

Symbolic Logic, 70.360 – Winter term 2010

Brandon University

Lectures: M, W, F, 8:30-9:50, in CHO 410

Instructor: Dr. Derek H. Brown

Contact information: brown@d@brandonu.ca, 727-9765

Office hours: Tues 1:30-2:30 & Wed 1:30-3:30 or by appointment, Clark Hall 331

Prerequisite: Introduction to Logic 70.162

This course is an introduction to predicate logic. Logic is what follows from what. Logicians have devised methods for describing patterns of reasoning and for distinguishing good from bad reasoning. *Predicate* logic builds on the sentential logic presented in 70.162, breaking sentences down into objects, properties, and generality. After introducing students to the formalism needed to translate English sentences into sentences in predicate logic, students will learn to evaluate the validity of inferences through *interpretations* and then through *deduction*. In the final weeks students will be introduced to metalogical proofs of the soundness and completeness of sentential logic. Throughout the course we will emphasize the *practical applicability* of the basic ideas of logic (unfortunately, the applicability of the more complicated ideas must be reserved for more advanced courses). To achieve this, students will regularly be assigned 'logical analyses' of selections from philosophical writings, the goal of which is to make explicit the logical arguments contained in these writings. The results will be discussed in class; each student will at some point in the course be required to present and defend her/his analysis of that day's sample.

Text: Bergmann, M., Moor, J. & Nelson, J. (2004). *The Logic Book*, 4th ed. McGraw Hill: NY, NY.

Grade evaluation:

Exam 1: Tuesday, September 28, 2010	worth 15% of final grade
Exam 2: Tuesday, October 19, 2010	worth 15% of final grade
Exam 3: Tuesday, November 9, 2010	worth 15% of final grade
Exam 4: Tuesday, December 7, 2010	worth 15% of final grade
6 'logical analysis' assignments x 5 marks/assignment	worth 30% of final grade
Class Participation	worth 10% of final grade

- Individuals with disabilities, either permanent or temporary, which might affect their ability to perform in this class, are encouraged to inform the instructor at the start of the semester. Adaptations may be made as required to provide for equitable participation.
- In the event that you miss an exam you *must* present documentation establishing your whereabouts during the exam, and the reason for your absence must be deemed acceptable by the instructor. Conflicts with scheduled university events (e.g. athletic) in which you will participate must be brought to the instructor's attention during the first week of the term. *If a student misses an exam and does not provide adequate documentation in a timely manner s/he will receive a grade of 0 on that exam.*
- ***Please turn off all cell phones during lectures.***

Grade assignments will be *roughly* in accordance with the following:

95-100	A+	67-71	C+
89-95	A	63-67	C
84-89	A-	59-63	C-
79-84	B+	50-59	D
75-79	B	0-50	F
71-75	B-		

NOTE: Decimal grades from 0.0-0.49 will be rounded down, and from 0.5-0.99 will be rounded up.

Rough schedule of topics:

Weeks 1-2: Chapter 7

Weeks 3-5: Chapter 8

Weeks 6-9: Chapter 10

Weeks 10-13: Chapter 6

Students are specifically referred to the policy on 'Academic Dishonesty and Misconduct' under the 'Registration Regulations' section of the General Calendar (in subsection 'Registration' and sub-subsection 'Coursework and Examinations'). This is available in print or online. Violations of this policy, including all forms of plagiarism, will not be tolerated.