Philosophy 29425/39425

Logic for Philosophy

Winter 2015

TR 9:00-10:20

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COURSE DESCRIPTION

Key contemporary debates in the philosophical literature often rely on formal tools and techniques that go beyond the material taught in an introductory logic class. A robust understanding of these debates—and, accordingly, the ability to meaningfully engage with a good deal of contemporary philosophy—requires a basic grasp of extensions of standard logic such as modal logic, multi-valued logic, and supervaluations, as well as an appreciation of the key philosophical virtues and vices of these extensions. The goal of this course is to provide students with the required logic literacy. While some basic metalogical results will come into view as the quarter proceeds, the course will primarily focus on the scope (and, perhaps, the limits) of logic as an important tool for philosophical theorizing.

BOOKS

The following text is required for the course, available for purchase at the Seminary Coop Bookstore (5751 S Woodlawn Ave.):

— Sider, *Logic for Philosophy*, New York: Oxford University Press (2010)

The above book as well as some other useful material are on reserve at Regenstein. Any additional material will be made available through the course's Chalk website.

COURSE REQUIREMENTS

There will be five homework assignments and one final exam (2 hours):

First homework	due January 13$^{\text{th}}$, in class	worth 10%
Second homework	due January 27$^{\text{th}}$, in class	worth 17.5%
Third homework	due Feburary 10$^{\text{th}}$, in class	worth 17.5%
Fourth homework	due February 24$^{\text{th}}$, in class	worth 17.5%
Fifth homework	due March 10$^{\text{th}}$, in class	worth 17.5%
Final Exam	March 17$^{\text{th}}$, 8–10	worth 20%

Homework assignments will be uploaded to the Chalk site in advance of the due dates. Late homeworks will be docked a grade per day (e.g., B+ to B) unless you have received approval ahead of time. Room assignments for final exams will be announced by the Registrar during the quarter and can be obtained at `http://registrar.uchicago.edu/courses/final-exams.shtml`. Homework assignments as well as the final exam are cumulative.

Homework assignments will be returned and discussed during sections.

Collaboration on homework exercises is permitted but students should by no means hand in someone else's work as their own.

Students may, if they wish, opt to write a term paper in place of the final examination. The topic must be approved ahead of time and suitably relate to the issues discussed in class.

The following schedule provides an overview over the topics that we will address during this semester as well as the assigned readings. Readings may change as the semester goes on. Updated versions of this syllabus will be posted on Chalk as changes are made.

All readings are from Sider's *Logic for Philosophy*.

Date	Topic	Readings
Week 1	Standard Logic	Chapters 1, 2.1–2.6, 4.1–4.4
Week 2	Beyond Standard Propositional Logic	Chapter 3
Week 3	Beyond Standard Predicate Logic	Chapter 5
Week 4	Modal Propositional Logic	Chapter 6.1–6.4
Week 5	Beyond Modal Propositional Logic	Chapter 7
Week 6	Counterfactuals	Chapters 8
Week 7	Quantified Modal Logic	Chapter 9
Week 8	Two-Dimensional Modal Logic	Chapter 10
Week 9	Metatheory	Chapters 2.8, 2.9, 4.5, 6.5, 6.6
Week 10	Conclusion & Outlook	(no reading)