## PHILOSOPHY

Courses offered by the Department of Philosophy are listed under the subject code PHIL on the Stanford Bulletin's ExploreCourses web site.

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 conduct or enhance understanding of other subjects. Philosophy also examines the efforts of past thinkers to understand the world and people's experience of it.

Although it may appear to be an assortment of different disciplines, there are features common to all philosophical inquiry. These include an emphasis on methods of reasoning and the way in which judgments are formed, on criticizing and organizing 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, including artistic, political, and economic, students of the humanities and social sciences should find their understanding deepened by acquaintance with philosophy.

## Mission of the Undergraduate Program in Philosophy

The mission of the undergraduate program in Philosophy is to train students to think clearly and critically about the deepest and broadest questions concerning being, knowledge, and value, as well as their connections to the full range of human activities and interests. The Philosophy major presents students with paradigms and perspectives of past thinkers and introduces students to a variety of methods of reasoning and judgment formation. Courses in the major equip students with core skills involved in critical reading, analytical thinking, sound argumentation, and the clear, well-organized expression of ideas. Philosophy is an excellent major for those planning a career in law, medicine, business, or the non-profit sector. 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.

## Learning Outcomes (Undergraduate)

The department expects undergraduate majors in the program to be able to demonstrate the following learning outcomes. These learning outcomes are used in evaluating students and the department's undergraduate program. Students are expected to demonstrate:

1. the ability to communicate philosophical ideas effectively orally and in writing.
2. close reading, argument evaluation, and analytical writing.
3. dialectical ability to identify strengths and weaknesses of an argument and devise appropriate and telling responses.
4. the ability to think critically and demonstrate clarity of conceptualization.
5. the ability to differentiate good from unpromising philosophical questions.
6. the ability to sustain an argument of substantial scope, showing control over logical, argumentative, and evidential relations among its parts.

## Special and Joint Majors

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 Special Option in Philosophy and Literary Thought enables students to combine interests in philosophy and literary studies. Interested students should see the Director of Undergraduate Studies for Philosophy and Literature.

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

The joint major in Philosophy and Computer Science provides opportunities for the systematic study of computation together with philosophy in the broadest sense.

## Graduate Program in Philosophy

The Department of Philosophy offers an M.A. and a Ph.D. degree. The University's basic requirements for the M.A. and Ph.D. degrees are discussed in the "Graduate Degrees (http://www.stanford.edu/dept/ registrar/bulletin/4901.htm)" section of this bulletin.

## Learning Outcomes (Graduate)

The purpose of the master's program is to develop knowledge and skills in Philosophy and to prepare students for a professional career or doctoral studies. This is achieved through completion of core courses, with an option for further specialization. (See below for details.)

The Ph.D. is conferred upon candidates who have demonstrated substantial scholarship and the ability to conduct independent research and analysis in Philosophy. Through completion of advanced course work and rigorous skills training, the doctoral program prepares students to make original contributions to the knowledge of Philosophy and to interpret and present the results of such research.

## Library and Associations

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.

## Bachelor of Arts in Philosophy

There are three ways of majoring in Philosophy:

- The General Program
- The Special Program in the History and Philosophy of Science
- The Special Option in Philosophy and Literature.

A student completing any of these receives a B.A. degree in Philosophy.
There is also a major program offered in Philosophy and 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 recommends 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 PHIL 80 Mind, Matter, and Meaning. (PHIL 80 should normally be taken no later than the first quarter after declaring the major.) Students taking a Philosophy Thinking Matters course may count 4 units toward the introductory Philosophy requirement.

Students who took the Winter/Spring Philosophy Introduction to the Humanities (IHUM) track may count 5 units toward the Introductory Philosophy requirement. (IHUM courses are no longer offered).
b. the core: 24 additional Philosophy units as follows:
i logic: Select one of the following. More advanced logic courses may also be counted for this requirement by petition.

Select one of the following:

| PHIL 49 | Survey of Formal Methods | 4 |
| :--- | :--- | :--- |
| PHIL 50 | Introductory Logic | 4 |
| PHIL 150 | Mathematical Logic | 4 |
| PHIL 151 | Metalogic | 4 |
| PHIL 154 | Modal Logic | 4 |

ii Philosophy of science: This requirement may be satisfied by PHIL 60, PHIL 61, or an intermediate philosophy of science course numbered between PHIL 160-169.
iii Moral and political philosophy: This requirement may be satisfied by PHIL 2 or any intermediate course devoted to central topics in moral and political philosophy numbered between PHIL 170-172 or 174-176.
iv Contemporary theoretical philosophy: This requirement may be satisfied by any intermediate course numbered between PHIL 180-189.
v History of philosophy:

| Select both of the following |  |
| :--- | :--- |
| PHIL 100 | Greek Philosophy |
| PHIL 102 | Modern Philosophy, Descartes to Kant |

c. one undergraduate philosophy seminar from the PHIL 194 series.
d. electives: courses numbered 10 or above, at least 9 units of which must be in courses numbered above 99.
2. Units for Tutorial, Directed Reading (PHIL 196 Tutorial, Senior Year, PHIL 197 Individual Work, Undergraduate, PHIL 198 The Dualist), The Dualist (PHIL 198 The Dualist), Honors Seminar (PHIL 199 Seminar for Prospective Honors Students), 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 55unit 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 six 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 field of study in History and Philosophy of Science. This field of study is declared on Axess. 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.

