

University of Waterloo
Department of Philosophy

Philosophy 240 (LEC 001)
Introduction to Formal Logic

Term Winter 2012
Class: T/Th 8:30 - 9:50
Classroom: ML349

Instructor: Gregory Andres, Ph.D.
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COURSE DESCRIPTION

This course is an introduction to formal symbolic logic. After basic logical concepts such as truth, validity and soundness are introduced, two systems of logic will be taught: propositional and quantificational logic. Propositional logic will be used to familiarize you with the basic techniques and symbols of formal logic. We will expand upon this in the more complex and flexible quantificational logic.

REQUIRED TEXT & ACCESSORIES

1. Paul Tomassi, *Logic*, Routledge, 1999.

COURSE REQUIREMENTS

1. 1 assignment worth 10%
2. 2 assignments worth 15% each
3. 1 assignment worth 20%
4. Final Exam (40%)

Please see class website for due dates and other information. No late work will be accepted except for documented medical or compassionate grounds.

COURSE WEBSITE

www.gregandres.com

COURSE OUTCOMES

By the end of the course you should be able to:

- Use truth tables to test for validity
- Use truth-trees to test for validity, logical truth, logical falsehood, and logical equivalence
- Construct proofs in both propositional and quantificational logic
- Discuss the strengths and limitations of first-order logic
- Articulate why philosophers are interested in logic in the first place

ADDENDUM

CROSS-LISTED COURSE:

Please note that a cross-listed course will count in all respective averages no matter under which rubric it has been taken. For example, a PHIL/PSCI cross-list will count in a Philosophy major average, even if the course was taken under the Political Science rubric.

ACADEMIC INTEGRITY:

Academic Integrity: In order to maintain a culture of academic integrity, members of the University of Waterloo are expected to promote honesty, trust, fairness, respect and responsibility.

Discipline: A student is expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for his/her actions. A student who is unsure whether an action constitutes an offence, or who needs help in learning how to avoid offences (e.g., plagiarism, cheating) or about rules for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline:
<http://www.adm.uwaterloo.ca/infosec/Policies/policy71.htm>

Grievance: A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. Read Policy 70 - Student Petitions and Grievances, Section 4:
<http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm>

Appeals: A student may appeal the finding and/or penalty in a decision made under Policy 70 - Student Petitions and Grievances (other than regarding a petition) or Policy 71 - Student Discipline if a ground for an appeal can be established. Read Policy 72 - Student Appeals:
<http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm>

Academic Integrity website (Arts):
http://arts.uwaterloo.ca/arts/ugrad/academic_responsibility.html

Academic Integrity Office (UW):
<http://uwaterloo.ca/academicintegrity/>

ACCOMMODATION FOR STUDENTS WITH DISABILITIES:

Note for students with disabilities: The Office for Persons with Disabilities (OPD), located in Needles Hall, Room 1132, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with the OPD at the beginning of each academic term.