

science. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

**NRSC 297. Directed Research (1-6)** Outside research, 3-18 hours. Prerequisite(s): graduate standing; consent of instructor. Research and experimental studies conducted under the supervision of a faculty member on specially selected topics in neuroscience. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

**NRSC 299. Research for the Thesis or Dissertation (1-12)** Outside research, 3-36 hours. Prerequisite(s): graduate standing; consent of instructor. Original research in an area selected for the advanced degree. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

## Peace and Conflict Studies Minor

**Subject abbreviation: PCST**  
**College of Humanities, Arts, and Social Sciences**

Georgia Warnke, Ph.D., Chair  
Department Office, HMNSS 1607  
(951)827-2830; [georgia.warnke@ucr.edu](mailto:georgia.warnke@ucr.edu)

### Committee in Charge

June O'Connor, Ph.D. (Religious Studies)  
Erith Jaffe-Berg, Ph.D. (Theatre)  
Bronwyn Leebaw, Ph.D. (Political Science)  
Christine Gailey, Ph.D. (Women's Studies)  
Juliann Allison, Ph.D. (Political Science)  
Victoria Bomberry, Ph.D. (Ethnic Studies)  
Wendy Ashmore, Ph.D. (Anthropology)  
Derek Burrill (Media and Cultural Studies)  
Stephen E. Cullenberg, Ph.D.  
*Dean, College of Humanities, Arts, and Social Sciences, ex officio*

Administered through the Interdisciplinary Studies Office, the Peace and Conflict Studies Minor provides opportunities for undergraduate students to give sustained attention to the diverse origins and expressions of conflict, to models for resolution advised by scholars and practitioners, to proactive peacemaking through the investigative and creative strategies fostered in higher education.

Students must take 5 upper-division courses as specified in sections 1 and 2 below.

1. Students must take at least one course from each of the following three rubrics plus a fourth course from the list below from any rubric:

- Perspectives from Religion, Philosophy, Literature and the Arts CLA 141/AST 145/CHN 141/CPAC 141/POSC 140, CPLT 115/GER 163/HISE 163/MCS 115, CPLT 132/FREN 132/GER 132, CPLT 134/GER 134/JPN 134/MCS 114, ENGL 135, RLST 116, RLST 174, RLST 175, RLST 176, THEA 191, VNM 162/AST 162/HIST 187/SEAS 162
- Social Scientific Perspectives ETST 111, POSC 123, POSC 124, POSC 124S, POSC 129, POSC 142L, POSC 150, POSC 159, POSC 160, POSC 169, SOC 122

- Historical Perspectives HISA 114, HISA 135/ETST 112, HISA 162/LNST 172, HISA 165, HISA 166, HISE 145, HISE 146, HIST 184/AST 160/SEAS 184/VNM 184, MCS 173 (E-Z)/CPLT 173 (E-Z), POSC 125, POSC 162/LNST 142

2. Capstone Course; one of the following:  
PCST 190, PCST 197, PCST 198-I

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

## Upper-Division Courses

**PCST 190. Special Studies (1-5)** Consultation, 10 hours per quarter; extra reading, 6-9 hours; written work, 3-6 hours. Prerequisite(s): upper-division standing; consent of Peace and Conflict Studies Committee chair; consent of faculty advisor is required for students repeating the course. Individual study in the areas of conflict resolution and mediation. Examines theories in depth, as well as case studies introduced in previous courses. Course is repeatable.

**PCST 197. Research for Undergraduates (4)** Consultation, 10 hours per quarter; extra reading, 6 hours; written work, 3 hours. Prerequisite(s): upper-division standing; consent of Peace and Conflict Studies Committee chair. Directed original research in the fields of conflict resolution, mediation, and peace studies.

**PCST 198-I. Individual Internship in Peace and Conflict Studies (4)** Consultation, 1 hour; internship, 8 hours; written work, 3 hours. Prerequisite(s): upper-division standing; consent of Peace and Conflict Studies Committee chair; consent of faculty advisor is required for students repeating the course. Provides internship opportunities in organizations that engage in mediation and conflict resolution. Includes supervision under an assigned faculty member. Course is repeatable to a maximum of 16 units.

## Pest Management

**Subject Abbreviation: PSMT**  
**College of Natural and Agricultural Sciences**

The M.S. program in Pest Management is not currently accepting new students. For further information call (800) 735-0717 or (951) 827-5621.

## Philosophy

**Subject abbreviation: PHIL**  
**College of Humanities, Arts, and Social Sciences**

John M. Fischer, Ph.D., Chair  
Department Office, 1604 Humanities  
and Social Sciences  
(951) 827-5208; [philosophy.ucr.edu](http://philosophy.ucr.edu)

### Professors

Carl F. Cranor, Ph.D.  
John M. Fischer, Ph.D. *President's Chair*  
David K. Glidden, Ph.D.  
Paul D. Hoffman, Ph.D.

Robin Jeshion, Ph.D.  
John Perry, Ph.D.  
Andrews Reath, Ph.D.  
Eric Schwitzgebel, Ph.D.  
Charles Siewert, Ph.D.  
Georgia Warnke, Ph.D.  
Gary Watson, Ph.D.  
Howard K. Wettstein, Ph.D.  
Mark A. Wrathall, Ph.D.  
Larry Wright, Ph.D.

### Professors Emeriti

David Harrah, Ph.D.  
Bernd Magnus, Ph.D.

### Associate Professors

Peter J. Graham, Ph.D.  
Agnieszka Jaworska, Ph.D.  
Pierre Keller, Ph.D.  
Erich Reck, Ph.D.

### Assistant Professors

Coleen Macnamara, Ph.D.  
Michael Nelson, Ph.D.

## Majors

The Department of Philosophy offers a major and minor in Philosophy and a major in Philosophy/Law and Society.

The **Philosophy major** is designed to introduce students to the important issues and arguments surrounding such subjects as morality, knowledge, the nature of the mind and of the physical world, science, and language. The program provides a rigorous background in the history of Western philosophy, and studies contemporary approaches (both analytic and Continental) to philosophical issues. The B.A. degree in Philosophy prepares students for graduate study in philosophy, and is also excellent preparation for law school. For students interested in a double major, philosophy also serves as an excellent complement to psychology, mathematics, political science, and the natural sciences.

The **Philosophy/Law and Society major** offers students a means of understanding complex relationships between social institutions and provides a strong basis for graduate studies in areas related to law and philosophy. The Philosophy/Law and Society curriculum is sound background for students planning on pursuing the study of law.

## University Requirements

See Undergraduate Studies section.

## College Requirements

See College of Humanities, Arts, and Social Sciences, Colleges and Programs section.

## Major Requirements

The department offers two majors: the traditional Philosophy major, and a Philosophy/Law and Society major.

### Philosophy Major

The major requirements for the B.A. degree in Philosophy are as follows:

Fifty-six (56) units of course work in Philosophy including at least 36 upper-division units.

## 356 / Programs and Courses

1. PHIL 007 or PHIL 007H and PHIL 008 or PHIL 008H
2. PHIL 100 (Sophomore-Junior Seminar)
3. Three courses in the history of philosophy, at least one of which must be in ancient Greek or Roman philosophy. Select courses from PHIL 030 (E-Z), PHIL 120 (E-Z), PHIL 121 (E-Z), PHIL 122 (E-Z); a specific list is provided by the Philosophy Department. Not more than two courses may be from PHIL 030 (E-Z)
4. At least two courses in metaphysics, epistemology, or philosophy of language: PHIL 130 through PHIL 152, PHIL 159.
5. At least one course in moral and political philosophy: PHIL 108, PHIL 116, PHIL 117, PHIL 119, PHIL 153, PHIL 161 through PHIL 169 (E-Z).

