**PHIL 250-03: INTRODUCTION TO SYMBOLIC LOGIC**

TR 9:50-11:30am
Nathaniel Greely
E-mail: ngreely2@calstatela.edu
Office Hours E&T A422: TR 1:40pm-3pm

---

This course examines fundamental issues in logic and provides students with the skill set to improve critical and analytical reasoning. During the term, we will focus on the methodology for deductive reasoning. In doing so, the objective is to translate between English sentences and a formal language, thereby providing a means of analyzing the validity of arguments in natural language. Ultimately this will enable students to determine if a set of sentences constitutes a deductively valid argument.

We will be using mathematical type reasoning, in addition to basic language skills, to accomplish our goals. Since these skills improve with practice it is important to keep up with the work.
If you feel that you are falling behind, please see me immediately.

This course satisfies the Critical Thinking requirement, as well as course requirements for the Philosophy major.

**Text** Available for free on Moodle.

**Software** Available for free at: https://logiclx.humnet.ucla.edu/Logic/Download
(To use this software, you must have Internet access.)

## Grades

The assignments for the course are listed below. The percentage following each assignment indicates the percentage of your overall course grade determined by the particular assignment.

Homework (20%): Homework is to be completed and submitted through the Logic 2010 software. All assignments are due prior to class on the due date. I will go over answers and sample problems in class to provide you with feedback on your work.

First quiz (20%): Tentatively scheduled for May 5

Second quiz (20%): Tentatively scheduled for May 28

Final exam (30%): Scheduled for Jun. 11

Class Participation (10%): Students who show up to class and participate will see this reflected positively in their grade. Those who are absent, either mentally or physically, will lose points.

**Grading Scale**

| | | | |
|---|---|---|---|
| A | 93-100 | C | 68-71 |
| A- | 89-92 | C- | 64-67 |
| B+ | 84-88 | D+ | 59-63 |
| B | 80-83 | D | 55-58 |
| B- | 76-79 | D- | 51-54 |
| C+ | 72-75 | F | 0-50 |

## Late Work

Late work will be accepted only if you arrange for it in advance, or if you present a documented excuse (like a doctor's note) for a genuine emergency. Otherwise, no make-up quizzes or exam will be given.

## Course Topics and Readings

The following is the tentative course schedule. Slight adjustments may be necessary due to the needs of the class.

**Mar. 31** – Campus Holiday, no class
**Apr. 2** – Course introduction

**Apr. 7** – The Joy of Logic
- Film: *The Joy of Logic*

**Apr. 9** – Introduction to logic and basic concepts; using Logic2010
- Reading: *An Introduction to Symbolic Logic*, Introduction, Chapter 0.1-6

**Apr. 14** – Language of logic; parsing
- Reading: *An Introduction to Symbolic Logic*, Chapter 1.1

**Apr. 16** – Translation of sentences, truth tables
- Reading: *An Introduction to Symbolic Logic*, Chapter 1.2-3

**Apr. 21** – Rules of deduction; derivation
- Reading: *An Introduction to Symbolic Logic*, Chapter 1.4-5

**Apr. 23** – Conditional and indirect derivations
- Reading: *An Introduction to Symbolic Logic*, Chapter 1.6-7

**Apr. 28** – Subderivations; strategies
- Reading: *An Introduction to Symbolic Logic*, Chapter 1.8-10

**Apr. 30** – Review

**May. 5** – First Quiz

**May. 7** – Building a library of theorems
- Reading: *An Introduction to Symbolic Logic*, Chapter 1.11-12

**May. 12** – Conjunction; disjunction, biconditional

- Reading: *An Introduction to Symbolic Logic*, Chapter 2.1

**May. 14** – Translation of sentences; complex sentences

- Reading: *An Introduction to Symbolic Logic*, Chapter 2.2-3

**May. 19** – Rules of derivation

- Reading: *An Introduction to Symbolic Logic*, Chapter 2.4-5

**May. 21** – More derivations; derived rules

- Reading: *An Introduction to Symbolic Logic*, Chapter 2.7-9

**May. 26** – Review
**May. 28** – Second Quiz

**Jun. 2** – Derived rules

- Reading: *An Introduction to Symbolic Logic*, Chapter 2.8-9

**Jun. 4** – Review

**Jun. 11– Final Exam, 10:45am – 1:15pm**

## Cheating and Plagiarism

You must do your own work for the class. If you cheat on any assignment, you will receive a zero on that assignment. For more information you can see the section on plagiarism on the CSULA website: http://www.calstatela.edu/academic/senate/handbook/appf.htm.

## Students with Disabilities

The University provides reasonable accommodations to students with documented physical and learning disabilities. Faculty members fully support the Americans with Disabilities Act (ADA) and will provide reasonable accommodation to any student with a disability who is registered with the Office of Students with Disabilities (OSD) and needs and requests accommodation. OSD may be contacted to verify the presence of a disability and to confirm that accommodation is necessary. The Office for Students with Disabilities (OSD), located in Student Affairs Room 115 coordinates all documentation of disabilities.
(323-343-3140) http://www.calstatela.edu/univ/osd/