

Phil 315: Introduction to modal logic
pandemic edition
Spring 2021

1 Logistics

- Professor: Gillies
- Lecture: Asynchronous and weekly
- Web presence: canvas
- Office hours: tbd

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The location of my office continues not matter this term: through the magic of Zoom I am everywhere and nowhere.

2 Course description

This course will survey some examples of non-truth-functional logics, especially prominent modal/intensional logics, and (perhaps) partial/multi-valued logics. The focus will be primarily on developing and understanding the semantics of these logics and what they might be good for.

3 Learning goals

After successfully completing this course, students will have basic familiarity with various modal/intensional and partial/multi-valued logics and what they are good for. You will also be better at proving things.¹

¹ Also, even better at zooming.

4 Texts

The course will rely on two texts:

- Zach, Richard. 2019. *Boxes and Diamonds: An Open Introduction to Modal Logic*. Open Logic Project.
- Your careful notes and solutions to problems taken during class and while doing problem sets. I will post my lecture notes on canvas.

Boxes and Diamonds is an open access text and is freely available. I have put a canonical version of it on our canvas site.²

² Don't consult outside books. Trust me on this. Also, since our book is open source, the version on the Open Logic site might change during the term, and chaos would then ensue. That's why we are relying on the cached version on canvas.

5 Evaluation

Your course grade will be based on a possible **500 points** to be earned throughout the term. The default itemization of the points is below. It is subject to revision by me.

- Quizzes: totaling 100 points
 - There will be up to 12 of these. These happen on a pseudo-random basis. There are no make-ups for quizzes, ever, under any circumstances.
 - Note that keeping current on your reading and problem sets has been smuggled into this grade.
- Exams: totaling 400 points
 - 4 midterms (100 points each)
 - The exam schedule is on canvas.

6 Synchronous bits

This course is officially "asynchronous with some synchronous elements". Mostly, that means asynchronous. Two exceptions.

First exception. Videos of me pretending to talk to you aren't the best way to learn logic. So, often, when I record a lecture I will announce the zoom stuff for it and you can join me as I record it. Attendance is not required. But I think I will be better at getting the ideas across, and know which bits you need me to say more about, if I can see you and we can have some give and take.

There are some rules and expectations to make this work:

- Put on your fave fake background and turn your video on.
- You have to wear clothes. PJs are totally fine.
- Bring as much of your brain power as you can.
- Ask questions and take notes.

I think this can work.

Second exception. Quizzes and exams will be synchronous. I will give you a fairly wide, but still constrained, window of opportunity to do the quiz or exam. I think I will aim to have that window always be the same for each quiz and exam.³ This

If you are just watching tik toks at least drop a link to the funny ones in the chat.

If you have a dog, you need to show us the dog if he's a good boy (yes he is a good boy).

³ For instance, maybe it will be something like quizzes will take place only on Fridays from 3:00 pm - 4:30 pm. More on this soon.

is suboptimal, I know.

Highlights about this:

- There will be an announcement sent to you through canvas when there is a quiz or exam available.
- This will include details about the time limit for completing it.
- You must also turn them in through canvas.⁴
- We will be proving things about the logics we discuss and the only way to do that is to write up a proof and turn it in.
- So all completed quizzes and exams must be turned in pdf format. The easiest way to do this is to write up your proofs on paper, scan it using your phone, and save the scan as a pdf.⁵

⁴ canvas will only let me grade your quiz if you turn it in through canvas. So sending me your completed quiz by email will not work.

⁵ It sounds complicated but I know you are like the tech generation so this is in your wheelhouse. Let me know privately if this doesn't work for you or you don't know how to do this and we will figure it out.

7 Other academic policies

Extra credit. The exams will have some small extra credit opportunities. Other than this, there is none.

Cheating. Don't do anything I might mistake for being dishonest. All forms of academic dishonesty (cheating, plagiarism, etc.) will be prosecuted through the appropriate University offices. Here's a link:

Seriously, do not mess around with cheating this term.

- <http://academicintegrity.rutgers.edu/academic-integrity-policy/>

Appeals. If you wish to appeal your grade on an exam or quiz, you must do so in writing (email does not count) no later than one week after the exam or problem set was originally returned to the class.

8 Rutgers services

- Counseling, ADAP & Psychiatric Services (CAPS) (848) 932-7884; 17 Senior Street, New Brunswick (www.rhscaps.rutgers.edu/).
- Violence Prevention & Victim Assistance (VPVA) (848) 932-1181; 3 Bartlett Street, New Brunswick (www.vpva.rutgers.edu/)

- Disability Services (848) 445-6800; Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway (<https://ods.rutgers.edu/>)