Students are urged to consult the department's undergraduate advisor in preparing their course of study each quarter while at UCR.

### Philosophy/Law and Society Major

Major requirements for a B.A. degree in Philosophy/Law and Society are as follows:

1. **Philosophy requirements** (36 units)
  - a) PHIL 007 or PHIL 007H
  - b) Three courses in the history of philosophy (two of which must be upper-division): PHIL 030 (E-Z), PHIL 120 (E-Z), PHIL 121 (E-Z), PHIL 122 (E-Z)
  - c) Five courses in moral and political philosophy: PHIL 108, PHIL 116, PHIL 117, PHIL 119, PHIL 153, and PHIL 161 through PHIL 169 (E-Z)
2. **Law and Society requirements** (36 units)
  - a) PHIL 007 or PHIL 007H
  - b) LWSO 100
  - c) One course chosen from ECON 111, POSC 114, PSYC 012, SOC 004 (or equivalent course in research methods)
  - d) Three courses chosen from ANTH 127, ECON 119, HISE 153, PHIL 165, POSC 167, PSYC 175, SOC 159
  - e) Two courses chosen from ENSC 174, HISA 120A, HISA 120B, HISE 123, LWSO 175 (E-Z), PHIL 164, POSC 111, POSC 166, POSC 168, POSC 186, SOC 147, SOC 149, SOC 180
  - f) LWSO 193, Senior Seminar

**Note** For sections 2.d) and 2.e) combined, not more than two courses may be taken from the same department. In filling the dual requirements of the major, students may not count more than two courses toward both parts of their total requirements (Philosophy Department requirements and Law and Society requirements). The department has its own Philosophy/Law and Society undergraduate advisor, and each student is urged to consult the advisor in preparing a course of study each quarter while at UCR.

### Minor

A student may minor (24 units) in Philosophy by taking either PHIL 007, PHIL 007H, PHIL 008 or PHIL 008H, four upper-division philosophy courses, and one other philosophy course at any level.

Students may also choose to do a Philosophy minor with special emphasis, taking their four upper-division courses from one of the areas listed below:

1. Philosophy, Literature, and History of Philosophy: PHIL 120 (E-Z), PHIL 121 (E-Z), PHIL 122 (E-Z), PHIL 132, PHIL 151, PHIL 152, PHIL 150, PHIL 159
2. Philosophy and Cognitive Science: PHIL 125, PHIL 126, PHIL 130, PHIL 131, PHIL 132, PHIL 133, PHIL 134, PHIL 135
3. Philosophy and the Natural Sciences: PHIL 117, PHIL 130, PHIL 134, PHIL 137, PHIL 140, PHIL 151, PHIL 167
4. Philosophy and Social and Policy Analysis: PHIL 153, PHIL 161, PHIL 162, PHIL 163, PHIL 164, PHIL 165

See Minors under the College of Humanities, Arts, and Social Sciences in the Colleges and Programs section of this catalog for additional information on minors.

## Graduate Program

The Department of Philosophy offers the M.A. and Ph.D. degrees in Philosophy.

**Admission** Domestic applicants must supply GRE scores for the aptitude tests. All applicants must submit a statement of interest and a writing sample.

Upon entering the program, students are assigned a committee of two faculty advisors. Students consult with the graduate advisor and their advisory committees twice a year, in September and January, to discuss their individual course of study, progress in the program, and recent performance. In the first year, students (whether they have entered with an M.A. or a B.A.) take three proseminars for first-year graduate students, two in Metaphysics and Epistemology, and one in Moral Philosophy (PHIL 275A, PHIL 275B, PHIL 275C). The proseminars are designed to acquaint first-year students with the current state of discussion in central areas of contemporary philosophy and to impart the skills needed to conduct their own research.

### Master's Degree

The Department of Philosophy offers the M.A. degree in Philosophy under Plan I (Thesis).

**Course Work** Students must complete, with a grade of "B" or better, course work totaling 48 units of graduate credit in philosophy. Of these, 12 units must be in the three proseminars for first-year graduate students, and an additional 12 units must be seminars and workshops in the 272-283 series. Up to 24 units may be in the 100-series or 220-266 series courses,

depending on the student's interests and background. These courses are to be chosen only in consultation with the student's advisory committee and the graduate advisor.

Courses taken on a Satisfactory (S)/No Credit (NC) basis cannot be used to satisfy course requirements.

Students should note that although they need not complete distributional requirements or a language requirement to acquire the M.A. degree, there are strict distributional and language requirements for the Ph.D. degree, as well as a colloquium and professional development workshop requirement (described below under the Ph.D. requirements). Students who expect to continue on in the Ph.D. program must begin to fulfill these requirements immediately upon entering the program if they expect to acquire the Ph.D. degree within the prescribed period of time.

**M.A. Logic Requirement** The logic requirement for the M.A. degree is completion of PHIL 124 with a grade of "B" or better. Students may be excused from this requirement if they show sufficient knowledge of logic upon entering the graduate program, as indicated by an optional diagnostic examination administered at the start of each academic year. Students who are unsure about the adequacy of their background are encouraged to take the test for diagnostic purposes.

**M.A. Paper** Students select a paper to submit to the graduate advisor as their M.A. paper no later than the end of the spring quarter of their second year. M.A. papers can be seminar papers, revised seminar papers, or any other paper that the student has written (of 25 pages or less). Further information on what constitutes an acceptable paper is available from the graduate advisor.

Upon the submission of this paper, the graduate advisor selects three faculty members to serve as the M.A. committee, which conducts an oral examination on the paper. Normally the oral examination will be completed before the end of the student's second year, but it may be postponed until the fall quarter of the student's third year. Failure to pass the M.A. oral examination after two opportunities constitutes grounds for dismissal from the program. In addition, completion of the M.A. requirements does not guarantee permission to continue in the Ph.D. program.

### Doctoral Degree

The Department of Philosophy offers the Ph.D. degree in Philosophy.

**Admission** Students are invited to continue toward candidacy for the Ph.D. degree on the basis of performance in courses and seminars, satisfactory completion of the M.A. requirements, and the recommendation of their advisory committee in consultation with the graduate advisor. A student's course of study is supervised by an advisory committee, in consultation with the graduate advisor until the

student's dissertation committee is appointed. Students with a master's degree in Philosophy from other universities are eligible for admission. These students must enroll in the first-year proseminars.

**Course Work** Students must complete 12 more units in philosophy, with a grade of "B" or better, in addition to the 48 units for the M.A. degree. Of the student's 60 graduate units in philosophy, 12 units must be in the area of the history of philosophy, with 4 of these in ancient philosophy, 4 units in addition to the proseminar (PHIL 275A, PHIL 275B) in the area of metaphysics and epistemology, and 8 units in addition to the proseminar (PHIL 275C) in the area of ethics, political philosophy, and aesthetics.

Thirty-two of these 60 units must be seminars and workshops in the 272-283 series. Courses taken on a Satisfactory (S)/No Credit (NC) basis cannot be used to satisfy course requirements.