| Select one of the following: | 3 |  |
| :--- | :--- | :--- |
| PHIL 49 | Survey of Formal Methods | 4 |
| PHIL 50 | Introductory Logic | 4 |
| PHIL 150 | Mathematical Logic | 4 |
| PHIL 151 | Metalogic | 4 |
| UIPHIL 154 | Modal Logic | 4 |

b. either PHIL 60 Introduction to Philosophy of Science or PHIL 61 Philosophy and the Scientific Revolution.
c. PHIL 80 Mind, Matter, and Meaning.
3. Three history of science courses.
4. Three philosophy of science courses, of which one must be PHIL 164 Central Topics in the Philosophy of Science: Theory and Evidence.
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 (PHIL 196 Tutorial, Senior Year, PHIL 197 Individual Work, Undergraduate, PHIL 198 The Dualist) may not be counted in the 61 -unit requirement. No more than 10 units completed with grades of 'satisfactory' andol' C 'credit' $m$ my be counted in the 61 - unit 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.

## Special Option in Philosophy and Literature

1. Core requirements for the major in Philosophy, including:
a. an introductory course
b. PHIL 80 Mind, Matter, and Meaning
c. the core distribution requirements listed in section 1 b of the general program above.
2. Gateway course in philosophy and literature (PHIL 81 Philosophy and Literature). This course should be taken as early as possible in the student's career, normally in the sophomore year.
3. Three courses in a single national literature, chosen by the student in consultation with the adviser and the program director of undergraduate studies. This normally involves meeting the language proficiency requirements of the relevant literature department.
4. Electives within Philosophy beyond the core requirements totaling at least 5 units, and drawn from courses numbered 100 or higher.
5. Two upper division courses of special relevance to the study of philosophy and literature, as identified by the committee in charge of the program. A list of approved courses is available from the program director of undergraduate studies, and is published on the web at http://philit/programs/relevance.html
6. Capstone seminar in the PHIL 194 series.
7. Capstone seminar of relevance to the study of philosophy and literature, as approved by the program committee. In some cases, with approval of the Philosophy Director of Undergraduate Study and the program director of undergraduate studies, the same course may be used to meet requirements 6 and 7 simultaneously. In any case, the student's choice of a capstone seminar must be approved in writing by the Philosophy Director of Undergraduate Study and the program director of undergraduate studies. This year's capstone seminars include:

|  |  | Units |
| :--- | :--- | ---: |
| Select one of the following: |  |  |
| PHIL 193D | Dante and Aristotle | 4 |
| PHIL 194L | Montaigne | $3-5$ |
| FRENCH 228E | Getting Through Proust |  |

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$\qquad$
$\qquad$

## Units

## COMPLIT 217 The Poetry of Friedrich Holderlin

Students are encouraged to consider doing honors work in a topic related to philosophy and literature through the Philosophy honors program.

The following rules also apply to the special option:

1. Units for Honors Tutorial, Directed Reading (PHIL 196 Tutorial, Senior Year, PHIL 197 Individual Work, Undergraduate, PHIL 198 The Dualist), The Dualist (PHIL 198 The Dualist), Honors Seminar (PHIL 199 Seminar for Prospective Honors Students) may not be counted toward the 65-unit requirement. No more than 10 units with a grade of 'satisfactory' or 'credit' may be counted toward the unit requirement.
2. A maximum of 15 transfer units may be counted toward the major, at most 10 of which may substitute for courses within Philosophy. Transfer credits may not substitute for PHIL 80 or PHIL 81, and are approved as substitutes for the five area requirements or PHIL 194 only in exceptional cases.
3. Courses offered in other departments may be counted toward requirements 3,5 and 7 , but such courses, including affiliated courses, do not generally count toward the other requirements. In particular, such courses may not satisfy requirement 4.
4. Units devoted to meeting the language requirement are not counted toward the 65-unit requirement.

## 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 grade 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 (PHIL 196 Tutorial, Senior Year) 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 (PHIL 199 Seminar for Prospective Honors Students) during the Spring Quarter of the junior year.

