Biology 329a. Neuronal Regeneration  
Psychology 313a. Advanced Seminar in Behavioral Neuroscience  
Psychology 315a. Hormones and Behavior  
Psychology 316a. Comparative Neuroanatomy  
Psychology 319a. Memory and Brain

II. Three electives may be chosen from the courses listed above (but not already taken) or below:

- Biology 101a - MCSR, INS. Biological Principles I  
- Biology 212a - MCSR, INS. Genetics and Molecular Biology  
- Biology 214a - MCSR, INS. Comparative Physiology  
- Biology 217a - MCSR, INS. Developmental Biology  
- Biology 224a - MCSR, INS. Biochemistry and Cell Biology  
  (same as Chemistry 231)  
- Biology 333a. Advanced Cell and Molecular Biology  
- Chemistry 232a - MCSR. Biochemistry (same as Biology 232)  
- Computer Science 355a. Cognitive Architecture  
- Mathematics 204a - MCSR. Biomathematics (same as Biology 174)  
- Physics 104a - MCSR, INS. Introductory Physics II  
- Psychology 210b. Infant and Child Development  
- Psychology 216b. Cognitive Psychology  
- Psychology 251b. Research Design in Psychology  
- Psychology 259b/260b. Abnormal Psychology  
- Psychology 270b. Laboratory in Cognition

Neuroscience 291a–294a. Intermediate Independent Study  
Neuroscience 401a–404a. Advanced Independent Study and Honors

Philosophy

Lawrence H. Simon, Department Chair  
Emily C. Briley, Department Coordinator

Professor: Scott R. Sehon  
Associate Professors: Lawrence H. Simon (Environmental Studies), Matthew F. Stuart†  
Assistant Professor: Sarah O’Brien Conly  
Visiting Faculty: Sarah K. Paul

Requirements for the Major in Philosophy

The major consists of eight courses, which must include Philosophy 111, 112, and 223; at least one other course from the group numbered in the 200s; and two from the group numbered in the 300s. The remaining two courses may be from any level. Courses in which D grades are received are not counted toward the major.
Requirements for the Minor in Philosophy
The minor consists of four courses, which must include Philosophy 111 and 112 and one course from the group numbered in the 200s. The fourth course may be from any level. Courses in which D grades are received are not counted toward the minor.

First-Year Seminars
Topics in first-year seminars change from time to time but are restricted in scope and make no pretense to being an introduction to the whole field of philosophy. They are topics in which contemporary debate is lively and as yet unsettled and to which contributions are often being made by more than one field of learning. For a full description of first-year seminars, see pages 149–60.

[16c. Personal Ethics.]
18c. Love. Fall 2009. Sarah Conly.
[27c. Moral History.]

Introductory Courses
Introductory courses are open to all students regardless of year and count towards the major. They do not presuppose any background in philosophy and are good first courses.

111c. Ancient Philosophy. Every fall. Fall 2009. Sarah Conly.
   The sources and prototypes of Western thought. We try to understand and evaluate Greek ideas about value, knowledge, and truth.

   A survey of seventeenth- and eighteenth-century European philosophy, focusing on discussions of the ultimate nature of reality and our knowledge of it. Topics include the nature of the mind and its relation to the body, the existence of God, and the free will problem. Readings from Descartes, Locke, Hume, Kant, and others.

   Our society is riven by deep and troubling moral controversies. Examines some of these controversies in the context of current arguments and leading theoretical positions. Possible topics include abortion, physician-assisted suicide, capital punishment, sexuality, the justifiability of terrorism, and the justice of war.

   Does God exist? Can the existence of God be proven? Can it be disproven? Is it rational to believe in God? What does it mean to say that God exists (or does not exist)? What distinguishes religious beliefs from non-religious beliefs? What is the relation between religion and science? Approaches these and related questions through a variety of historical and contemporary sources, including philosophers, scientists, and theologians. (Same as Religion 142.)

   When we disagree over whether or not the earth goes around the sun, or whether slavery is wrong, it seems to us that we are disagreeing over something to which there is a single true
Courses of Instruction

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answer; we can’t all be right. On the other hand, when we fully countenance the complexity of cultural diversity and worldviews in all different times and places, the idea that there is a single truth or single morality that applies to everyone at all times might seem implausible. Indeed, we might think the view that there is an absolute truth or absolute morality leads to intolerance and oppression. Investigates whether there is one truth or many — whether there is a single objective truth, or whether truth is in some way relative to particular cultures, places, and times. Or perhaps there is simply no such thing as truth or morality, at least not that we humans are capable of knowing. Concerns both descriptive truths—the kind of truths science purports to deliver to us—and normative truths about what is moral or valuable. Readings from classic and contemporary sources.


In the past few years, a number of psychologists have focused on the empirical study of human happiness. What is happiness? What conditions make human beings happy? What role does heredity play in determining our ability to be happy? Philosophers, on the other hand, have asked themselves a related but slightly different set of questions. Should we pursue happiness? Are things that make us happy “good”? Can we be happy without fulfilling our moral obligations? What should we do when the demands of ethics and those of our happiness are in conflict? What other values compete with that of happiness? Examines these philosophical questions concerning happiness and the good life in light of the empirical results of positive psychology.

152c. Death.

Intermediate Courses


What are the causes of historical development? Is history progressive? Do freedom and reason manifest themselves in history? A study of the development of political philosophy and philosophy of history in nineteenth-century German philosophy from Kant through Hegel to Marx.


