

PHILOSOPHY GRADUATE COURSE OFFERINGS FALL 2002

Philosophy 5305: Philosophy of Modern Science & Technology
Problems, literature, and schools in the philosophy of science and technology. Explanation and confirmation.

Instructor: L. Perini CRN: 95429
Lecture: 2:00-4:50 LITRV 1760 T
(Cross listed with: STS 5305; CRN 95202)

Philosophy 5334: Ethics

This seminar is a systematic examination of central topics in philosophical ethics. The focus will be on important work from the past half-century, including recent work by contemporary moral philosophers. Some typical questions we might address: What kind of meaning do ethical terms have, and what is the nature of ethical judgment? In what sense can ethical judgments be said to be true or false, and what makes them so? Are ethical properties such as goodness or rightness objective features of the world, i.e. real properties of people or actions? If so, how are they related to the natural properties investigated by the sciences, and how do we perceive them? If not, should they be understood as rooted instead in contingent human emotions or commitments, or perhaps as necessary constructions of human reason? What is it for there to be a genuine reason for someone to do something, and can it be argued that there is always a reason to act ethically? Are ethical reasons always overriding, trumping other kinds of reasons a person might have for acting differently? What factors are ultimately relevant to something's being right or wrong, or valuable?

Instructor: W. Fitzpatrick CRN: 94017
Lecture: 3:30-6:15 MAJWM 225 T

Philosophy 5344: History of Ethics - Kant's Ethics

Examination of Kant's ethical theory.

Instructor: A. Baxley CRN: 95430
Lecture: 9:05-12:05 MAJWM 225 W

Philosophy 5505: Symbolic Logic

This is the first course of a two-semester sequence in modern symbolic deductive logic and its metatheory. This course is intended for graduate students who have not taken a rigorous undergraduate logic course. This semester covers basic notions such as argument, validity, and soundness and will develop a system of first order logic, progressing from truth functional sentential logic to the polyadic predicate calculus with identity. A variety of proof techniques will be used, and emphasis placed on translation between English and the artificial logical languages. Along the way there will be a selective tour of the history of logic.

Instructor: H. Miller CRN: 94018
Lecture: 1:25-2:15 MAJWM 225 M W F

Philosophy 6014: Special Topics in Philosophy Ludwig Wittgenstein

Ludwig Wittgenstein (1889-1951) is widely considered to be the most important philosopher of the 20th Century. He produced two influential yet very different philosophies in his lifetime, and he was thought by most everyone who knew him to be a genius. Though his work is often alluded to by philosophers as well as other intellectuals, it is not easily read and understood. In this course we will carefully read and study his two most significant works, the *Tractatus Logico-*

Philosophicus (1921), and the *Philosophical Investigations* (1953), as well as a recent biography. Among the philosophical topics we will discuss are: the nature of language, the relationship between language and reality, the nature of philosophy and its relationship to science, the place of value, and the nature of thought and the mind. The aim is to give students an understanding of his main philosophical ideas, the place of his ideas in the history of philosophy, and the relationship between his life and his work. There will also be an opportunity for interested students to study the influence or relevance of his work to disciplines outside of philosophy, such as architecture, literary theory, sociology, science studies, and cultural studies. Students will write weekly reaction papers to the reading, and three longer papers. In addition, graduate students will make a class presentation. Also graduate students will be reading some additional material. (This class & the 4015 class will meet together for three hours per week. In addition, those who enroll in the graduate course will meet for an extra hour per week, at a time to be arranged.)

Instructor: J. Klagge CRN: 95572
Lecture: 11:00-12:15 MAJWM 225 T Th

Philosophy 6334: Advanced Topics in the Philosophy of Science Philosophy and Methodology of Statistical Inference and Modeling

This course will be an introduction to methodological and philosophical dimensions of widely used research tools of statistical data analysis, modeling, and inference in natural and social sciences. Long-standing questions about how to understand and justify these tools are becoming more pressing as the growing availability of computer power and statistical software make possible the easy availability of sophisticated statistical tools:

How should one interpret a p-value in significance testing? How should one decide on the appropriate choice of probabilities of type I and II errors? What are the consequences of such choices? What are the essential differences between Bayesian and frequentist methods? When is it appropriate to mix tools from different methodologies? When are causal conclusions warranted by regression analysis? When and how can statistical modeling techniques afford inferences with predictive reliability? What is the justification for using tools of meta-analysis? When are data-dependent model searches justifiable? When do they lead to unreliable "data-mining"?

Our work will combine statistical, philosophical and logical analysis, along with an examination of central historical and current controversies. We will examine the mainstream tools for inference and modeling as well as some of the newest methodological developments. Our readings will include works by statisticians, philosophers of science, and statistical practitioners in biology, economics, ecology, psychology, risk assessment. Some statistical background will be expected. (Students are encouraged to meet with the instructor(s) to discuss any questions as to the background requirements.) This course may also be taken under different course numbers as appropriate.

Instructor: D. Mayo CRN: 95433
Lecture: 3:35-6:00 MAJWM 532 W
(Cross listed with: STS 6334 - CRN: 95582)