Kirschten, Robert W., Ph.D., U. of Chicago. Asst. Prof., English
- Klein, Richard J., Ph.D., Yale U. Assoc. Prof., Romance Studies
- Knapp, Anthony W., Ph.D., Princeton U. Prof., Mathematics
- Koschmann, J. Victor, Ph.D., U. of Chicago. Asst. Prof., History
- Kramnick, Isaac, Ph.D., Harvard U. Prof., Government
- Kretzmann, Norman, Ph.D., Johns Hopkins U. Susan Linn Sage Professor of Philosophy, Philosophy
- Kronik, John W., Ph.D., U. of Wisconsin. Prof., Romance Studies
- Krumhansl, Carol L., Ph.D., Stanford U. Asst. Prof., Psychology
- Krumhansl, James A., Ph.D., Cornell U. Horace White Professor of Physics, Physics/Laboratory of Atomic and Solid State Physics
- Kufner, Herbert L., Ph.D., Cornell U. Prof., Modern Languages and Linguistics
- LaCapra, Dominick C., Ph.D., Harvard U. Prof., History
- LaFeber, Walter F., Ph.D., U. of Wisconsin. Marie Underhill Noll Professor of American History, History
- Lambert, Bernd, Ph.D., U. of California at Berkeley. Prof., Anthropology
- Lambert, William W., Ph.D., Harvard U. Prof., Psychology/Sociology/Anthropology
- Lawler, Margaret, M.A., San Jose State Coll. Assoc. Prof., Theatre Arts
- Lazzaro, Claudia, Ph.D., Princeton U. Asst. Prof., History of Art
- Leavitt, Thomas W., Ph.D., Harvard U. Prof., History of Art
- Lee, David M., Ph.D., Yale U. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Leed, Richard L., Ph.D., Cornell U. Prof., Modern Languages and Linguistics
- Leeds, Patricia G., Ph.D., U. of Wisconsin. Asst. Prof., Government
- LePage, G. Peter, Ph.D., Stanford U. Asst. Prof., Physics/Laboratory of Nuclear Studies
- Levin, Harry, Ph.D., U. of Michigan. William R. Kenan, Jr., Professor of Psychology, Psychology
- Levitsky, David A., Ph.D., Rutgers U. Assoc. Prof., Nutritional Sciences/Psychology
- Levy, Charles S., Ph.D., Cornell U. Prof., English
- Lewis, Philip E., Ph.D., Yale U. Prof., Romance Studies
- Lichtenbaum, Stephen, Ph.D., Harvard U. Prof., Mathematics
- Littauer, Raphael M., Ph.D., Cambridge U. (England). Prof., Physics/Laboratory of Nuclear Studies
- Livesay, George R., Ph.D., U. of Illinois. Prof., Mathematics
- Long, Franklin A., Ph.D., U. of California at Berkeley. Henry R. Luce Professor of Science and Society Emeritus, Chemistry/Science, Technology, and Society
- Lowi, Theodore J., Ph.D., Yale U. John L. Senior Professor of American Institutions, Government
- Lurie, Alison, A.B., Radcliffe Coll. Prof., English
- Lynch, Thomas F., Ph.D., U. of Chicago. Prof., Anthropology
- Lyons, David B., Ph.D., Harvard U. Prof., Philosophy/Law
- Maas, James B., Ph.D., Cornell U. Prof., Psychology
- McCall, Dan E., Ph.D., Columbia U. Prof., English
- McClane, Kenneth A., M.F.A., Cornell U. Asst. Prof., English
- McClelland, Peter D., Ph.D., Harvard U. Assoc. Prof., Economics
- McConkey, James R., Ph.D., State U. of Iowa. Prof., English
- McConnell-Ginet, Sally, Ph.D., U. of Rochester. Assoc. Prof., Modern Languages and Linguistics
- McCoy, John, Ph.D., Cornell U. Prof., Linguistics (Modern Languages and Linguistics)/Chinese Literature (Asian Studies)
- McDaniel, Boyce D., Ph.D., Cornell U. Floyd R. Newman Professor of Nuclear Studies, Physics/Laboratory of Nuclear Studies
- McGinnis, Robert, Ph.D., Northwestern U. Prof., Sociology
- Mack, Ronald D., Ph.D., Columbia U. Assoc. Prof., Psychology
