Philosophy

General Information

Philosophy continues to keep alive the tradition begun by Socrates, Plato, and Aristotle of critically examining one’s most cherished assumptions. Moreover, it deals with questions that are common to several areas of inquiry, such as art, ethics, the social sciences, the natural sciences, and the various professions. The study of philosophy also encourages logical precision, a heightened awareness of assumptions used in any discussion, and an attitude of both open-mindedness and responsible criticism toward new and unusual ideas. These skills are particularly useful for students planning careers in law, business, computer science, writing, or other fields requiring such disciplines of mind. For these reasons many students have found it useful to combine a major in another field with a major in philosophy. To accommodate such students, the department has a special program for double majors.

The philosophy faculty has an unusually wide range of research interests. Faculty members have written books and articles addressing not only the classical and traditional concerns of philosophy, but also contemporary controversies in the fields of law, psychology, sociology, political theory, biology, medical ethics, theology, logic, and philosophy of history as well. For their research in some of these areas, members have been awarded a number of national research grants, including fellowships from the National Science Foundation, the American Council of Learned Societies, the National Endowment for the Humanities and the John Templeton Foundation.

In keeping with this emphasis on diversity, the department is represented by scholars trained in widely different approaches to philosophy, such as the analytic tradition, Continental idealism and existentialism, Marxist dialectic, and Asian modes of thought.

Programs

Degrees
Philosophy BA
Philosophy MA
Philosophy BA and MA Dual Degree Program
Philosophy MA Accelerated Master's Program

Minors
Law and Philosophy
Philosophy
Philosophy of Science and Technology

Certificate
Bioethics Graduate Certificate

Courses

PHIL 1021 Choice and Chance: 3 semester hours
Same as MATH 1021. Prerequisites: A satisfactory score on the UMSL Math Placement Examination, obtained at most one year prior to enrollment in this course. This course provides an introduction to inductive logic and the theory of probability in an organized and systematic way, so as to give students tools for more effective decision-making. We will introduce the probability calculus, basic concepts of utility theory, decision theory and different approaches to understanding probability. This course is designed to be accessible to students of all levels. This course fulfills the University's general education mathematics proficiency requirement.

PHIL 1030 Present Moral Problems: 3 semester hours
This course will explore a range of ethical dilemmas with an eye towards living the best life. How should I live? What actions are right and wrong? How should I treat myself and others? In this class, we will consider these and other issues by investigating practical problems in American life including human rights, the environment, hunger and poverty, war and violence, racial and ethnic discrimination, gender roles and marriage, abortion, and euthanasia. This course fulfills the American History and Government general education requirement.

PHIL 1050 Existentialism and Phenomenology: 3 semester hours
The course will cover classic works by philosophers and writers in the existential and phenomenological traditions. Topics include free will, existential crisis, despair, anxiety, faith, the death of God, the origin of morals, authentic life, as well as the structure and content of conscious experience.

PHIL 1091 Great Philosophers: 3 semester hours
This online course introduces philosophy through a survey and examination of the ideas of fifteen of the most important figures in the history of the subject. From Socrates to Nietzsche, the questions, answers, and lives of the great philosophers are explored in a multimedia context. This course does not satisfy any of the requirements for philosophy major or minor.

PHIL 1110 Western Philosophy I: Antiquity to the Renaissance: 3 semester hours
Lectures and discussions tracing the development of western philosophy from its beginnings among the pre-Socratics through the Middle Ages and Renaissance. Philosophical ideas will be examined in the cultural and historical context: the Greek city-state, the rise of Christianity, etc.

PHIL 1111 Western Philosophy II: Descartes to the Present: 3 semester hours
Lectures and discussions on the development of western philosophy from Descartes (1596-1650) to the present. Philosophical ideas will be examined with an eye to their historical and cultural setting: the rise of modern science, the industrial revolution, the rise of capitalism, etc.

PHIL 1120 Asian Philosophy: 3 semester hours
Critical study of selected philosophical classics of India and China. This course fulfills the cultural diversity requirement.

