PHILOSOPHY

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Chair: Kenneth Taylor
Director of Graduate Study: Mark Crimmins
Director of Undergraduate Study: Debra Satz (Autumn), Lanier Anderson (Winter, Spring)
Professors: Michael Bratman (on leave), John Etchemendy, Solomon Feferman, Dagfinn Føllesdal (Winter), Michael Friedman (on leave Spring), Grigori Mints, Julius Moravcsik, John Perry, Elliott Sober, Johan van Benthem (Spring), Thomas Wasow, Allen Wood
Associate Professors: Chris Bobonich, Mark Crimmins, Graciela De Pierris (on leave), Peter Godfrey-Smith (on leave), Debra Satz, Kenneth Taylor
Assistant Professors: Lanier Anderson (on leave Autumn), Andrew Arana, Nadeem Hussain, Agnieszka Jaworska (on leave), Krista Lawlor (on leave), Tamar Schapiro (on leave), Michael Strevens
Professor (Research): Rega Wood
Lecturers: Mark Collier, David Hills, Patricia Marino, Scott Tanona
Courtesy Professors: Denis Phillips, Richard Rorty
Courtesy Assistant Professor: Reviel Netz
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Courses given in Philosophy have the subject code PHIL. For a complete list of subject codes, see Appendix B.

Philosophy concerns itself with fundamental problems. Some are abstract and deal with the nature of truth, justice, value, and knowledge; others are more concrete and their study may help guide our conduct or enhance our understanding of other subjects. In addition, philosophy examines the efforts of past thinkers to understand the world and our experience of it.

Although it may appear to be an assortment of different disciplines, there are features common to all philosophical enquiry. These include an emphasis on methods of reasoning and the way in which our judgments are formed, on criticizing and organizing our beliefs, and on the nature and role of fundamental concepts.

Students of almost any discipline can find something in philosophy which is relevant to their own specialties. In the sciences, it provides a framework within which the foundations and scope of a scientific theory can be studied, and it may even suggest directions for future development. Since philosophical ideas have had an important influence on human endeavors of all kinds (artistic, political, even economic), students of the humanities will find their understanding deepened by some acquaintance with philosophy.

Philosophy is an excellent major for those planning a career in law, medicine, or business. It provides analytical skills and a breadth of perspective helpful to those called upon to make decisions about their own conduct and the welfare of others. Philosophy majors who have carefully planned their undergraduate program have an excellent record of admission to professional and graduate schools.

The Special Program in the History and Philosophy of Science enables students to combine interests in science, history, and philosophy. Students interested in this program should see the special adviser.

The joint major in Philosophy and Religious Studies combines courses from both departments into a coherent theoretical pattern.

The Tanner Memorial Library of Philosophy contains an excellent working library and ideal conditions for study.

Graduate students and undergraduate majors in philosophy have formed associations for discussion of philosophical issues and the reading of papers by students, faculty, and visitors. These associations elect student representatives to department meetings.

UNDERGRADUATE PROGRAMS
BACHELOR OF ARTS

There are two ways of majoring in philosophy: the "General Program" and the "Special Program in the History and Philosophy of Science." A student completing either of these receives a B.A. degree in Philosophy. There is also a major program offered jointly with the Department of Religious Studies. To declare a major, a student should consult with the Director of Undergraduate Study and see the undergraduate student services administrator to be assigned an adviser and work out a coherent plan. The department strongly urges proficiency in at least one foreign language.

GENERAL PROGRAM

1. Course requirements, minimum 55 units:
   a) Preparation for the major: an introductory course (under 100) and 80. (PHIL 80 should normally be taken no later than the first quarter after declaring the major.) Students taking both quarters of the winter/spring philosophy Introduction to the Humanities (IHUM) track can count 5 units toward the introductory philosophy requirement.
   b) The core: 24 additional Philosophy units as follows
      1) Logic: one from 57, 159, 160A, 169
      2) Philosophy of science: any course from 60, 61, 156, 163-168
      3) Moral and political philosophy: one from 170-173
      4) Metaphysics and epistemology: one from 180-189
      5) History of philosophy: 100 and 102 are required of each major
   c) One undergraduate philosophy seminar from the 194 series.
   d) Electives: courses numbered 10 or above, at least 13 units of which must be in courses numbered above 99.
2. Units for Tutorial, Directed Reading (PHIL 196, 197, 198), The Dualist, Honors Seminar (PHIL 199), or affiliated courses may not be counted in the 55-unit requirement. No more than 10 units completed with grades of "satisfactory" and/or "credit" may be counted in the 55-unit requirement.
3. A maximum of 10 transfer units or two courses can be used for the departmental major. In general, transfer courses cannot be used to satisfy the five area requirements or the undergraduate seminar requirement. Students may not substitute transfer units for the PHIL 80 requirement.

SPECIAL PROGRAM IN HISTORY AND PHILOSOPHY OF SCIENCE

Undergraduates may major in Philosophy with a degree field in History and Philosophy of Science under the Department of Philosophy. Each participating student is assigned an adviser who approves the course of study. A total of 61 units are required for the sub-major, to be taken according to requirements 1 through 5 below. Substitutions for the listed courses are allowed only by written consent of the undergraduate adviser for History and Philosophy of Science. Students are encouraged to consider doing honors work with an emphasis on the history and philosophy of science. Interested students should see the description of the honors thesis in Philosophy and consult their advisers for further information.

1. Three science courses (for example, biology, chemistry, physics) for 12 units.
2. The following Philosophy (PHIL) core courses must be completed with a letter grade by the end of the junior year:
   a) one from 57, 159, 160A, 169
   b) 60 or 61
   c) 80
3. Three history of science courses.
4. Three philosophy of science courses, of which one must be PHIL 164.

5. Three additional courses related to the major, in philosophy or history, to be agreed on by the adviser.
6. At least six courses in the major must be completed at Stanford with a letter grade. Units for Tutorial, Directed Reading, or The Dualist (196, 197, 198) may not be counted in the requirement. No more than 10 units completed with grades of "satisfactory" and/or "credit" may be counted in the requirement.
7. Transfer units must be approved in writing by the Director of Undergraduate Study at the time of declaring a major. Transfer courses are strictly limited when used to satisfy major requirements.

MINORS

A minor in Philosophy consists of at least 30 units of Philosophy courses satisfying the following conditions:

1. IHUM 23A and 23B (Reason, Passion, and Reality) may be counted for a maximum of 5 units.
2. At least 10 units must be from courses numbered 100 or above.
3. The 30 units must include one of:
   a) a history of philosophy course numbered 100 or above
   b) two quarters of Area 1 (only 5 of the 10 units can count towards 30-unit requirement)
4. One course from any two of the following three areas (PHIL):
   a) Philosophy of science and logic: 60, 61, 156, 163-168; 57, 159, 160A, 169
   b) Moral and political philosophy: 20, 30, 170-172
   c) Metaphysics and epistemology: 10, 80, 180-189
5. Units for tutorials, directed reading, and affiliated courses may not be counted.
6. Transfer units must be approved in writing by the Director of Undergraduate Studies at the time of declaring. The number of transfer units is generally limited to a maximum of 10.
7. No more than 6 units completed with grades of "satisfactory" and/or "credit" count towards the 30-unit requirement.

Students must declare their intention to minor in Philosophy in a meeting with the Director of Undergraduate Studies. This formal declaration must be made no later than the last day of the quarter two quarters before degree conferral. The Permission to Declare a Philosophy Minor (signed by the Director of Undergraduate Studies) lists courses taken and to be taken to fulfill minor requirements. This permission is on file in the department office. Before graduation, a student's record is checked to see that requirements have been fulfilled, and the results are reported to the University Registrar.

HONORS PROGRAM

Students who wish to undertake a more intensive and extensive program of study, including seminars and independent work, are invited to apply for the honors program during Winter Quarter of the junior year. Admission is selective on the basis of demonstrated ability in philosophy, including an average of at least 'A-' in a substantial number of philosophy courses and progress towards satisfying the requirements of the major.

With their application, candidates should submit an intended plan of study for the remainder of the junior and the senior years. It should include at least 5 units of Senior Tutorial (196) during Autumn and/or Winter Quarter(s) of the senior year. Students who are applying to Honors College may use the same application for philosophy honors. In the quarter preceding the tutorial, students should submit an essay proposal to the Philosophy Undergraduate Director and determine an adviser.

Students applying for honors should enroll in Junior Honors Seminar (199) during the Spring Quarter of the junior year.

The length of this essay may vary considerably depending on the problem and the approach; usually it falls somewhere between 7,500 and 12,500 words. The honors essay may use work in previous seminars and courses as a starting point, but it cannot be the same essay that has been used, or is being used, in some other class or seminar. It must be a substantially new and different piece of work reflecting work in the tutorials.

A completed draft of the essay is submitted to the adviser at the end of the Winter Quarter of the senior year. Any further revisions must be finished by the fifth full week of the Spring Quarter, when three copies of the essay are to be given to the undergraduate secretary. The honors essay is graded by the adviser together with a second reader, chosen by the adviser in consultation with the student. The student will also provide an oral defense of the thesis at a meeting with the adviser and second reader. The essay must receive a grade of 'A-' or better for the student to receive honors.

