PH 404. Philosophy of Science. 3 or 4 hours.
Selected works on the aims and methods of science; the status of scientific theories, natural laws and theoretical entities; the nature of scientific explanation. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): PHIL 102 and one non-logic 200-level course in philosophy; or consent of the instructor.

PH 406. Topics in Philosophy of Language. 3 or 4 hours.
Intensive treatment of one or more topics, such as meaning and reference, communication, the structure of language, language and thought, and the relation of language to reality. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): PHIL 102 and one 200-level non-logic course in philosophy; or consent of the instructor.

PH 410. Introduction to Formal Logic. 3 or 4 hours.
Review of predicate logic and of introductory set theory. The concept of a formal system. Notions of completeness and soundness. Introduction to Gödel's first incompleteness theorem. Course Information: 3 undergraduate hours. 4 graduate hours. Prerequisite(s): PHIL 210 or consent of the instructor.

PH 422. Studies in Medieval Philosophy. 0-4 hours.
Study of selected philosophers such as Boethius, Avicenna, Aquinas, William Ockham, and selected issues such as the relationship between faith and reason, the nature of reason, the nature of human cognition, the nature of morality. Course Information: Same as RELS 422. 3 undergraduate hours. 4 graduate hours. May be repeated if topics or figures vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level philosophy course; or consent of the instructor. Class Schedule Information: To be properly registered, students must enroll in one Discussion/Recitation and one Lecture.

PH 423. Studies in Early Modern Philosophy. 3 or 4 hours.
Careful reading of selected works of one or more philosophers, 1600 to 1750, such as Descartes, Hobbes, Spinoza, Leibniz, Locke, Berkeley, Hume, Reid and Rousseau. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics or figures vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PH 424. Kant. 3 or 4 hours.
Intensive study of Kant's philosophy. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic course in philosophy; or consent of the instructor.

PH 425. Studies in Nineteenth-Century Philosophy. 3 or 4 hours.
Careful reading of one or more post-Kantian philosophers such as Hegel, Schelling, Fichte, Schopenhauer, Marx, J.S. Mill, Kierkegaard, Nietzsche. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PH 426. Analysis and Logical Empiricism. 3 or 4 hours.
Developments in twentieth century analytic philosophy with roots in the study of logic and language, such as logical atomism and logical empiricism. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics and figures vary. Approval to repeat course granted by the department. Prerequisite(s): PHIL 102 and one non-logic 200-level course in philosophy; or consent of the instructor.
PHIL 427. Continental Philosophy II: European Thought Since 1960. 3 or 4 hours.
European thought since 1960: Existential Marxism; Critical Theory; Structuralism, Post-Structuralism and Deconstruction. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics or figures vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PHIL 428. Topics in Ancient Philosophy. 3 or 4 hours.
Careful reading of related works by Ancient Philosophers, such as Plato and Aristotle. Course Information: 3 undergraduate hours; 4 graduate hours. May be repeated if topics or figures vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PHIL 429. Special Studies in the History of Philosophy. 3 or 4 hours.
Advanced study of a historical school, period, or the development of a historical theme. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics or figures vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in the history of philosophy; or consent of the instructor.

PHIL 430. Topics in Ethics. 3 or 4 hours.
Selected topics in ethics. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated up to 1 time(s) with approval. Approval to repeat course granted by the department. Prerequisite(s): One 200-level course in philosophy or consent of the instructor. Recommended background: Credit in a course in moral, social, or political philosophy.

PHIL 431. Topics in Social/Political Philosophy. 3 or 4 hours.
Selected topics in social and political philosophy. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PHIL 432. Topics in Ethics. 3 or 4 hours.
Selected topics in ethics. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated up to 1 time(s) with approval. Approval to repeat course granted by the department. Prerequisite(s): One 200-level course in philosophy or consent of the instructor. Recommended background: Credit in a course in moral, social, or political philosophy.

PHIL 433. Topics in Social/Political Philosophy. 3 or 4 hours.
Selected topics in social and political philosophy. Course Information: 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PHIL 441. Topics in Philosophy of Religion. 3 or 4 hours.
Intensive study of one or more selected topics concerning the philosophical aspects of basic religious beliefs and concepts. Course Information: Same as RELS 441. 3 undergraduate hours. 4 graduate hours. May be repeated if topics vary. Approval to repeat course granted by the department. Prerequisite(s): One non-logic 200-level course in philosophy; or consent of the instructor.

PHIL 444. Neuroscience I. 3 hours.
Neuroscience as an integrative discipline. Neuroanatomy of vertebrates, neural development, cellular neurobiology, action potential mechanisms, synaptic transmission and neurotranspharmacology. Course Information: Same as BIOS 484 and PSCH 484. Prerequisite(s): BIOS 286 or PSCH 262.

PHIL 485. Neuroscience II. 3 hours.
Integrative neuroscience, including sensory and motor systems; learning, memory, and language; pathology of nervous systems; philosophical perspectives, and modeling. Course Information: Same as BIOS 485 and PSCH 485. Prerequisite(s): BIOS 286 or PSCH 262.

PHIL 500. Writing in Philosophy. 4 hours.
Practice in philosophical writing including finding a thesis. Judicious choice of reading on the topic, outlining, and composing drafts as well as style, paragraphing, and making sentences. Required of all first year Ph.D. students. Course Information: Prerequisite(s): Graduate standing in philosophy.