The length of the honors essay may vary considerably depending on the problem and the approach; usually it falls somewhere between 7,500 and 12,500 words. This 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 also provides 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.

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

## Philosophy and Religious Studies Combined Major

The undergraduate 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. Required course: PHIL 80 Mind, Matter, and Meaning
b. 16 units, including at least one Philosophy course from each of the following areas:
i Logic and philosophy of science: Students take either one from this list or an intermediate philosophy of science course numbered PHIL 160-169.

| PHIL 49 | Survey of Formal Methods | 4 |
| :--- | :--- | :--- |
| PHIL 50 | Introductory Logic | 4 |
| PHIL 60 | Introduction to Philosophy of Science | 5 |
| PHIL 61 | Philosophy and the Scientific Revolution | 5 |
| PHIL 150 | Mathematical Logic | 4 |
| PHIL 151 | Metalogic | 4 |
| PHIL 154 | Modal Logic | 4 |

ii Ethics and value theory: This requirement may be satisfied by PHIL 2 or any intermediate course devoted to central topics in moral and political philosophy numbered between PHIL 170 172 or 174-176.
iii Contemporary theoretical philosophy: Take either PHIL 1 Introduction to Philosophy or an intermediate course numbered PHIL 180-189.
iv History of philosophy: Select one of

| PHIL 100 | Greek Philosophy | 4 |
| :--- | :--- | :--- |
| PHIL 101 | Introduction to Medieval Philosophy | 4 |
| PHIL 102 | Modern Philosophy, Descartes to Kant | 4 |
| PHIL 103 | 19th-Century Philosophy | 4 |

2. Religious Studies (RELIGST) courses: 20 units, chosen in consultation with the student's adviser, including:
a. RELIGST 290 Majors Seminar (5 units; Winter Quarter; recommended junior year; fulfills WIM requirement)
b. at least one course in philosophy of religion, broadly construed, chosen in consultation with, and approved by, the Religious Studies Director of Undergraduate Studies.
c. diversity requirement: Students may not take all their religion courses in one religious tradition.

## 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 combined major are allowed only with special permission. No more than 10 units of work with a grade of 'satisfactory' count toward the combined major.

## Honors Program

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

## Joint Major Program in Philosophy and Computer Science

The joint major program (JMP), authorized by the Academic Senate for a pilot period of six years beginning in 2014-15, permits students to major in both Computer Science and one of ten Humanities majors. See the "Joint Major Program (http://exploredegrees.stanford.edu/ undergraduatedegreesandprograms/\#jointmajortext)" section of this bulletin for a description of University requirements for the JMP. See also the Undergraduate Advising and Research JMP web site and its associated FAQs.

Students completing the JMP receive a B.A.S. (Bachelor of Arts and Science).

Because the JMP is new and experimental, changes to procedures may occur; students are advised to check the relevant section of the bulletin periodically.

The joint major in Philosophy and Computer Science provides opportunities for the systematic study of computation together with philosophy in the broadest sense.

The joint major is appropriate for three distinct groups of students:

1. students with separate interests in the two fields who wish to begin thinking about their interaction (or else applications of one set to the other);
2. students interested in exploring philosophical issues in, and foundations of, computing;
3. students who would like to pursue philosophical investigations using computational methods.

## Philosophy Major Requirements in the Joint Major Program

See the "Computer Science Joint Major Progra (http:// exploredegrees.stanford.edu/schoolofengineering/computerscience/ \#jointmajorprogramtext)m" section of this bulletin for details on Computer Science requirements.

Students in the joint major are required to complete the same introductory and core requirements as other Philosophy majors, with the exception of a more demanding logic requirement. In addition, joint majors must complete a senior capstone seminar in Philosophy (PHIL 194), and are normally expected to complete (separately from PHIL 194) an integrative senior capstone project, developed with faculty
adviser(s) in CS and/or Philosophy, and approved in writing by the joint major's faculty adviser in Philosophy. Students may register for 5-10 units Individual Work, Undergraduate (PHIL 197) in association with the integrative capstone. These units may be taken across one or two quarters, and must be taken for a letter grade. Such projects must integrate the student's CS and philosophical learning.

In recognition of the student's work in the CS side of the joint major, the normal elective units required for Philosophy majors are reduced by 5 units for joint majors. Thus, the joint major requires 50 units within Philosophy.

Because logic is a core area of intersection between Philosophy and CS, students are in the best position to leverage the intersection of their work in the two fields if they develop a strong background in logical methods, and have a clear understanding of the way those formal methods are or can be used within Philosophy. Joint majors are therefore required to complete training in logic at least through successful completion of PHIL 150.