PHIL 1125 Islamic Philosophy: 3 semester hours
An introduction to arabic philosophy in the islamic classical period (roughly from the mid-ninth through the twelfth centuries). We consider the philosophical and theological background, and then examine the thought of such notable Islamic philosophers as al-Kindi, Ibn Sina, al-Ghazali, and Ibn Rushd. Topics treated typically include proofs for the existence of God, whether the world is eternal or had a beginning, the nature of the soul and whether it is immortal, and the distinction between essence and existence. This course fulfills the cultural diversity requirement.
PHIL 1130 Approaches to Ethics (MOTR PHIL 102): 3 semester hours
A study and discussion of representative topics in moral philosophy such as moral skepticism, moral objectivity, theories of obligation and value, evaluation of social institutions and the relation between morality and science. Traditional and contemporary writers will be considered.

PHIL 1150 Introduction to Philosophy (MOTR PHIL 100): 3 semester hours
A study and discussion of representative topics in philosophy such as free will and determinism, concepts of mind and body, the basis of value judgments, knowledge and belief, and the possibility of constructing a world view.

PHIL 1151 Love 101: 3 semester hours
A critical review of what media personalities, philosophers, criminal justice experts, medical experts, neuroscientists, and psychologists have said about love and its place in our lives. Included will be such topics as the neuroscience of love, love across culture, love and commitment issues, marriage and the “seven-year itch,” jealousy, domestic violence, and verbal abuse. Larger questions will include the role of love in the good life; the ethics of love; the psychological consequences of obsession, breakups and divorce; arranged marriages vs. freely chosen love; and the morality of laws that affect relationships between loving partners.

PHIL 1159 Blind Spots: 3 semester hours
This course provides a comprehensive introduction to cognitive biases, and to the strategies that can be used to address them. After an introductory unit devoted to the psychology of human reasoning, the course is structured around historical and contemporary case studies of particular biases, such as confirmation bias, negativity bias, and overconfidence.

PHIL 1160 Critical Thinking (MOTR PHIL 101): 3 semester hours
An introduction to the language and logical structure of arguments, the principles of sound reasoning, and application of these principles in a variety of contexts.

PHIL 1180 Science vs. God: 3 semester hours
This course examines whether religion and science are compatible, discusses the science-religion debate historically, and broaches philosophical issues surrounding belief, especially whether belief should be based in empirical evidence or in faith. Following these introductory course sessions, the class will discuss, in detail, topics in science and religion, including creation versus evolution; human nature (including abortion and stem cell research); the nature of sexuality and gender; the science of religion; morality; the environment from a religious perspective; meaningfulness in the universe; and finally, evidence for or against the afterlife, existence of a divinity, and divine providence.

PHIL 1185 Philosophy of Religion: 3 semester hours
A philosophical investigation of such problems as the nature of religious faith and experience, the relation of faith and reason, alternative concepts of deity and the problem of evil.

PHIL 2249 Accounting Ethics: 3 semester hours
Same as ACCTNG 2430. Prerequisites: ACCTNG 2400 and ACCTNG 2410 (may be taken concurrently). This course examines moral problems as they relate to the profession of accounting and the professional Codes of Conduct that govern the accounting profession. Students will apply the requirements of the Codes of Conduct to cases where ethical dilemmas or violations of professional standards may be present.

PHIL 2250 Medicine, Values, and Society: 3 semester hours
A critical survey from the perspective of moral theory of businesses and business practices. Topics vary but usually include some of the following: Whether the sole moral obligation of businesses is to make money; whether certain standard business practices, e.g., the creation of wants through advertising, are moral; whether businesses ought to be compelled, e.g., to protect the environment or participate in affirmative action programs.

PHIL 2251 Sexuality Ethics: 3 semester hours
A critical review of what philosophers, both classical and contemporary, have said about sexual experience and its place in our lives. Included will be such topics as sexual desire, sexual perversion, love and commitment, marriage and adultery, larger questions might include that role of sexual experience in the good life, issues of sexual privacy, and the morality of laws which regulate sexual activity.

PHIL 2252 Crime and Punishment: 3 semester hours
Same as CRIMIN 2252. This course will address fundamental conceptual, ethical, and moral issues that arise in the context of the legal system. Topics may include punishment, pre-trial detention, the death penalty, acquittal of persons who are legally guilty, plea bargaining, moral obligation to obey the law, and laws restricting civil liberties.

PHIL 2253 Philosophy and Feminism: 3 semester hours
Same as GS 2253. A critical examination of what various philosophers have said about issues of concern to women. Sample topics include oppressation, racism, women's nature, femininity, marriage, motherhood, sexuality, pornography, the ethics of care.