- McLafferty, Fred W., Ph.D., Cornell U. Prof., 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. Warshaw and Robert Irving Warshaw Professor of Economics, Economics

- March, Kathryn S., Ph.D., Cornell U. Asst. Prof., Anthropology/Women's Studies
- Marcham, Frederick G., Ph.D., Cornell U. Goldwin Smith Professor of English History Emeritus, History
- Marcus, Philip L., Ph.D., Harvard U. Prof., English
- Marston, Stephen T., Ph.D., U. of Michigan. Asst. Prof., Economics
- Masson, Robert T., Ph.D., U. of California at Berkeley. Assoc. Prof., Economics
- Mazzotta, Giuseppe F., Ph.D., Cornell U. Prof., Romance Studies
- Mei, Tsu-Lin, Ph.D., Yale U. Prof., Chinese Literature and Philosophy (Asian Studies)
- Meinwald, Jerrold, Ph.D., Harvard U. Goldwin Smith Professor of Chemistry, Chemistry
- Meltzer, Leo, Ph.D., U. of Michigan. Assoc. Prof., Psychology/Sociology
- Mermin, Dorothy M., Ph.D., Harvard U. Assoc. Prof., English
- Mermin, N. David, Ph.D., Harvard U. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Messing, Gordon M., Ph.D., Harvard U. Prof., Classics/Modern Languages and Linguistics
- Miller, Richard W., Ph.D., Harvard U. Assoc. Prof., Philosophy
- Mitra, Tapan, Ph.D., U. of Rochester. Prof., Economics
- Mitsis, Phillip, Ph.D., Cornell U. Asst. Prof., Classics
- Molan, Peter D., Ph.D., U. of California at Berkeley. Asst. Prof., Near Eastern Studies
- Monosoff-Pancaldo, Sonya, Artists Diploma, Juilliard School of Music. Prof., Music
- Moore, R. Laurence, Ph.D., Yale U. Prof., History
- Morgan, Robert R., M.F.A., U. of North Carolina. Assoc. Prof., English
- Morley, Michael D., Ph.D., U. of Chicago. Prof., Mathematics
- Morris, Edward P., Ph.D., Yale U. Prof., Romance Studies
- Morrison, George H., Ph.D., Princeton U. Prof., Chemistry
- Murra, John V., Ph.D., U. of Chicago. Prof. Emeritus, Anthropology
- Murray, Edward, Ph.D., Yale Univ. Asst. Prof., Music
- Murray, Timothy, Ph.D., Johns Hopkins U. Asst. Prof., English
- Najemy, John M., Ph.D., Harvard U. Assoc. Prof., History
- Neisser, Ulric, Ph.D., Harvard U. Susan Linn Sage Professor of Psychology, Psychology
- Nelkin, Dorothy W., A.B., Cornell U. Prof., City and Regional Planning/Science, Technology, and Society/Physics/Sociology
- Nerode, Anil, Ph.D., U. of Chicago. Prof., Mathematics
- Newhall, Herbert F., Ph.D., Cornell U. Prof. Emeritus, Physics
- Nicholson, Philip, Ph.D., California Inst. of Tech. Asst. Prof., Astronomy
- Noblitt, James S., Ph.D., Harvard U. Prof., Modern Languages and Linguistics
- Norton, Mary Beth, Ph.D., Harvard U. Prof., History
- Novarr, David, Ph.D., Yale U. Prof., English
- Nutting, Peter W., Ph.D., U. of California at Berkeley. Asst. Prof., German Literature
- O'Connor, Stanley J., Ph.D., Cornell U. Prof., History of Art
- Orear, Jay, Ph.D., U. of Chicago. Prof., Physics/Laboratory of Nuclear Studies
- Ostro, Steven J., Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Astronomy/National Astronomy and Ionosphere Center
- Owen, David I., Ph.D., Brandeis U. Assoc. Prof., Ancient Near Eastern History and Archaeology, Near Eastern Studies
- 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
- Parker, Roger, Ph.D., King's College, U. of London (England). Asst. Prof., Music
- Parrish, Stephen M., Ph.D., Harvard U. Prof., English
- Paterson, Donald R. M., M.M., U. of Michigan. Assoc. Prof., Music