Thus, the Philosophy requirements of the joint major are:

1. An Introductory course (numbered under 100)
2. PHIL 80 (writing in the major)
3. Core requirements in philosophy
a. One course in logic (PHIL 150 or higher);
b. One course in philosophy of science;
c. One course in moral or political philosophy (normally PHIL 2 or PHIL 170s)
d. One course in contemporary theoretical philosophy (PHIL 180s)
e. Two courses in the history of philosophy, namely
i PHIL 100 (ancient philosophy)
ii PHIL 102 (modern philosophy)
4. Capstone seminar within philosophy (PHIL 194s)
5. Expected integrative independent capstone project
6. Electives sufficient to bring the student's overall program up to a minimum total of 50 units in Philosophy.

Units for Independent Work, Directed Reading, the Dualist, and Honors Seminar (PHIL 196, 197, 198, 199) do not count toward the overall requirement of 50 units within Philosophy. No more than 10 units of courses completed with grades of 'Satisfactory' or 'Credit' may be counted toward the 50 -unit requirement.

Students in the joint major should register their major declaration not only with the Director of Undergraduate Study (DUS) of Philosophy but also with the joint major's faculty adviser in Philosophy. In consultation with the faculty adviser (ideally beginning in the sophomore year), each joint major should work out an individualized program of courses to develop her/his philosophical interests and to explore the connections between them and her/his interests in computation. Each student should meet with the faculty adviser quarterly for a program update, during which there is discussion of opportunities for integrating the ongoing work in Philosophy and CS through course work, employment, projects, or other extracurricular activities. The faculty adviser assists students to develop coherent programs of study leading toward integrative senior experiences. If the normal expectation of a senior project turns out not to be suitable in individual cases, the student must obtain approval in writing from the faculty adviser of the substitute integrative activities and the faculty advisor of the joint major.

## Learning Objectives

Because the joint major seeks to develop deep disciplinary knowledge within Philosophy, the learning objectives of the general philosophy major also apply in the case of the joint major. In this aspect, students are expected to demonstrate:

1. the ability to communicate philosophical ideas effectively orally and in writing.
2. close reading, argument evaluation, and analytical writing.
3. dialectical ability to identify strengths and weaknesses of an argument and devise appropriate and telling responses.
4. the ability to think critically and demonstrate clarity of conceptualization.
5. the ability to differentiate good from unpromising philosophical questions.
6. the ability to sustain an argument of substantial scope, showing control over logical, argumentative, and evidential relations among its parts.

In addition, the joint major has the ambition to develop key knowledge and capacities that are relevant to the intersection of Philosophy and CS. In this domain, students in the joint major are expected to:

1. develop problem solving skills suitable to their work in the Computer Science side of the major, in accordance with learning goals specified for the joint major by Computer Science.
2. develop mastery of logical and formal methods adequate to support their work at the intersection of computing and philosophy.
3. demonstrate a deep understanding of at least one particular area of intersection between the two fields, or of how methods and ideas from one of the disciplines can inform or be applied to the other.

## Declaring a Joint Major Program

To declare the joint major, students must first declare each major through Axess, and then submit the Declaration or Change of Undergraduate Major, Minor, Honors, or Degree Program. (https://stanford.box.com/ change-UG-program) The Major-Minor and Multiple Major Course Approval Form (http://studentaffairs.stanford.edu/sites/default/files/ registrar/files/MajMin_MultMaj.pdf) is required for graduation for students with a joint major.

## Dropping a Joint Major Program

To drop the joint major, students must submit the Declaration or Change of Undergraduate Major, Minor, Honors, or Degree Program. (https:// stanford.box.com/change-UG-program). Students may also consult the Student Services Center (http://studentservicescenter.stanford.edu) with questions concerning dropping the joint major.

## Transcript and Diploma

Students completing a joint major graduate with a B.A.S. degree. The two majors are identified on one diploma separated by a hyphen. There will be a notation indicating that the student has completed a "Joint Major". The two majors are identified on the transcript with a notation indicating that the student has completed a "Joint Major".

## Minor in Philosophy

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

1. Students taking a Philosophy Thinking Matters course may count it as equivalent to a maximum of 4 units of Philosophy courses under 100. Students who took the Winter/Spring Philosophy Introduction to the Humanities (IHUM) track may count these courses as equivalent to a maximum of 5 units of Philosophy courses under 100. (IHUM courses are no longer offered).
2. The 30 units must include one of:
a. a history of philosophy course numbered 100 or above
b. one quarter of Philosophy Thinking Matters (THINK)
c. two quarters of IHUM (only 5 of the 10 units can count towards 30 -unit requirement). IHUM courses are no longer offered.
3. Minors must take one course from any two of the following three areas (PHIL):
a. Philosophy of Science and Logic: For philosophy of science, either PHIL 60, PHIL 61, or an intermediate philosophy of science courses numbered between PHIL 160-169; or else, for logic, one of:
b.