PHIL 2254 Business Ethics: 3 semester hours
A critical survey from the perspective of moral theory of businesses and business practices. Topics vary but usually include some of the following: Whether the sole moral obligation of businesses is to make money; whether certain standard business practices, e.g., the creation of wants through advertising, are moral; whether businesses ought to be compelled, e.g., to protect the environment or participate in affirmative action programs.

PHIL 2255 Environmental Ethics: 3 semester hours
Examines such issues as the value of wilderness, our duties to animals and the natural world, pollution and development, environmental justice.

PHIL 2256 Bioethics: 3 semester hours
Same as GERON 2256. An examination of ethical issues in health care practice and clinical research and in public policies affecting health care. Topics include: abortion, euthanasia, health care, experimentation, informed consent and the right to health care.

PHIL 2257 Happiness and the Meaning of Life: 3 semester hours
This course is an accessible introduction to the historical and contemporary perspectives on happiness and the meaning of life in philosophy. It examines the nature of happiness by focusing on three major theories: happiness as pleasure, happiness as excellence and happiness as desire satisfaction. Other issues examined may include the relevance of virtue for happiness, the experience machine argument, the best way to pursue happiness as a personal or a policy goal, and other related topics.

PHIL 2258 Medicine, Values, and Society: 3 semester hours
Social, conceptual, and policy issues connected with medicine form the focus of the course. Topics may include: (1) role played by race & gender in design of research and distribution of care; (2) whether diseases are socially constructed categories reflecting the values of society; (3) development of social policies that offer universal access to health care; (4) the legitimacy of using psychotropic drugs to enhance life, rather than treat the disease. The course differs from Bioethics by emphasizing policy issues and their conceptual basis. Content of this course may vary.
PHIL 2259 Engineering Ethics: 3 semester hours
An examination of ethical issues in engineering using professional engineering codes as a starting point. The course will have a problem solving orientation, focusing on the analysis of particular cases. Actual high-profile cases such as the Challenger disaster will be considered, as well as hypothetical cases illustrating the more commonly encountered moral problems in engineering (such as accepting gifts from vendors). Topics include the engineer/manager relationship, engineers and the environment, honesty in engineering, and risk, safety, and liability.

PHIL 2277 Philosophy and Food: 3 semester hours
This course will examine issues surrounding the production, consumption, and enjoyment of food. Questions about food choices, food scarcity, self-control, and aberrant eating will be addressed. The focus will range from global issues such as population growth, the carrying capacity of the planet, famine, and GMO crops to more narrowly focused topics such as the workings of our sense of taste, our ability to evaluate and rank different food items, and the very idea of expertise in tasting.

PHIL 2280 Minds, Brains, and Machines: 3 semester hours
This course is an introduction to basic philosophical issues in cognitive science. General topics may include minds as computers; computers as minds, or the possibility of artificial intelligence that is truly intelligent; relationship between mental function and brain function; and some areas of current research, such as reasoning, vision, and emotion. This course fulfills the University’s general education information literacy requirement.

PHIL 2283 Markets and Morals: 3 semester hours
Prerequisites: MATH 1030, or equivalent. This course will explore moral issues connected with economic markets: the reasons for and against promoting free markets and free trade; a consideration of goods and services that may be included in or above market transactions; how free markets impact happiness and individual freedom; and the moral considerations surrounding capitalism, libertarianism, socialism, and Marxism.

PHIL 3286 International Business Ethics: 3 semester hours
Same as INTL BUS 3286. The course will deal with moral issues that are raised by the increasing globalization of business. Apart from the general issue of whether this globalization is itself a good thing, we will discuss such issues as child labor, working conditions, safety standards, environmental policies, bribery and other "corrupt" practices, respect for intellectual property, etc. Frequent short papers will be assigned.

PHIL 3301 Ancient Philosophy: 3 semester hours
Freshman admitted by consent of department. The principle philosophical doctrines of the ancient world, with special emphasis on the philosophies of Plato and Aristotle. Although there is no formal prerequisite, it is recommended that students have taken at least one other philosophy course.