The honors tutorials represent units in addition to the 55-unit requirement.

The Department of Philosophy cooperates with the honors component of the "Interdisciplinary Studies in Humanities" as described in that section of this bulletin.

JOINT MAJOR IN PHILOSOPHY AND RELIGIOUS STUDIES

The joint major in Philosophy and Religious Studies consists of 60 units of course work with approximately one third each in the philosophy core, the religious studies core, and either the general major or the special concentration. Affiliated courses cannot be used to satisfy this requirement.

No courses in either the philosophy or religious studies core may be taken satisfactory/no credit or credit/no credit.

In general, transfer units cannot be used to satisfy the core requirements. Transfer units and substitutions must be approved by the director of undergraduate studies in the appropriate department.

CORE REQUIREMENTS

1. Philosophy (PHIL) courses:
   a) 80
   b) 16 units, including at least one Philosophy course from each of the following areas:
      1) Logic and philosophy of science: 57, 60, 61, 156, 159, 160A, 162-169
      2) Ethics and value theory: 170-173
      3) Epistemology, metaphysics, and philosophy of language: 180-189
      4) History of philosophy: 100-103
2. Religious Studies courses: 20 units, including at least two courses in diverse religious traditions (for example, an Eastern and a Western or a literate and a preliterate tradition) and including at least one seminar.

General Major Requirements—Five additional courses (approximately 20 units) divided between the two departments. No more than 5 of these units may come from courses numbered under 99 in either department. Each student must also take at least one undergraduate seminar in religious studies and one undergraduate seminar in philosophy.

Special Concentration—With the aid of an adviser, students pursue a specialized form of inquiry in which the combined departments have strength; for example, American philosophy and religious thought, philosophical and religious theories of human nature and action, philosophy of religion. Courses for this concentration must be approved in writing by the adviser.

Directed Reading and Satisfactory/No Credit Units—Units of directed reading for fulfilling requirements of the joint major are allowed only with special permission. No more than 10 units of work with a grade of 'satisfactory' count toward the joint major.

HONORS PROGRAM

Students pursuing a joint major in Philosophy and Religious Studies may also apply for honors by following the procedure for honors in either of the departments.

COTERMINAL BACHELOR'S AND MASTER'S DEGREES

It is possible to earn an M.A. in Philosophy while earning a B.A. or B.S. This can usually be done by the end of the fifth undergraduate year, although students whose degree is not in philosophy may require an additional year. Standards for admission to, and completion of, this program are the same as for M.A. applicants who already have the bachelor's degree when matriculating. Applicants for the coterminal program are

not, however, required to take the Graduate Record Exam. Information about applying is available from Graduate Admissions in the Registrar's Office. The application deadline for Philosophy is January 13.

GRADUATE PROGRAMS

The department is prepared to direct and supervise individual study and research to supplement instruction offered in the courses listed below. In addition, advanced seminars not listed in the catalog are frequently organized in response to student interest. Candidates for advanced degrees are urged to discuss their entire program of study with their department advisers as early as possible.

Applications to graduate programs in the Department of Philosophy can be obtained from Graduate Admissions, the Registrar's Office. Applicants must take the Graduate Record Examination by October of the year the application is submitted.

MASTER OF ARTS

University requirements for the M.A. are discussed in the "Graduate Degrees" section of this bulletin.

Four programs lead to the M.A. in Philosophy. One is a general program providing a grounding in all branches of the subject. The others provide special training in one branch.

Admissions—All prospective master's students, including those currently enrolled in other Stanford programs, must apply for admission to the program. The application deadline is April 1 of the academic year preceding entry into the program. In exceptional circumstances, consideration may be given to applications received after the April 1 deadline but before April 30. No fellowships are available. Entering students must meet with the director of the master's program and have their advisers' approval, in writing, of program proposals. The master's program should not be considered a stepping stone to the doctoral program; these two programs are separate and distinct.

Unit Requirements—Each program requires a minimum of 45 units in philosophy. Students in a special program may be allowed or required to replace up to 9 units of philosophy by 9 units in the field of specialization. Although the requirements for the M.A. are designed so that a student with the equivalent of a strong undergraduate philosophy major at Stanford might complete them in one year, most students need longer. Students should also keep in mind that although 45 units is the minimum required by the University, quite often more units are necessary to complete department requirements. Up to 6 units of directed reading in philosophy may be allowed. There is no thesis requirement, but an optional master's thesis or project, upon faculty approval, may count as the equivalent of up to 8 units. A special program may require knowledge of a foreign language. At least 45 units in courses numbered 100 or above must be completed with a grade of 'B-' or better at Stanford. Students are reminded of the University requirements for advanced degrees, and particularly of the fact that for the M.A., students must complete three full quarters as measured by tuition payment.

GENERAL PROGRAM

The General Program requires a minimum of 45 units in Philosophy courses numbered above 99. These courses must be taken for a letter grade and the student must receive at least a 'B-' in the course. Courses taken to satisfy the "undergraduate core" or affiliated courses may not be counted in the 45 units. The requirement has three parts:

1. *Undergraduate Core:* students must have when they enter, or complete early in their program, the following undergraduate courses (students entering from other institutions should establish equivalent requirements with a master's adviser upon arrival or earlier):
   a) Logic 57, 159, or 160A
   b) Philosophy of science: any course from 60, 61, 163-167
   c) Moral and political philosophy: one from 170-173
   d) Metaphysics and epistemology: one from 80, 180-189
   e) History of philosophy: two history of philosophy courses numbered 100 or above

2. *Graduate Core:* students must take at least one course numbered over 105 from three of the following five areas (courses used to satisfy the undergraduate core cannot also be counted toward satisfaction of the graduate core). Crosslisted and other courses taught outside the Department of Philosophy do not count towards satisfaction of the core.
   a) Logic and semantics
   b) Philosophy of science and history of science
   c) Ethics, value theory, and moral and political philosophy
   d) Metaphysics, epistemology, and philosophy of language
   e) History of philosophy
   Each master's candidate must take at least two courses numbered above 200 (these cannot be graduate sections of undergraduate courses). One may be a graduate core seminar (260, 270, 280, 281), but no student is admitted to a core seminar before completing undergraduate requirements in the area of the seminar and securing the approval of the instructor.

3. Specialization: students must take at least three courses numbered over 105 in one of the five areas.

SPECIAL PROGRAM IN SYMBOLIC SYSTEMS

Students should have the equivalent of the Stanford undergraduate major in Symbolic Systems. Students who have a strong major in one of the basic SSP disciplines (philosophy, psychology, linguistics, computer science) may be admitted, but are required to do a substantial part of the undergraduate SSP core in *each* of the other basic SSP fields. This must include the following three philosophy courses or their equivalents: 80; 160A; and one from 181, 183, 184, 186. This work does not count towards the 45-unit requirement.

COURSE REQUIREMENTS

1. Four courses in philosophy at the graduate level (numbered 200 or above), including courses from three of the following five areas:
   a) Philosophy of language
   b) Logic
   c) Philosophy of mind
   d) Metaphysics and epistemology
   e) Philosophy of science
   At most two of the four courses may be graduate sections of undergraduate courses numbered 100 or higher.

2. Three courses numbered 100 or higher from outside Philosophy, chosen in consultation with an adviser. These courses should be from two of the following four areas:
   a) Psychology
   b) Linguistics
   c) Computer Science
   d) Education

Remaining courses are to be chosen in consultation with and approved by an adviser.

SPECIAL PROGRAM IN THE PHILOSOPHY OF LANGUAGE

Admission is limited to students with substantial preparation in philosophy or linguistics. Those whose primary preparation has been in linguistics may be required to satisfy all or part of the undergraduate core requirements as described in the General Program. Those whose preparation is primarily in philosophy may be required to take additional courses in linguistics.

COURSE REQUIREMENTS

1. Philosophy of language: two approved courses in the philosophy of language numbered 180 or higher.
2. Syntactic theory and generative grammar: 284 and LINGUIST 231.
3. Logic: at least two approved courses numbered 160A or higher.
4. An approved graduate-level course in mathematical linguistics or automata theory.

DOCTOR OF PHILOSOPHY

The University's basic requirements for the Ph.D. degree (residence, dissertation, examination, and so on) are discussed in the "Graduate Degrees" section of this bulletin. The requirements detailed here are department requirements.

There are six basic areas (philosophy of science, ethics, metaphysics and epistemology, philosophy of language, logic, and history) in which students should have proficiency in order to obtain a Ph.D. Demonstrating proficiency takes the form of course work, intensive seminars, and papers, as detailed below.

All courses used to satisfy proficiency requirements must be passed with a letter grade of 'B-' or better (no satisfactory/no credit).

At the end of the first year, the department reviews the progress of each first-year student to determine whether the student may continue in the program.

Any student in one of the Ph.D. programs may apply for the M.A. when all University and department requirements have been met.