Logic

| PHIL 49 | Survey of Formal Methods | 4 |
| :--- | :--- | :--- |
| PHIL 50 | Introductory Logic | 4 |
| PHIL 150 | Mathematical Logic | 4 |
| PHIL 151 | Metalogic | 4 |
| PHIL 154 | Modal Logic | 4 |

c. Moral and political philosophy: This requirement may be satisfied by PHIL 2 or any intermediate course devoted to central topics in moral and political philosophy numbered between PHIL 170-172, or 174-176.
d. Contemporary theoretical philosophy: This requirement may be satisfied by most intermediate courses numbered between PHIL 180-189.
4. At least 10 units must be from courses numbered 100 or above.
5. Transfer units must be approved in writing by the Director of Undergraduate Study at the time of declaring. The number of transfer units is generally limited to a maximum of 10 .
6. No more than 6 units completed with grades of 'satisfactory' or 'credit' count towards the 30 -unit requirement.
7. Units for tutorials, directed reading, and affiliated courses may not be counted.

Students must declare their intention to minor in Philosophy in a meeting with the Director of Undergraduate Study. 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 Study) 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.

## Master of Arts in Philosophy

University requirements for the M.A. are discussed in the "Graduate Degrees (http://exploredegrees.stanford.edu/graduatedegrees)" section of this bulletin.

Three 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.

## Coterminal Bachelor's and Master's Degrees in Philosophy

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 a student 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.

University requirements for the coterminal M.A. are described in the "Coterminal Bachelor's and Master's Degrees (http:// exploredegrees.stanford.edu/cotermdegrees)" section of this bulletin. For University coterminal degree program rules and University application forms, see the Registrar's coterminal forms (https://4
registrar.stanford.edu/resources-and-help/forms/coterminal-forms) web site.

## University Coterminal Requirements

Coterminal master's degree candidates are expected to complete all master's degree requirements as described in this bulletin. University requirements for the coterminal master's degree are described in the "Coterminal Master's Program (http://exploredegrees.stanford.edu/ cotermdegrees)" section. University requirements for the master's degree are described in the "Graduate Degrees (http:// exploredegrees.stanford.edu/graduatedegrees/\#masterstext)" section of this bulletin.

After accepting admission to this coterminal master's degree program, students may request transfer of courses from the undergraduate to the graduate career to satisfy requirements for the master's degree. Transfer of courses to the graduate career requires review and approval of both the undergraduate and graduate programs on a case by case basis.

In this master's program, courses taken during or after the first quarter of the sophomore year are eligible for consideration for transfer to the graduate career; the timing of the first graduate quarter is not a factor. No courses taken prior to the first quarter of the sophomore year may be used to meet master's degree requirements.

Course transfers are not possible after the bachelor's degree has been conferred.

The University requires that the graduate adviser be assigned in the student's first graduate quarter even though the undergraduate career may still be open. The University also requires that the Master's Degree Program Proposal be completed by the student and approved by the department by the end of the student's first graduate quarter.

## Admissions

All prospective master's students, including those currently enrolled in other Stanford programs, must apply for admission to the program. No fellowships are available. Entering students must meet with the director of the master's program and have their advisor's 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:

Select one of the following:

| PHIL 49 | Survey of Formal Methods | 4 |
| :--- | :--- | :--- |
| PHIL 50 | Introductory Logic | 4 |
| PHIL 150 | Mathematical Logic | 4 |
| PHIL 151 | Metalogic | 4 |
| PHIL 154 | Modal Logic | 4 |

b. Philosophy of science: This requirement may be satisfied by PHIL 60, PHIL 61, or any intermediate philosophy of science course numbered between PHIL 160-169.
c. Moral and political philosophy: This requirement may be satisfied by any intermediate course devoted to central topics in moral and political philosophy numbered between PHIL 170-172, or PHIL 174-176.
d. Contemporary theoretical philosophy: This requirement may be satisfied by any intermediate course numbered between PHIL 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, philosophy of mind, and philosophy of language
e. History of philosophy

## 3. 200-Level Course Requirement

Each master's candidate must take at least two courses numbered above 200; these cannot be graduate sections of undergraduate courses.

## 4. 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 philosophy courses:

|  |  | Units |
| :--- | :--- | :---: |
| PHIL 80 | Mind, Matter, and Meaning | 5 |
| PHIL 151 | Metalogic | 4 |

And one of the following:

| PHIL 181 | Philosophy of Language | 4 |
| :--- | :--- | :--- |
| PHIL 184 | Epistemology | 4 |
| PHIL 186 | Philosophy of Mind | 4 |
| PHIL 187 | Philosophy of Action | 4 |

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 advisor. These courses should be from two of the following four areas:
a. Psychology
b. Linguistics
c. Computer Science
d. Education

Remaining courses are chosen in consultation with and approved by an advisor.