- Payne, Lawrence E., Ph.D., Iowa State U. Prof., Mathematics
- Pempel, T. John, Ph.D., Columbia U. Assoc. Prof., Government
- Peterson, Charles A., Ph.D., U. of Washington. Assoc. Prof., History
- Piera, Carlos, Ph.D., U. of California at Los Angeles. Asst. Prof., Modern Languages and Linguistics
- Pintner, Walter M., Ph.D., Harvard U. Prof., History
- Platek, Richard, Ph.D., Stanford U. Assoc. Prof., Mathematics
- Pohl, Robert O., Doktor, U. Erlangen (Germany). Prof., Physics/Laboratory of Atomic and Solid State Physics
- Polenberg, Richard, Ph.D., Columbia U. Prof., History
- Porter, Richard F., Ph.D., U. of California at Berkeley. Prof., Chemistry
- Possen, Uri M., Ph.D., Yale U. Assoc. Prof., Economics
- Powers, David S., Ph.D., Princeton U. Asst. Prof., Near Eastern Studies
- Provine, William B., Ph.D., U. of Chicago. Prof., History
- Pucci, Pietro, Ph.D., U. of Pisa (Italy). Prof., Classics
- Que, Lawrence U., Jr., Ph.D., U. of Minnesota. Asst. Prof., Chemistry
- Radzinowicz, Mary A., Ph.D., Columbia U. Prof., English
- Ramage, Andrew, Ph.D., Harvard U. Assoc. Prof., History of Art
- Randel, Don M., Ph.D., Princeton U. Prof., Music
- Randel, Mary G., Ph.D., Harvard U. Asst. Prof., Romance Studies
- Rasmussen, James R., Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Chemistry
- Regan, Dennis T., Ph.D., Stanford U. Assoc. Prof., Psychology
- Regan, Elizabeth Adkins, Ph.D., U. of Pennsylvania. Assoc. Prof., Psychology/Biological Sciences
- Reppy, John D., Ph.D., Yale U. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Richardson, Robert C., Ph.D., Duke U. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Roe, Albert S., Ph.D., Harvard U. Prof., History of Art
- Rosecrance, Barbara, Ph.D., Brandeis U. Asst. Prof., English
- Rosecrance, Richard N., Ph.D., Harvard U. Walter S. Carpenter Jr. Professor of International and Comparative Politics, Government
- Rosen, Bernard C., Ph.D., Cornell U. Prof., Sociology
- Rosen, Carol, Ph.D. Harvard U. Asst. Prof., Modern Languages and Linguistics
- Rosenberg, Alex, Ph.D., U. of Chicago. Prof., Mathematics
- Rosenberg, Edgar, Ph.D., Stanford U. Prof., English/Comparative Literature
- Ross, Claudia N., Ph.D., Michigan U. Asst. Prof., Modern Languages and Linguistics
- Rothaus, Oscar S., Ph.D., Princeton U. Prof., Mathematics
- Rush, Myron, Ph.D., U. of Chicago. Prof., Government
- Ryan, Thomas A., Ph.D., Cornell U. Prof. Emeritus, Psychology
- Sagan, Carl E., Ph.D., U. of Chicago. David C. Duncan Professor in the Physical Sciences, Astronomy/Center for Radiophysics and Space Research
- Salpeter, Edwin E., Ph.D., Birmingham U. (England). James Gilbert White Distinguished Professor in the Physical Sciences, Physics/Astronomy
- Sangren, P. Steven, Ph.D., Stanford U. Asst. Prof., Anthropology
- Santí, Enrico M., Ph.D., Yale U. Assoc. Prof., Romance Studies
- Saul, Peter, Asst. Prof., Theatre Arts
- Sawyer, Paul L., Ph.D., Columbia U. Assoc. Prof., English
- Schatz, Alfred H., Ph.D., New York U. Prof., Mathematics
- Scheinman, Lawrence, Ph.D., U. of Michigan Prof., Government
- Scheraga, Harold A., Ph.D., Duke U. George W. and Grace L. Todd Professor of Chemistry, Chemistry
- Schuler, Richard E., Ph.D., Brown U. Assoc. Prof., Economics/Engineering
- Schwarz, Daniel R., Ph.D., Brown U. Prof., English
- Sen, Shankar, Ph.D., Harvard U. Prof., Mathematics