PROFICIENCY REQUIREMENTS

1. *Course requirements*, to be completed during the first two years:
   a) Seven of the eight items listed below:
      1) four core graduate courses and seminars in philosophy of language (281); philosophy of mind, metaphysics, and epistemology (280); value theory (270); and philosophy of science (260).
      2) three history courses, each consisting of an approved graduate-level course in the history of philosophy. Courses satisfying this seven-out-of-eight requirement must include at least one history course in ancient philosophy, one in modern.
      3) PHIL 160A.
   b) PHIL 159 or the equivalent.
   c) Breadth requirement: a course in Eastern or Continental philosophy, or some other course establishing breadth.
   d) A total of at least 39 units of course work in the Department of Philosophy numbered above 110, but not including Teaching Methods (PHIL 239) or affiliated courses. Units of Individual Directed Reading (PHIL 240) may be included only with the explicit approval of the Director of Graduate Studies.
2. *Teaching Assistance:* a minimum of five quarters of teaching assistance at 25 percent time, usually during the second and third years.
3. *Candidacy:* to continue in the Ph.D. program, each student must be approved for candidacy during the sixth academic quarter (normally the Spring Quarter of the student's second year). Students may be approved for candidacy on a conditional basis if they have only one or two outstanding deficiencies, but are not officially advanced to candidacy until these deficiencies have been removed. Approval for candidacy indicates that, in the department's judgment, the student can successfully complete the Ph.D. In reaching this judgment, the department considers the overall quality of the student's work during the first six quarters and the student's success in fulfilling course requirements.
4. During the third year of graduate study, and after advancement to candidacy, a Ph.D. student should successfully complete at least three graduate-level courses/seminars, at least two of which must be in philosophy. Courses required for candidacy are not counted toward satisfaction of this requirement. Choice of courses/seminars outside philosophy is determined in consultation with a student's adviser.
5. During the summer of their second year, students are eligible to attend a dissertation development seminar given by the department.
6. Dissertation work and defense: the third and fourth (and sometimes fifth) years are devoted to dissertation work.
   a) *Dissertation Proposal:* by Spring Quarter of the third year, students select a dissertation topic, a reading committee, and some possible thesis relative to that topic. The topic and thesis should be sketched in a proposal of three to five pages, plus a detailed, annotated bibliography indicating familiarity with the relevant literature. The proposal should be approved by the reading committee before the meeting on graduate student progress late in Spring Quarter.
   b) *Departmental Oral:* during Autumn Quarter of the fourth year, students take an oral examination, called the "Departmental Oral," based on at least 30 pages of written work, in addition to the proposal. The aim of the exam is to help the student arrive at an acceptable plan for the dissertation and to make sure that the student, thesis, topic, and adviser make a reasonable fit. In cases where such an exam is deemed inappropriate by the reading committee, the student may be exempted by filing a petition with the Director of Graduate Studies, signed by the student and the members of the reading committee.
   c) *Fourth-Year Colloquium:* no later than the Spring Quarter of the fourth year, students present a research paper in a seminar open to the entire department. This paper should be on an aspect of the student's dissertation research.
   d) *University Oral Exam:* Ph.D. students must submit a completed draft of the dissertation to the three-person reading committee at least one month before the student expects to defend the thesis in the University oral exam. If the student is given permission to go forward, the University orals take place approximately two weeks later. A portion of the exam consists of a student presentation based on the dissertation and is open to the public. A closed question period follows. If the draft is ready by Autumn Quarter of the fourth year, the student can request that the University oral count as the department oral.

SPECIAL GRADUATE PROGRAMS

The department recognizes that some students may need to spend a large amount of time preparing themselves in some other discipline related to their philosophical goals, or in advanced preparation in some area within philosophy. In such circumstances, the department may be willing to waive some of the Ph.D. requirements. Such an exemption is not automatic; a program must be worked out with an adviser and submitted to the department some time in the student's first year. This proposal must be in writing and must include:

1. The areas to be exempted (see below).
2. A program of additional courses and seminars in the special area (usually at least 12 units).
3. A justification of the program that considers both intellectual coherence and the student's goals.

The department believes there is plenty of room for normal specialization within the program as it stands, and that all students will specialize to some extent. Thus, the intent is not to exempt courses on a one-to-one basis, but only to grant exemptions when a student plans an extensive and intensive study of some relevant area.

Special program students may be exempted from no more than two of the following:

1. One additional item from the items listed above in requirement 1(a)
2. PHIL 159 (but then they must take PHIL 57)
3. The breadth requirement

If a student's special program involves substantial course work outside of philosophy then, with the approval of the adviser, the student may petition the department to reduce requirement l(d) (the Philosophy unit requirement for the first two years). Normally this requirement is not reduced below 32 units.

Ph.D. MINOR

To obtain a Ph.D. minor in Philosophy, students must follow these procedures:

1. Consult with the Director of Graduate Studies to establish eligibility, and select a suitable adviser.
2. Give to the department academic assistant a signed copy of the program of study (designed with the adviser) which offers:
   a) 30 units of courses in the Department of Philosophy with a letter grade of 'B-' or better in each course. No more than 3 units of directed reading may be counted in the 30-unit requirement.
   b) At least one course or seminar numbered over 99 to be taken in each of these five areas:

   1) Logic
   2) Philosophy of science
   3) Ethics, value, theory, and moral and political philosophy
   4) Metaphysics, epistemology, and philosophy of language
   5) History of philosophy
   c) Two additional courses numbered over 199 to be taken in one of those (b) five areas.
3. A faculty member from the Department of Philosophy (usually the student's adviser) serves on the student's doctoral oral examination committee and may request that up to one third of this examination be devoted to the minor subject.
4. Paperwork for the minor must be submitted to the department office before beginning the program.

INTERDEPARTMENTAL PROGRAMS

GRADUATE PROGRAM IN HUMANITIES

The Department of Philosophy also participates in the Graduate Program in Humanities leading to the joint Ph.D. degree in Philosophy and Humanities. It is described in the "Interdisciplinary Studies in Humanities" section of this bulletin.

GRADUATE PROGRAM IN COGNITIVE SCIENCE

Philosophy participates with the departments of Computer Science, Linguistics, and Psychology in an interdisciplinary program in Cognitive Science. It is intended to provide an interdisciplinary education, as well as a deeper concentration in philosophy, and is open to doctoral students. Students who complete the requirements within Philosophy and the Cognitive Science requirements receive a special designation in Cognitive Science along with the Ph.D. in Philosophy. To receive this field designation, students must complete 30 units of approved courses, 18 of which must be taken in two disciplines outside of philosophy. The list of approved courses can be obtained from the Cognitive Science program located in the Department of Psychology.

SPECIAL TRACK IN PHILOSOPHY AND SYMBOLIC SYSTEMS

Students interested in interdisciplinary work relating philosophy to artificial intelligence, cognitive science, computer science, linguistics, or logic may pursue a degree in this program.

Prerequisites—Ideally, admitted students have covered the equivalent of the core of the undergraduate Symbolic Systems Program requirements as described in that section of this bulletin, including courses in artificial intelligence (AI), cognitive science, linguistics, logic, and philosophy. The graduate program is designed with this background in mind. Students missing part of this background may need additional course work. Aside from the required course work below, the Ph.D. requirements are the same as for the regular program.

Courses of Study—The program consists of two years of courses and two years of dissertation work. Students are required to take the following courses in the first two years:

1. Six Philosophy courses:
   a) Two of the following: 260, 270, 280, 281
   b) One course in the history of modern philosophy
   c) Two quarters of graduate logic courses from among 290A, 291A, 292A, 293A
   d) At least one additional seminar in the general area of symbolic systems: e.g., 296, 382, 395, and so on
2. Five cognitive science and computer science courses:
   a) At least two courses in cognitive psychology
   b) Two or three graduate courses in computer science, at least one in AI and one in theory
3. Three linguistics and computational linguistics courses:
   a) Graduate courses on natural language that focus on two of the following areas: phonetics and phonology, syntax, semantics, or pragmatics
   b) One graduate course in computational linguistics, typically LINGUIST 239

4. At least two additional graduate seminars at a more advanced level, in the general area of the program, independent of department. These would typically be in the area of the student's proposed dissertation project.

The requirements for the third year are the same as for other third-year graduate students in philosophy: a dissertation proposal, creation of a dissertation committee, and at least three approved graduate courses and seminars. The dissertation committee must include at least one member of the Department of Philosophy and one member of the Program in Symbolic Systems outside the Department of Philosophy.

The requirement for the fourth year is the same as for the other graduate students in philosophy: a department oral on an initial draft of part of the dissertation, a fourth year colloquium, and a University oral exam when the dissertation is essentially complete.

JOINT PROGRAM IN ANCIENT PHILOSOPHY

This program is jointly administered by the Departments of Classics and Philosophy and is overseen by a joint committee composed of members of both departments. It provides students with the training, specialist skills, and knowledge needed for research and teaching in ancient philosophy while producing scholars who are fully trained as either philosophers (with a strong specialization in ancient languages and philology) or classicists (with a concentration in philosophy).

