INTRODUCTION TO LOGIC
730:201
SPRING 2020

Instructor: Lauren Richardson
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Office Hours: online, Monday 1-3pm

COURSE DESCRIPTION

This course is an introduction to the concepts and principles of symbolic logic. We will 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.

Course "lectures" (i.e., short videos on the topics for the week) will be posted on the course Google Drive page. You'll receive a link to the Google Drive on Canvas. In addition, there will be one online Q&A session per week. The Q&A session is recommended, but not required. (Unlike office hours, which are one-on-one, in the Q&A session we will gather as a group and go through your questions together.) You are also free to send me questions via email.

COURSE MATERIALS

A Modern Formal Logic Primer, Paul Teller.

All readings will be posted to the course Google Drive page; you do not need to purchase a hard copy of the book.

COURSE REQUIREMENTS AND GRADING

1. Problem Sets: 20%, pass/fail
   Problem sets will be posted to Canvas under "Assignments." I highly encourage you to put your best effort into the problem sets; they will prepare you for the exams.
2. Midterm Exam: 35%
3. Final Exam: 45%

All problem sets and exams are open-book. Late problem sets will not be accepted (i.e., you will receive a 0), unless you have received an extension at least 24 hours ahead of time. Late exams will receive a five-point deduction (e.g. 90 to 85) for every hour they are late. Problem sets and exams must be submitted via Canvas in either .doc or .pdf format by 11:59pm EST on the due date.

Grading scale:

89.5-100%: A
84.5-89.49%: B+
79.5-84.49%: B
74.5-79.49%: C+
69.5-74.49: C
59.5-69.49: D

ACADEMIC INTEGRITY

Group work is not permitted. The University's academic integrity policy can be found here: http://academicintegrity.rutgers.edu/. Group work or plagiarism will result in an automatic 'F' in the course.
NOTE ABOUT COVID-19: I want to be sensitive to the unique challenges that the circumstances surrounding Covid-19 may present to you this semester. Please reach out if you are experiencing difficulties.

ROADMAP

DATE	TOPIC	READINGS	ASSIGNMENTS
1/19-1/22	*Propositional Logic*: Introduction and transcription	Teller, Volume I chapters 1-2	
1/25-1/29	*Propositional Logic*: Logical equivalence, logical truths, and contradictions	Teller, Volume I chapter 3	
2/1-2/5	*Propositional Logic*: Validity and conditionals	Teller, Volume I chapter 4	Problem Set 1 due 2/5
2/8-2/12	*Propositional Logic*: Natural deduction, part one	Teller, Volume I chapter 5	
2/15-2/19	*Propositional Logic*: Natural deduction, parts two and three	Teller, Volume I chapter 6-7	Problem Set 2 due 2/19
2/22-2/26	**Midterm Exam** Friday, 2/26 Distributed 9:00am EST	*Review*	
3/1-3/5	*Predicate Logic*: Syntax	Teller, Volume II chapter 1	
3/8-3/12	*Predicate Logic*: Semantics and validity	Teller, Volume II chapters 2-3	
3/15-3/19	*Spring Break*		

3/22-3/26	*Predicate Logic*: Transcription	Teller, Volume II chapter 4	Problem Set 3 due 3/26
3/29-4/2	*Predicate Logic*: Natural deduction, part one	Teller, Volume II chapter 5	
4/5-4/9	*Predicate Logic:* Natural deduction, part two	Teller, Volume II chapter 6	
4/12-4/16	*Predicate Logic:* Identity, functions, and definite descriptions	Teller, Volume II chapter 9	Problem Set 4 due 4/16
4/19-4/23	*Basic Metatheory*	Teller, Volume II chapter 10	
4/26-4/30	*Review*		Problem Set 5 (review) due 4/28
5/3-5/7	**Final Exam,** *date/time TBD*		