Philosophy 20100-02/30000-02

Introduction to Logic

Autumn 2023

TR 9:30-10:50

Course Instructor: Malte Willer
Email: willer@uchicago.edu
Office hours: R 11:30–1:30
Office: Stuart 228

COURSE DESCRIPTION

This class is an introduction to the concepts and principles of symbolic logic. We learn the syntax and semantics of truth-functional and first-order quantificational logic, and apply the resultant conceptual framework to the analysis of valid and invalid arguments, the structure of formal languages, and logical relations among sentences of ordinary discourse. Occasionally we will venture into topics in philosophy of language and philosophical logic, but our primary focus is on acquiring a facility with symbolic logic as such.

BOOKS

The book for the course is Paul Teller's *A Modern Formal Logic Primer*, which is freely available online: `http://tellerprimer.ucdavis.edu/`

COURSE REQUIREMENTS

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

First homework	due October 3rd, in class	worth 13%
Second homework	due October 17th, in class	worth 13%
Third homework	due October 31st, in class	worth 13%
Fourth homework	due November 16th, in class	worth 13%
Fifth homework	due November 30th, in class	worth 13%
Final Exam	day/time tbd by Registrar	worth 35%

Homework assignments will be uploaded to the Canvas site in advance of the due dates. Late homeworks will be docked 10 points per day unless you have received approval ahead of time. Room assignments for final exams will be announced by the Registrar later in the quarter. Homework assignments as well as the final exam are cumulative.

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

Your letter grade will be determined by your final numerical grade. The grading scheme is available on the Canvas site.

I will not hold you to a strict attendance policy. However, success in this class will require constant attention throughout the semester. Students who let a week slide (or who take a vacation from the homework exercises) frequently never manage to catch up.

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 Canvas as changes are made. All readings are from Teller's *A Modern Formal Logic Primers*.

Date	Topic	Readings
Week 1	Basic Concepts of Logic I	Volume I, Chapters 1-2
Week 2	Basic Concepts of Logic II	Volume I, Chapters 3-4
Week 3	Natural Deduction I	Volume I, Chapter 5
Week 4	Natural Deduction II	Volume I, Chapters 6-7
Week 5	Quantifiers I	Volume II, Chapters 1-2
Week 6	Quantifiers II	Volume II, Chapters 3-4
Week 7	Quantified Natural Deduction I	Volume II, Chapter 5
Week 8	Quantified Natural Deduction II	Volume II, Chapter 6
Week 9	Thanksgiving Break	no reading
Week 10	Identity, Functions, Definite Descriptions	Volume II, Chapter 9