Students are admitted to the program by either department. Graduate students admitted by the Philosophy department will receive their Ph.D. from the Philosophy department; those admitted by the Classics department will receive their Ph.D. from the Classics department. For Philosophy graduate students, this program will provide training in classical languages, literature, culture, and history. For Classics graduate students, this program will provide training in the history of philosophy and in contemporary philosophy.

Each student in the program will be advised by a committee consisting of one professor in each department.

Requirements for Philosophy Graduate Students:
These are the same as the proficiency requirements for the Ph.D. in Philosophy with the following exceptions:

1. The student is exempted from the breadth requirement.
2. If the student has already taken two courses in modern philosophy, he/she does not need to take a course in modern philosophy to satisfy proficiency requirement 1.a.2.

One year of Greek is a requirement for admission to the program. If students have had a year of Latin, they are required to take 3 courses in second- or third-year Greek or Latin (at least one of which must be in Latin). If they have not had a year of Latin, they are then required to complete a year of Latin, and take two courses in second- or third-year Greek or Latin.

Students are also required to take at least three courses in ancient philosophy at the 200 level or above (one of which must be in the Classics department and two of which must be in the Philosophy department).

GRADUATE DEGREES IN HISTORY AND PHILOSOPHY OF SCIENCE AND TECHNOLOGY

See the description in the "History and Philosophy of Science and Technology" section of this bulletin.

GRADUATE FELLOWSHIPS AND ASSISTANTSHIPS

A limited amount of fellowship support is available for Ph.D. students in philosophy. Students request aid by checking the appropriate box on the application form. Details of this program may be obtained from the department. Note that a condition of financial aid may be teaching assistance that goes beyond the Ph.D. requirement.

COURSES

(WIM) indicates that the course satisfies the Writing in the Major requirements. See the quarterly *Time Schedule* for revised listings.

INTRODUCTORY

These courses acquaint the student with some of the most important problems, positions, and methods in Philosophy. Some are designed to give general preparation for further work in Philosophy. Some apply the philosopher's approach to particular problems and subjects encountered in other areas of study.

PHIL 10. God, Self, and World: An Introduction to Philosophy—Traditional philosophical problems including why and how to do what is right, the existence of God, how and what one can know about the world, how to understand the nature of the mind and its relation to the body, and whether people have free will. Paradoxes. Readings include classical and contemporary texts. GER:3a

5 units, Aut (Marino)

PHIL 11N. Belief, Reason, and Faith—Stanford Introductory Seminar. Preference to freshmen. What are good reasons to believe something? Does one need good reasons to believe something? Do people need reasons for religious belief? If so, what are they? Are they similar to the reasons for mathematical or scientific beliefs, or are there special reasons connected with the practical importance of religion, that apply to religious belief? Or is religious belief different in that no reasons are needed for it? Or is it always wrong to believe without good reasons? Readings from the history of modern philosophy including Descartes, Hume, Kant, Kierkegaard, Clifford, Peirce, and James. GER:3a

3 units, Aut (A. Wood)

PHIL 12N. Being at Home as an Ethical Concept—Stanford Introductory Seminar. Preference to freshmen. Where is home? What is home? Can one build home in one's mind? How does one know home has been found? The ethical implications of these questions through philosophy and literature. GER:3a

3 units, Win (Moravcsik)

PHIL 13N. What is the Truth?—Stanford Introductory Seminar. Preference to freshmen. This question can be answered precisely in some important cases. In some of those cases, truth can be established through proof. Successes in this quest for certified truth are closely connected to successes of automation of reasoning. Recommended: 5 units AP in Mathematics, or 5 units in Stanford Mathematics courses with a grade of 'A.' GER:3a

3 units, Spr (Mints)

PHIL 14N. Time and Meaning—Stanford Introductory Seminar. Preference. to freshmen. The nature of time and its meaning for human beings. The existence of time, the flow of time, progress, recurrence, entropy, time travel, and immortality. Readings in philosophy, literature, and elementary physics (no equations or prior knowledge required). GER:3a

3 units, Aut (Strevens)

PHIL 15N. Freedom, Community, and Morality—Stanford Introductory Seminar. Preference to freshmen. Does the freedom of the individual conflict with the demands of human community and morality? Or, as some philosophers have maintained, does the freedom of the individual find its highest expression in a moral community of other human beings? Readings include Camus, Mill, Rousseau, and Kant. GER:3a

3 units, Win (Friedman)

PHIL 16N. Darwin—Stanford Introductory Seminar. Preference to freshmen. Darwin described *The Origin of Species* as one long argument. What that argument is, and the historical context in which it was developed and received. Readings include *The Origin of Species*, other readings from Darwin, and secondary literature. GER:3a

3 units, Spr (Sober)

PHIL 20. Introduction to Moral Philosophy—(Same as ETHICSOC 20.) What is the basis of moral judgments? What makes right actions right, and wrong actions wrong? What makes a state of affairs good or worth promoting? Answers to classic questions in ethics through the works of traditional and contemporary authors. GER:3b

5 units, Spr (Perry)

PHIL 30. Introduction to Political Philosophy—(Same as ETHICSOC 30, PUBLPOL 103A.) Issues of state authority, justice, liberty, and equality, approached through major works in political philosophy. Topics include human nature and citizenship, the obligation to obey the law, democracy and economic inequality, equality of opportunity and affirmative action, religion, and politics. GER:3b

5 units, Win (Hussain)

PHIL 57. Introductory Logic—Study of propositional and predicate logic, emphasizing translating English sentences into logical symbols and constructing derivations of valid arguments. GER:2c

4 units, Win, Spr (Escoto)

PHIL 60. Introduction to Philosophy of Science—(Same as HPS 60.) Survey of 20th-century views on the nature of scientific knowledge. Logical positivism and Popper; the problem of induction; Kuhn, Feyerbend, and radical philosophies of science; subsequent attempts to rebuild moderate empiricist and realist positions. GER:3a

5 units, Win (Tanona)

PHIL 61. Philosophy and the Scientific Revolution—(Same as HPS 61.) The relationship between the scientific revolution of the 17th century that resulted in the birth of modern science and the contemporaneous intellectual developments constituting the birth of modern philosophy. Readings focus on Galileo and Descartes. GER:3a

5 units, Aut (Friedman) alternate years, not given 2004-05

PHIL 74Q. Ethical Aspects of Risk—Stanford Introductory Seminar. Preference to sophomores. The ethical issues connected with risk and how to deal with them. Clarification of the notion of risk. Perception of risk and other psychological and social aspects of risk. Focus is on the wide spectrum of ethical issues that confront us in connection with risk.

5 units (Føllesdal) not given 2003-04

PHIL 77. Methodology in Ethics: Translating Theory into Practice—(Same as ETHICSOC 77.) Ideally, social policies are informed by ethical thought and reflection, but doing good in the world requires the active translation of moral theory and political philosophy into action. What kinds of empirical data are relevant to social decision making, and how should those data be collected, evaluated, and integrated into normative analysis? What assumptions about human nature are in play? How should diverse cultural values be addressed? Case studies from biomedical science, business, and government. Required community service internship.

5 units, Spr (Koenig)

PHIL 78. Medical Ethics—(Same as ETHICSOC 78.) Introduction to moral reasoning and the ethical debates that arise in medicine, healthcare, and new biomedical technologies. Topics include genetic manipulation, euthanasia, abortion, health resources allocation, race and gender, and the physician-patient relationship. GER:3a,4c

4 units, Spr (Collier)

PHIL 80. Mind, Matter, and Meaning—Intensive survey of some central and perennial topics in philosophy: free will and determinism, the mind-body problem, and knowledge of other minds. Prerequisite: one course in philosophy other than logic. GER:3a (WIM)

5 units, Aut (Taylor), Spr (Crimmins)

HISTORY OF PHILOSOPHY

100-103 are surveys of important figures and movements in Western philosophy. Other courses cover particular periods, movements, and figures in the history of philosophy. Prospective Philosophy majors should take as many as possible during the sophomore year.

PHIL 100. Greek Philosophy—Greek philosophical thought, covering Socrates, Plato, Aristotle, and the Hellenistic schools (the Epicureans, the Stoics, and the Skeptics). Topics: the nature of the soul, virtue and happiness, knowledge, and reality. GER:3a

4 units, Aut (Bobonich)

PHIL 101. Introduction to Medieval Philosophy: Freedom, Community, and Evil—The 4th-14th centuries saw major developments in European theories about the nature of rational beings, their freedom, moral responsibility, and life in community. What purpose does freedom serve? Does it make sense to speak of freedom to do evil? Are there intrinsically virtuous acts? What is heroic virtue? Must government serve the common good? How do human laws embody natural law? Readings from Augustine's political writings and Abelard's ethical writings. Anselm on freedom and the fall of the devil, Aquinas on law and morality, and Ockham on politics and virtue. GER:3a

4 units, Spr (R. Wood) alternate years, not given 2004-05

PHIL 102. Modern Philosophy, Descartes to Kant—Introduction to the thought of major figures in early modern philosophy in the areas of epistemology, metaphysics, and philosophy of mind. Readings include Descartes, Locke, Leibniz, Berkeley, Hume, and Kant. GER:3a

4 units, Win (Anderson)

PHIL 103. 19th-Century Philosophy—Survey of contributions to 19th-century European philosophy, focusing on issues in ethics and the philosophy of history. Works include Mill, *Utilitarianism*, Hegel, *The Philosophy of World History*, Kierkegaard, *The Sickness Unto Death*, and Nietzsche, *On the Genealogy of Morals*.

