Course Description
This is a second course in symbolic logic. It reviews propositional logic, develops further the logic of quantification, and explores metalogical issues such as the construction, consistency, soundness and completeness of deductive systems. The course also concerns multi-valued or deviant logic, propositional modal logic, quantified modal logic, counterfactuals, and two-dimensional modal logic. Finally, if time permits, Gödel's incompleteness theorems will be sketched.

Course Prerequisites
Students should have completed 'Philosophy 320: Symbolic Logic I' (or its equivalent). It is assumed that students already have a familiarity with propositional logic and predicate logic and that they have constructed proofs using the rules of inference in natural deduction.

Course Objectives
The aim of this course is to introduce students to important metalogical theorems and results concerning first-order logic. It is also to expose students to aspects and extensions of symbolic logic that are relevant in contemporary philosophy — for example, concerning issues in the metaphysics of modality and in semantics. Finally, this course aims to give students the ability to reflect rigorously on the nature of logic and truth. At a minimum, it is the instructor’s hope that students will develop a degree of logical literacy that will allow them to tackle articles written by professional philosophers.
Course Requirements and Grading Policies
Final grades will be based on the following components:

- Weekly homework assignments (20%)
- Mid-term Exam I (20%)
- Mid-term Exam II (20%)
- Final Exam (40%)

The homework assignments will be due in class every Thursday (with the exception of the two Thursdays of the mid-term exams). The mid-terms and final will all be “take-home” exams. Due dates are given below.

In addition, this class will have the following policies:

- There will be eleven homework assignments over the course of the semester; the top ten will count towards the student’s final grade.
- No late assignments will be accepted.
- Absent extraordinary circumstances, no extension will be given for the mid-terms or final.
- All work must be the student’s own. Any instance of plagiarism will result in a failing grade for the course.

Texts
There is only one required textbook:

- Theodore Sider, *Logic for Philosophy*, Oxford University Press, forthcoming. The text is available at: http://tedsider.org/books/lfp.pdf. (Thanks to Professor Sider for kind permission to use his text!)

The following books are recommended for current and future fun and philosophical reflection:

- George S. Boolos, John P. Burgess, & Richard C. Jeffrey, *Computability and Logic*, 5th edition, Cambridge: Cambridge University Press, 2007. [The textbook that used to be used for this course.]


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