

WESTERN UNIVERSITY
DEPARTMENT OF PHILOSOPHY
Undergraduate Course Outline 2022-23

PHILOSOP 2020-650: Basic Logic

Fall and Winter Term 2022-23
Online, lectures posted Wednesdays

Instructor: Chris Viger
Office hours: Tu, W 12-1pm
Office: STVH 4133
Email: cviger@uwo.ca

PREREQUISITE CHECKING

No prerequisite

DESCRIPTION

This is an introductory course in formal logic, which may be used to satisfy the logic requirement for the HSP module in Philosophy. The focus of the course is on Modern Symbolic Logic. The first term focuses solely on propositional or sentential logic; the second term is dedicated to first-order predicate logic. A system of natural deduction is introduced for proving statements and assessing natural language arguments. A formal language is introduced along with techniques for translating between this formal system and natural language. Truth tables are used to test for truth-functional properties. A more efficient system of truth trees is then introduced to test for these properties. Carroll Diagrams are introduced as a method to test for the validity of categorical syllogisms. Theoretical notions of soundness and completeness are defined. Informal reasoning to verify logical truth, equivalence, and consistency is presented. Time permitting the course will conclude with a brief introduction to modal and other alternative logics.

TEXTS

Arthur, Richard (2017). An Introduction to Logic Using Natural Deduction, Real Arguments, a Little History and Some Humour. 2nd Edition. Broadview Press.

OBJECTIVES

1. Improve critical reasoning skills
2. Learn formal systems of propositional and first-order predicate logic
3. Learn to translate between ordinary language and formal language
4. Use truth tables to test for truth-functional properties
5. Learn to use formal trees to test for various logical properties
6. Learn formal proof methods and use them to test argument validity
7. Learn to use Carroll Diagrams to determine the validity of categorical syllogisms
8. Define soundness and completeness of a formal system
9. Informally verify quantificational truth, equivalence, and consistency

METHOD OF EVALUATION

Weekly Assignments 40%
Midyear Examination 30%
Final Examination 30%

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 that govern the conduct, standards, and expectations for student participation in Philosophy courses are available in the Undergraduate section of the Department of Philosophy website <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.

EVALUATION OF ACADEMIC PERFORMANCE

At least three days prior to the deadline for withdrawal from a course without academic penalty, students will receive an 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.