4 units (A. Wood) not given 2003-04

PHIL 111/211. Problems in Medieval Philosophy—(Graduate students register for 211.) Major issues in medieval philosophy such as metaphysics, semantics, time, substance, and change. Will and morality is the topic for 2003. Texts from Thomas Aquinas, John Duns Scotus, and William of Ockham. Issues include the nature of the will as a psychological faculty and its freedom, the role of the will in virtue, and the relation of moral virtues to each other.

3-4 units, Aut (R. Wood)

PHIL 112/212. Socrates' Philosophy—(Graduate students register for 212.) Socrates' main philosophical theses and his method of argument.

4 units (Staff) not given 2003-04

PHIL 114/214. Hume—(Graduate students register for 214.) The major positions in Hume's philosophical writings including his views of epistemology, ethics, cognitive psychology, religion, motivation, and the emotions.

4 units, Win (Collier)

PHIL 115/215. Heraclitus and Predecessors—(Graduate students register for 215.) Heraclitus' radical departure from early Greek philosophy. Prerequisite: 100 or Classics equivalent.

4 units (Moravcsik) not given 2003-04

PHIL 117/217. Recovering the Original Aristotle—(Graduate students register for 217.) Did Aristotle have a coherent notion of substantiality, and if so, what key properties must substances have? The implications of Aristotle's theory of categories for his theories of substance.

2-4 units, Aut (Moravcsik)

PHIL 121/221. Descartes—(Graduate students register for 221.) Descartes' philosophical writings on rules for the direction of the mind, method, innate ideas and ideas of the senses, mind, God, eternal truths, and the material world.

4 units (De Pierris) not given 2003-04

PHIL 122/222. Hegel's *Philosophy of Right*—(Graduate students register for 222.) An introduction to Hegel's philosophy through study of his last major work, *Elements of the Philosophy of Right* (1821). Emphasis is on Hegel's philosophy of natural rights, morality, society, politics, and history.

4 units, Win (A. Wood)

PHIL 125/225. Kant's *Critique of Pure Reason*—(Graduate students register for 225.) The founding work of Kant's critical philosophy emphasizing his contributions to metaphysics and epistemology. His attempts to limit metaphysics to the objects of experience. Prerequisite: one course dealing with systematic issues in metaphysics or epistemology, or with the history of modern philosophy.

4-5 units (A. Wood) not given 2003-04

PHIL 126/226. Kant's Ethical Theory—(Graduate students register for 226.) An introduction to Kant's ethical theory through *Groundwork for the Metaphysics of Morals* and selections from *The Metaphysics of Morals*.

4 units, Spr (A. Wood)

PHIL 129/229. Pragmatism—(Graduate students register for 229.) Introduction to Peirce, James, Dewey, and some recent writers such as Rorty. Focus is on questions of truth, belief, knowledge, and the nature of philosophical inquiry.

4 units (Staff) not given 2003-04

PHIL 130/230. The Philosophical and Educational Thought of John Dewey—(Same as EDUC 304; graduate students register for 230.) Readings vary each year. Emphasis may be on his social and moral writings. (SSPEP)

4 units, Aut (Phillips)

PHIL 132/232. Existentialism—(Graduate students register for 232.) Focus is on the existentialist preoccupation with human freedom. What constitutes authentic individuality? What is one's relation to the divine? How can one live a meaningful life? What is the significance of death? A rethinking of the traditional problem of freedom and determinism in readings from Rousseau, Kierkegaard, and Nietzsche, and the extension of these ideas by Sartre, Beauvoir, and Camus, including their social and political consequences in light of 20th-century fascism and feminism.

4 units (Anderson) not given 2003-04

PHIL 133/233. Major Figures in 20th-Century Philosophy—(Graduate students register for 233.) Husserl, Heidegger, Sartre, Gadamer, Wittgenstein, Quine, Davidson, and Rawls. Readings from their central writings.

4 units (Føllesdal) not given 2003-04

PHIL 134/234. Phenomenology and Contemporary Continental Philosophy—(Graduate students register for 234.) Husserl's phenomenology as a key to understanding contemporary continental philosophy, notably Heidegger's and Sartre's existentialisms, Gadamer's hermeneutics, and recent trends in contemporary German and French philosophy. The role of intentionality in contemporary debates in cognitive science. Husserl's *Ideas and Cartesian Meditations* read in full.

4 units, Win (Føllesdal)

PHIL 135/235. Wittgenstein—(Graduate students register for 235.) The main themes and claims in Wittgenstein's later work concentrating on his views about meaning, mind, knowledge, the nature of philosophical perplexity, and the nature of philosophical progress in his *Philosophical Investigations*. Emphasis is on the relationship between the novel arguments of the *Investigations* and its ways of writing up the results of philosophical questioning.

4 units (Hills) not given 2003-04

LOGIC AND PHILOSOPHY OF SCIENCE

PHIL 155/255. Concepts of Freedom—(Graduate students register for 255.) Historical and current concepts of freedom. The views of Hume, Kant, Mill, A.V. Dicey, and Hayek; recent works, including economic concepts of freedom. Recent work on free will as a properly empirical concept.

3 units, Spr (Suppes)

PHIL 156. Popper, Kuhn, and Lakatos—(Same as EDUC 214.) These 20th-century philosophers of science raise fundamental issues dealing with the nature of scientific progress: the rationality of change of scientific belief, science versus non-science, role of induction in science, truth or verisimilitude as regulative ideals. Their impact in the social sciences and applied areas such as educational research. (SSPEP)

3 units, Spr (Phillips)

PHIL 157/257. Topics in Philosophy of Logic—(Graduate students register for 257.) Foundational issues in logic; the question of what the subject matter and boundaries of logic are. The claim that second-order logic is not logic. What has led philosophers to such a peculiar-sounding claim? Is the claim based, as the instructor has argued, on a faulty definition of logic consequence? Prerequisite: 160A, concurrent registration in 160A, or consent of the instructor.
3 units, Aut (Feferman)

PHIL 158/258. Topics in Logic—(Graduate students register for 258.)
4 units (Mints) not given 2003-04

PHIL 159. Basic Concepts in Mathematical Logic—(Same as LINGUIST 135.) GER:2c
4 units, Aut (Arana)

PHIL 160A. First-Order Logic—The syntax and semantics of sentential and first-order logic. Introduction to the basic concepts of model theory. Gödel's Completeness Theorem and its consequences: the Löwenheim-Skolem Theorem and the Compactness Theorem. Prerequisite: 159 or consent of instructor.
4 units, Win (Arana)

PHIL 160B. Computability and Logic—Approaches to effective computation: recursive functions, register machines, and various programming styles. Proof of their equivalence, discussion of Church's Thesis. Elementary recursion theory. These techniques are used to prove Gödel's Incompleteness Theorem for arithmetic, whose technical and philosophical repercussions are surveyed. Prerequisite: 160A.
4 units, Spr (Arana)

PHIL 161. Set Theory—(Enroll in MATH 161.)
3 units (Staff) not given 2003-04

PHIL 162/262. Philosophy of Mathematics—(Graduate students register for 262.) Introduction to 20th-century approaches to the foundations and philosophy of mathematics. The background in mathematics, set theory, and logic. The schools and programs of logicism, predicativism, platonism, formalism, and constructivism. Readings from leading thinkers. Prerequisite: 160A or consent of the instructor.
4 units, Spr (Mints)

PHIL 163. Topics in the Philosophy of Probability—Hume argued that all inductive inferences, including predictions about the future, rest on the assumption that nature is uniform and that the future will resemble the past, and that this assumption cannot be justified. Hume's skeptical argument and attempts to refute it. What happens to Hume's argument when it is formulated using probability theory. Two philosophical issues in which probability reasoning has been central: the design argument for the existence of God, and Hume's critique of miracles as a source of evidence for God's existence. The relationship between the Bayesian model of scientific reasoning where theories are assigned probabilities, and frequentist statistics in which no such assignment occurs.
4 units (Sober) not given 2003-04

PHIL 164/264. Central Topics in the Philosophy of Science: Theory and Evidence—(Graduate students register for 264.) What counts as evidence for a scientific theory? What counts as evidence for the existence of unobservable entities? Topics include inductive logic, the paradoxes of confirmation, the new riddle of induction, hypothetico-deductivism, boot-strapping, Bayesianism, inference to the best explanation, and falsificationism.
4 units, Aut (Strevens)

PHIL 165/265. Philosophy of Physics—(Graduate students register for 265.) The philosophy of quantum mechanics. What is a superposition? The measurement problem such as Schrödinger's cat. Modern approaches to the problem: the many worlds and many minds theories, the GRW theory, Bohm's theory.
4 units (Tanona) not given 2003-04

