

PHIL 730:201:91, Index 15949, Spring 2019

Introduction to Logic (online course)

Instructor: Cherie Braden

Email: cherie.braden@gmail.com Class Website: TBA

Meeting Times: There is no scheduled class meeting time for this class. Weekly video lectures will be available online. For one portion of the final exam, you must have a 30–45-minute Skype meeting with me sometime between May 7 and May 11.

Learning Goals: This course meets the SAS Core Requirement for formal or mathematical reasoning (QR). Students will learn to “formulate, evaluate, and communicate conclusions and inferences from quantitative information.”¹

Course Description: This is a course in symbolic logic covering Chapters 1–8 of the *Modern Logic* textbook. We will begin by learning to identify the logical structure of ordinary-language arguments in order to distinguish between deductively valid and deductively invalid reasoning. We will then learn the language of sentential logic, which we will use to evaluate arguments computationally and to develop an understanding of the relationship between deductive and semantic consequence. The course will progress from sentential logic through monadic predicate logic to first-order logic with identity. This course develops the sort of rigorous argumentation skills needed for fields such as philosophy, law, economics, and public policy, and it provides a foundation for advanced work in philosophy, mathematical logic, linguistics, and cognitive science. No prior exposure to symbolic logic is needed.

Office Hours: TBA (once weekly online) and by appointment. I’m **not** available for one-on-one tutoring.

Required Materials: Textbook: *Modern Logic*, Graeme Forbes ISBN-13: 978-0-19-508029-2; ISBN 0-19-508029-7
The first two chapters are available on the author’s website here:
<http://spot.colorado.edu/~forbesg> (click on “*Modern Logic* Material”).

Other materials: Internet access, a computer that will allow you to use the course website and watch videos, a way to convert both written and typed homework into PDF, and for the final, a device with speakers, microphone, a camera, and Skype.

Homework: There will be one assignment per week (approximately 13 in total) consisting of readings from the textbook with corresponding written exercises. Most homework may be either handwritten or typed; several assignments must be handwritten. No homework will be assigned in the week leading up to the midterm. The last assignment will be due May 5.

Submit homework through the course website (not email) in PDF format. Save any multi-page assignment in a single PDF. Save separate assignments as separate PDFs. Include your name and the assignment number on the front page of every PDF submitted. Title your PDF LastName.HW#, where # is the number of that assignment. I will not grade illegible or messy submissions.

Class Forum: Always consult the forum before you consult me. I encourage you to discuss the reading and homework in the forum. Do not share answers or partial answers on the forum. Small hints are allowed if they don’t take away the challenge of figuring out the answer, either alone or in conjunction with other hints that have already been given. An example of a good hint would be to point your classmate to a helpful page in the textbook or a useful rule. Do not collaborate on answers except when I give you explicit permission to do so. If no one gives you a hint, you are still responsible for figuring out the solution.

The forum counts for 10% of your course grade. Participate as both a giver and a recipient of help. At the end of the semester, I will gauge how regularly you participated, how much

¹ <https://sasoue.rutgers.edu/docman-docs/assessment/830-2016-17-ru-nb-core-curriculum-assessment-report/file>

you participated, how thoughtful your questions were, and how useful and accurate your help and hints were.

Midterm: Available Tuesday, March 12; due by Friday, March 14, 11 p.m. Untimed written/typed test.

Final: Written portion: Available Tuesday, May 7; due by Friday, May 11, 11 p.m. Untimed written/typed test.

Oral comprehension portion: This will be a brief (30–45 minutes) discussion-based test. This portion of the exam is pass/fail, and you must pass it to pass the final exam. Passing the oral comprehension portion of the exam is necessary but not sufficient for establishing that you have not cheated on the written portion (the necessity/sufficiency distinction is something you'll learn in this class).

Email Policy: Please do not expect same-day email responses. Although I do sometimes end up having time to respond quickly, I am not on call 24/7. If, for example, you email me questions about the homework less than 48 hours before it is due, I do not promise to answer them, and I will not answer inquiries about the homework on the day that it is due.

Grading: Homework 40% Midterm Exam 20%
Final Exam 30% Bulletin Board Participation 10%

A = 90–100 B+ = 85–89 B = 80–84 C+ = 75–79 C = 70–74 D = 60–69

I will not accept late work without appropriate documentation of a qualifying excuse.

Because each assignment builds on the last, you will need to do every assignment in order to keep up, even if it's too late to get credit for it.

Students with documented disabilities who anticipate that they may need accommodations in this course should email me early in the semester to make arrangements and should follow the procedures here: <https://ods.rutgers.edu/students/registration-form>.

Important Dates:

Tuesday 1/22	First day of class
Tuesday 1/29	Last day to drop a class without a W
Wednesday 1/30	Last day to add a class
Tuesday 3/12	Midterm available
Thursday 3/14	Midterm due
March 16–24	Spring break (no homework)
Monday 3/25	Last day to drop a class <i>with</i> a W
Monday 5/6	Last day of class
Tuesday 5/7	Final exam available
Saturday 5/11	Final Exam due

Academic Integrity: Rutgers's academic integrity policy is available here: <http://academicintegrity.rutgers.edu/academic-integrity-policy/>. You may not collaborate on homework assignments, except when (and only to the extent that) helping each other is permitted on the class discussion board. Collusion can be surprisingly detectable in logic homework. You may not get your answers from other sources (such as the internet at large). You *may* get outside help with your homework from a tutor or someone else who is not in the class, as long as you are doing the actual work yourself. You may not get any outside help on exams (use your book, your assignments, and the material available on the course website). If I believe you have cheated on any assignment or exam, you will receive an F on it.

Rutgers Learning Centers sometimes offer tutoring during the semester (see <https://rlc.rutgers.edu/services/peer-tutoring>). But the material in this course is specialized, and there is no guarantee that you'll be able to find a tutor who knows it. If you want a tutor, you might also try emailing the philosophy department to see if any graduate students offer hourly tutoring for a reasonable price (again, no guarantee).