Philosophy 29425/39425

Logic for Philosophy

Spring 2017

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 take-home exam. The homeworks are due in class on the assigned day; the final exam is due by 5pm on the assigned day in Professor Willer's mailbox in Stuart 202.

First homework	due April 4th	worth 10%
Second homework	due April 18th	worth 17.5%
Third homework	due May 2nd	worth 17.5%
Fourth homework	due May 16th	worth 17.5%
Fifth homework	due May 30th	worth 17.5%
Final Exam	due June 6th	worth 20%

Homework assignments will be uploaded to the Chalk site in advance of the due dates. Late homeworks will be docked five points per day (e.g. 93 to 88) unless you have received approval ahead of time. 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.

Roadmap

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, 2.1–2.4, 2.6–2.7, 4.1–4.4
Week 2	Beyond Standard Propositional Logic	Chapters 3.1–3.4
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)