PHIL 167A/267A. Philosophy of Biology—(Graduate students register for 267A.) Philosophical questions raised by evolutionary biology. The concepts of fitness and adaptation. How are hypotheses about adaptation to be tested? How should organisms be classified? How can the history of the phylogenetic branching process be inferred? Are there laws in evolutionary biology? Are theories in biology reducible to theories in physics? What does evolutionary biology contribute to the understanding of human mind and culture?
4 units, Aut (Sober)

PHIL 167B/267B. Philosophy, Biology, and Behavior—(Graduate students register for 267B.) Continuation of 167A/267A. Further philosophical study of key theoretical ideas in biology, focusing on problems involving explanation of behavior. Topics: altruism, group selection, genetic determinism. Prerequisite: 167A, or some philosophy background and Biological Sciences or Human Biology core, or equivalent with consent of instructor.
4 units (Godfrey-Smith) not given 2003-04

PHIL 168/268. Theories of Truth—(Graduate students register for 268.) In what does the truth of a belief or statement consist? Why does it matter to find out? The correspondence, pragmatist, coherence, and deflationary theories of truth, and implications of adopting them.
4 units, Win (Marino)

PHIL 169. Modal Logic—Introduction to the basics of modal logic, with an emphasis on action and information. Topics show the interdisciplinary nature of the field, among philosophy, computer science, linguistics, mathematics, and economic game theory. Prerequisite: 159 or a similar background in standard predicate logic.
4 units, Spr (van Benthem)

ETHICS, AESTHETICS, AND SOCIAL AND POLITICAL PHILOSOPHY

PHIL 170. Ethical Theory—(Same as ETHICSOC 170.) A critical study of Kantian, utilitarian and virtue-based ethical theories. Readings will include works of Aristotle, Kant, Mill and more recent writers.
4 units, Spr (A. Wood)

PHIL 171/271. Political Philosophy—(Same as ETHICSOC 171; graduate students register for 271.) Questions about a just society. Which liberties should a just society protect: economic, political, expressive? What sorts of equality should a just society ensure: opportunity, outcome, economic, political? Can a just society ensure both liberty and equality? Focus is on answers from rival, contemporary theories of justice: utilitarianism, libertarianism, and egalitarian liberalism.
4 units, Aut (Satz)

PHIL 172. Kantian Value Theory—The role of autonomy, principled rational self-governance, in Kant's account of the norms to which humans beings are answerable as moral agents, citizens, empirical inquirers, and religious believers. Relations between moral values (goodness, rightness) and aesthetic values (beauty, sublimity).
4 units, Win (Hills)

PHIL 173A. Aesthetics: Metaphor across the Arts—What if a metaphor is an instructively compact work of art, or if finding a metaphor apt is an instructively simple case of finding something aesthetically valuable? What does this reveal about the nature of art and language? Introduction to the philosophical study of art and aesthetic value, organized around metaphor. Contemporary accounts of metaphor as a verbal device. Arguments for the existence of nonverbal metaphor in nonliterary arts. The power and appeal of metaphors drawn from art, art criticism, theoretical inquiry, and everyday life.
4 units (Hills) not given 2003-04

PHIL 173B/273B. Metaethics—(Graduate students register for 273B.) Can moral and ethical values be justified or is it all just a matter of opinion? Is there a difference between facts and values? Are there any moral truths? Does it matter if there are not? Focus is not on which things or actions are valuable or morally right, but rather what is value or rightness itself. Survey of, and introduction to, contemporary metaethics.
4 units (Hussain) not given 2003-04

PHIL 174/274. Freedom and the Practical Standpoint—(Graduate students register for 274.) Confronted with the question of how to act, people think of themselves as freely determining their own conduct. Natural science poses a challenge to this insofar as it strives to explain all events, including human actions, in terms of causal processes. Are people justified in thinking of themselves as free? Three main philosophical approaches to this question: incompatibilism, compatibilism, and the two-standpoint view, with an emphasis on the question of how the two-standpoint view fares in comparison with the other approaches.
4 units (Staff) not given 2003-04

PHIL 175. Philosophy of Law—Philosophical foundations of law and the legal system. The justifiability of patterns of assigning legal responsibility within criminal law. Prerequisite: four prior courses in Philosophy.
4 units (Bratman) not given 2003-04

PHIL 176/276. Political Philosophy: The Social Contract Tradition—(Graduate students register for 276.) Why and under what conditions do human beings need political institutions? What makes them legitimate or illegitimate? What is the nature, source, and extent of the obligation to obey the legitimate ones, and how should people alter or overthrow the others? Answers by political theorists of the early modern period: Hobbes, Locke, Rousseau, and Kant.
4 units, Aut (Hills)

PHIL 177. Philosophical Issues Concerning Race and Racism—(Same as POLISCI 136.) Concepts of race, race consciousness, and racism, and their connections. What is race and what is its role in racism? How should ethnic and racial identities be viewed to secure the conditions in which humanity can be seen as a single moral community whose members have equal respect? What laws, values, and institutions best embody the balance between the competing goals of group loyalty, opposition to racism, and common humanity? Philosophical writings on freedom and equality, human rights, pluralism, and affirmative action. Historical accounts of group exclusion and various explanations. GER:4b
4 units, Win (Satz)

PHIL 178. Ethics in Society Honors Seminar—(Same as ETHICSOC 190.) Interdisciplinary. Students present issues of public and personal morality; topics chosen with the advice of the instructor. Student-prepared reading lists.
3 units, Win (Callan)

PHIL 179. Philosophy of Friendship: Individual and Communal Ethics—Explorations of interactions between individual and communal wellbeing.
4 units (Staff) not given 2003-04

EPISTEMOLOGY, METAPHYSICS, PHILOSOPHY OF MIND, AND PHILOSOPHY OF LANGUAGE

PHIL 181. Philosophy of Language—The study of conceptual questions about language has been a central focus of contemporary philosophy, both for its inherent interest and because philosophers have come to see that questions about language lurk behind perennial questions in other areas of philosophy, including epistemology, the philosophy of science, metaphysics, and ethics. Introduction to key concepts and debates about the notions of meaning, truth, reference, and language use, with relations to psycholinguistics and formal semantics. Readings from such philosophers as Frege, Russell, Wittgenstein, Grice, and Kripke. Prerequisites: 80 and some background in logic.
4 units (Crimmins) not given 2003-04

PHIL 183/283. Meaning and Experience—(Graduate students register for 283.) How our judgments concerning meaning may be based on empirical evidence. Issues from epistemology, notably perception, philosophy of science, philosophy of mind, and philosophy of language. Emphasis is on W.V. Quine, and his philosophy, and his later works.
4 units, Win (Føllesdal) not given 2004-05

PHIL 184. Theory of Knowledge—The nature of belief and the sense in which it aims at truth. The nature and status of the norms employed in assessing the beliefs of others and striving to improve one's own beliefs. Relations between believing and knowing. Skeptical reasoning and what it reveals about the nature and limits of human inquiry. Connections between debates in the theory of knowledge and the philosophy of mind. Prerequisite: 80 or consent of instructor.
4 units, Spr (Hills)

PHIL 185. Contextualism/Skepticism—Standard arguments for skepticism have proved compelling and hard to combat. Why do these arguments prove compelling as arguments, but also prove to have no effect on the practice of attributing knowledge to oneself and others? Contextualism seeks to exploit this curious fact in response to skepticism by claiming that how good a position one must be in to count as knowing varies with the context one is in. The skeptic changes the context, thereby briefly depriving one of one's claim to know. Readings: Austin, Clarke, Cohen, DeRose, Dretske, Lewis, Unger.
4 units (Staff) not given 2003-04

PHIL 186. Philosophy of Mind—Debates concerning the nature of mental states, their relation to straightforwardly physical states of the human body, the manner in which they acquire their content, the ways people come to know about them in themselves and in others, and the roles they play in the explanation of human conduct.
4 units, Spr (Taylor)

PHIL 187/287. Philosophy of Action—(Graduate students register for 287.) What is it to be an agent? Is there a philosophically defensible contrast between being an agent and being a locus of causal forces to which one is subject? What is it to act purposively? What is intention? What is it to act intentionally? What is it to act for a reason? Are the reasons for which one acts causes of one's action? What is it to act autonomously? Readings: Davidson, Frankfurt, and others. Prerequisite: 80.
4 units, Win (Hussain)

PHIL 188. Personal Identity—People seem to remain the same despite the various changes they undergo during their lives. Why? The answer can profoundly influence one's beliefs about whether people are essentially bodies or minds, and whether one's own survival matters. Readings include John Locke, Thomas Reid, David Hume, Bernard Williams, and Derek Parfit.
4 units, Spr (Perry)

PHIL 189. Philosophical Applications of Cognitive Science—The relevance of recent discoveries about the mind to philosophical questions in metaphysics, epistemology and philosophy of science, and ethics. Questions include: is there a right way to carve up the world into categories? Are the rules of logic objective, or just the way we happen to think? Is there such a thing as objective right and wrong?
4 units, Spr (Strevens)

