

Syllabus  
PHL 358, Philosophical Logic

**Professor:** Sinan Dogramaci

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**Office Hours:** Anytime, by appt. I'll also ask the class which times of week are good for most people, and I'll try to keep certain slots free.

**Course Information:**

This course will focus on a number of the most important 20th century results in so-called metalogic, the results that concern the powers and limitations on formal logical systems. We will prove the completeness of classical predicate logic, the Compactness and Lowenheim-Skolem theorems, and the incompleteness of arithmetic.

The course will be technically demanding. Students who have no previous experience with mathematical proofs will have to be willing to work hard and learn as they go.

**Text:**

Computability and Logic, 5th ed., Boolos, Burgess and Jeffrey.

The book is full of typos. As soon as you get your copy, go to this website and mark all the errata in your book: <http://www.princeton.edu/~jburgess/addenda.htm>

**Grading:**

There will be nine problem sets, distributed over the course of the semester as described in the schedule below. These will determine your course grade. The final overview problem set counts double.

**Late Work:**

Any work handed in after the start of the class when it is due will be docked 5%. An additional 5% will be docked every 24 hours after that. Once solutions are posted on blackboard (which will usually be a few days after the due date), work may not be handed in any longer and the assignment is scored as 0. Medical excuses for late work require written notice from your doctor to avoid docking.

**Plagiarism:**

Problem sets are to be done *on your own*.

If you copy someone else's answers, that counts as plagiarism. This course will have a zero tolerance policy for plagiarism. **Students are caught plagiarizing *all the time***. If you plagiarize in this course, it will be caught, you will automatically fail the course, and you will be reported to the dean.

**Disabilities:**

"Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 471-6259." (quoted from a memo from Vice Provost Ritter.)

DATE	LECTURE	PROBLEM SETS
Aug 26	Intro and chapter 1	
Aug 31	Chapter 1	
Sept 2	Chapter 2	PS #1 distributed
Sept 7	Chapter 9	PS #1 DUE
Sept 9	Chapter 9/10	
Sept 14	Chapter 10	PS #2 distributed
Sept 16	Chapter 12	PS #2 DUE
Sept 21	Chapter 12	
Sept 23	Chapter 13	
Sept 28	Chapter 13	
Sept 30	Chapter 13	PS #3 distributed
Oct 5	Chapter 14	PS #3 DUE
Oct 7	Chapter 14	PS #4 distributed
Oct 12	Chapter 6	PS #4 DUE
Oct 14	Chapter 6/7	
Oct 19	Chapter 7	
Oct 21	Chapter 7	PS #5 distributed
Oct 26	Chapter 15	PS #5 DUE
Oct 28	Chapter 15	PS #6 distributed
Nov 2	Chapter 16	PS #6 DUE
Nov 4	Chapter 16	PS #7 distributed
Nov 9	Chapter 16	
Nov 11	Chapter 17	PS #7 DUE
Nov 16	Chapter 17	
Nov 18	Chapter 18	PS #8 distributed
Nov 23	Chapter 18	PS #8 DUE
Thanksgiving		
Nov 30	Article by J.R. Lucas	
Dec 2	Article by Paul Benacceraf	Overview PS#9 distributed; due in 1 week