#### Colloquia and Professional Development

**Workshop Requirement** Students must register for the PHIL 270 (Philosophy Colloquia) during each quarter of their first and second years. Students must register for PHIL 400 (Research and Professional Development Workshop) during each quarter of their second and third years.

**Language Requirement** Students must show the competence necessary to work in one of four foreign languages: French, German, Latin, or Greek. Another language may be substituted upon approval of the faculty if it agrees better with the student's area of their research.

**Logic Requirement** To satisfy the logic requirement, students must pass PHIL 125 (Intermediate Logic) with a grade of "B" or better.

**Proposition Requirement** All Ph.D. students must complete an acceptable proposition normally during their third year in the program. A proposition is a paper, no more than forty pages in length, devoted to a significant problem in philosophy. It should show the ability to mount a sustained thesis and to work with the relevant primary or secondary literature.

#### Written and Oral Qualifying Examinations

Students must write a dissertation prospectus and pass a qualifying oral examination before advancing to candidacy. This examination, which is supervised by a faculty committee as stipulated in the regulations of the Graduate Division, concentrates on the students' preparation for writing a dissertation as indicated by the dissertation prospectus. It must be taken after the student has passed the M.A. language and proposition requirements and normally occurs within two quarters of the completion of these requirements.

**Dissertation and Final Oral Examination** A dissertation to be presented as prescribed by the Graduate Council is prepared under the direction of the candidate's dissertation committee. After completion of the dissertation, the candidate is examined in its defense by the dissertation committee.

**Normative Time to Degree** 18 quarters

## Lower-Division Courses

**PHIL 001. Introduction to Philosophy (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. An introductory exploration into the nature of the individual, his/her place in the universe, and the forces that shape his/her destiny. Credit is awarded for only one of PHIL 001 or PHIL 001H.

**PHIL 001H. Honors Introduction to Philosophy (4)** Lecture, 2 hours; discussion, 1 hour; extra reading, 3 hours. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 001. An introductory course designed to explore a small number of classical texts central to philosophy and the liberal arts and sciences. Students examine issues surrounding the nature of knowledge, the foundations of moral philosophy, and the relation of both to the development of the human and natural sciences. Texts may vary from year to year and include works by such authors as Plato, Aristotle, Descartes, Hobbes, Hume, and Kant. Satisfactory (S) or No Credit (NC) grading is not available. Credit is awarded for only one of PHIL 001 or PHIL 001H.

**PHIL 002. Contemporary Moral Issues (4)** Lecture, 2 hours; discussion, 1 hour; consultation, 1 hour. Prerequisite(s): none. Philosophical analysis of contemporary moral issues such as: abortion, discrimination, sexual morality, punishment, the obligation to obey the law, suicide, euthanasia, war, privacy. Credit is awarded for one only of PHIL 002 or PHIL 002H.

**PHIL 002H. Honors Contemporary Moral Issues (4)** Lecture, 2 hours; discussion, 1 hour; extra reading, 3 hours. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 002. Philosophical analysis of contemporary moral issues such as abortion, discrimination, sexual morality, punishment, the obligation to obey the law, suicide, euthanasia, war, and privacy. Satisfactory (S) or No Credit (NC) grading is not available. Credit is only awarded for one of PHIL 002 or PHIL 002H.

**PHIL 003. Ethics and the Meaning of Life (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. Approaches one of the basic questions of value: How should one live? Covers classical and contemporary discussions of issues such as the human good, human virtue, the role of pleasure and happiness, egoism and altruism, duty, the relativity and objectivity of value, the meaning of life, death, autonomy, integrity, and conscience. Credit is awarded for only one of PHIL 003 or PHIL 003H.

**PHIL 003H. Honors Ethics and the Meaning of Life (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 003. Approaches one of the basic questions of value: How should one live? Covers classical and contemporary discussions of issues such as the human good, human virtue, the role of pleasure and happiness, egoism and altruism, duty, the relativity and objectivity of value, the meaning of life, death, autonomy, integrity, and conscience. Satisfactory (S) or No Credit (NC) grading is not available. Credit is awarded for only one of PHIL 003 or PHIL 003H.

**PHIL 004. Introduction to the Philosophy of Race (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. Introduction to the philosophy of race from classical theorists to contemporary critical race theory. Topics covered include the Enlightenment,

discussions of race in the founding of the American Republic, Supreme Court decisions from Dred Scott to recent affirmative action decisions, and the concept of race as a social construction.

**PHIL 005. Evil (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. An introduction to the nature of evil, its motivation, and its origins. Utilizes a variety of sources to examine these themes, including classical philosophical texts and contemporary films. Credit is awarded for only one of PHIL 005 or PHIL 005H.

**PHIL 005H. Honors Evil (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 005. An introduction to the nature of evil, its motivation, and its origins. Utilizes a variety of sources to examine these themes, including classical philosophical texts and contemporary films. Satisfactory (S) or No Credit (NC) grading is not available. Credit is awarded for only one of PHIL 005 or PHIL 005H.

**PHIL 006. Reason, Belief, and Truth (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. An introductory examination of the nature of reason, rationality, argument, proof, and persuasion and the nature of theory, belief, faith and conviction, and truth and falsity. Discusses the various bodies of belief and modes of inquiry, such as the natural and social sciences, the humanities, morality, religion, and mathematics.

**PHIL 007. Introduction to Critical Thinking (4)** Lecture, 2 hours; discussion, 1 hour. Prerequisite(s): none. A practical examination of reasoning and argument typically illustrated. Credit is awarded for only one of PHIL 007 or PHIL 007H.

**PHIL 007H. Honors Introduction to Critical Thinking (4)** Lecture, 2 hours; discussion, 1 hour; term paper, 3 hours. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 007. A practical examination of reasoning and argument, typically illustrated. Satisfactory (S) or No Credit (NC) grading is not available. Credit is only awarded for one of PHIL 007 or PHIL 007H.

**PHIL 008. Introduction to Logic (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. An introduction to symbolic logic. Teaches how to distinguish, in a precise way, valid deductive arguments from those that are invalid; includes learning to use logical symbolism, truth tables, and formal deductions. Credit is awarded for only one of PHIL 008 or PHIL 008H.

**PHIL 008H. Honors Introduction to Logic (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 008. An introduction to symbolic logic. Teaches how to distinguish, in a precise way, valid deductive arguments from those that are invalid; includes learning symbolism, truth tables, and formal deductions. Satisfactory (S) or No Credit (NC) grading is not available. Credit is awarded for only one of PHIL 008 or PHIL 008H.

**PHIL 009. Biomedical Ethics (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. Introduces the major camps in ethical theory - utilitarianism, deontology, virtue ethics, and feminist ethics. Applies these theories to critically examine contemporary issues in bioethics. Includes stem-cell research, assisted reproductive technologies, contract gestation, maternal-fetal conflicts, genetic and pharmacological enhancements, access to health care, and physician-assisted suicide. Credit is awarded for only one of PHIL 009 or PHIL 009H.

## 358 / Programs and Courses

**PHIL 009H. Honors Biomedical Ethics (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 009. Introduces the major camps in ethical theory - utilitarianism, deontology, virtue ethics, and feminist ethics. Applies these theories to critically examine contemporary issues in bioethics. Includes stem-cell research, assisted reproductive technologies, contract gestation, maternal-fetal conflicts, genetic and pharmacological enhancements, access to health care, and physician-assisted suicide. Satisfactory (S) or No Credit (NC) grading is not available. Credit is awarded for only one of PHIL 009 or PHIL 009H.