PHIL 190. Introduction to Cognitive Science—(Same as SYMBSYS 100.) The history, foundations, and accomplishments of the cognitive sciences, including presentations by leading Stanford researchers in artificial intelligence, linguistics, philosophy, and psychology. Overview of the issues addressed in the Symbolic Systems major. GER:3b
4 units, Spr (Beaver, Richardson)

PHIL 193D. Camera Arts: Technologies and Values—(Same as HUMNTIES 193D.) The nature and significance of the principal camera arts, including still photography, film, and video, in the context of technological and intellectual change. The invention of new kinds of camera and new reasons to prize or deplore what cameras have to offer.
4 units, Aut (Hills)

PHIL 193Z. Theoretical Roots of Contemporary Criticism—(Same as HUMNTIES 193Z.) Philosophical assessment of theoretical roots of contemporary literary and cultural criticism: Marxism, psychoanalysis, and deconstruction. Focus is on primary theoretical texts including Marx, Lukács, Gramsci, Freud, Saussure, and Derrida. Short literary texts, examples from popular culture, and criticism analyzed in the context of the theoretical material.
4 units, Spr (Hussain)

PHIL 194A. Scientific Realism—Does science aim to provide true descriptions of the world, or does it aim to provide useful tools for predicting and controlling observable parts of the world? The debate between scientific realists and empiricists. Readings include Bas Van Fraassen's *The Scientific Image* and critical reactions.
4 units, Aut (Sober)

PHIL 194B. Time and Free Will
4 units, Win (Perry)

PHIL 194C. Ethical Evaluation of Political Communities—Types of communities and ways of evaluating them. What if moral considerations clash with economic ones, or with matters of power? What matters most in a community: rules or the attitudes of its members? What are better or worse ways for a community to survive? What does, and what should, tie a community together?
4 units, Spr (Moravcsik)

PHIL 194M. Goodman and Wittgenstein: Rule-Following, Practices, and Community
4 units (Staff) not given 2003-04

PHIL 195A. What is an Emotion?—Are emotions blind passions impervious to the influence of reason? Or are they cognitive states akin to judgment or belief, susceptible and responsive to the norms governing other cognitive attitudes? Philosophical theories occupying positions between these extremes, with emphasis on the role played by emotions in evaluation and motivating action. The importance of what seems the most obvious distinguishing feature of emotions, that they are felt.
2 units, Aut (Bloser)

PHIL 195C. Ethical Pluralism in Liberal Democracy—How should liberal democracies respond to intractable disagreement about ethical questions? They cannot be entirely neutral about divisive moral issues because liberal democratic policies are themselves morally controversial. How political theorists have responded to the existence of ethical pluralism, from early liberal statements of religious toleration to contemporary articulations of multiculturalism, political liberalism, and deliberative democracy. Authors include Locke, Mill, Berlin, Rawls, Nagel, Hampshire, and Gutmann.
4 units, Aut (May)

PHIL 196. Tutorial, Senior Year
5 units, Aut, Win, Spr, Sum (Staff)

PHIL 197. Individual Work, Undergraduate
1-15 units, Aut, Win, Spr, Sum (Staff)

PHIL 198. *The Dualist*—Weekly meeting of the editorial board of *The Dualist*, a national journal of undergraduate work in philosophy. Open to all undergraduates. May be taken 1-3 quarters. (AU)
1 unit, Aut, Win, Spr, Sum (Staff)

PHIL 199. Seminar for Prospective Honors Students—Open to juniors intending to do honors in philosophy. Methods of research in philosophy. Topics and strategies for completing honors project.
2 units, Spr (Bloser)

PRIMARILY FOR GRADUATE STUDENTS

Graduate students should also consult previous entries in the catalog for courses with graduate student numbers.

PHIL 206S. Seminar in Foundations of Neuroscience—Topic this year is physical models of memory retrieval with an emphasis on associative networks and concepts of resonance.
3 units, Win (Suppes)

PHIL 218. Hellenistic Philosophy
4 units (Staff) not given 2003-04

PHIL 223. Medieval Commentary on Aristotle's *De Anima*—Aristotle's view on mental representation, interpreted, refined, and criticized by Thomas Aquinas and other medieval philosophers. Reading of original texts in translation and of recent historical and systematic discussion.
3 units (Føllesdal, Moravcsik, Suppes) not given 2003-04

PHIL 224. Kant's Philosophy of Physical Science—Kant's *Metaphysical Foundations of Natural Science* (1786), published between the first (1781) and second (1787) editions of the *Critique of Pure Reason,* in the scientific and philosophical context provided by Newtonian natural philosophy and the Leibnizean tradition. The place of this work in the development of Kant's thought. Prerequisite: prior acquaintance with either Kant's theoretical philosophy or the contemporaneous scientific context, principally Newton, Leibniz, and Euler.
4 units, Aut (Friedman)

PHIL 227. Hegel's *Elements of the Philosophy of Right*
3 units (Staff) not given 2003-04

PHIL 236. Aesthetics
4 units (Hills) not given 2003-04

PHIL 237. Nietzsche—Preference to Ph.D. students. Nietzsche's later works, with emphasis on *The Gay Science*, *Beyond Good and Evil*, and *On the Genealogy of Morals*. The overall shape of Nietzsche's philosophical and literary projects, and his core doctrines such as eternal recurrence, will to power, and perspectivism. Central problems such as the proper regulation of belief, and the roles of science, morality, art, and illusion in life.
3-5 units, Spr (Anderson)

PHIL 239. Teaching Methods in Philosophy—For Ph.D. students in their second or third year who are teaching assistants for the department. Discussion of issues about the teaching of philosophy.
1-4 units, Aut, Win, Spr, Sum (Staff)

PHIL 240. Individual Work for Graduate Students
1-15 units, Aut, Win, Spr, Sum (Staff)

PHIL 241. Dissertation Development Seminar
3 units, Sum (Staff)

PHIL 242A. Philosophy of Science Seminar
3 units, Win (Sober)

PHIL 242B. Seminar in Philosophy of Science: Higher and Lower in Explanation—High level explanation in science is explanation in terms of organisms, economies, societies, and ideas, rather than of particles or electromagnetic forces. The form and advantages of high level explanation. Relation between high and low level explanations including emergence, and reduction. High level ontology and high level explanation.
3 units, Spr (Strevens)

PHIL 243. Saving Phenomena—(Same as CLASSGEN 134/234.) The determination of theory by empirical evidence is at the heart of the philosophy of science. Readings include seminal works of Western science: Ptolemy's *Almagest,* focusing on theories of the Sun and the Moon; Galen's *On Natural Faculties,* focusing on the theory of the urinary bladder; Archimedes' *Planes in Equilibrium,* focusing on the theory of balance. Each represents a different use of empirical evidence in scientific theory, and combining evidence provides a richer theory of saving the phenomena. GER:3b
4-5 units, Aut (Netz, Suppes)

PHIL 253E. French Social Thought from Durkheim to Bourdieu—(Enroll in FRENGEN 253E.) Affiliated offering; may not be used to satisfy Philosophy requirements.
3-5 units, Spr (Dupuy)

PHIL 256E. Political Anthropology from Rousseau to Freud—(Enroll in FRENGEN 256E.) Affiliated offering; may not be used to satisfy Philosophy requirements.
3-5 units (Dupuy) not given 2003-04

PHIL 260. Core Seminar in Philosophy of Science
4 units (Friedman, Strevens) not given 2003-04

PHIL 269. Advanced Modal Logic—Mathematical analysis of modal systems, including bisimulation and expressive power, correspondence theory, algebraic duality, completeness and incompleteness, and extended modal logics, up to guarded fragments of first-order logic, fixed-point logics, and second-order logic. Prerequisite: 160A, 169 or an equivalent background.
4 units (van Benthem) not given 2003-04

PHIL 270. Core Seminar in Ethics—For first- and second-year students in the Philosophy Ph.D. program.
4 units, Spr (Satz)

PHIL 272. Sentimentalism and Rationalism in Ethics—Two major strands in the history of modern, pre-Kantian moral philosophy. Emphasis is on the dialogue between sentimentalists and rationalists on the subject of the relationship between the natural and the normative. Authors include Frances Hutcheson, David Hume, Adam Smith, Samuel Clarke, and Richard Price.
3 units (Schapiro) not given 2003-04

PHIL 275. Marx and Weber—Marx and Weber aspired to grasp the fundamental political problems of the human predicament (unfreedom, inequality, oppression, and bureaucratization). Both developed theories to account for these problems, investigated the extent that such problems could be mitigated or resolved, and believed that social science could contribute to understanding the modern world and efforts to change it. Their works are evaluated with regard to politics, human agency, social change, and the role of knowledge.
3 units (Staff) not given 2003-04

PHIL 277. Topics in Democratic Theory—(Same as POLISCI 333.) Modern approaches to democratic theory including liberal, communitarian, republican, and participatory theories beginning with the works of Locke, Rousseau, and Mill. Writers: John Rawls, Ronald Dworkin, Jeremy Waldron, Joshua Cohen, Habermas, Petit, Iris Marion Young, Ian Shapiro, and Amy Gutman.
3-5 units (Ferejohn, Satz) not given 2003-04

