

PHIL 3---: Nonclassical Logic

Class Time: Asynchronous

Class Location: Online

Instructor: Chris Rahlwes

Email: TBD

How to reach me: *Please drop by my open office hours (TBD) or email me to make an appointment (either in-person or online). Always include PHIL 3--- in the subject of your email for a quicker response. I will respond within 24 hours Monday-Friday.*



Course Description:

The course provides an introduction to non-classical systems of logic that significantly differ from standard propositional and predicate logics regarding logical consequence and logical truth. We will start with an introduction to modal logic, and then move to traditions that introduce a third and fourth truth-values to the classical truth-values of true and false. From this, we turn to fuzzy logic, which allows for intermediates between the two classical truth-values. We will wrap up the course with logical pluralism and address what we should do with so many logical systems.

Course Goals

By the successful completion of this course, you will be able to:

1. Identify and apply different non-classical systems of logic.
 2. Determine the role of truth and logical consequence with these systems of logic.
 3. Develop an understanding of issues surrounding multiple competing logical systems.
 4. Determine the use and importance of systematic, rigorous theories.
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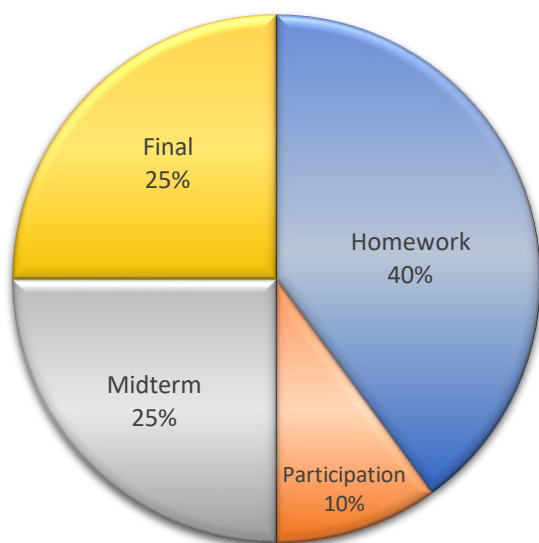
Course Structure

- **This is a flip class.**
- You are only required to come to half of the allocated course meeting time. During this time, we will focus on working through a few problem sets.
- For the remaining course meeting time, you are to watch the prerecorded lectures over the course material.

Means of Evaluation

- **Homework Assignments (40%).** Problem sets labeled “PS1” through “PS17” on the course schedule are found in the Carnap Book, embedded in the assigned chapters. Since you are only able to submit these problems, when you have a correct answer, I encourage you to attempt the problems as you read the chapter: don’t wait until they are due! Extra problem sets will be labeled ‘XPS’.
 - **Note:** the “Total points earned” displayed on the Carnap site does align with the points allocated in the course.
 - **Note:** correct will be allowed on XPS problem sets for half credit.
- **Participation (10%).** Actively engaging in-class problem sets.
- **Midterm (25%).** Cover materials up to week 6. Corrections can be made for half credit.
- **Final (25%)** Cumulative final, but with an additional focus on weeks 9 and 11. You are only allowed one attempt. Corrections cannot be made.

Weighted Grade



Letter Grade Cutoffs:

Grade	Percentage
A	93%
A-	90%
B+	87%
B	83%
B-	80%
C+	77%
C	73%
C-	70%
D+	67%
D	63%
D-	60%
F	Below 60%

Note: These are cut-off points: *decimals will not be rounded up.* Temporary grades: N (no basis for grade), I (incomplete grade), X (final assessment absence)

Required Materials:

- **Graham Priest, *An Introduction to Non-Classical Logic* (2nd edition). Cambridge.
ISBN: 978052170265**
- Additional course readings will be available online.
- You will need to bring material to write, take notes, and access the internet during class.
- You will need a word processor (such as [Google Docs](#) or [Microsoft Word](#)), a pdf reader (such as [Adobe Acrobat Reader](#)), and a web browser.

Course Policies: TBD

	Date	Topic/Readings	Assignments
Week 1		Introduction Classical Logic <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 1 • Altreuter, <i>et al.</i>, “What is Logic” 	
Week 2		Basic Modal Logic <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 2 • Altreuter, <i>et al.</i>, “Basic Modal Logic” 	Problem Set 1
Week 3		Normal Modal Logic <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 3 	Problem Set 2
Week 4		Intuitionistic Logic <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 6.1–6.4 • Haack, “Intuitionism” 	Problem Set 3
Week 5		Intuitionistic Logic <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 6.5–6.8 	Problem Set 4
Week 6		Many-valued Logics <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 7.1–7.5 • Altreuter, <i>et al.</i>, “Multi-valued Logic” 	Problem Set 5
Week 7		Many-valued Logics <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 7.6–7.12 • Altreuter, <i>et al.</i>, “Polish Logic” 	Problem Set 6
Week 8		Review	MIDTERM
Week 9		First Degree Entailment <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 8 	Problem Set 7

Week 10		Logics with Gaps, Gluts and Worlds <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 9.1–9.6 • Altreuter, <i>et al.</i>, “The Logic of Paradox” 	Problem Set 8
Week 11		Logics with Gaps, Gluts and Worlds <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 9.7–9.9 	Problem Set 9
Week 12		Fuzzy Logics <u>Required Readings</u> <ul style="list-style-type: none"> • Priest, Chapter 11 • Haack, “Do We Need ‘Fuzzy Logic?’” 	Problem Set 10
Week 13		Logical Pluralism <u>Required Readings</u> <ul style="list-style-type: none"> • Cook, “Let a Thousand Flowers Bloom: A Tour of Logical Pluralism” 	Problem Set 11
Finals Week			Final

Resources Available to All Students: TBD

College is a challenging time in your life.

Here is a list of resources that can help you navigate your experience as a student at TBD. It is important to remember that you are not alone, and these resources are there for you when you need help to achieve your academic goals.