**PHIL 010. Language, Mind, and Reality (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. Explores the nature of language, communication, and mentality and their role in shaping our thought and experience of the world. Tackles questions about the innateness of concepts, the social and rational norms governing communication, the nature of speech acts and their connection to hate speech and pornography, and the scope of mentality. Credit is awarded for only one of PHIL 010 or PHIL 010H.

**PHIL 010H. Honors Language, Mind, and Reality (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): admission to the University Honors Program or consent of instructor. Honors course corresponding to PHIL 010. Explores the nature of language, communication, and mentality and their role in shaping our thought and experience of the world. Tackles questions about the innateness of concepts, the social and rational norms governing communication, the nature of speech acts and their connection to hate speech and pornography, and the scope of mentality. Satisfactory (S) or No Credit (NC) grading is not available. Credit is awarded for only one of PHIL 010 or PHIL 010H.

**PHIL 012. Introductory Seminar in Moral Philosophy (4)** Seminar, 3 hours; extra reading, 2 hours. Prerequisite(s): none. An introduction to a small number of central moral issues: Small class size in order to provide for substantial discussion and close supervision of written papers.

**PHIL 030 (E-Z). Introduction to the History of Philosophy (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): none. Introductory surveys of important periods and subjects in the history of Western philosophy. Topics include E. Hellenic Philosophy: Pre-Socratics through Aristotle; F. Hellenistic Philosophy: Epicureans, Stoics, and Skeptics; G. Medieval Philosophy; I. Early Modern Philosophy; J. Late Modern Philosophy; K. Nineteenth-Century Philosophy; M. History of Ethics; N. History of Political Philosophy.

## Upper-Division Courses

**PHIL 100. Sophomore-Junior Seminar (4)** Seminar, 3 hours; term paper, 3 hours. Prerequisite(s): one course in philosophy; sophomore, junior, or senior standing in Philosophy or Philosophy/Law and Society. A writing-intensive seminar designed to introduce students to philosophical analysis and writing through an in-depth focus on a philosophical text or issue. Content varies.

**PHIL 107. Languages and Minds (4)** Lecture, 3 hours; extra reading, 2 hours; written work, 1 hour. Prerequisite(s): one course in philosophy or consent of instructor. An investigation of interrelated issues in the philosophy of mind and language, including the mind-body relation, theories of meaning, how thoughts and language represent states of affairs in the world, and the nature of consciousness.

**PHIL 108. Philosophical Issues of Race and Gender (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. Investigates philosophical issues concerning race and gender. Themes include the role of cultural and biological criteria in defining these concepts; the roles of race and gender in personal identity; the nature of racism, sexism, and their variants; and policy implications such as affirmative action and the civil status of homosexual relationships. Cross-listed with WMST 108.

**PHIL 110. Asian Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. A general introduction to philosophy as well as a survey of Asian contributions to philosophy, focusing on the Indian and Chinese traditions. Examines questions concerning how best to live one's life, what can be known, the relation between mind and body, whether there are minds and bodies, and the nature of the universe.

**PHIL 111. Philosophy, Film, and Reflective Popular Culture (4)** Lecture, 3 hours; screening, 1 hour; extra reading, 2 hours. Prerequisite(s): upper-division standing or consent of instructor. Examines a number of philosophical themes as depicted in film and/or other media of reflective popular culture. Four or five films are screened; each is examined for the philosophical issues it raises. Themes may include integrity, love, spirituality, meaning, identity, and morality.

**PHIL 112. Mortal Questions (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. Focuses on aspects of our distinctively human capacity to lead a meaningful life, especially investigating aspects of the nature of the mind and human freedom. The nature of death and its place in the context of a meaningful life is discussed.

**PHIL 113. God (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing. Topics include examination of the nature of divinity and the nature of evil, the influence of the concept of God upon philosophical history, ideals, and values, and the riddle of an after-life.

**PHIL 114. Science and Human Understanding (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Discusses how contemporary philosophers have examined human understanding as exemplified in science.

**PHIL 115. The Care of the Soul (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. A historical and contemporary examination of the role philosophy has played in nurturing the human spirit in the face of other philosophical efforts to demythologize the soul into neural functions or even mere congeries of atoms in motion in the void.

**PHIL 116. Business Ethics (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): upper-division standing or consent of instructor. An inquiry into some of the moral issues arising from business life, such as conflicts of interest, responsibility to consumers, corporate culture and character, and the morality of competition. Also considers the history of ethics and the history business as an institution.

**PHIL 117. Environmental Ethics (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. A philosophic consideration of ethical problems that arise from the use and exploitation of the environment. Topics covered include workplace pollution hazards; environmental pollution and protection of collective natural resources; the rights of future generations; the rights of animals; the protection of endangered species.

**PHIL 118. Personhood and Personal Identity (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. Develops the basic elements of the concept of personhood, and how persons are alleged to be crucially different from non-human animals. Various theories are considered about what is essential to us as individuals and what makes us the same person over time. Explores the relationship between these metaphysical issues and moral issues, such as euthanasia, animals' rights, and abortion.

**PHIL 119. Economics and Philosophy (4)** Lecture, 3 hours; individual study, 3 hours. Prerequisite(s): ECON 104B or consent of instructor. Examines issues on the boundary of economics and philosophy. Topics include social choice theory and economic justice; foundations of utility theory, rational choice, and economic welfare; and epistemology and the philosophies of science of Popper, Kuhn, and others. Cross-listed with ECON 117.

**PHIL 120 (E-Z). Ancient Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Each segment covers a major figure in ancient Greek or Roman philosophy. E. Plato; F. Aristotle; G. Plato and Aristotle; I. Cicero; J. Seneca; K. Plutarch. Credit is awarded for only one of PHIL 120 (E-Z) or PHIL 220 (E-Z).

**PHIL 121 (E-Z). Major Philosophers (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Each segment covers a major figure in the history of medieval, early modern, or late modern philosophy. E. Aquinas; F. Descartes; G. Leibniz; I. Spinoza; J. Locke; K. Hume; M. Reid; N. Kant; O. Hegel; Q. Nietzsche; R. Royce; S. Freud; T. Heidegger; V. Wittgenstein; X. Kripke. Credit is awarded for only one of each of the corresponding lettered segments of PHIL 121 (E-Z) and PHIL 221 (E-Z).

**PHIL 122 (E-Z). Topics in History of Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Topics include E. Ancient Philosophy; F. Medieval Philosophy; I. French Renaissance Philosophy; J. Early Modern Philosophy; M. Moral Theories of Hume and Kant; N. Nineteenth-Century Moral Philosophy; O. Kant and Post-Kantian European Moral Philosophy; Q. Political Philosophy; R. Origins of Analytical Philosophy. Credit is awarded for only one of each of the corresponding lettered segments of PHIL 122 (E-Z) and PHIL 222 (E-Z).

**PHIL 123. Readings in Classical Chinese Philosophy (4)** Lecture, 3 hours; written work, 3 hours. Prerequisite(s): CHN 104 or consent of instructor. Introduces selections from key philosophical texts in classical Chinese. Focuses on a combination of Chinese reading and philosophical understanding. Cross-listed with CHN 106.

