Tentative syllabus as of Feb. 11, 2019 --- subject to change

Philosophy 31

Logic, First Course

UCLA

Summer Session A 2019

Instructor

Bill Kowalsky

Office hours: TBD

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Lectures: Tuesdays and Thursdays, 10:45pm-12:50pm, Bunche Hall 2160

Sections:

1A Tuesdays, 1:30pm-2:20pm, Bunche Hall 2168

1B Thursdays, 1:30pm-2:20pm, Bunche Hall 2168

Description

In this course, we will learn a new language: symbolic logic. Using this formal language, we will study some forms of logically valid inference: inferences in which conclusions follow from premises by logic alone. We will develop ways to formally prove that a conclusion follows logically from premises. Additionally, the symbolic language we develop in 31 is adequate to capture a substantial part of English, and we will practice translating English sentences into our symbolic language. Thus, this class also aims to provide skills for analyzing claims and arguments in everyday life. This course will also provide important background skills for any field that relies on exact reasoning or abstract argumentation. Our course will cover sentential logic and monadic predicate logic.

Logic 2010

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

Textbook

The required (free) textbook will be An Exposition of Symbolic Logic by Terry Parsons. We will cover Chapters 1 through 3 in this course. It is available on the course webpage, and through the Logic2010 program.

I am happy to recommend various texts for students wishing to learn the material more deeply, or from the perspective of a different field (such as computer science or linguistics).

Grading

30% Homework

30% Midterm exam

40% Final exam
Homework

After each lecture, an assignment will be posted on the assignments page. These assignments will be due 10 minutes before the beginning of the next lecture. Your answers are submitted to our Logic2010 server. Solutions must be submitted via the program.

This course is cumulative; later material builds essentially on earlier material. Hence, I advise that you keep up with the homework from the beginning. One advantage of the software is that it gives you the ability to check your answers, and receive immediate feedback. You may check your answers an indefinite number of times before submitting, without penalty.

Late Policy

Problems submitted late receive at most 70% credit. To receive any credit, a problem must be submitted within one week of its original due date.

Exams

There will be one midterm and one final in this course. The exams will also use the Logic2010 software, and will take place in a computer lab (exact location TBD).

The exams will be open-book and open-note. However, the error-checking functions of the Logic2010 software will be disabled during the exam. Communication during the exam is forbidden. Any suspected cheating will be reported to the Dean of Students.

We will have review sessions before each exam. These will also be held in a computer lab. There, you can work on a practice exam, and ask questions of the instructor and TA.

UCLA Logon ID is required for the exams

To use the computer labs (and hence, in order to take the exams), you need a UCLA Logon ID. If you need to, you can create one at logon.ucla.edu. If you have problems getting one, please go to Bruin Online Help Desk at Kerckhoff Hall 124 (or call them at 310-267-4357).

Accessibility

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. Where possible, students should contact CAE within the first two weeks of the term, as reasonable notice is required to coordinate accommodations.

Tentative Schedule

Week 1

6/25  Introduction to logic and Logic2010. The basic elements of our symbolic language.


Week 2
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7/2   Inference rules and derivations. Strategies
7/4   Independence Day holiday. No lecture, no section.

**Week 3**
7/9   Expanding our language with predicates and quantifiers. Translating new sentences with our expanded language.
7/11  New inference rules and derivations.

**Week 4**
7/16  More about derivations and strategies.
7/17  **Review session.** Location and time TBD.
7/18  **Midterm exam.** Location TBD.

**Week 5**
7/23  Introduction to invalidities. More on derivations with quantifiers.
7/25  Practicing invalidities.

**Week 6**
7/30  More practice for invalidities; overall review; looking ahead.
7/31  **Review session.** Location and time TBD.
8/1   **Final exam.** Location TBD.