

Prof Matthew Lockard
Southern Methodist University
J Term 2013

PHIL 1301: Elementary Logic Syllabus

Logic is the study of principles of valid inference. This course is an introduction to first-order symbolic logic, specifically, sentential logic and predicate logic with quantification.

Our goal will be to gain facility with these logical systems. This involves symbolizing English sentences in sentential and predicate logic, learning how to distinguish valid from invalid arguments, and constructing valid arguments by applying explicitly formulated rules of derivation.

The course's primary focus is on mastering these formal systems of symbolic logic. But the ultimate goal is to learn how to reason with greater clarity and rigor, by applying the principles of logic to arguments couched in ordinary language.

Class Meeting Times:

Class will be held each day, beginning on Monday, January 7th, to Wednesday, January 16th.

Grading:

Grades will be determined as follows:

- Homework = 50% of semester grade
- Quizzes = 30% of semester grade
- Final exam = 15% of semester grade
- Attendance and participation = 5% of semester grade

Course materials:

Software: This course uses a software program called Logic 2010. All homework assignments will be completed, and then submitted over the web, using this software. The software is installed on the computers in Fondren Library West 103B. Students can also download the software to their personal computers from <http://logic2k.humnet.ucla.edu/>. Detailed instructions on downloading, installing, and using the software will be distributed in class, and will also be made available in the Course Documents section of our course's BlackBoard website.

Textbook: The textbook for this course is *An Introduction to Symbolic Logic* by Terence Parsons (in Logic 2010, it's often referred to as "TerryText"). The text is available in pdf form, for free, from our course's BlackBoard website and from our course's Logic 2010 website.

Instructor contact info:

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Disability Accommodations:

Students needing academic accommodations for a disability must first be registered with Disability Accommodations & Success Strategies (DASS) to verify the disability and to establish eligibility for

accommodations. Students may call 214-768-1470 or visit <http://www.smu.edu/alec/dass.asp> to begin the process. Registered students should then notify me to make appropriate arrangements.

Religious holidays, sporting events, & extracurricular activities:

Given the compacted structure of the J Term schedule, any absences would have a severely negative impact on one's performance in the class; there simply isn't enough time, over the course of a week and a half, to make up missed material. But if you do anticipate that you will be missing any class time, please notify me at the beginning of the term, so can work out ways to accommodate you.

Student learning outcomes:

This course is designed to help students acquire facility with logic, both as a formal system in its own right, and as a means to distinguish good from bad reasoning in informal argumentation.

This course satisfies both the Quantitative Reasoning and Philosophical and Religious Inquiry and Ethics I pillars of the University Curriculum

Outline of topics and sequence of exams:

Our course will closely follow the layout of the textbook. Quizzes will be given at the end of each section. The final examination will be comprehensive.

- I. Sentential logic
 - a. Conditionals and negation (TerryText Chapter 1)
Quiz #1
 - b. Conjunction and disjunction (TerryText Chapter 2)
Quiz #2

- II. Monadic predicate logic (TerryText Chapter 3)
 - a. Predicates, names, and variables
 - b. Existential and universal quantification
Quiz #3

- III. Polyadic predicate logic (TerryText Chapter 4)*
Quiz #4*

- Final exam

* *time permitting*