PHIL 3302 Medieval Philosophy: 3 semester hours
A critical study of the important philosophies of the period from August to the Renaissance. Although there is no formal prerequisite, it is recommended that students have taken at least one other philosophy course.

PHIL 3303 Early Modern Philosophy: 3 semester hours
Principal figures in the development of rationalism, empiricism and skepticism in early modern Europe, from Descartes through Hume. Although there is no formal prerequisite, it is recommended that students have taken at least one other philosophy course.

PHIL 3304 19th and 20th Century Philosophy: 3 semester hours
This course covers major nineteenth and twentieth century philosophers. It may include such major figures as Hegel, Nietzsche, Mill, Pierce, James, Carnap, Wittgenstein, Russell and Sartre.

PHIL 3320 Topics in Applied Ethics: 3 semester hours
This course has variable content related to topics in applied ethics. Topics covered may include feminism, sexual ethics, environmental ethics, business ethics and bioethics. Philosophy majors should enroll in this course rather than any 2000-level applied ethics course. This course may be repeated for credit as long as the topic differs.

PHIL 3327 Race and Racism: 3 semester hours
This course will investigate the concepts of race and racism through an examination of metaphysical, psychological, ethical, and political problems associated with race.

PHIL 3340 Knowledge and Reality: 3 semester hours
This course introduces students to basic issues in contemporary metaphysics and theories of knowledge. Topics may include universals, causality, skepticism and truth.

PHIL 3360 Formal Logic: 3 semester hours
An introductory study of logical truth and deductive inference, with emphasis on the development and mastery of a formal system.

PHIL 3378 Philosophy of Mind: 3 semester hours
Prerequisites: Three hours of philosophy or consent of instructor. An introduction to philosophical issues pertaining to the mind. Topics may include how the mind relates to the body, how the mind represents the world, how the mind works, consciousness, and free will.

PHIL 3380 Philosophy of Science: 3 semester hours
An examination of science: what makes science special? Topics may include (but are not limited to): empiricism and of induction; paradigms and revolutions; explanation, causation and laws; realism versus instrumentalism; critiques of science such as those of feminism or postmodernism; and reductionism - ultimately is it all just physics?.

PHIL 4401 Plato: 3 semester hours
Prerequisites: Six hours of philosophy, a course in Ancient Philosophy recommended, graduate standing, or consent of instructor. A study of selected Platonic dialogues.

PHIL 4402 Aristotle: 3 semester hours
Prerequisites: Six hours of philosophy, a course in Ancient Philosophy recommended, graduate standing, or consent of instructor. A selective study of Aristotle’s major works.

PHIL 4407 Kant: 3 semester hours
Prerequisites: Six hours of philosophy, PHIL 3304 or equivalent recommended, graduate standing or consent of instructor. A systematic study of the Critique of Pure Reason.

PHIL 4410 Topics and Figures in the History of Philosophy: 3 semester hours
Prerequisites: Nine hours of philosophy, graduate standing, or consent of instructor. In-depth examination of a particular topic, significant figure or philosophical movement from the history of philosophy. The philosopher or movement to be studied will be announced prior to registration. This is a variable content course and may be taken again for credit with the consent of the instructor and department chair.
PHIL 4420 Topics in Non-Western Philosophy: 3 semester hours
Prerequisites: PHIL 1120, graduate standing of consent of instructor. An extensive exploration of issues in some particular non-Western tradition (Islamic, Indian, or Chinese). This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

PHIL 4421 The Analytic Tradition: 3 semester hours
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. PHIL 3360 strongly recommended. Course studies in depth the development of analytic philosophy with a broad emphasis on its style and substance. Topics may include early writings that set the stage for this tradition (Frege, Moore, Russell), the basic texts of Logical Positivism (Carnap, Schlick, Neurath, Hempel), and later responses including reassessment of the doctrine, the revival of naturalism, and the “death” of philosophy (Wittgenstein, Quine, Sellars). This is a variable content course that may be taken again for credit with consent of the instructor and the department chair.

PHIL 4430 Social and Political Philosophy: 3 semester hours
Prerequisites: Six credit hours of Philosophy. This course deals with questions regarding the foundations of ethics and the status of our ethical judgments about what's right and wrong, good and bad. The course will consider contemporary approaches to issues such as moral motivation, moral reasons, moral explanations, moral disagreement, moral knowledge, and moral supervenience, as well as various debates between realists and antirealists, and between cognitivists and expressivists.