- Senderovich, Saveli, Ph.D., New York U. Asst. Prof., Russian Literature
- Seznec, Alain, D.E.S., U. of Paris-Sorbonne (France). Prof., Romance Studies
- Shank, Richard C., M.F.A., Yale U. Prof., Theatre Arts
- Shapiro, Stuart L., Ph.D., Princeton U. Prof., Astronomy/Center for Radiophysics and Space Research
- Shaw, Harry E., Ph.D., U. of California at Berkeley. Asst. Prof., English
- Sheffer, Martin A., Ph.D., Harvard U. Assoc. Prof., Government
- Shoemaker, Sydney S., Ph.D., Cornell U. Susan Linn Sage Professor of Philosophy, Philosophy
- Shore, Richard A., Ph.D., Massachusetts Inst. of Technology. Assoc. Prof., Mathematics
- Siegel, James T., Ph.D., U. of California at Berkeley. Prof., Anthropology
- Siegel, Sandra F., Ph.D., U. of Chicago. Assoc. Prof., English
- Siemann, Robert H., Ph.D., Cornell U. Assoc. Prof., Physics/Laboratory of Nuclear Studies
- Sienko, Michell J., Ph.D., U. of California at Berkeley. Prof., Chemistry
- Sievers, Albert J., III, Ph.D., U. of California at Berkeley. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Siggia, Eric D., Ph.D., Harvard U. Assoc. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Silbey, Joel H., Ph.D., U. of Iowa. Prof., History
- Silsbee, Robert H., Ph.D., Harvard U. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Silverman, Albert, Ph.D., U. of California at Berkeley. Prof., Physics/Laboratory of Nuclear Studies
- Slafoff, Walter J., Ph.D., U. of Michigan. Prof., English
- Smith, Robert J., Ph.D., Cornell U. Goldwin Smith Professor of Anthropology, Anthropology
- Sokol, Thomas A., M.M., George Peabody Coll. Prof., Music
- Solá, Donald F., Ph.D., Cornell U. Prof., Modern Languages and Linguistics
- Somkin, Fred, Ph.D., Cornell U. Assoc. Prof., History
- Speth, Birgit, Ph.D., Massachusetts Inst. of Technology. Asst. Prof., Mathematics
- Spitzer, Frank L., Ph.D., U. of Michigan. Prof., Mathematics
- Staller, George J., Ph.D., Cornell U. Prof., Economics
- Stallworthy, Jon H., B. Litt., Oxford U. (England). John Wendell Anderson Professor of English, English
- Stalnaker, Robert C., Ph.D., Princeton U. Prof., Philosophy
- Stein, Peter C., Ph.D., Massachusetts Inst. of Technology. Prof., Physics/Laboratory of Nuclear Studies
- Stern, Robert, Ph.D., Vanderbit U. Assoc. Prof., Industrial and Labor Relations/Sociology
- Stith, Marice W., M.A., Ohio State U. Assoc. Prof., Music
- Strauss, Barry S., Ph.D., Yale U. Asst. Prof., History
- 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, English
- Stucky, Steven, D.M.A., Cornell U. Asst. Prof., Music
- Sturgeon, Nicholas L., Ph.D., Princeton U. Assoc. Prof., Philosophy
- Stycos, Joseph M., Ph.D., Columbia U. Prof., Sociology
- Suñer, Margarita A., Ph.D., Indiana U. Assoc. Prof., Modern Languages and Linguistics
- Svejnar, Jan, Ph.D., Princeton U. Asst. Prof., Economics
- Sweedler, Moss E., Ph.D., Massachusetts Inst. of Technology. Prof., Mathematics
- Talman, Richard M., Ph.D., California Inst. of Technology. Prof., Physics/Laboratory of Nuclear Studies
- Tarrow, Sidney G., Ph.D., U. of California at Berkeley. Prof., Government
- Terzian, Yervant, Ph.D., Indiana U. Prof., Astronomy/National Astronomy and Ionosphere Center

- Teskey, Gordon L., Ph.D., U. of Toronto. Asst. Prof., English
- Teukolsky, Saul A., Ph.D., California Inst. of Technology. Assoc. Prof., Physics/Astronomy