**PHIL 124. Formal Logic (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): CS 120A/EE 120A or CS 150 or MATH 112 or PHIL 008 or PHIL 008H or consent of instructor. An introduction to first-order logic, the core of the logic often used in contemporary philosophy, mathematics, computer science, and linguistics.

**PHIL 125. Intermediate Logic (4)** Lecture, 3 hours; extra reading, 2 hours; term paper, 1 hour. Prerequisite(s): PHIL 124 or consent of instructor. The basic metatheory of first-order logic; with an emphasis on the precise relation between its syntax (formulas, rules of inference, and proofs) and semantics (interpretations, truth, validity), leading to the soundness and completeness theorems.

**PHIL 126. Advanced Logic (4)** Lecture, 3 hours; extra reading, 2 hours; term paper, 1 hour. Prerequisite(s): PHIL 125. Advanced metatheory of first-order logic, leading to a discussion of some of the important incompleteness, undecidability and non-expressibility results of twentieth-century logic (Godel, Church, Turing, etc.).

**PHIL 127. Advanced Topics in Logic (4)** Lecture, 3 hours; extra reading, 1 hour; problem sets, 3 hours. Prerequisite(s): PHIL 124 or PHIL 125. A study of selected non-truth-functional and nonstandard logics. Includes modal logics, tense logics, free logics, paraconsistent logics, and set theory. Course is repeatable as content changes.

**PHIL 128. Introduction to Arabic Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An introduction to Arabic philosophical texts. Provides close and literary reading of texts in philosophy, as well as considers the impact these texts have had or can have on Western cultural formation. Cross-listed with ARLC 154 and CPLT 154.

**PHIL 130. Theory of Knowledge (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. An inquiry into the nature of human knowledge—its possibility, criteria, scope, and limitations. Credit is awarded for only one of PHIL 130 or PHIL 230.

**PHIL 131. Twentieth-Century Analytic Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. A discussion of some major issues and thinkers in the tradition dominant in twentieth-century British and American philosophy. Philosophers discussed might include Frege, Russell, Carnap, Quine, Kripke, and D. Lewis. Credit is awarded for only one of PHIL 131 or PHIL 231.

**PHIL 132. Philosophy of Language (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. A study of some of the traditional issues in the philosophy of language, such as analyticity, theories of reference, truth, speech act theory, and philosophical theories of formal grammars. Credit is awarded for only one of PHIL 132 or PHIL 232.

**PHIL 133. Metaphysics (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. An investigation of some of the traditional problems in Western philosophy that have been labeled metaphysical, such as the existence of God, the relationship between mind and body, the determinism versus free will debate, and the nature of time and space. Credit is awarded for only one of PHIL 133 or PHIL 233.

**PHIL 134. Philosophy of Mind (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. A study of several theories of the nature of mind and an analysis of particular issues occasioned by them: the mind-body problem, personal identity, emotions, human action, self-knowledge, knowledge of other minds, and explanations of human behavior. Credit is awarded for only one of PHIL 134 or PHIL 234.

**PHIL 135. Philosophy of Psychology (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Examines philosophical issues arising in the context of empirical psychology. Topics may include moral development, artificial intelligence and the modeling of cognition, the nature of perception and memory, fallacies in human reasoning, mechanisms of self-understanding, and mental illness and personhood. Credit is awarded for only one of PHIL 135 or PHIL 235.

**PHIL 137. Philosophy of Science (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Topics discussed include understanding scientific objectivity in the light of history and sociology of science; realism and anti-realism about scientific theories; scientific methodology and its logic; and the nature of scientific explanation. Credit is awarded for only one of PHIL 137 or PHIL 237.

**PHIL 138. Philosophy of Agency (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. An investigation of problems that arise in attempts to understand human agency: the nature and explanation of action, intention, free will and moral responsibility, and weakness of will. Credit is awarded for only one of PHIL 138 or PHIL 238.

**PHIL 139. Philosophy of Mathematics (4)** Lecture, 3 hours; extra reading, written work, homework problems, 3 hours. Prerequisite(s): PHIL 124 or one mathematics course or consent of instructor. Discusses topics such as the abstract nature of mathematical objects, the sources of mathematical knowledge, the relation between mathematics and logic, and the infinite in mathematics. Considers the development of some selected parts of mathematics (especially arithmetic, geometry, algebra, and set theory) and of various corresponding philosophical positions (platonism, formalism, intuitionism, structuralism). Course is repeatable as content changes. Credit is awarded for only one of PHIL 139 or PHIL 239.

**PHIL 140. Topics in Metaphysics (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. An in-depth discussion of selected issues in contemporary metaphysics, such as abstract objects, essentialism and identity, laws of nature, free will, and determinism. Course is repeatable as content changes.

**PHIL 142. Advanced Topics in the Philosophy of Language (4)** Lecture, 3 hours; extra reading, 2 hours; written work, 1 hour. Prerequisite(s): PHIL 107 or PHIL 132 or consent of instructor. An in-depth study of a particular topic in the philosophy of language. Potential topics include context-sensitivity (how the meaning of a sentence depends upon nonlinguistic facts about context); theories of meaning (e.g., the Frege-Russell account in terms of propositions, the Lewis-Stalnaker possible worlds account, and Davidson's truth theory account). Course is repeatable as content changes to a maximum of 8 units. Credit is awarded for only one of PHIL 142 or PHIL 242.

**PHIL 144. Advanced Topics in Philosophy of Mind (4)** Lecture, 3 hours; extra reading, 2 hours; written work, 1 hour. Prerequisite(s): PHIL 107 or PHIL 134 or consent of instructor. Examines a selected topic in philosophy of mind. Potential topics include consciousness and self-consciousness; intentionality and theories of mental content; mental causation; consciousness and free will; introspection and knowledge of other minds; perception; emotion; imagination; concepts and rationality; artificial minds; and animal minds. Course is repeatable as content changes to a maximum of 8 units. Credit is awarded for only one of PHIL 144 or PHIL 244.

**PHIL 150. Philosophy in Literature (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. An examination of philosophical issues raised by selected novelists, poets, and playwrights.

**PHIL 151. Existentialism (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An examination of philosophical and literary works which deal with the

significance of some fundamental human experiences: identity crises, choice and commitment, anxiety and death, the experience of meaninglessness, and alienation. Credit is awarded for only one of PHIL 151 or PHIL 251.

**PHIL 152. Twentieth-Century Continental Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Examines the character and consequences of several recent movements in continental philosophy, including hermeneutics, structuralism, deconstruction, and critical theory. Authors discussed include Heidegger, Gadamer, Habermas, Derrida, and Foucault. Credit is awarded for only one of PHIL 152 or PHIL 252.

**PHIL 153. Marxist Critique (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An examination of the ideas central to the tradition of Western Marxism: ideology, critique, reification, instrumental reason, the domination of nature, and communicative action. Theorists discussed typically include Hegel, Marx, Lukacs, Adorno, Horkheimer, Benjamin, and Habermas. Credit is awarded for only one of PHIL 153 or PHIL 253.

**PHIL 155. Peace in the Middle East (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. A study of the roots of the Middle Eastern crises. Focuses on the Arab-Israeli conflict and possible solutions toward peace. Addresses problems through historical, religious, and political lines of inquiry. Cross-listed with RLST 155.

**PHIL 159. Philosophy of Religion (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. A historical, critical examination of the concepts and arguments involved in the Judeo-Christian God-hypothesis, and the influence of this world view upon the ideals and values of the Western world. Credit is awarded for only one of PHIL 159 or PHIL 259.

