

# Spring 2010

519DPT

## Topics in Logic

Tuesday & Thursday

5-7pm

Dipert

(dual listed w/ 489)

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This is a course in symbolic logic intended for graduate students, and undergraduates with a solid preparation in logic. To take this class, you must have had PHI 315 (Symbolic Logic) or be prepared to pass a test on that material early in the semester (first-order predicate logic with relations and quantifiers; translation between English and FOL, and skill in producing deductions.)

We will begin with Categorical logic: however, this will not be the usual course in Aristotelian logic, but instead one that presents it as a modern theory with a symbolic, complete natural deduction theory, and a semantics. We will then review rapidly, with philosophical commentary, the first-order predicate logic; we will emphasize the harder parts of FOL, namely translations and deductions with quantified relations. Especially in this early part of the course we will discuss topics in the pedagogy of logic, including computer-assisted learning packages, that would be of use for undergraduate teachers of logic at all levels.

We will examine and compare several theories about special relations that are extensions of FOL, such as set theory, mereology, and the Peano postulates. We will look at several axiomatic systems. We will discuss the semantics for first-order logic, including practice in devising finite models and interpretations that show arguments in FOL to be invalid.

The last part of the discussion of FOL will discuss, but not prove, various philosophically important theorems in metalogic: completeness and soundness, incompleteness and uncomputability.

Finally we will discuss ontological issues in logical systems, and the uses of intensional and modal logics in theories about belief, knowledge, and ethical obligation. (We will not discuss the standard alethic modal logics, such as S1-S5, since those are covered in a dedicated course.)

Probable Texts:

Harry Gensler, *Introduction to Logic* (2002)

R.I.G. Hughes, *Philosophical Companion to First-Order Logic* (1993)

plus articles from the *Stanford Encyclopedia of Philosophy* and handouts.

Recommended: E.J. Lemmon, *Beginning Logic*

528MCG

## Philosophy of Language

Wednesday

3-5pm

McGlone

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This will be an advanced research seminar focusing on recent work on propositions. Readings will include selections from Kit Fine's *Semantic Relationism*, Jeffery King's *The Nature and Structure of Content*, Steven Schiffer's *The Things We Mean*, and Scott Soames's forthcoming book *What is Meaning*. Readings will also include critical discussions of the abovementioned works and, maybe, some relevant background material.

**Course Requirements:** Students taking the seminar "intensively" will be required to give micro-presentations and complete a term paper that displays significant mastery of material discussed in seminar and course readings. Students taking the seminar "extensively" will be required to give micro-presentations, but will not be required to write a term paper.

556KOC

**Topic in History of Philosophy**

Monday

1-3pm

Kochiras

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This seminar focuses upon some problems addressed by early modern figures, particularly those related to the philosophy of science. Among those problems are the nature of substance, action, and causation, the proper extent of empiricism, and the role of rationalist or metaphysical principles in knowing about the world. Student presentations will figure prominently in the seminar. The seminar is open to graduate students only.

578LAW

**Kant's Ethics**

Tuesday

3-5pm

Lawler

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Kant's ethics occupy a central place in his three critiques. The first Critique prepares the metaphysical space for the second. If deterministic science is true of reality, then morality, with its crucial assumption of free will, is an illusion. So it was necessary for Kant to "to deny knowledge, in order to make room for faith" as he says in the Preface to the *Critique of Pure Reason*. Since knowledge is limited to appearances, although we cannot know that we have free will, we can still believe that it is real. Kant's faith-related moral philosophy, occupying the metaphysical space of reality rather than appearance, therefore occupies this "room" opened up by the critique of scientific knowledge. It is important to keep in mind this perspective in considering what Kant says about morality. To focus exclusively on the role of reason in Kant's ethics is to miss the significance of this initial framework, with its critique of knowledge. Moreover, it is not enough to understand what is morally right; it is necessary to *realize* one's moral duties, the culminating ideal for which is the creation of a just society, what Kant calls "the highest good." Kant's third critique, the *Critique of Judgment*, develops a teleological conception of reality that complements the mechanism of science and is open to the perspectives

of morality. In this perspective of the realization of the moral ideals, Kant's historical and political essays provide essential components for the understanding of morality.

