COURSE — PHIL 500: INTRODUCTION TO LOGIC, FALL 2019

INSTRUCTORS — J. Dmitri Gallow, Lecturer (✉: jdmitrigallow@pitt.edu)
Marco Maggiani, Recitation Leader (✉: mam773@pitt.edu)
Travis McKenna, Recitation Leader (✉: travis.mckenna@pitt.edu)

LECTURE TIMES — Mondays and Wednesdays, 14:00–14:50
Room G23, Parran Public Health Building

OFFICE HOURS — Dmitri's office hours are after lecture on Mondays and Wednesdays, from 15:00 to 16:00 (1029D, Cathedral of Learning)
Marco's office hours are on Tuesdays, 14:00–15:00, and Thursdays 16:00–17:00 (1009D, Cathedral of Learning)
Travis's office hours are on Mondays and Wednesdays, from 13:00–14:00 (1009C, Cathedral of Learning)

DESCRIPTION — In a variety of contexts, we attempt to persuade each other by making *arguments*—*i.e.*, by providing reasons to think that some claim is true. Figuring out what to believe about a wide variety of subjects therefore requires you to be able to evaluate these arguments—to discern which are good and which are bad, and in what ways they are good or bad. Logic is the study of which arguments are good, which are bad, and why. In this course, we will learn two important logical theories, with a focus on techniques for reasoning about which arguments are good, according to those theories.

COURSE TEXT — We'll be using a personalized version of the open textbook *Forall x: An Introduction to Formal Logic*, by P. D. Magnus and Tim Button, with additions and revisions by J. Robert Loftis, Aaron Thomas-Bolduc, Richard Zach, and J. Dmitri Gallow. A pdf of the will be available through Courseweb.

EVAULATION — Final grades will be determined by 4 components:

Problem Sets	30%
Midterm	25%
Final	35%
Recitation	10%

The midterm and final are mandatory. If you do not complete the midterm or the final, then you will receive a failing grade for the course.

PROBLEM SETS: At nine points throughout the course, you will be asked to complete a problem set. You are allowed, and even encouraged, to work through these problems with other students in the course. However, be sure to not fall into the trap of simply copying the answers of your fellow students. The problem sets are *for your benefit*, to help you learn the material. If you simply copy the work of your fellow students, you will put yourself in a bad position for the midterm and final.

MIDTERM AND FINAL: There will be an in-class Midterm on 10/21, and a final on 12/9, from 10:00–11:50. I will provide you with practice midterms and finals in advance.

RECITATION: 10% of your grade will be determined by your participation in recitation section.

SCHEDULE

DATE	TOPICS AND READINGS
8/26	Course Introduction Syllabus
8/28	Basic Concepts of Logic: Arguments and Validity *Forall x*, chapters 1 and 2
9/4	Basic Concepts of Logic: Other Logical Notions *Forall x*, chapter 3
9/9	Basic Concepts of Logic: Validity and Formal Validity *Forall x*, chapter 4
9/11	Sentence Logic: Translation *Forall x*, chapter 5 ***problem set 1 due***
9/16	Sentence Logic: Syntax *Forall x*, chapters 6 and 7
9/18	Sentence Logic: Semantics *Forall x*, chapters 8 and 9
9/23	Sentence Logic: Validity *Forall x*, chapters 10 and 11 ***problem set 2 due***
9/25	Sentence Logic: Validity, day 2 *Forall x*, chapters 12 and 13 (*optional*)
9/30	Natural Deduction for Sentence Logic, day 1 *Forall x*, chapter 15 ***problem set 3 due***
10/2	Natural Deduction for Sentence Logic, day 2 *Forall x*, chapter 16
10/7	Natural Deduction for Sentence Logic, day 3 *Forall x*, chapter 17 ***problem set 4 due***
10/9	Natural Deduction for Sentence Logic, day 4 *Forall x*, chapter 18
10/14	Natural Deduction for Sentence Logic, day 5 *Forall x*, chapter 19
10/16	The Correctness and Completeness of Sentence Logic ***problem set 5 due***
10/21	**Midterm** (covers material up to 10/14) ***optional natural deduction challenge due***
10/23	Predicate Logic: Introduction *Forall x*, chapter 21
10/28	Predicate Logic: Translation *Forall x*, chapter 22

SCHEDULE (CON'T)

DATE	TOPICS AND READINGS
10/30	Predicate Logic: Overlapping Quantifiers and Syntax *Forall x*, chapters 23 and 24 ***problem set 6 due***
11/4	Predicate Logic: Syntax and Semantics *Forall x*, chapter 25
11/6	Predicate Logic: Semantics *Forall x*, chapter 26
11/11	Predicate Logic: Validity *Forall x*, chapters 27 and 28 ***problem set 7 due***
11/13	Predicate Logic: Validity, day 2 *Forall x*, chapter 29
11/18	Natural Deduction for Predicate Logic *Forall x*, chapter 30
11/20	Natural Deduction for Predicate Logic, day 2 *Forall x*, chapter 31 ***problem set 8 due***
12/2	Natural Deduction for Predicate Logic, day 3 *Forall x*, chapter 32
12/4	Natural Deduction for Predicate Logic, day 4 ***problem set 9 due***
12/9	**Final** in our usual classroom, from 10:00–11:50

ACADEMIC INTEGRITY

Students in this course will be expected to comply with the University of Pittsburgh's Policy on Academic Integrity. Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam, including dictionaries and programmable calculators.

DISABILITY SERVICES

If you have a disability for which you are or may be requesting an accommodation, be sure to contact me within the first two weeks of the semester, as well as Disability Resources and Services (DRS), 140 William Pitt Union, (412) 648-7890, drsrecep@pitt.edu, (412) 228-5347 for P3 ASL users. DRS will verify your disability and determine reasonable accommodations for this course.

RECORDING POLICY

To ensure the free and open discussion of ideas, students may not record classroom lectures, discussion and/or activities without the advance written permission of the instructor, and any such recording properly approved in advance can be used solely for the student's own private use.

SCHEDULE REVISION

As the course progresses, the course schedule may be revised. If it is, I will notify all enrolled students via email and post an updated syllabus to Courseworks.