- Thorbecke, Erik, Ph.D., U. of California at Berkeley. H. Edward Babcock Professor of Economics and Food Economics, Nutritional Sciences/Economics
- Tierney, Brian, Ph.D., Cambridge U. (England). Bryce and Edith M. Bowmar Professor in Humanistic Studies, History
- Tigner, Maury, Ph.D., Cornell U. Prof., Physics/Laboratory of Nuclear Studies
- Tittler, Jonthan P., Ph.D., Cornell U. Asst. Prof., Romance Studies
- Trice, Harrison M., Ph.D., U. of Wisconsin. Prof., Industrial and Labor Relations/Sociology
- Troxell, Barbara, M.S., Curtis Inst. of Music. Assoc. Prof., Music
- Tsiang, Sho-Cheih, Ph.D., London School of Economics. (England). Prof., Economics
- Uphoff, Norman T., Ph.D., U. of California at Berkeley. Assoc. Prof., Government
- Usher, David A., Ph.D., Cambridge U. Assoc. Prof., Chemistry
- Usner, Daniel H., Jr., Ph.D., Duke U. Asst. Prof., History
- vanCoetsem, Frans, Dr. Phil., U. of Louvain (Belgium). Prof., Modern Languages and Linguistics
- Vanek, Jaroslav, Ph.D., Massachusetts Inst. of Technology. Carl Marks Professor of International Studies, Economics
- Vernon, Kathleen M., Ph.D., U. of Chicago. Asst. Prof., Romance Studies
- Veverka, Joseph F., Ph.D., Harvard U. Prof., Astronomy/Center for Radiophysics and Space Research
- Wahlbin, Lars B., Ph.D., U. of Goteborg (Sweden). Assoc. Prof., Mathematics
- Wan, Henry Y., Jr., Ph.D., Massachusetts Inst. of Technology. Prof., Economics
- Wasserman, Ira M., Ph.D., Harvard U. Asst. Prof., Astronomy/Center for Radiophysics and Space Research
- Waugh, Linda R., Ph.D., Indiana U. Prof., Modern Languages and Linguistics
- Webster, James, Ph.D., Princeton U. Prof., Music
- Weick, Karl E., Ph.D., Ohio State U. Prof., Psychology
- Weiss, John H., Ph.D., Harvard U. Asst. Prof., History
- West, James E., Ph.D., Louisiana State U. Prof., Mathematics
- Widom, Benjamin, Ph.D., Cornell U. Prof., Chemistry
- Wiesenfeld, John R., Ph.D., Case Inst. of Technology. Assoc. Prof., Chemistry
- Wilcox, Charles F., Jr., Ph.D., U. of California at Los Angeles. Prof., Chemistry
- Wilkins, John W., Ph.D., U. of Illinois. Prof., Physics/Laboratory of Atomic and Solid State Physics
- Williams, L. Pearce, Ph.D., Cornell U. John Stambaugh Professor of History, History
- Williams, Robin M., Jr., Ph.D., Harvard U. Henry Scarborough Professor of Social Sciences, Sociology
- Williams, Simon, Ph.D., U. of East Anglia (England). Asst. Prof., Theatre Arts
- Wilson, Kenneth G., Ph.D., California Inst. of Technology. James A. Weeks Professor in Physical Sciences, Physics/Laboratory of Nuclear Studies
- Wolczanski, Peter T., Ph.D., California Inst. of Technology. Asst. Prof., Chemistry
- Wolff, John U., Ph.D., Yale U. Prof., Modern Languages and Linguistics
- Wolters, Oliver W., Ph.D., U. of London (England). Goldwin Smith Professor of Southeast Asian History, History
- Wood, Allen W., Ph.D., Yale U. Prof., Philosophy
- Wyatt, David K., Ph.D., Cornell U. Prof., History
- Yan, Tung-mow, Ph.D., Harvard U. Prof., Physics/Laboratory of Nuclear Studies
- Yano, Makoto, Ph.D., U. of Rochester. Asst. Prof., Economics
- Yennie, Donald R., Ph.D., Columbia U. Prof., Physics/Laboratory of Nuclear Studies
- Young, Martie W., Ph.D., Harvard U. Prof., History of Art
- Zaslav, Neal A., Ph.D., Columbia U. Assoc. Prof., Music
- Zholkovsky, Alexander K., Cand. Phil., Moscow U. (USSR). Prof., Russian Literature