**PHIL 161. Ethics (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. A study of the major classical moral philosophers in the Western tradition and of some selected problems of metaethics. Credit is awarded for only one of PHIL 161 or PHIL 261.

**PHIL 162. Human Nature and Radical Evil (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. An advanced study of theories of human nature and evil. Credit is awarded for only one of PHIL 162 or PHIL 262.

**PHIL 163. Political Philosophy (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An inquiry into some of the main philosophic issues arising from political life, such as the nature and justification of authority, democracy, natural rights, justice, equality, and civil disobedience. Credit is awarded for only one of PHIL 163 or PHIL 263.

**PHIL 164. Justice (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. A philosophical analysis of the concept of justice. Credit is awarded for only one of PHIL 164 or PHIL 264.

**PHIL 165. Philosophy of Law (4)** Lecture, 3 hours; discussion, 1 hour; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An inquiry into the nature of criminal law, the relation between law and morality, the nature of legal responsibility, and the obligation to obey the law. Credit is awarded for only one of PHIL 165 or PHIL 265.

## 360 / Programs and Courses

**PHIL 166. Philosophy of Feminism (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An analysis of current concepts and debates in feminist philosophy including gender equality, gender difference, and the relation of sex and gender. Situates various approaches to these topics in the history of philosophy. Credit is awarded for only one of PHIL 166 or PHIL 266.

**PHIL 167. Biomedical Ethics (4)** Lecture, 3 hours; discussion, 1 hour. Prerequisite(s): upper-division standing or consent of instructor. A philosophical discussion of newly emerging issues, both ethical and social, in biology and medicine, such as genetic engineering, euthanasia, experimentation with human subjects, abortion, behavior control, and patient's right to know.

**PHIL 168. Ethics and Families (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): upper-division standing or consent of instructor. An analysis of some of the ethical issues that arise in and with regard to families of different kinds. Issues may include gender relations in "traditional marriages"; the ethics of same-sex marriage; the morality of abortion, surrogate mothering, and cloning; the justice of school vouchers; the grounds for universal health care; and possible gender inequalities in divorce. Cross-listed with WMST 141.

**PHIL 169 (E-Z). Topics in Value Theory (4)** Lecture, 3 hours; extra reading, 3 hours. Prerequisite(s): one course in philosophy or consent of instructor. Topics include E. Ethics; F. Aesthetics; G. Political Philosophy; I. Social Philosophy; J. Philosophy of Law.

**PHIL 171. Feminist Bioethics (4)** Lecture, 3 hours; extra reading, 2 hours; written work, 1 hour. Prerequisite(s): upper-division standing or consent of instructor. An exploration of the ways in which feminist theory provides insight on contemporary issues in bioethics. Topics include women in clinical research, cosmetic surgery, abortion, contract gestation, fetal protection policies, and the politics of mental illness. Cross-listed with WMST 106.

**PHIL 173. Philosophy of Sex and Sexuality (4)** Lecture, 3 hours; extra reading, 2 hours; written work, 1 hour. Prerequisite(s): upper-division standing or consent of instructor. Investigates philosophical issues relating to human sexual behaviors and identities. Topics include attempts to distinguish sexual from nonsexual activities; the construction and medicalization of sex and sexuality; and historical and contemporary ethical evaluations of various sexual activities and identities (homosexuality, heterosexuality, masturbation, sado-masochism, various fetichisms, polyamory, and other nonmonogamies).

**PHIL 190. Special Studies (1-5)** To be taken with the consent of the department Chair as a means of meeting special curricular problems. Course is repeatable to a maximum of 16 units.

**PHIL 193. Senior Seminar (4)** Seminar, 3 hours; term paper, 3 hours. Prerequisite(s): two upper-division courses in philosophy; senior standing in Philosophy or Philosophy/Law and Society or consent of instructor. Advanced seminar for Philosophy majors. Course is repeatable as content changes to a maximum of 8 units.

**PHIL 195. Senior Thesis (1-4)** Prerequisite(s): enrollment by request of student with approval of department chair. Course is graded In Progress (IP) until the thesis is completed. Course is repeatable to a maximum of 8 units.

**PHIL 198-I. Individual Internship in Philosophy (2-8)** Internship, 4-16 hours; written work, 2-8 hours. Prerequisite(s): upper-division standing; consent of instructor. An intern assignment in government,

education, science, business, or other field related to philosophy. Students write a substantive philosophical paper pertaining to the work done in the internship. Course is repeatable to a maximum of 8 units.

## Graduate Courses

**PHIL 220 (E-Z). Ancient Philosophy (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Each segment covers a major figure in ancient Greek or Roman philosophy. E. Plato; F. Aristotle; G. Plato and Aristotle; I. Cicero; J. Seneca; K. Plutarch. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of each of the corresponding lettered segments of PHIL 120 (E-Z) and PHIL 220 (E-Z).

**PHIL 221 (E-Z). Major Philosophers (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Each segment covers a major figure in the history of medieval, early modern, or late modern philosophy. E. Aquinas; F. Descartes; G. Leibniz; I. Spinoza; J. Locke; K. Hume; M. Reid; N. Kant; O. Hegel; Q. Nietzsche; R. Royce; S. Freud; T. Heidegger; V. Wittgenstein; X. Kripke. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of each of the corresponding lettered segments of PHIL 121 (E-Z) and PHIL 221 (E-Z).

**PHIL 222 (E-Z). Topics in History of Philosophy (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Topics include E. Ancient Philosophy; F. Medieval Philosophy; I. French Renaissance Philosophy; J. Early Modern Philosophy; M. Moral Theories of Hume and Kant; N. Nineteenth-Century Philosophy; O. Kant and Post-Kantian European Moral Philosophy; Q. Political Philosophy; R. Origins of Analytical Philosophy. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of each of the corresponding lettered segments of PHIL 122 (E-Z) and PHIL 222 (E-Z).

**PHIL 230. Theory of Knowledge (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An inquiry into the nature of human knowledge—its possibility, criteria, scope, and limitations. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 130 or PHIL 230.

**PHIL 231. Twentieth-Century Analytic Philosophy (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. A discussion of some major issues and thinkers in the tradition dominant in twentieth-century British and American philosophy. Philosophers discussed might include Frege, Russell, Carnap, Quine, Kripke, and D. Lewis. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 131 or PHIL 231.

**PHIL 232. Philosophy of Language (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. A study of some of the traditional issues in the philosophy of language, such as analyticity, theories of reference, truth, speech act theory, and philosophical theories of formal grammars. Students who complete all writing assignments, including a term

paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 132 or PHIL 232.

**PHIL 233. Metaphysics (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An investigation of some of the traditional problems in Western philosophy that have been labeled metaphysical, such as the existence of God, the relationship between mind and body, the determinism versus free will debate, and the nature of time and space. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 133 or PHIL 233.

**PHIL 234. Philosophy of Mind (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. A study of several theories of the nature of mind and an analysis of particular issues occasioned by them: the mind-body problem, personal identity, emotions, human action, self-knowledge, knowledge of other minds, and explanations of human behavior. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 134 or PHIL 234.

**PHIL 235. Philosophy of Psychology (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Examines philosophical issues arising in the context of empirical psychology. Topics may include moral development, artificial intelligence and the modeling of cognition, the nature of perception and memory, fallacies in human reasoning, mechanisms of self-understanding, and mental illness and personhood. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 135 or PHIL 235.

