PHL 313 - Introduction to Symbolic Logic

Summer 2014

Instructor: Brian Miller

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Office: WAG 411

Office Hours: M-Th 3:00-3:30

Overview of the course:

This course is an introduction to formal logic. We'll study techniques for translating natural language sentences into the more precise language of first-order logic. The sentences of this formal language lack the ambiguity that is common to natural language expressions, and so allow for a rigorous study of the logical relations that exist between them. That account takes the form of a system of proof: a set of inference rules which allows us to determine precisely when one sentence follows logically from another set of sentences. Hence by learning a system of proof we learn a method for determining the validity of arguments.

Required text:

Dave Barker-Plummer, Jon Barwise and John Etchemendy, *Language, Proof and Logic, 2nd edition*, ISBN (Paperback): 978-1-57586-632-1 (second edition)

Important: this text includes software which must be used to complete and turn in your homework. Using that software requires an activation code. Activation codes are included with <u>new</u> textbooks only! Do not buy a used textbook! Be sure to buy the second edition!

If you do not have access to a computer, both a Mac and a PC are available in WAG 316 (hours 8:00AM to 5:00PM weekdays) with the software installed. You will still need your activation code in order to turn in your homework.

Evaluation:

First exam: 25%

Second (final) exam: 35%

Homework: 20% Pop quizzes: 20%

Class schedule: There are only two fixed dates for the term:

Midterm: 6/24/14

Final Exam: TBD by the university

The pace of the rest of the course will be whatever feels comfortable. If the material seems relatively easy we'll move quickly, and when it's more difficult we'll slow down. Homework and reading assignments will be posted on Blackboard as we proceed with the semester. We'll cover at least the core material in the first two sections of the text, and if there's time left over we'll incorporate more.

Classroom Policies:

Special Accommodations: if you have a disability documented with UT's SSD and require special accommodations, please let me know as soon as possible to ensure that your needs are met.

Religious Holidays: if you expect to miss a class meeting due to a conflict with a religious holiday, please let me know in advance.

Attendance: attendance is required for this course. Your attendance will be measured by your performance on the exams, your ability to complete the homework assignments, and your presence for pop quizzes. If you are absent on the day of a pop quiz, or arrive after the quiz has been administered, you will receive a zero on that quiz. The only exceptions to this policy will be when the absence is due to a documented emergency or a religious holiday, in which case a make-up quiz will be given.

Academic dishonesty: UT characterizes academic dishonesty as any act designed to give an unfair or undeserved academic advantage, such as cheating, plagiarism, unauthorized collaboration / collusion, falsifying academic records, misrepresenting facts (e.g. providing false information to postpone an exam, obtain an extended deadline for an assignment, or even gain an unearned financial benefit), or any other acts (or attempted acts) that violate the basic standard of academic integrity. Penalties for acts of academic dishonesty may include grade-related penalties ("F" in the course), suspension or even permanently expulsion from the University. Other potential consequences can be particularly farreaching, such as the creation of a disciplinary record that may very well impact future opportunities (e.g. you will not be admitted to graduate or professional school). If you have any questions, please see the website of the Dean of Students at: http://deanofstudents.utexas.edu/sjs/acint_student.php

Homework: each student must complete and turn in his or her own homework assignments. Please do not copy answers from your friends. That said, for some students it is easier to learn logic in a group setting. For this reason you are welcome to work through homework assignments in groups. Please remember that if you are having trouble with the homework then you are sure to have trouble with the exam, so don't rely on your peers for the answers! If you are having trouble please see me in my office hours.

Electronics: you are welcome to use a computer during class if you find it to be helpful, though for logic it probably won't be. Please be careful not to distract me or your fellow students.

Late Work: homework assignments must be submitted before the start of class on the day that they are due. Late work will not be accepted.

Grading scale:

- 100-93 = A
- 02-90 = A-
- 89 87 = B +
- 86 83 = B
- 82 80 = B-
- 79 77 = C+
- 76 73 = C
- 72 70 = C-
- 69 67 = D +
- 66 63 = D
- 62 60 = D-
- < 59 = F