Logic, First Course  
Philosophy 31  
UCLA  
Summer session A, 2017

Instructor  
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Lectures:  
Tuesdays and Thursdays, 3:15pm–5:20pm, Humanities 135

Sections:  
1A Tuesdays, 1:30pm–2:20pm, CLICC C (Powell Library, 3rd Floor)  
1B Thursdays, 9:30am–10:20am, CLICC C  
1C Tuesdays, 10:30am–11:20am, CLICC C

Description  
In this course, you will learn a new language, symbolic logic. You will be able to reason symbolically from premises to their logical conclusions. We will also translate English language into our logical language so that we will see what English sentences really logically entail. Students will learn the art of rigorously analyzing the validity of arguments and testing whether an assertion is a tautology or not. This course will provide background skills which are essential in any field which relies on exact reasoning and abstract arguments. More specifically, we will cover both sentential logic and monadic predicate logic.

Logic2010  
We will use a UCLA-made program, Logic2010, for all our assignments and exams. The program can be downloaded for free at https://logiclx.humnet.ucla.edu/. The use of the program will be fully explained at the beginning of the course.

Texts  
Our text is *An Exposition of Symbolic Logic* by Terry Parsons. We will go through Chapters 1 to 3 during this course. It is available on the course web page, and also in Logic2010 main menu under the tab 'Logic Text'.

There is a further, suggested reading for those who want to learn more deeply about the subject: *Logic: Techniques of formal reasoning (2nd edition)* by Donald Kalish, Richard Montague, and Gary Marr.

Grading  
30% Homework  
30% Midterm Exam  
40% Final Exam

Homework  
After each lecture, a number of assignments will be posted on the assignments web page. (Click “assignments” in the program main menu.) They are due 10 minutes before the beginning of the
next lecture. Your answers are submitted to our server via Logic2010. Submitting the solutions via the program is required.

**Note:** You can repeatedly check whether your solutions are correct with the program's error checking function before you submit them.

Practice is essential in mastering logic and succeeding in the exams. The homework assignments are a fun and effective way of achieving those goals. Progress in this course **builds on** the mastery of earlier material. Hence, keeping up with the homework from the beginning is very important.

Since this course moves fast during the limited summer schedule, it is a good idea to ask for help immediately. There are many opportunities for asking help: We have office hours, discussion sections and also you can reach us by email.

It is also a great idea to form study groups and work together to solve the problems. Every student needs to submit their solutions through their own Logic account. Above all, keep in mind that practice necessary for doing well in the exams, and to get that practice you need to try do the problems yourself.

**Lateness policy**
Since you can check your homework problems repeatedly before you submit them, problems which are submitted late will receive **at best 70%** of the maximum points. No score will be awarded for late rules recognition and parsing problems, because they are very simple to do, even with trial and error. Finally, problems need to submitted within one week of the due time.

**Exams**
There will be one midterm and a final in this course. The location is a computer lab, CLICC C, in Powell Library. The computer lab will have a computer with Logic2010 for every student. You will work through the exam within Logic2010 essentially in the same way as with your homework. Your exam answers will uploaded to a server which enables the instructors to check them quickly.

The exams are open-book and open-notes. Most of the error checking functions within the program will be disabled during the exam. Naturally, all other communication during the exam is strictly off-limits. Any suspected cheating must be reported by me to the Dean of Students.

We will have a review session before each of the exams. During a review session, you will get to work on a practice exam and ask questions in real time from the instructor and the TA's.

**UCLA Logon ID is needed for the exams**
Note that you need a UCLA Logon ID in order to use the computer labs and thus, to take part in the exam. You can create one at: logon.ucla.edu. If you have problems with obtaining one, then you can go to the Bruin Online Help Desk at Kerckhoff Hall 124, or call them at (310) 267-4357.
Students needing academic accommodations based on a disability should contact the Center for Accessible Education (CAE) at (310)825-1501 or in person at Murphy Hall A255. When possible, students should contact the CAE within the first two weeks of the term as reasonable notice is needed to coordinate accommodations. For more information visit www.cae.ucla.edu.

**Tentative Schedule**

*Note: The exam locations and times have not been finalized yet. I will update the syllabus when they are.*

**Week 1**
6/27  Introduction to logic and Logic2010. The basic tools of our language: Symbols, connectives, truth tables.

**Week 2**
7/4   Independence Day holiday – no lecture and no section
7/6   Inference rules and derivations. Discussion about strategies.

**Week 3**
7/11  Expanding our language with predicates and quantifiers. “All” and “Some”. Widening our translation repertoire in symbolizations.
7/13  New inference rules and derivations.

**Week 4**
7/18  More about derivations and strategies for derivations.
7/19  **Review Session, 3:00pm – 6:00pm, location CLICC C**
7/20  **Midterm, 3:15pm – 5:15pm, location CLICC C**

**Week 5**
7/27  Practicing invalidities.

**Week 6**
8/1   More practice on invalidities and derivations. Overall review.
8/2   **Review Session, 3:00pm – 6:00pm, location CLICC C**
8/3   **Final exam, 3:15pm – 6:15pm, location CLICC C**