PHIL 4435 Classical Ethical Theory: 3 semester hours
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. Significant contributions to moral philosophy from Plato and Aristotle to Bentham and Mill.

PHIL 4437 Metaethics: 3 semester hours
Prerequisites: Six credit hours of Philosophy. This course deals with questions regarding the foundations of ethics and the status of our ethical judgments about what's right and wrong, good and bad. The course will consider contemporary approaches to issues such as moral motivation, moral reasons, moral explanations, moral disagreement, moral knowledge, and moral supervenience, as well as various debates between realists and antirealists, and between cognitivists and expressivists.

PHIL 4438 Recent Ethical Theory: 3 semester hours
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. A study of major contributions to twentieth-century ethics, including works by such writers as Moore, Dewey, Ross, Stevenson, Hare, Rawls.

PHIL 4440 Theories of Knowledge: 3 semester hours
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. An examination of concepts and problems involved in the characterization of knowledge. Specific topics will vary, but will usually include knowledge, belief, skepticism, evidence, certainty, perception, truth, and necessity.

PHIL 4445 Metaphysics: 3 semester hours
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. An examination of selected metaphysical topics such as substance, universals, causality, necessity, space and time, free will, being, and identity.

PHIL 4450 Special Readings in Philosophy: 1-3 semester hours
Prerequisite: Consent of department. Independent study through readings, reports, and conferences. This is a content course and may be taken again up to a total of 6 credit hours with consent of instructor and department chair.

PHIL 4451 Special Topics in Philosophy: 3 semester hours
Prerequisites: Six hours of philosophy, graduate standing, or consent of instructor. A critical study of classical and/or contemporary contributions to a selected topic in philosophy. The topic to be considered will be announced prior to registration. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

PHIL 4458 Ethics and the Computer: 3 semester hours
Prerequisites: Six hours of coursework above the level of MATH 1030 in Math/Computer Science or at least six hours of philosophy or consent of instructor. An examination of ethical issues concerning the use of computers generally and software engineering in particular. Aims at developing awareness of these issues, and skills for ethical decision-making regarding them through careful, analytical methods. Typical issues include privacy, intellectual property, computer fraud, and others.

PHIL 4460 Topics in Logic: 3 semester hours
This course is the study of major developments in symbolic reasoning. Emphasis is given to theoretical problems with some attention devoted to philosophical issues arising from logic.

PHIL 4478 Topics in Philosophy of Mind and Philosophy of Language: 3 semester hours
Prerequisites: PHIL 3378 or six hours of other philosophy courses or consent of instructor. This course is an examination of selected topics at the interface of philosophical and psychological research. This is a variable content course and can be taken again for credit with the approval of the instructor and the department chair.

PHIL 4479 Philosophy of Cognitive Science: 3 semester hours
Prerequisites: PHIL 3378 or PHIL 4478 or nine hours of other philosophy courses or consent of instructor. An exploration of the philosophical foundations of cognitive science, a cooperative effort of philosophers, cognitive psychologists, brain scientists, computer scientists, and others to understand the relationship between the mind and the brain.

PHIL 4480 Topics in Philosophy of Science: 3 semester hours
Prerequisites: Consent of the instructor. An advanced introduction to the philosophy of science for advanced undergraduates in philosophy and graduate and professional students. Topics covered include scientific method, confirmation, explanation, the nature of theories, scientific progress, science criticism, ethics in science, and science and religion.

PHIL 4487 Philosophy of Law: 3 semester hours
Same as CRIMIN 4487. Prerequisites: CRIMIN 1100 or three hours of philosophy or graduate standing or consent of instructor. This course provides an intensive study of recent philosophical debate about such issues as the authority of law, legal equality and justice, legal responsibility, self-determination and privacy, and legal punishment.