We see ourselves as rational agents: we have beliefs, desires, intentions, wishes, hopes, etc. We also have the ability to perform actions, seemingly in light of these beliefs, desires, and intentions. Is our conception of ourselves as rational agents consistent with our scientific conception of human beings as biological organisms? Can there be a science of the mind and, if so, what is its status relative to other sciences? What is the relationship between mind and body? How do our mental states come to be about things in the world? How do we know our own minds, or whether other people even have minds? Readings primarily from contemporary sources.

220c. Bioethics.


How should one live? What is the good? What is my duty? What is the proper method for doing ethics? The fundamental questions of ethics are examined in the classic texts of Aristotle, Hume, Mill, and Kant.

222c. Political Philosophy.


The central problem of logic is to determine which arguments are good and which are bad. To this end, we introduce a symbolic language and rigorous, formal methods for
seeing whether one statement logically implies another. We apply these tools to a variety of arguments, philosophical and otherwise. We also demonstrate certain theorems about the formal system we construct.


Science is often thought of as the paradigm of rational inquiry, as a method that gives us an unparalleled ability to understand the nature of the world. Others have doubted this rosy picture, and have emphasized historical and sociological aspects of the practice of science. Investigates the nature of science and scientific thought by looking at a variety of topics, including the demarcation of science and non-science, relativism and objectivity, logical empiricism, scientific revolutions, and scientific realism.


What is knowledge, and how do we get it? What justifies us in believing certain claims to be true? Does knowing something ever involve a piece of luck? Is it possible that we lack knowledge of the external world altogether? An introduction to the theory of knowledge, focusing on contemporary issues. Considers various conceptions of what it takes to have knowledge against the background of the skeptical challenge, as well as topics such as self-knowledge and the problem of induction.


Metaphysics is the study of very abstract questions about reality. What does reality include? What is the relation between things and their properties? What is time? Do objects and persons have temporal parts as well as spatial parts? What accounts for the identity of persons over time? What is action, and do we ever act freely?


Investigates several philosophically important results of modern logic, including Gödel’s incompleteness theorems, the Church-Turing Theorem (that there is no decision procedure for quantificational validity), and Tarski’s theorem (the indefinability of truth for formal languages). Discusses both the mathematical content and philosophical significance of these results.

Prerequisite: Philosophy 223 or permission of the instructor.

[241c. Philosophy of Law.]

[249c - ESD, IP. African Philosophy. (Same as Africana Studies 249.)]


What things in nature have moral standing? What are our obligations to them? How should we resolve conflicts among our obligations? After an introduction to ethical theory, topics to be covered include anthropocentrism, the moral status of nonhuman sentient beings and of nonsentient living beings, preservation of endangered species and the wilderness, holism versus individualism, the land ethic, and deep ecology. (Same as Environmental Studies 258.)


Advanced Courses

Although courses numbered in the 300s are advanced seminars primarily intended for majors in philosophy, adequately prepared students from other fields are also welcome. Besides stated prerequisites, at least one of the courses from the group numbered in the 200s will also be found a helpful preparation.


What is the best life? What should we strive for if we want to flourish? How important is the role of the intellect? Of friends? Of moral character? Uses Aristotle’s Ethics and contemporary readings to examine some possible answers.

Prerequisite: One course in philosophy or permission of the instructor.
An examination of the beginnings of analytic philosophy. Examines the major works from
the period 1879–1921 of the three progenitors of this philosophical movement: Gottlob Frege,
Bertrand Russell, and Ludwig Wittgenstein. Topics include objectivity and truth, logic and
inference, and the foundations of mathematics.
Prerequisite: Philosophy 223 or permission of the instructor.

334c. Free Will. Fall 2009. SCOTT R. SEHON.
Do we have free will and moral responsibility? Can we have free will and moral responsibility
if determinism is true? More broadly, can we have free will if all human behaviors can be
explained scientifically? Readings from contemporary sources.
Prerequisite: One course in philosophy.

337c. Hume. Fall 2010. MATTHEW STUART.
An examination of Hume’s metaphysics and epistemology, focusing on his masterpiece, A
Treatise of Human Nature. This work — completed when the author was only twenty-six — was
largely ignored during his lifetime, but is now recognized as the high-water mark of British
Empiricism. Topics to include Hume’s theories about cognition, imagination, causality,
inductive reasoning, free will, personal identity, miracles, and moral evaluation.
Prerequisite: Philosophy 112 or permission of the instructor.

Examines debates in recent ethical theory and normative ethics. Possible topics include
realism and moral skepticism, explanation and justification in ethics, consequentialism and
its critics, relativism, whether morality is overly demanding, the sources of normativity, and
the relation of ethics to science.
Prerequisite: Philosophy 112, 221, or 258, or permission of the instructor.

[346c. Philosophy of Gender: Sex and Love. (Same as Gay and Lesbian Studies 346 and
Gender and Women's Studies 346.)]

[375c. Metaphysics of the Self.]

392c. Advanced Topics in Environmental Philosophy. Spring 2010. LAWRENCE H. SIMON.
Examines philosophical, moral, political, and policy questions regarding various
environmental issues. Possible topics include the ethics of climate change policy, our
obligations to future generations, benefit-cost analysis vs. the precautionary principle as a
decision-making instrument, and the relationship between justice and sustainability. (Same
as Environmental Studies 392.)

401c–404c. Advanced Independent Study and Honors in Philosophy. THE DEPARTMENT.

Physics and Astronomy

Thomas Baumgarte, Department Chair
Dominica Lord-Wood, Department Coordinator

Professors: Thomas Baumgarte, Stephen G. Naculich, Dale A. Syphers
Associate Professors: Mark O. Battle, Madeleine E. Msall
Lecturer: Karen Topp
Laboratory Instructors: Kenneth Dennison, Gary L. Miers