**PHIL 237. Philosophy of Science (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Topics discussed include understanding scientific objectivity in the light of the history and sociology of science; realism and antirealism about scientific theories; scientific methodology and its logic; and the nature of scientific explanation. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 137 or PHIL 237.

**PHIL 238. Philosophy of Agency (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An investigation of problems that arise in attempts to understand human agency, such as the nature and explanation of action, intention, free will and moral responsibility, and weakness of will. Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 138 or PHIL 238.

**PHIL 239. Philosophy of Mathematics (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Discusses topics such as the abstract nature of mathematical objects, the sources of mathematical knowledge, the relation between mathematics and logic, and the infinite in mathematics. Considers the development of some selected parts of mathematics (especially arithmetic, geometry, algebra, and set theory) and of various corresponding philosophical positions (platonism, formalism, intuitionism, structuralism). Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable as content changes. Credit is awarded for only one of PHIL 139 or PHIL 239.

**PHIL 242. Advanced Topics in the Philosophy of Language (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An in-depth study of a particular topic in the philosophy of language. Potential topics include context-sensitivity (how the meaning of a sentence depends upon nonlinguistic facts about context); theories of meaning (e.g., the Frege-Russell account in terms of propositions, the Lewis-Stalnaker possible worlds account, and Davidson's truth theory account). Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable as content changes to a maximum of 8 units. Credit is awarded for only one of PHIL 142 or PHIL 242.

**PHIL 244. Advanced Topics in Philosophy of Mind (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Examines a selected topic in philosophy of mind. Potential topics include consciousness and self-consciousness; intentionality and theories of mental content; mental causation; consciousness and free will; introspection and knowledge of other minds; perception; emotion; imagination; concepts and rationality; artificial minds; and animal minds. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable as content changes to a maximum of 8 units. Credit is awarded for only one of PHIL 144 or PHIL 244.

**PHIL 251. Existentialism (4)** Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An examination of philosophical and literary works which deal with the significance of some fundamental human experiences: identity crises, choice and commitment, anxiety and death, the experience of meaninglessness, and alienation. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 151 or PHIL 251.

**PHIL 252. Twentieth-Century Continental Philosophy (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. Examines the character and consequences of several recent movements in continental philosophy, including hermeneutics, structuralism, deconstruction, and critical theory. Authors discussed include Heidegger, Gadamer, Habermas, Derrida, and Foucault. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 152 or PHIL 252.

**PHIL 253. Marxist Critique (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An examination of the ideas central to the tradition of Western Marxism: ideology, critique, reification, instrumental reason, the domination of nature, and communicative action. Theorists discussed typically include Hegel, Marx, Lukacs, Adorno, Horkheimer, Benjamin, and Habermas. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 153 or PHIL 253.

**PHIL 259. Philosophy of Religion (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. A historical, critical examination of the concepts and arguments involved in the Judeo-Christian God-hypothesis, and the influence of this world view on the ideals and values of the Western world. Students who complete all writing assignments, including a term

paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 159 or PHIL 259.

**PHIL 261. Ethics (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. A study of the major classical moral philosophers in the Western tradition and of some selected problems of metaethics. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 161 or PHIL 261.

**PHIL 262. Human Nature and Radical Evil (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An advanced study of theories of human nature and evil. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 162 or PHIL 262.

**PHIL 263. Political Philosophy (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An inquiry into some of the main philosophic issues arising from political life, such as the nature and justification of authority, democracy, natural rights, justice, equality, and civil disobedience. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 163 or PHIL 263.

**PHIL 264. Justice (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. A philosophical analysis of the concept of justice. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 164 or PHIL 264.

**PHIL 265. Philosophy of Law (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An inquiry into the nature of criminal law, the relation between law and morality, the nature of legal responsibility, and the obligation to obey the law. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 165 or PHIL 265.

**PHIL 266. Philosophy of Feminism (4)**

Lecture, 3 hours; seminar, 1 hour. Prerequisite(s): graduate standing. An analysis of current concepts and debates in feminist philosophy including gender equality, gender difference, and the relation of sex and gender. Situates various approaches to these topics in the history of philosophy. Students who complete all writing assignments, including a term paper, receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Credit is awarded for only one of PHIL 166 or PHIL 266.

**PHIL 270. Philosophy Colloquia (1)**

Colloquium, 1 hour. Prerequisite(s): graduate standing. Visiting scholars give oral reports on current research in philosophy and discuss them with students and faculty. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

**PHIL 272A. Workshop in Philosophy (2-4)**

Workshop, 2-3 hours; outside research, 1-3 hours. Prerequisite(s): graduate standing; consent of instructor. Close reading of a philosophical text or texts on a single topic. May be undertaken as a one-, two-, or three-quarter course (PHIL 272A, PHIL 272B, PHIL 272C). Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S)

or No Credit (NC) grade. Graded In Progress (IP) until the last quarter is completed, at which time a final grade is assigned. PHIL 272A, PHIL 272B, and PHIL 272C are repeatable as their contents change to a maximum of 12 units on one topic and to a maximum of 36 units for the three courses.

**PHIL 272B. Workshop in Philosophy (2-4)**

Workshop, 2-3 hours; outside research, 1-3 hours. Prerequisite(s): PHIL 272A; consent of instructor. Close reading of a philosophical text or texts on a single topic. May be undertaken as a one-, two-, or three-quarter course (PHIL 272A, PHIL 272B, PHIL 272C). Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Graded In Progress (IP) until the last quarter is completed, at which time a final grade is assigned. PHIL 272A, PHIL 272B, and PHIL 272C are repeatable as their contents change to a maximum of 12 units on one topic and to a maximum of 36 units for the three courses.

**PHIL 272C. Workshop in Philosophy (2-4)**

Workshop, 2-3 hours; outside research, 1-3 hours. Prerequisite(s): PHIL 272B; consent of instructor. Close reading of a philosophical text or texts on a single topic. May be undertaken as a one-, two-, or three-quarter course (PHIL 272A, PHIL 272B, PHIL 272C). Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Graded In Progress (IP) until the last quarter is completed, at which time a final grade is assigned. PHIL 272A, PHIL 272B, and PHIL 272C are repeatable as their contents change to a maximum of 12 units on one topic and to a maximum of 36 units for the three courses.

**PHIL 275A. Proseminar for First-Year Graduate**

**Students: Metaphysics and Epistemology (4)** Seminar, 3 hours; extra reading, 3 hours. Prerequisite(s): first-year standing in the graduate program in Philosophy. One course in a three-term sequence designed to introduce new graduate students to current issues and methods of research in metaphysics and epistemology.

**PHIL 275B. Proseminar for First-Year Graduate**

**Students: Metaphysics and Epistemology (4)** Seminar, 3 hours; extra reading, 3 hours. Prerequisite(s): PHIL 275A; first-year standing in the graduate program in Philosophy. One course in a three-term sequence designed to introduce new graduate students to current issues and methods of research in additional areas of metaphysics and epistemology.

**PHIL 275C. Proseminar for First-Year Graduate**

**Students: Moral Philosophy (4)** Seminar, 3 hours; extra reading, 3 hours. Prerequisite(s): first-year standing in the graduate program in Philosophy. One course in a three-term sequence designed to introduce new graduate students to current issues and methods of research.

**PHIL 280. Seminar in Philosophical Problems (4)**

Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Considers an important philosophical problem. Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable.

