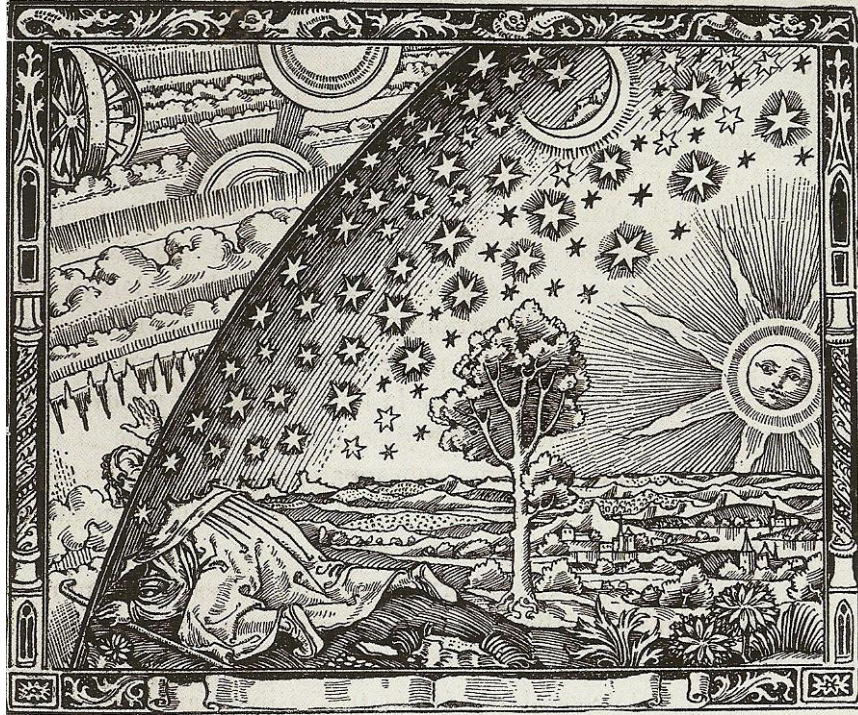


WESTERN UNIVERSITY
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2019-20

Philosophy 2250: Logic



Full Year
MWF 11:30-12:30
AHB 2B04

Instructor: Lorne Falkenstein
STVH 3141, Office Hours: MWF 1-2pm
519-661-2111
lfalkens@uwo.ca

DESCRIPTION

A study of five fundamental notions: truth, possibility, attribution, identity, and existence. The focus of this study is not on what these things are but on how they work in reasoning. Truth and possibility figure in reasoning employing sentences, attribution and identity in reasoning employing terms, and existence in reasoning about objects. Taken together, these types of reasoning comprise modern, first-order logic. The course moves from wholes to parts. It begins with a study of the logical conditions under which truth and falsity are attributed to sentences, moves on to do the same for possibility and necessity, and then turns to consider how truth and possibility are determined by the attribution of predicates and names to objects and by the existence of objects. This is done by developing a symbolic language that isolates the conditions responsible for truth/falsity and possibility/necessity. The symbolic language is used to offer quasi-mathematical demonstration of results. More information is available from the course web page at instruct.uwo.ca/philosophy/212/. Access is by uwo e-mail log-in ID and password. In the case of a typo entering your log-in ID or password, please close and restart your browser before

making a second attempt.

TEXTS

Lorne Falkenstein, Molly Kao, and Scott Stapleford, *Logic Works*. Available online at instruct.uwo.ca/philosophy/212/

OBJECTIVES

- be able to formalize demonstrations and claims made in ordinary English in the language of first order logic
- be able to render such formalizations back into flowing English prose, given an interpretation of the variables
- be able to determine whether such formalizations are well formed
- be able to use trees and derivations to determine consequence/derivability, unsatisfiability/inconsistency, and equivalence/interderivability
- be able to establish consequence, satisfaction, and equivalence by direct appeal to the semantics for first order logic
- be able to identify models that establish non-consequence, satisfiability, and non-equivalence and explain why those models work
- be able to explain what it means for a decision procedure to be consistent, sound, complete, and decidable, and for a language to be compact, extensional, and expressively complete
- be able to identify the principal parts of a demonstration by mathematical induction and explain how they work together to establish a conclusion
- be able to identify some of the philosophical problems associated with the use of names and descriptions and with integrating modal with predicate logic

REQUIREMENTS

Attendance as recorded by record of assignment completion and pick-up		10%
Exam 1 – Chapters 1-3	October 2	15%
Exam 2 – Chapters 4-6	October 30	15%
Exam 3 – Chapters 7-9	Exam period	15%
Exam 4 – Chapter 10	January 29	15%
Exam 5 – Chapters 11-13	March 4	15%
Exam 6 – Chapters 15-18	Exam period	15%

Guidelines:

- There will be an assignment due for each second class.
- Answers on assignments should be surrounded by enough white space to permit insertion of comments.
- It is important to review returned assignments before preparing subsequent ones.
- Assignments are corrected, but not graded. To earn credit, assignments must be picked up in the following class.
- Late assignments are not accepted. Incomplete assignments are accepted, provided a representative sample of questions from each assigned exercise set is included in the assignment and provided assignments are not repeatedly incomplete.
- 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 examinations is necessary to pass the course; it is also sufficient to pass the course.

AUDIT

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

DEPARTMENT OF PHILOSOPHY POLICIES

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.

ACCOMMODATION

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department. Documentation shall be submitted, as soon as possible, to the Office of the Dean of the student's Faculty of registration, together with a request for relief specifying the nature of the accommodation being requested.

The UWO Policy on Accommodation for Medical Illness and further information regarding this policy can be found at

http://uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf.

SELF-REPORTED ABSENCE FORM

Students who experience an unexpected illness or injury or an extenuating circumstance (48 hours or less) that is sufficiently severe to temporarily render them unable to meet academic requirements (e.g., attending lectures or labs, writing tests or midterm exams, completing and submitting assignments, participating in presentations) should self-declare using the online Self-Reported Absence portal. This option should be used in situations where the student expects to resume academic responsibilities within 48 hours or less.

The following conditions are in place for self-reporting of medical or extenuating circumstances:

http://westerncalendar.uwo.ca/PolicyPages.cfm?Command=showCategory&PolicyCategoryID=1&SelectedCalendar=Live&ArchiveID=#SubHeading_322

EVALUATION OF ACADEMIC PERFORMANCE

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive assessment of work accounting for at least 15% of their final grade. For 3000- or 4000-level courses in which such a graded assessment is impracticable, the instructor(s) must obtain an exemption from this policy from the Dean and this exemption must be noted on the corresponding course syllabus. In rare instances and at the Dean's discretion, other courses could receive a similar exemption, which also must be noted in the course syllabus.

COURSE ASSIGNMENT

The last day of scheduled classes in any course will be the last day on which course assignments will be accepted for credit in a course. Instructors will be required to return assignments to

students as promptly as possible with reasonable explanations of the instructor's assessment of the assignment.

ACADEMIC OFFENCES

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

PLAGIARISM CHECKING

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com <http://www.turnitin.com>.

SUPPORT SERVICES

Registrarial Services <http://www.registrar.uwo.ca>

Student Support Services <https://student.uwo.ca/psp/heprdweb/?cmd=login>

Services provided by the USC <http://westernusc.ca/services/>

Student Development Centre <http://www.sdc.uwo.ca/>

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. Immediate help in the event of a crisis can be had by phoning 519.661.3030 (during class hours) or 519.433.2023 after class hours and on weekends.