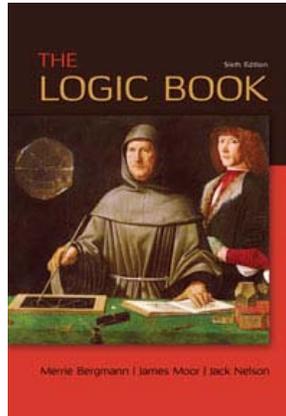


**WESTERN UNIVERSITY  
DEPARTMENT OF PHILOSOPHY  
Undergraduate Course Outline 2015-2016**

**Philosophy 2250: Introduction to Logic  
Previously Philosophy 212**



**Course Web site**

**[instruct.uwo.ca/philosophy/212/](http://instruct.uwo.ca/philosophy/212/)**

**(cut and paste this address into your browser – include the concluding / )**

**Access is by your uwo e-mail login id and password**

<b>Fall/Winter Term 2014/15</b> <b>MWF 1:30-2:20 p.m.</b> <b>Classroom: AHB 1B08</b>	<b>Instructor: Lorne Falkenstein</b> <b>Office Hours: MWF 12:00-1:00, StH 3141</b> <b>lfalkens@uwo.ca</b>
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**DESCRIPTION**

This course deals with the two most basic systems of modern formal logic, sentential logic and first order predicate logic with identity, definite descriptions and functions. Application of proof theory and model theory for these systems will be practiced on an ongoing basis. Studies will focus on the foundations of proof theory and model theory in the syntax, semantics, and metatheory of the formal systems. Philosophical problems of formal logic will also be discussed.

This course introduces symbolic notations and deductive procedures that are specific to logic and that do not presuppose any previous knowledge of logic or mathematics. Material will be introduced slowly, with ample opportunity for student learning through self-corrected exercises and in-class presentation of examples.

**TEXTS**

Merrie Bergmann, James Moor, and Jack Nelson, *The Logic Book*, 6th edition (New York: McGraw-Hill, 2013). The most recent edition is required.

**OBJECTIVES**

Students graduating from this course will become familiar with the basic logical concepts of denotation, satisfaction, truth, contingency, necessity, consistency, equivalence, entailment, and validity. They will have learned the vocabulary, the syntax, and the semantics for the formal languages that are currently used to capture those features of natural languages that bear on the logic of sentences and the logic of predicates. They will be able to “translate” the logical features of sentences in the natural language into

the formal language of modern first order predicate logic and use syntactic procedures (trees and derivations) to determine validity, entailment, equivalence, consistency, necessity, and contingency. They will also understand why these procedures are sound and complete for first order logic, and why they are decidable for sentential logic but undecidable for predicate logic (though this last result will not be rigorously proven). They will understand the semantics for first order predicate logic and will be able to work with semantic models.

## **REQUIREMENTS**

Attendance at every class as recorded by assignments (due every 2 <sup>nd</sup> class; due for pick-up every other class)	12%
Mid term exam (in the Christmas exam period)	44%
Final exam (final exam period)	44%

### Guidelines:

- There will be an assignment due for each second class. It is not expected that assignments will be done without mistakes.
- Answers on assignments should be surrounded by sufficient white space to permit insertion of comments.
- Because mistakes made on earlier assignments can be repeated on subsequent ones, it is important to review returned assignments before preparing subsequent ones.
- Full credit for assignments is automatic as long as the assignment is both submitted in class on the day it is due and picked up in the following class. It is understood that students may not always be able to complete all assigned questions. It is expected as a condition of credit that they will normally complete all of them, and always complete a major portion of questions of each type included in an assignment set.
- Assignments submitted late receive 50% credit; assignments picked up late lose 50% credit. Assignments submitted or picked up more than one class late receive no credit. Assignments not picked up within two classes from the due date are not retained.
- If a student fails to ***pick up*** a submitted assignment during the following class on more than two occasions, no further assignments from that student will be accepted without a written explanation. (This regulation does not apply to failure to submit assignments.)
- Assignments not submitted or picked up in the classroom are considered submitted or picked up late (drop box or office drop off or pick up is not an alternative)
- A 50% average on exams is necessary to pass the course; it is also sufficient to pass the course.
- Because students who faithfully submit and pick up assignments outperform others to such an extent that it is difficult to keep the class average within acceptable margins, no accommodations can be made for students who fail to submit or pick up assignments throughout the year but nonetheless do well on exams.

In class use of a laptop computer with wireless internet access is recommended.

## **AUDIT**

Students wishing to audit the course should consult with the instructor prior to or during the first week of classes.

The **Department of Philosophy Policies** which govern the conduct, standards, and expectations for student participation in Philosophy courses is available in the Undergraduate section of the Department of Philosophy website at <http://uwo.ca/philosophy/undergraduate/policies.html>. It is your responsibility to understand the policies set out by the Senate and the Department of Philosophy, and thus ignorance of these policies cannot be used as grounds of appeal.

Students who are in emotional/mental distress should refer to Mental Health@Western <http://www.uwo.ca/uwocom/mentalhealth/> for a complete list of options about how to obtain help.