PHIL 278. Margins of Agency—What can be learned about foundational issues and concepts in moral theory and moral psychology (autonomy, valuing, reasons for action, moral responsibility) by studying cases of agency at the margins such as addiction, Alzheimer's disease, lesions in the prefrontal cortex, psychopathy, early childhood? Readings from contemporary literature.
3 units (Jaworska) not given 2003-04

PHIL 279. Research Seminar in Ethical Theory
3 units, Win (Schapiro)

PHIL 280. Core Seminar in Metaphysics and Epistemology—For first- and second-year students in the Philosophy Ph.D. program.
4 units, Aut (Crimmins)

PHIL 281. Core Seminar in Philosophy of Language—For first- and second-year students in the Philosophy Ph.D. program.
4 units (Taylor) not given 2003-04

PHIL 282. Epistemic Possibility
3 units, Win (Perry)

PHIL 284. Graduate Seminar in Metaphysics and Epistemology
3 units, Spr (Crimmins)

PHIL 285A. Intersubjectivity—Seminar. Edmund Husserl, Edith Stein, and other continental and analytic philosophers who have contributed to the understanding of intersubjectivity, empathy, and related issues. Notable contributions of psychology to this field.
3 units, Win (Føllesdal) not given 2004-05

PHIL 286. Knowledge of Mind
3 units (Taylor) not given 2003-04

PHIL 286B. Graduate Seminar on Lexical Semantics—How to specify the meanings of lexical terms. Fodor on atomism-holism. Do meanings have primarily psychological reality, or also ontological reality? Theories examined include the instructor's own proposal.
2-4 units, Spr (Moravcsik)

PHIL 288. Ontology and Realism—What entities really exist, what is it to commit oneself to things existing, and what grounds might there be for so committing oneself? Ordinary things, abstract objects, unobservables. Connections with larger questions of objectivity and realism.
3 units, Spr (Crimmins)

PHIL 289. Seminar on the Language of Thought—The relation of recent research that favors the hypothesis that mental phenomena can be understood as computations over representations in a language of thought entokened in people's brains. How this program promises solutions to traditional problems in the philosophy of mind while leaving behind pretheoretic intuitions such as about *qualia* or consciousness. Readings include Rey, Fodor, Dennett, Searle, and Levine.
3 units, Win (Rey)

PHIL 290A. Model Theory—(Same as MATH 290A.) Language and models of the first order, predicate calculus, complete and decidable theories. Fraisse-Ehrenfeucht games. Preservation theorems. Prerequisites 160A,B or equivalent.
3 units, Aut (Feferman)

PHIL 290B. Model Theory—(Same as MATH 290B.) Kripke (possible world) semantics of intuitionistic and modal logics. Completeness results and strategies in automated deduction. Algebraic models. Second order systems. May be taken independently of 290A. Prerequisites: 160A,B or equivalent.
3 units, Win (Mints)

PHIL 291A,B. Recursion Theory—(Same as MATH 291A,B.) Theory of recursive functions and recursively enumerable sets. Turing machines and alternative approaches. Diophantine definability. Definability in formal systems. Gödel's incompleteness theorems. Recursively unsolvable problems in mathematics and logic. Introduction to recursive ordinals and hierarchies. Prerequisites: 160A,B and 162, or equivalents.
3 units (Staff) not given 2003-04

PHIL 292A,B. Set Theory—(Same as MATH 292A,B.) The basics of axiomatic set theory; the systems of Zermelo-Fraenkel and Bernays-Gödel. Topics: cardinal and ordinal numbers, the cumulative hierarchy and the role of the axiom of choice. Models of set theory, including the constructible sets and models constructed by the method of forcing. Consistency and independence results for the axiom of choice, the continuum hypothesis and other unsettled mathematical and set-theoretical problems. Prerequisites: 160A,B and 161, or equivalents.
3 units (Staff) not given 2003-04

PHIL 293A,B. Proof Theory—(Same as MATH 293A,B.) Gentzen's natural deduction and/or sequential calculi for first-order predicate logic. Normalization respectively cut-elimination procedures. Extensions to infinitary calculi; ordinal complexity of proof trees. Subsystems of analysis and their reduction to constructive theories. Prerequisites: 160A,B and 162, or equivalents.
3 units (Staff) not given 2003-04

PHIL 294. Topics in Logic—(Same as MATH 294.) Epsilon calculus. Syntax and semantics of first order epsilon calculus. Hilbert's epsilon substitution method. Recent progress and open problems. Prerequisites: 160A,B or equivalents.
   3 units, Win (Mints)

PHIL 298. Logic, Language, and Information—Logical systems for analyzing information structures, communication, and other cognitive actions. Special topics: systems for information update; logic and game theory. Prerequisite: 169 or an equivalent background in modal logic.
   3 units, Spr (van Benthem)

PHIL 300. Purity of Methods—Seminar in the philosophy of mathematics. Historical and philosophical investigation of purity as a proof constraint in mathematics. Readings include Aristotle, Descartes, Kant, and Hilbert. Historical and contemporary case studies in mathematical practice, particularly in geometry and algebra, and their philosophical import. Emphasis is on understanding how precise mathematical results can have important philosophical payoffs.
   3 units, Spr (Arana)

PHIL 314. Medieval Latin Paleography—An introduction to the history of writing and editing texts in philosophy, cosmology, mathematics, physics, psychology, and theology. Medieval Latin scripts as a basis for dating and placing European manuscripts. Medieval abbreviation, punctuation, and codicology. A brief survey of medieval Latin scripts provides some basis for dating and placing European manuscripts. Students select, transcribe, edit, and present a medieval university text related to their own interests. Prior consultation with instructor on text selection strongly advised. Prerequisite: Latin.
   4 units (R. Wood) not given 2003-04

PHIL 318. Aristotle's *Ethics*—Aristotle's ethical views through the *Protrepticus* and the *Eudemian Ethics*.
   3 units, Spr (Bobonich)

PHIL 319. Aristotle's *Metaphysics*—Focus is on his theology and its connections with his psychology and ethics.
   3 units (Bobonich) not given 2003-04

PHIL 336W. Hume and Contemporary Political Theory—(Enroll in POLISCI 336W.)
   5 units, Spr (Hardin)

PHIL 360. The Social Structure of Science—The role of social structure in the realization of science's goals. The social structure of events such as scientific revolutions. The social role of science. Readings from philosophy, sociology, and economics, with an emphasis on normative questions of special interest to philosophers. Prerequisite: some familiarity with the philosophical classics such as Popper and Kuhn.
   3 units (Strevens) not given 2003-04

PHIL 362. Hegel
   5 units (Staff) not given 2003-04

PHIL 367. Seminar in Philosophy of Biology—Topics may include unorthodox views of inheritance and evolution. Prerequisite: 167A/267A.
   3 units (Staff) not given 2003-04

PHIL 375. Philosophy and Literature—(Same as FRENGEN 318E.) Points of intersection between philosophy and literature. Philosophy on literature; philosophical approaches to the understanding of literary texts, and issues of truth, fiction, authorship, selfhood. Philosophy in literature; literary texts that invoke philosophical problems or approaches, particularly those in ethics. Philosophy as literature; problems raised by philosophical texts whose proper use requires attention to their form. Readings from Sophocles, Beckett, Plato, Montaigne, Nehamas, Nussbaum, MacIntrye, Walton.
   2-4 units (Anderson, Landy) not given 2003-04

PHIL 379. Graduate Seminar in Metaethics—Theories about the meaning of ethical terms and the content of ethical judgements. Do these theories fit with best accounts of human agency and practical deliberation? Readings from recent literature. Prerequisites: 173B/273B, 181, 187/287 or equivalent.
   3 units, Aut (Hussain)

PHIL 380. Shared Agency—Topics in philosophy of action.
   3 units (Bratman) not given 2003-04

PHIL 382. Empiricism and Scientific Realism—Many philosophers think that logical empiricism was refuted by Quine's critique of the analytic/synthetic distinction and by Hempel's critique of empirical meaningfulness. Both endorsed an epistemological holism as empiricism's successor. Scientific realism became and remains popular notwithstanding Van Fraassen's attempt to revive empiricism. The status of empiricism and scientific realism with a focus on scientific reasoning. Realists have endorsed a form of argument called inference to the best explanation as an account of how scientific hypothesis evaluation proceeds. What account can empiricism provide? The role of simplicity and unification in scientific inference. Emphasis is on the difference between deductive and probabilistic reasoning.
   3 units (Sober) not given 2003-04

PHIL 383. Graduate Seminar in Philosophy of Mind—Topics concerning intentional psychology and computational theories of mind. Potential challenges to these theories posed by facts about human fallibility such as self-deception and weakness of the will.
   3 units (Lawlor) not given 2003-04

PHIL 384. Cognitive Architecture—Investigation of recent and classical debates in philosophy and cognitive science about the cognitive architecture of the mind. Topics: connectionism, empiricism, evolutionary psychology, modularity, and nativism.
   3 units (Staff) not given 2003-04

PHIL 450. Thesis
   1-15 units, Aut, Win, Spr, Sum (Staff)