## 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" subsection above. 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:

| PHIL 384 | Seminar in Metaphysics and Epistemology | 4 |
| :--- | :--- | :--- |
| LINGUIST 230A | Introduction to Semantics and Pragmatics | 4 |

3. Logic: at least two approved courses numbered PHIL 151 Metalogic or higher.
4. An approved graduate-level course in mathematical linguistics or automata theory.

## Doctor of Philosophy in Philosophy

Prospective graduate students should see the Office of Graduate Admissions (http://gradadmissions.stanford.edu) web site for information and application materials. Applicants should take the Graduate Record Examination by October of the year the application is submitted.

The University's basic requirements for the Ph.D. degree including residence, dissertation, and examination are discussed in the "Graduate Degrees (http://exploredegrees.stanford.edu/graduatedegrees)" section of this bulletin. The requirements detailed here are department requirements. These requirements are meant to balance structure and flexibility in allowing students, in consultation with their advisers, to
take a path through the program that gives them a rigorous and broad philosophical education, with room to focus on areas of particular interest, and with an eye to completing the degree with an excellent dissertation and a solid preparation for a career in academic philosophy.

Normally, all courses used to satisfy the distribution requirements for the Philosophy Ph.D. are Stanford courses taken as part of a student's graduate program. In special circumstances, a student may petition to use a very small number of graduate-level courses taken at other institutions to satisfy a distribution requirement. To be approved for this purpose, the student's work in such a graduate-level course would need to involve an appropriate subject matter and would need to be judged by the department to be at the level of an ' $A$ ' in a corresponding graduatelevel course at Stanford.

Courses used to satisfy any course requirement in Philosophy must be passed with a letter grade of 'B-' or better (no satisfactory/no credit), except in the case of a course/seminar used to satisfy the third-year course/seminar requirement and taken for only 2 units. Such a reducedunit third-year course/seminar must be taken credit/no credit.

At the end of each year, the department reviews the progress of each student to determine whether the student is making satisfactory progress, and on that basis to make decisions about probationary status and termination from the program where appropriate.

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. First-year Ph.D. Proseminar: a one quarter, topically focused seminar offered in Autumn Quarter, and required of all first-year students.
2. Distribution requirements during the first six quarters. Intended to ensure a broad and substantial exposure to major areas of philosophy while allowing for considerable freedom to explore.
a. six courses distributed across three areas as follows: i two courses in value theory including ethics, aesthetics, political philosophy, social philosophy, philosophy of law. At least one of the courses satisfying this distribution requirement must be in ethics or political philosophy.
ii Two courses in language, mind, and action. One course satisfying this requirement must be drawn from the language related courses, and one from mind and action related courses.
iii two courses in metaphysics and epistemology (including metaphysics, epistemology, philosophy of science). At least one of the courses satisfying this requirement must be drawn from either metaphysics or epistemology.
iv Instructors indicate which courses may satisfy particular requirements. If a course potentially satisfies more than one requirement the student may use it for only one of those area requirements; no units may be double-counted. Students must develop broad competencies in all these areas. Those without strong backgrounds in these areas would normally satisfy these distribution requirements by taking more basic courses rather than highly specialized and focused courses. Students should consult with their adviser in making these course decisions, and be prepared to explain these decisions when reviewed for candidacy; see requirement 6 below.
b. Logic requirement: PHIL 150 Mathematical Logic or equivalent.
c. History/logic requirement. One approved course each in ancient and modern philosophy, plus either another approved history of philosophy course or PHIL 151 Metalogic.
d. Students should normally take at least 64 graduate level units at Stanford during their first six quarters (in many cases students
would take more units than that) and of those total units, at least 49 units of course work are to be in the Philosophy department. These courses must be numbered above 110, but not including Teaching Methods (PHIL 239 Teaching Methods in Philosophy) or affiliated courses. Units of Individual Directed Reading are normally not to be counted toward this 49-unit requirement unless there is special permission from the student's adviser and the Director of Graduate Studies.

## 3. Writing Requirement

A qualifying paper of professional quality and approximately 8000 words. Students must complete a version of the paper, which is itself likely to be a revision of a paper written during the first year of course work, by the beginning of their fourth quarter. The paper is read by a committee of two faculty who make suggestions for additional revision. The final version must be submitted by the first day of the sixth quarter, normally Spring Quarter of the second year.