PHIL 5400 Proseminar in Philosophy: 3 semester hours
Prerequisites: Graduate standing. Required of all entering Graduate Students in the Fall Semester of the first full year of residency. Topics vary. Other graduate students may take this course with the permission of the instructor and the director of Graduate Studies in Philosophy. Students will be expected to write papers, give presentations, and join in class discussion.
**PHIL 5410 Seminar in Significant Figures in Philosophy: 3 semester hours**
Prerequisites: Graduate standing. In-depth study of the work of a single philosopher. The philosopher selected will be announced prior to registration. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5478 Seminar in Philosophy of Mind: 3 semester hours**
Prerequisites: Graduate standing. Topics may include functionalism and physicalism; representation and the nature of propositional attitudes such as belief, desire, and the various emotions; folk psychology and knowledge of other minds; introspection and knowledge of one’s own mind; conscious and unconscious mental states and processes. This is a variable content course and may be taken again for credit with consent of the instructor and the department chair.

**PHIL 5495 Thesis Research: 1-3 semester hours**
Prerequisites: Graduate standing or consent of instructor. May be repeated once for credit with the consent of the instructor and the department chair.

**PHIL 5521 Seminar in Analytic Philosophy: 3 semester hours**
Prerequisites: Graduate standing or consent of instructor. Intensive study of selected topics, texts, or individuals in historical or contemporary analytic philosophy. Topics may include, but are not limited to, Frege semantics, Russell’s theory of definite descriptions, logical positivism, Wittgenstein’s philosophy of language, Quine on the analytic/synthetic distinction, Kripke possible-world semantics, theories of propositions, the analysis of knowledge, contextualism in epistemology and language, relative semantics, epistemic two-dimensionalism, conceivability vs. possibility, three-dimensionalism vs. four-dimensionalism, presentism vs. eternalism, and applications of core concepts in other areas of philosophy. This is a variable content course and may be taken again for credit with consent of instructor and department chair.

**PHIL 5530 Seminar in Social and Political Philosophy: 3 semester hours**
An intensive study of contemporary philosophical debate about such issues as civil liberty, economic justice, political decision-making, and state authority. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5533 Philosophy of Law: 3 semester hours**
Same as CRIMIN 5533. Prerequisite: Graduate standing or consent of instructor. Examination of origins of law and the basis for legal obligation. Specific consideration of the justification of punishment, morality and law, and legal reasoning.

**PHIL 5538 Seminar in Ethical Theory: 3 semester hours**
Prerequisites: Graduate standing or consent of the instructor. In this course we will seek to answer questions from normative ethics or metaethics, which may include: What do all morally wrong actions have in common? What does the word "wrong" mean? How, if at all, can we verify moral judgements? Are any moral judgements valid for all societies? Do we always have good reason to be moral?.

**PHIL 5540 Seminar in Epistemology: 3 semester hours**
Prerequisites: Graduate standing or consent of instructor. Close study of selected topics, texts, or individuals in epistemology. Topics may include (but are not limited to) theories of justification, naturalism in epistemology, and conceptions of knowledge. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5545 Seminar in Metaphysics: 3 semester hours**
Prerequisite: Graduate standing. Intensive study of a selected topic or problem area in metaphysics, e.g. mind-body identity, nature of the self, or conception of time. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5551 Special Readings in Philosophy: 1-3 semester hours**
Prerequisites: Graduate standing, written consent of instructor. Independent study through readings, reports, and conferences. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5560 Seminar in Logic: 3 semester hours**
Prerequisites: Graduate standing. A focused study of topics in logic and/or its history. Representative topics include: Aristotelian logic, modal logic, the Gödel incompleteness theorems, relevance logic, paraconsistent logic, free logic. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5561 Graduate Formal Logic: 3 semester hours**
Prerequisites: Graduate standing; permission of the department. A rigorous introduction to formal logic that includes sentential calculus, predicate logic, and completeness proofs. May be taken for graduate credit only with permission of the graduate advisor and chair.

**PHIL 5579 Seminar in Philosophy of Cognitive Science: 3 semester hours**
Prerequisites: Graduate standing. A focused study of topics in logic and/or its history. Representative topics include: Aristotelian logic, modal logic, the Gödel incompleteness theorems, relevance logic, paraconsistent logic, free logic. This is a variable content course and may be taken again for credit with the consent of the instructor and the department chair.

**PHIL 5580 Seminar in Philosophy of Science: 3 semester hours**
Prerequisites: Graduate standing or consent of instructor. Focus is on recent issues and controversies. Topics may include: theories and observation, models of explanation, confirmation, realism and antirealism, empiricism & naturalism, “social construction” and feminist views of science. This is a variable content course and may be taken again with the consent of the instructor and the department chair.