# Philosophy 206 Formal Logic Spring 2006

MWF 10:00am, Clough 313 Professor: Brendan O'Sullivan Office: Clough 402 Phone: 843-3096

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#### Formal Logic

In this course, we will be covering propositional logic and predicate logic with identity. If time permits, we will also cover informal fallacies. This course presupposes no background in logic or in philosophy. You should be aware that our studies involve a good bit of symbols and proofs (think of something akin to high school geometry).

#### Course Goals

# **Teaching Objectives**

- 1. Introduce students to the concept of validity and the rules and concepts of formalized natural deduction.
- 2. Introduce students to the methods of formal logic and promote their skills in this area.
- 3. Provide a sufficient grounding for more advanced study in logic, as well as an appreciation of the power and limitations of propositional and first order predicate logic.

#### **Learning Outcomes**

- 1. A demonstrated understanding of the notion of validity and of the rules and concepts of formalized natural deduction.
- 2. A demonstrated ability to translate English sentences into the symbolism of propositional and predicate logic, to produce derivations in the propositional and predicate logical calculi, and to produce counterexamples to invalid arguments.
- 3. A passing grade.

#### Texts

Patrick Hurley. *A Concise Introduction to Logic*. 9<sup>th</sup> ed. Belmont, CA: Wadsworth, 2006.

Note: you must have the 9<sup>th</sup> ed. Earlier editions will not suffice.

iLrn Logic. An online learning system that accompanies Hurley's text.

Resources of which you should be aware:

Study Guide to Hurley's <u>A Concise Introduction to Logic 9<sup>th</sup> ed</u>.

Practice Tests to Hurley's <u>A Concise Introduction to Logic 9<sup>th</sup> ed</u>.

## **Assignments**

Two Tests (20% each)
Quizzes & Homework (35%)
Cumulative Final (25%)

You will only acquire the requisite facility with logic if you are <u>consistently</u> working on problem sets. As such, you should anticipate doing logic problems each day of the semester.

I am currently in the process of setting up an iLrn Logic module for the course. Assuming that I can get it up and running, I anticipate online graded homework assignments and quizzes.

Work Load: I expect you to be doing 2-3 hours of homework for each hour of class.

### The Honor Code:

You are expected to observe the Honor Code at all times. All work on tests and quizzes must be your own. You are welcome to work on homework together and in general to discuss class material with each other and with me. I will discuss more specific guidelines concerning the online homework assignments.