

Department of Philosophy

PHL 277: Logic

Semester I, 2015-2016

I. Course Description

The goal of this course is, primarily, to introduce the student to the central concepts in logic. For our purposes, logic is characterized as the general study of arguments, with emphasis on the principles and methods that enable us to distinguish good arguments from bad ones. The study of logic comprises the recognition, recasting, construction, and evaluation of arguments. As such, we investigate how to recognize arguments when we come across them either in written or in spoken form. We further study how to reorganize arguments, into a standardized form, in preparation for evaluation. Finally, we learn how to evaluate arguments that we come across, and, of course, how to construct our own arguments.

Logic is primarily divided into two types: deductive logic and inductive logic. This course focuses on deductive logic, though not to the exclusion of inductive logic. To that end, we are concerned to gain a working understanding of sentential (statement) logic, and, perhaps, some aspects of the predicate calculus, along with a functional comprehension of the philosophical concepts that are important when studying logic, e.g., truth, tautology, consistency, contradiction, contingency, equivalence, validity, and the like. We also take time to learn a number of the informal fallacies. There may also be time to consider foundational concepts in other logics: e.g., modal logic.

II. General Information

Meetings: MWF: 8:30am-9:25am
Room, SB 106

Professor: Rob Thompson
Office: Smee Hall, 207
Phone: 849-2930
Office Hours: See door and by appointment.
E-mail: robertthompson@pointloma.edu

Texts: The Art of Reasoning: An Introduction to Logic and Critical Thinking (4th ed.), David Kelley

III. Course Learning Outcomes

1. Students will recognize, recast, construct, and evaluate arguments using a variety of tools.
2. Students will investigate the art and science of human reasoning, including its limits.
3. Students will apply standard forms of argument assessment, including the informal fallacies, to reasoning in common and technical contexts.

IV. Course Requirements and Grading

Attendance: Attend every class session. No make-ups will be allowed for any required work unless the cause of the absence is one of the following: illness, religious observance, travel due to a sanctioned university event (e.g., team sports, musical presentation—be sure to see me to get such an absence cleared before missing the class). As always, you are responsible for the content of any

missed class.

Per the University's attendance policy, any student who misses more than 20% of the course may be de-enrolled without appeal. In addition to no credit being gained for the course, you may receive a failing grade on your transcript if de-enrollment occurs after the last day to drop a semester class. As with any course requirement, you bear the responsibility to insure that the attendance requirement is met. Significant tardiness will count as an absence.

Readings: Read all of the assigned material before coming to class. To do otherwise is to start a class period in a disadvantaged position, as I will assume that everyone has finished the reading when I prepare lectures and directed discussions. Moreover, it will be difficult at best to do the homework assignments without having finished the reading.

Homework: Do all homework assignments. Even though homework is not explicitly figured in the final grade, and will not usually be collected, success on the exams is positively correlated to successful completion of homework exercises to a high degree. To put it another way, if a student fails to regularly do the homework, that student will find it next to impossible to succeed in this course.

Participation: Participate in class. Please feel free to ask questions or make comments that are relevant to the material we are covering at any time. At times I may ask a student a direct question. On such rare occasions, the student is always free to pass on answering the question. This is different for board work in front of the class, as you are expected to participate in that from time to time.

100% **Exams:** There will be five exams, including the final. The nature of the course material is cumulative/comprehensive, so the exams will tend that way as well and the final exam will be so by design. Each exam will account for 20% of the final grade.

Late work and extra credit: No unsanctioned late work will be accepted. No extra credit will be given.

V. Miscellany

1. *Academic Misconduct Policy:* Academic misconduct includes plagiarism and the use of unauthorized materials, information, or study aids in any exam or other academic exercise. It also includes assisting others in any attempt to cheat. It will not be tolerated. However, respect for academic honesty is consistent with discussing the ideas of the course with others. In fact, I encourage you to discuss any and all of the course material that you find interesting outside of class. In the end, however, you must do your written work on your own. If you have any questions about academic honesty, either in general or in particular, please ask me.

A special note on plagiarism is warranted. Each of you is responsible to know what plagiarism is and to avoid even the appearance of plagiarism in your work. No act of plagiarism, whether born of one's intention or ignorance, will be tolerated in this class. Anyone caught plagiarizing will incur severe academic punishment. Such punishment will include a grade of zero for the plagiarized work, and may also include expulsion with a failing grade from the course. The student's name and an explanation of the incident will also be forwarded to the Department Chair/School Dean and the area Dean. The area Dean will review the report and submit it to the Provost and the Vice President for Student Development. It will also be placed in the student's permanent academic file. Please see the University policy stated in the catalogue.

2. *Harassment Policy:* Racial, sexual, and ethnic harassment, and any other type of disruptive behavior, are not conducive to a good learning environment. These behaviors will not be tolerated. However, I encourage all students to be open to any honest and tactful discussion of issues that might arise in the context of our learning.

3. *Reasonable Accommodation Policy*: All students are expected to meet the standards for this course as set by the instructor. However, students who may need accommodations should discuss options with the Academic Support Center during the first two weeks of class. The ASC will contact professors with suggested classroom needs and accommodations. Approved documentation must be on file in the ASC prior to the start of the semester.

4. *Inclusive Language Policy*: The use of inclusive language is now prevalent, even expected, throughout most sectors of our society (e.g., academia, government, business, religious organizations). Further, inclusive language is very often a more accurate and fair representation of the intended meaning of a person's communicative content. As such, everyone is expected to make use of inclusive language in all written work. The avoidance of such use in a given project will result in a lowering of the grade for that project. In addition, everyone is expected to make use of inclusive language during classroom discussions.

VI. Tentative Course Schedule

Unit 1: Natural Language and Propositions

Reading: Chapters 1, 2, & 3

Exam 1: Friday, September 18

Unit 2: Identification, Diagrams, and Fallacies

Reading: Chapters 4 & 5

Exam 2: Monday, October 12

Unit 3: Category and Statement Logic: Squares, Tables, and Trees

Reading: Chapters 6-6.4, 6.5, 7.1-7.3, 8, & 9-10.1

Exam 3: Friday, November 6

Unit 4: Statement Logic: Natural Deduction

Reading: Chapter 10.3ff

Exam 4: Friday, December 4

Unit 5: Statement Logic: Proofs and Predicates

Reading: Chapter 11

Exam 5 (Final): Friday, December 18, 7:30am-10:00am