PHIL 501. Seminar: Topics in Ancient Philosophy. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 502. Feminist Philosophy. 4 hours.
Topics in feminist philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 503. Medieval Philosophy. 4 hours.
Intensive study of special topics in medieval philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 504. Seminar in Political Theory. 4 hours.
A graduate introduction to Enlightenment and post-Enlightenment theories of politics and society in the North Atlantic world. Course Information: Same as POLS 504. Prerequisite(s): Consent of the department required for nondegree graduate students.

PHIL 505. Seminar in Modern Philosophy. 4 hours.
Intensive analysis of the work of one important philosopher or philosophical movement between 1600 and 1900. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 506. Nineteenth-Century Philosophy. 4 hours.
Topics in nineteenth-century philosophy. Course Information: May be repeated with approval. Students may register for more than one section per term. Approval to repeat course granted by the department.

PHIL 507. History of Analytic Philosophy. 4 hours.
Topics in late nineteenth- and early twentieth-century Anglo-American philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 508. History of Ethics and Social/Political Philosophy. 4 hours.
Topics in the history of ethics or social-political philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 509. History of Analytic Philosophy. 4 hours.
Topics in late nineteenth- and early twentieth-century Anglo-American philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 510. History of Ethics and Social/Political Philosophy. 4 hours.
Topics in the history of ethics or social-political philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 511. Topics in History of Philosophy. 4 hours.
Topics in the history of philosophy, including special topics other than those of the ancient and modern periods. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 520. Continental Philosophy. 4 hours.
Topics in continental philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 521. Continental Philosophy. 4 hours.
Topics in continental philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 522. Feminist Philosophy. 4 hours.
Topics in feminist philosophy. Course Information: May be repeated with approval. Students may register for more than one section per term. Approval to repeat course granted by the department.

PHIL 523. Continental Philosophy. 4 hours.
Topics in continental philosophy. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 524. Ethics. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.
PHIL 528. Social/Political Philosophy. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 530. Aesthetics. 4 hours.
Intensive study of selected topics in aesthetics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 532. Metaphysics. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 534. Philosophy of Mind. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 536. Epistemology. 4 hours.
Selected topics in the contemporary theory of knowledge. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 538. Philosophy of Language. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 540. Philosophy of Science. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 542. Philosophy of Special Sciences. 4 hours.
Intensive study of special topics in philosophy of physics, philosophy of biology, or other sciences. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 544. Philosophy of Logic. 4 hours.
Intensive study of selected topics. Course Information: May be repeated with approval. Approval to repeat course granted by the department. Students may register for more than one section per term when topics vary.

PHIL 546. Philosophy of Mathematics. 4 hours.
Philosophical foundations of mathematics. Course Information: May be repeated with approval. Approval to repeat course granted by the department.

PHIL 562. Mathematical Logic. 4 hours.
First order logic, completeness and incompleteness theorems, introduction to model theory and computability theory. Course Information: Same as MATH 502. Prerequisite(s): MATH 430 or consent of the instructor.

PHIL 563. Metamathematics II. 4 hours.
Incompleteness theorems, elementary recursion theory and proof theory, first and second order arithmetic. Course Information: Same as MATH 503. Prerequisite(s): MATH 502 or PHIL 562.

PHIL 565. Set Theory. 4 hours.
Naïve and axiomatic set theory. Independence of the continuum hypothesis and the axiom of choice. Course Information: Same as MATH 504. Prerequisite(s): MATH 430 or MATH 502 or PHIL 562.

PHIL 567. Model Theory I. 4 hours.
Elementary embeddings, quantifier elimination, types, saturated and prime models, indiscernibles, Morley's Categoricity Theorem. Course Information: Same as MATH 506. Prerequisite(s): MATH 502 or PHIL 562.

PHIL 568. Model Theory II. 4 hours.
Stability theory: forking and independence, stable groups, geometric stability. Course Information: Same as MATH 507. Prerequisite(s): MATH 506 or PHIL 567.

PHIL 569. Advanced Topics in Logic. 4 hours.
Advanced topics in modern logic; e.g. large cardinals, infinitary logic, model theory of fields, o-minimality, Borel equivalence relations. Course Information: Same as MATH 512. May be repeated. Students may register in more than one section per term. Prerequisite(s): Approval of the department.

PHIL 590. Research Seminar. 4 hours.
A work-in-progress seminar for graduate students at the topical, prospectus, or dissertation level. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Prerequisite(s): Completion of 10 of the 14 required courses for the Ph.D. in Philosophy.

PHIL 591. Teaching Methods in Philosophy. 1 hour.
Techniques and methods of teaching philosophy for philosophy teaching assistants. Includes visits to classes taught by students and feedback on teaching methods and performance. Course Information: Open only to Philosophy PhD students.

PHIL 593. Independent Research. 0-16 hours.
Topics and plan of study must be approved by the candidate's advisor and by the staff member who directs the work. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Students may register in more than one section per term.

PHIL 596. Independent Study. 1-4 hours.
Topics and plan of study must be approved by the candidate's advisor and by the staff member who directs the work. Course Information: May be repeated. Students may register in more than one section per term.

PHIL 599. Thesis Research. 0-16 hours.
Research for the Ph.D. thesis. Course Information: Satisfactory/Unsatisfactory grading only. May be repeated. Students may register in more than one section per term.