## 4. Teaching Assistancy

A minimum of five quarters of teaching assistancy are required for the Ph.D. Normally one of these quarters is as a teaching assistant for the Philosophy Department's Writing in the Major course, PHIL 80 Mind, Matter, and Meaning. It is expected that students not teach in their first year and that they teach no more than two quarters in their second year. Students are required to take PHIL 239 Teaching Methods in Philosophy during Spring Quarter of their first year and during Autumn Quarter of their second year. Teaching is an important part of students' preparation to be professional philosophers.
5. Review at the End of the Second Year for Advancement to Candidacy

By the fourth week of the sixth quarter students must submit a onepage explanation of their first- and second-year course plan and their writing requirement paper. The faculty's review of each student includes a review of the student's record, an assessment of the qualifying paper, and an assessment of the student's preparation for work in her/his intended area of specialization, as well as recommendations of additional preparation, if necessary.
6. Candidacy

To continue in the Ph.D. program, each student must apply for candidacy during the sixth academic quarter, normally the Spring Quarter of the student's second year. Students may be approved for or denied candidacy by the end of that quarter by the department.
In some cases, where there are only one or two outstanding deficiencies, the department may defer the candidacy decision and require the student to re-apply for candidacy in a subsequent quarter.
In such cases, definite conditions for the candidacy re-application will be specified, and the student must work with his/her adviser and the DGS to meet those conditions in a timely fashion. A failure to maintain timely progress in satisfying the specified conditions will constitute grounds for a denial of advancement to candidacy.
7. Dissertation Development Seminar in the summer after the second year. This is the point at which students are expected to transition from spending much of their time on coursework to focusing on their thesis project. By the end of the summer, students are expected to have a plan for moving forward with the project in the third year; they should have formed advising relationships with faculty and should have made headway towards identifying a specific topic.
8. Upon completion of the summer dissertation development seminar, students will sign up for independent study credit, PHIL 240 Individual Work for Graduate Students, with their respective advisers each quarter. A plan at the beginning, and a report at the end of each quarter will be signed by both student and adviser and submitted to the Graduate Administrator for inclusion in the student's file. This will be the process every quarter up until the completion of the departmental oral.
9. In autumn and winter quarters of the third year, students will register in and satisfactorily complete PHIL 301 Dissertation Development Proseminar. Students meet to present their work in progress and discuss their thesis project. Participation in these seminars is required.
10. During the third and fourth years in the program, a student should complete at least three graduate-level courses/seminars, at least two of them in philosophy (a course outside philosophy can be approved by the adviser), and at least two of them in the third year. At most one can be taken credit/no-credit, and at most one can be taken for reduced (2) units (in which case it must be taken credit/ no-credit); others must be passed with a B- or better. Courses required for candidacy are not counted toward satisfaction of this requirement. This light load of courses allows students to deepen their philosophical training while keeping time free for thesis research.
11. Dissertation Work and Defense

The third and following years are devoted to dissertation work. The few requirements in this segment of the program are milestones to encourage students and advisers to ensure that the project is on track.
a. Dissertation Proposal-By Spring Quarter of the third year, students should have selected a dissertation topic and committee. A proposal sketching the topic, status, and plan for the thesis project, as well as an annotated bibliography or literature review indicating familiarity with the relevant literature, must be received by the committee one week before the meeting on graduate student progress late in Spring Quarter. The dissertation proposal and the reading committee's report on it will constitute a substantial portion of the third year review.
b. Departmental Oral-During Autumn Quarter of the fourth year, students take an oral examination 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 student, thesis topic, and advisors make a reasonable fit. It is an important chance for the student to clarify their goals and intentions with the entire committee present.
c. Fourth-Year Colloquium-No later than Spring Quarter of the fourth year, students present a research paper in a 60-minute seminar open to the entire department. This paper should be on an aspect of the student's dissertation research. This is an opportunity for the student to make their work known to the wider department, and to explain their ideas to a general philosophical audience.
d. University Oral Exam-Ph.D. students must submit a completed draft of the dissertation to the reading committee at least one month before the student expects to defend the thesis in the University oral exam. If the student is given consent to go forward, the University oral can 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 may request that the University oral count as the department oral.

## Interdisciplinary Study

The department supports interdisciplinary study. Courses in Stanford's other departments and programs may be counted towards the degree, and course requirements in Philosophy are designed to allow students considerable freedom in taking such courses. Dissertation committees may include members from other departments. Where special needs arise, the department is committed to making it possible for students to obtain a philosophical education and to meet their interdisciplinary goals. Students are advised to consult their advisers and the department's student services office for assistance.

## Interdepartmental Programs

## 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-Admitted students should have covered the equivalent of the core of the undergraduate Symbolic Systems Program requirements as described in the "Symbolic Systems (http:// exploredegrees.stanford.edu/schoolofhumanitiesandsciences/ symbolicsystems)" 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. In addition to the required course work below, the Ph.D. requirements are the same as for the regular program, with the exception that one course in value theory and one course in history may be omitted.