The course focuses primarily on Kant's small but intricate work, the *Groundwork for the Metaphysics of Morals*. Lectures and supplied reading materials will provide sufficient information regarding Kant's three critiques and relevant essays. A final 15-20 page paper is required that incorporates both research in Kant scholarship and the essential ideas of the course.

579KOR

**Special Topics: Pictures**

Thursday

3-5pm

Korsmeyer

Jan 13-Feb 6

Friday

1-4

(also arranged)

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This will be a one-month, full-credit seminar on the nature of pictures and pictorial representation. Topics to be covered include: What makes a visual design a picture? What is the relationship between an image and its subject? Between a picture and its frame? What makes a picture realistic? Does pictorial seeing change through history? Are elements such as color objective or subjective? What kind of information does a picture contain and how is it conveyed? How does a visual image achieve conceptual content? How does/Can it express philosophical ideas? When is a picture also a work of art? Texts: The main text will be John Hyman, *The Objective Eye: Color, Form, and Reality in the Theory of Art* (Chicago, 2006). Supplementary readings will include works by Gombrich, Goodman, Wollheim, Kulvicki, Lopes, Derrida, Wartofsky, Danto, Stafford, Gracia, and others. The latter materials will be available from JSTOR or UBLearn.

Meetings: January 11 - February 6. Thursdays 3-5, Fridays 1-4 in 141 Park Hall. Additional meetings at art galleries to be arranged.

Requirements: Chief responsibility for the supplementary readings will be distributed among the participants, with 2-4 students presenting critical summaries of articles each week. Students taking the course intensively for a letter grade should do the readings, the presentations, and a paper of approximately 12-14 pages. Students taking the course extensively for an S/U grade should do the readings and the presentations.

More information on the content and structure of this course will be posted on my website ([www.philosophy.edu/~ckors](http://www.philosophy.edu/~ckors)). In the meantime, questions can be directed to me at [ckors@buffalo.edu](mailto:ckors@buffalo.edu).

584RAP

**Philosophy of Computer Science**

Monday Wednesday Friday

10-10:50am

Rapaport

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What is philosophy? What is "the philosophy of X" (where X = things like: science, psychology, history, etc.)? What is computer science? What is science? Is computer science a science? If so, what is it a science of? Is it a science of computers? What is a computer? Is it a science of computation? What is computation? What is an algorithm? What is a procedure? What is a recipe? What are Church's and Turing's "theses"? What is "hypercomputation"? What is a computer program? What is the relation of a program to that which it models or simulates? What is simulation? Are programs (scientific) theories? What is an implementation? What is software? Can computer programs be copyrighted, or patented? Can computer programs be verified? What is the philosophy of artificial intelligence? What is AI? What is the relation of computation to cognition? Can computers think? What are the Turing Test and the Chinese Room Argument? What is computer ethics? Should we trust decisions made by computers? Should we build "intelligent" computers.

588COH

**Contemporary European Philosophy**

Wednesday

1-3:00 pm

Cohen

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NO DESCRIPTION AVAILABLE

619KEA

**Modal Logic**

Tuesday & Thursday

1-2:20pm

Kearns

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This course will survey standard systems of modal logic, with an emphasis on propositional modal logic. Kripke-style possible-worlds semantics will be explored, and we will investigate alternative types of semantics. We will consider and discuss philosophical issues concerning modality. The exact mix of topics covered will be partly determined by the composition of the class. Students will be given frequent homework assignments which call for constructing proofs in and about various modal systems. There will be a midterm and a final exam, but no paper.

640TRI

**Graduate Research Ethics**

Thursday

5-7:40pm

Triggle

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NO DESCRIPTION AVAILABLE