**PHIL 281. Philosophical Texts (1-4)**

Seminar, 1-3 hours; consultation, 1 hour. Prerequisite(s): graduate standing. Involves focused reading and discussion of common text on research topics in philosophy. Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable.

## 362 / Programs and Courses

### PHIL 282. Seminar in Individual Philosophers (4)

Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Considers a major figure in the history of philosophy. Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable.

### PHIL 283. Seminar in Contemporary Philosophy (4)

Seminar, 3 hours; outside research, 3 hours. Prerequisite(s): graduate standing or consent of instructor. Covers an aspect of contemporary philosophy. Students who submit a term paper receive a letter grade; other students receive a Satisfactory (S) or No Credit (NC) grade. Course is repeatable.

**PHIL 290. Directed Studies (1-6)** Term paper, 3-18 hours. Prerequisite(s): consent of instructor and graduate advisor. Directed study to meet special curricular needs. Course is repeatable.

**PHIL 291. Individual Studies in Coordinated Areas (2-4)** Prerequisite(s): graduate standing. A program of studies designed to advise and assist candidates who are preparing for the Comprehensive Examinations. Open to M.A. students only; does not count toward the unit requirement for the M.A. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

**PHIL 292. Concurrent Analytical Studies in Philosophy (1-4)** Prerequisite(s): consent of instructor. Each 292 course will be taken concurrently with some 100-series course, approved by the Graduate Advisor, but on an individual basis. It will be devoted to completion of a graduate paper based on research or criticism related to the 100-series course. Faculty guides and evaluations will be provided throughout the quarter. Graded Satisfactory (S) or No Credit (NC). May be repeated for credit.

**PHIL 297. Directed Research (1-6)** Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

**PHIL 299. Research for Thesis or Dissertation (1-12)** Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

## Professional Courses

**PHIL 301. Directed Studies in the Teaching of Philosophy (1)** Seminar, 1 hour. Prerequisite(s): graduate standing. A program of orientation, lectures, and workshops designed to enhance the Teaching Assistant's understanding of teaching methods in philosophy and to provide opportunities to work closely with experts in college teaching in order to improve the quality of instruction. Required of all new Teaching Assistants. Graded Satisfactory (S) or No Credit (NC). Course is repeatable.

**PHIL 302. Teaching Practicum (1-4)** Prerequisite(s): employment as Teaching Assistant or Associate. Supervised teaching in lower-division courses and LWSO 100. Required of all teaching assistants in philosophy. Does not count toward the unit requirement for the M.A. degree. Graded Satisfactory (S) or No Credit (NC). May be repeated for credit.

**PHIL 400. Research and Professional Development Workshop (1)** Workshop, 8 hours per quarter; extra reading, 8 hours per quarter. Prerequisite(s): graduate standing. A series of presentations and workshops focused on a variety of issues in research, professional development, and teaching. Graded Satisfactory (S) or No Credit (NC). Course is repeatable to a maximum of 18 units.

## Physical Sciences

### College of Natural and Agricultural Sciences

The Physical Sciences major is not accepting new students at this time. For more information, contact the CNAS Undergraduate Academic Advising Center, 1223 Pierce Hall, or call (951) 827-7294.

## Physics and Astronomy

### Subject abbreviation: PHYS College of Natural and Agricultural Sciences

Harry W.K. Tom, Ph.D., Chair  
John A. Ellison, Ph.D., Vice Chair  
Department Office, 3047 Physics  
(951) 827-5331; [physics.ucr.edu](mailto:physics.ucr.edu)

#### Professors

Kenneth N. Barish, Ph.D.  
Robert B. Clare, Ph.D.  
Bipin R. Desai, Ph.D.  
John A. Ellison, Ph.D.  
J. William Gary, Ph.D.  
Gail G. Hanson, Ph.D.  
Ernest S. Ma, Ph.D.  
Allen P. Mills, Ph.D.  
Bahram Mobasher, Ph.D.  
Umar Mohideen, Ph.D.  
Richard K. Seto, Ph.D.  
Jing Shi, Ph.D.  
Harry W.K. Tom, Ph.D.  
Chandra M. Varma, Ph.D.  
Stephen J. Wimpenny, Ph.D.  
Jose Wudka, Ph.D.  
Jory A. Yarmoff, Ph.D.

#### Professors Emeriti

Frederick W. Cummings, Ph.D.  
Sun-Yiu Fung, Ph.D.  
Peter E. Kaus, Ph.D.  
Anne Kernan, Ph.D.  
Nai-Li H. Liu, Ph.D.  
Donald C. McCollum, Ph.D.  
John C. Nickel, Ph.D.  
Douglas E. MacLaughlin, Ph.D.  
Raymond L. Orbach, Ph.D.  
Michael Pollak, Ph.D.  
Eugen S. Simanek, Ph.D.  
R. Stephen White, Ph.D.  
Allen D. Zych, Ph.D.

#### Associate Professors

Ward Beyermann, Ph.D.  
E. Gabriela Canalizo, Ph.D.  
Roland Kawakami, Ph.D.  
Chun Ning "Jeanie" Lau, Ph.D.  
Owen Long, Ph.D.  
Leonid P. Pryadko, Ph.D.  
Kirill Shtengel, Ph.D.  
Gillian Wilson, Ph.D.

#### Assistant Professors

Shan-Wen Tsai, Ph.D.  
Roya Zandi, Ph.D.

## Major

The Department of Physics and Astronomy offers two degrees: the B.A. and B.S. in Physics. The **B.S. program** is designed for students with a strong interest in the sciences or engineering

who wish to emphasize this aspect of their education and training. The B.S. degree provides a strong background for students who wish to continue on to graduate school.

The **B.A. program** follows the liberal arts tradition with a broader coverage of the humanities and social sciences. It is selected often by students who intend to obtain a teaching credential with a specialty in science or to pursue a career combining business management opportunities with a knowledge in science and technology.

The extensive course offerings and modern facilities within the Department of Physics and Astronomy, coupled with close, personal counseling by faculty advisors, provide students with a physics program that is characterized by its breadth and flexibility.

## Career Opportunities

Graduates with a bachelor's degree in Physics generally begin their careers in government or industry. Professions include research and development, system modeling and analysis, and sales in a large variety of fields. A Physics degree provides one of the most flexible qualifications with direct applications to materials science, advanced electronics, lasers and microwave devices, computing and communications.

The federal government and national laboratories employ many physicists as do industries in medical and scientific instruments, computers, audio and telecommunications equipment, financial analysis and investments, material science, and engineering.

The bachelor's degree programs in the UCR Department of Physics and Astronomy are well suited for continued education in graduate school and for preparation in technical and professional careers. Colleges or universities, national laboratories, industry, and governmental agencies employ students with graduate training.

## University Requirements

See Undergraduate Studies section.

## College Requirements

See College of Natural and Agricultural Sciences, Colleges and Programs section.

Some of the following requirements for the major may also fulfill some of the college's breadth requirements. Consult with a department advisor for course planning.

## Major Requirements

The major requirements for the B.S. and B.A. degrees in Physics are as follows:

1. Lower-division requirements (63–64 units)
  - a) PHYS 040A, PHYS 040B, PHYS 040C, PHYS 040D, PHYS 040E
  - b) MATH 008B or MATH 009A, MATH 009B, MATH 009C, MATH 010A, MATH 010B, MATH 046