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

## 1. Philosophy courses:

a. at least three graduate seminars in the general area of symbolic systems other than logic, such as philosophy of mind and philosophy of language.
b. two quarters of graduate logic courses from among:

| PHIL 350A | Model Theory | 3 |
| :--- | :--- | :--- |
| PHIL 351A | Recursion Theory | 3 |

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 Al 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 288 Natural Language Understanding
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 and subsequent years are the same as for other third-year graduate students in philosophy: 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.

## 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 receive their Ph.D. from the Philosophy department; those admitted by the Classics department receive their Ph.D. from the Classics department. For Philosophy graduate students, this program provides training in classical languages, literature, culture, and history. For Classics graduate students, this program provides training in the history of philosophy and in contemporary philosophy.

Each student in the program is 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.

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.

## Ph.D. Subplan in History and Philosophy of Science

Graduate students in the Philosophy Ph.D. program may pursue a Ph.D. subplan in History and Philosophy of Science. The subplan is declared in Axess and subplan designations appear on the official transcript, but are not printed on the diploma.
Students must fulfill Departmental degree requirements and the following requitisments:

1. Attendance at the HPS colloquium series.
2. Philosophy of Science courses:

|  |  | Units |
| :--- | :--- | ---: |
| Select one of the following: |  |  |
| PHIL 263 | Significant Figures in Philosophy of Science | 4 |
| PHIL 264 | Central Topics in the Philosophy of Science: <br> Theory and Evidence | 4 |
| PHIL 264A | Central Topics in Philosophy of Science: Causation | 4 |
| PHIL 265 | Philosophy of Physics | 4 |
| PHIL 265C | Philosophy of Physics: Probability and Relativity | 4 |
| PHIL 266 | Probability: Ten Great Ideas About Chance | 4 |
| PHIL 267A | Philosophy of Biology | $2-4$ |
| PHIL 267B | Philosophy, Biology, and Behavior | 4 |
| 3. One elective seminar in the history of science. |  |  |
| 4. One elective seminar (in addition to the course satisfying requirement |  |  |
| 2) in philosophy of science. |  |  |

## Ph.D. Minor in Philosophy

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

1. Consult with the Director of Graduate Study to establish eligibility, and select a suitable adviser.
2. Give to the graduate administrator 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 six areas:
i Logic
ii Philosophy of science
iii Ethics, value theory, and moral and political philosophy
iv Metaphysics and epistemology
v Language, mind and action
vi History of philosophy
c. Two additional courses numbered over 199 to be taken in one of those (b) six 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.

Emeriti (Professors): Solomon Feferman, Dagfinn Føllesdal, John Perry,
Thomas Wasow, Allen Wood, Rega Wood, Denis Phillips (Courtesy
Professor)
Chair: Krista Lawlor

## Director of Graduate Study: MIchael Bratman

## Director of Undergraduate Study: Nadeem Hussain

Honors Director and Undergraduate Outreach Coordinator: Nadeem Hussain
Faculty Advisor for Joint Major with Computer Science: Thomas Icard
Professors: R. Lanier Anderson, Chris Bobonich, Michael Bratman, Rachael Briggs, Alan Code, John Etchemendy, Michael Friedman, Krista Lawlor, Helen Longino, Thomas Ryckman (Teaching), Debra Satz, Brian Skyrms (Spring), Kenneth Taylor, Johan van Benthem (Spring)

Associate Professors: Mark Crimmins, Graciela De Pierris, David Hills (Teaching), Nadeem Hussain, Tamar Schapiro

Assistant Professors: Jorah Dannenberg, Thomas Donaldson, Thomas Icard, Anna-Sara Malmgren

Acting Assistant Professor: Juliana Bidadanure
Courtesy Professors: Eamonn Callan, Reviel Netz, Josiah Ober, Thomas Sheehan

## Courtesy Associate Professor: Rob Reich

## Courtesy Assistant Professor: Kristi Olson

Visiting Professor: John Broome (Winter), Herlinde Pauer-Studer (Spring), Kendall Walton (Spring), Leif Wenar (Spring)

Lecturers: Facundo Alonso, Eli Alshanetsky, Willie Costello, Shane Duarte, Karola Kreitmair, Grant Rozeboom, Paul Skokowski, Richard Sommer, Jennifer Wang

## Cognate Courses

The following courses have substantial philosophical content. However, in the absence of special permission these courses cannot generally be used to satisfy requirements for the Philosophy major or graduate degrees in Philosophy.

|  |  | Units |
| :--- | :--- | :---: |
| MATH 161 | Set Theory | 3 |
| RELIGST 279 | After God: Why religion at all? | 4 |
| RELIGST 183 | Atheism: Hegel to Heidegger | 5 |

