Topics in Philosophical Logic:
Using Logic to do Philosophy

Place: TBD   **Time:** TBD

Instructor: Eric de Araujo   **Office:** TBD

Email: dearaujo.3@osu.edu   **Office Hours:** TBD

Texts & Materials

Required Textbooks:

- *Logic for Philosophy,* Theodore Sider

- *Philosophical Logic*, John P. Burgess

    Any additional materials will be made available on the course website.

Course Description

  This course is survey of logical systems for the purpose of doing philosophy. The jump from propositional to predicate logic is sometimes framed as a jump in expressive or inferential power. That is, we are told we can say or do more things with the resources of predicate logic than we could with the resources of propositional logic. This course makes a similar move into other logical systems. Not only will we learn to work with these different systems, but we will discuss the motivations for adopting these systems and how we can use them as technical resources for doing philosophical work. Although this involves some metatheoretical work, we will be less concerned with proving such results.

Course Goals & Objectives

By completing this course, students will be able to:

A. Use a variety of formal systems by

    1. learning the syntactic and semantic features of different logical systems,

    2. reasoning within formal systems, and

    3. reasoning about formal systems

B. Do philosophy by using the technical resources of various formal systems by

    3. reasoning about formal systems,

4. articulating the philosophical motivations for developing particular formal systems,

5. applying a formal system to a philosophical debate.

Schedule

Here is the schedule we hope to follow. The first table lists the topics and associated readings. *Logic for Philosophy* is referred to as *Sider*, and *Philosophical Logic* is referred to as *Burgess*. You should read the material before the first day of discussion. Reading quizzes are due the day of the assigned reading. The second table lists when major assignments are due and when the essay. The schedule is subject to change as the course progresses.

Topic Structure

We will progress through each topic using the same structure. Each topic begins with the reading and an entry quiz, has a mid-point quiz, and ends with an exit quiz. These are explained in **Course Mechanics** below. Here is what that will look like for each topic:

Component	Due Date	Venue	Includes Discussion
Reading	First Day of Topic		No
Entry Quiz		Online	
Mid-Point Quiz	Third Day of Topic	Online	Yes
Exit Quiz	1 class after End of Topic	In-Class	Yes

Schedule of Topics

Topic	Reading	Day Start	Day End	Goals
Propositional Logic	Chapter 1–2 of *Sider*	2	5	A, B
	Chapter 1 of *Burgess*			
Non-Classical Logics	Chapter 3 of *Sider*	6	9	A, B
	Chapter 6 of *Burgess*			
Predicate Logic	Chapters 4–5 of *Sider*	10	13	A, B
Modal Logic	Chapter 6 of *Sider*	14	17	A, B
	Chapter 3 of *Burgess*			
Non-Standard Modal Logic	Chapter 7 of *Sider*	18	21	A, B
	Chapter 2 of *Burgess*			
Counterfactual and Conditional Logic	Chapter 8 of *Sider*	22	26	A, B
	Chapter 4 of *Burgess*			

Schedule of Assignments and Exams

Day	Topic	Quiz
2		Entry Quiz
4	Propositional Logic	Mid Quiz
6		Exit Quiz
		Entry Quiz
8	Non-Classical Logics	Mid Quiz
10		Exit Quiz
		Entry Quiz
12	Predicate Logic	Mid Quiz
14		Exit Quiz
		Entry Quiz
16	Modal Logic	Mid Quiz
18		Exit Quiz
		Entry Quiz
20	Non-Standard Modal Logic	Mid Quiz
22		Exit Quiz
		Entry Quiz
24	Counterfactual and Conditional Logic	Mid Quiz
26		Exit Quiz
27	Essay Draft	
	Essay Peer Review	
Exam Week	Essay Revision	

Grading

	Quizzes	45%
Entry Quizzes		10%
Mid Quizzes		15%
Exit Quizzes		20%
	Participation	10%

	Essay	45%
Essay Draft		5%
Essay Peer Review		5%
Essay Revision		35%

Course Mechanics

Here is how I plan to accomplish the goals of the course:

Quizzes

Each topic has an entry, mid, and exit quiz. These quizzes are designed to give you progressively more practice with the content we are covering in each topic. Here is an explanation of each type of quiz:

- Entry Quiz
  These quizzes are intended to test your comprehension of our reading and give you an indication of what you will be able to do by the end of each topic. These quizzes are mostly graded on completion and completed online:

  - Completion = $^2/_3$

  - Accuracy = $^1/_3$

- Mid Quiz
  These quizzes are intended to prepare you to perform well on the exit quiz. These quizzes are mostly graded on accuracy, completed online, and have an accompanying discussion forum:

  - Completion = $^1/_3$

  - Accuracy = $^2/_3$

- Exit Quiz
  By the end of each topic, you should be able to perform well on the exit quiz. They are done on paper and turned in class. They have an accompanying discussion forum.

Essay: Peer Review, Presentation, & Revision

Much of the dialogue in philosophy today is done through presenting and publishing papers. I want you to be able to contribute to the philosophical dialogue by writing your own papers. Like the revision process in academic publishing, we will have a revision process with the paper you write for this course.

The paper you write will be an application of the technical resources you have learned to a philosophical topic. This can involve something like formalizing an argument using a logical systems we learned, an argument for adopting a particular system within a certain debate, or taking a position in some debate about using a logical system.

You will upload a draft of your paper to the course website at the end of the semester. I will assign you another student's draft to review and provide feedback on. Additionally, I will give you feedback on your drafts. Revisions are due during finals week.

Discussions

We will have two forums to discuss what we are learning: during class and online.

Classes will be used to review what we are learning, clarify misconceptions, ask questions, model skills, and practice. Coming to class having tried the entry and mid quizzes will position you to take advantage of class discussions. You will know what to ask questions about and how to get help from myself and your peers.

We will have online discussion forums where you will talk about the mid and exit quizzes with your classmates. I will assign you a group to discuss each topic with. Individual group members will be assigned questions from the quiz to discuss in the forum. You are expected to state your answer and how you arrived at it. Then you will reply to your group members with a discussion of their answers. You are allowed to utilize the answers and rationales your group comes up with as long as you are contributing to the discussion yourself.

Office Hours

Office hours tend to be an underutilized resource (unless something is due soon). You are welcome to come and chat about anything related to the course or even philosophy in general. Office hours can be a good way to clear up misconceptions and better understand how you are doing in the course. I will make an effort to find a time to meet if you cannot make it to the scheduled times.

Policies

[I aim to keep policies consistent across courses. See the syllabi for previously taught courses for a list of my policies.]