# HURON UNIVERSITY COLLEGE DEPARTMENT OF PHILOSOPHY

Undergraduate Course Outline—Intersession 2021

## Philosophy 2250: Introduction to Logic

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Intersession Term 2021 Mon – Thurs (Fri Tutorial) Course is Online – OWL

## Description & Objectives

This course is intended to introduce students to the art and science of logical reasoning. To the first end, we will develop syntactic and semantic methods to test the validity of arguments using the two most basic and popular systems of modern logic: the logic of sentences, and the logic of first-order predicates with identity and definite descriptions. To the second end, we will investigate the properties of these systems (called *meta-theory*). This will help us to explain why and how these systems capture and characterize the essential aspects of our valid reasoning, especially in application to science, mathematics, computation, and everyday life.

The study of formal logic provides excellent preparation for intellectual work in almost all other disciplines. Everyone can benefit from learning, in a systematic way, various methods of sound reasoning—methods that prize precision, clarity, rigour, practice, and patience. Students in this course should expect to develop an enhanced ability to engage in disciplined argument and to critically evaluate the arguments of others, especially in philosophical and scientific contexts. Students should also be prepared to confront and hopefully overcome personal concerns about "math-phobia"—i.e., the paralyzing aversion to mathematical or technical material. The course assumes no prior knowledge of logic.

## Requirements

• Participation: 5% (forum interaction, textbook errors, Zoom participation)

• 8 Homeworks: 16% (2% each – graded for completion)

• Daily Quizzes: 24% (1-3% each, most days – see Daily Lesson Checklists)

• Midterm: 25% (timed assignment available May 31st)

• Final Exam: 30% (timed assignment during June 2021 exam period)

Quizzes reinforce content and ensure daily engagement. Homeworks are more substantial and encourage consistent practice, they'll be graded for completion only. Homework submitted a day late receives 50% credit. After that no credit, but they'll still be corrected.

Students are expected to engage with OWL *daily* to keep up with the reading and practice schedule as outlined below and detailed in the Daily Lesson Checklists. In my experience, students *cannot* do well in this course without substantial practice every single day.

### **Texts**

- Merrie Bergmann, J. Moore, & J. Nelson (2014). *The Logic Book*, 6th ed. McGraw-Hill. (E-book available for purchase from bookstore website; also available on Amazon)
- Various supplementary readings to be made available on OWL.

## Schedule

Please note this is a six-week accelerated online course—a full-year course in the period from May 10th to June 18th. The material requires attention every single day, not just for learning but more importantly for *skills practice*. Expectation is 4–6 hours of engagement per weekday. The pace will be quick, the workload extremely heavy, but the rewards great.

Presentation of course content will be largely asynchronous—you'll follow along day-by-day as the course progresses, working through course activities and materials so that you can meet the course deadlines. But we'll also hold several live sessions each week as a group via Zoom for questions/practice, usually Mondays and Wednesdays with an extra drop-in tutorial on Fridays. Outside these times I'll still endeavour to be as accessible as possible.

Monday	Tuesday	Wednesday	Thursday	Friday
"First Term"				
May 10	May 11	May 12	May 13	May 14
§1.1–1.3	§2.1–2.2	§2.3–2.4	§3.1–3.3 +	
	Homework 1		Set Theory	
May 17	May 18	May 19	May 20	May 21
§3.4–3.5	§5.1	§5.2–5.4	$\S 3.6 + \text{Proofs}$	
	Homework 2		& Induction	
May 24	May 25	May 26	May 27	May 28
Long	§6.1–6.2	§6.3–6.4	Computation	
Weekend!!	Homework 3		Homework 4	
"Second Term"				
May 31	June 1	June 2	June 3	June 4
	§7.1–7.3	§7.4	7.5 + Relations	
Midterm!		Homework 5	& Descriptions	
June 7	June 8	June 9	June 10	June 11
§8.2-8.3	§8.4, §8.6	§10.1–10.2	§10.3–10.4	
	Homework 6			
June 14	June 15	June 16	June 17	June 18
$\S 8.1, \S 8.5 +$	§11.1–11.2	§11.3–11.4	Infinity & Math	
Truth Definition	Homework 7		Homework 8	

**Final Exam**: Either June 21st or 22nd, as scheduled by the Registrar.



#### **Appendix to Course Outlines: Academic Policies & Regulations 2021 - 2022**

#### **Prerequisite and Antirequisite Information**

Students are responsible for ensuring that they have successfully completed all course prerequisites and that they have not completed any course antirequisites. Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

#### **Student Code of Conduct**

Membership in the community of Huron University College and Western University implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. While in the physical or online classroom, students are expected to behave in a manner that supports the learning environment of others. Please review the Student Code of Conduct at: <a href="https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf">https://huronatwestern.ca/sites/default/files/Res%20Life/Student%20Code%20of%20Conduct%20-%20Revised%20September%202019.pdf</a>.

#### **Attendance Regulations for Examinations**

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

- 1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.
- 2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Dean of the Faculty offering the course will communicate that decision to the Dean of the Faculty of registration.

Review the policy on Attendance Regulations for Examinations here: <a href="https://www.uwo.ca/univsec/pdf/academic">https://www.uwo.ca/univsec/pdf/academic</a> policies/exam/attendance.pdf.

#### **Statement on 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 website: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/scholastic\_discipline\_undergrad.pdf</a>. The appeals process is also outlined in this policy as well as more generally at the following website: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appeals/appealsundergrad.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/appeals/appealsundergrad.pdf</a>.

#### Turnitin.com

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 (<a href="http://www.turnitin.com">http://www.turnitin.com</a>).

#### **Statement on Use of Electronic Devices**

It is not appropriate to use electronic devices (such as, but not limited to, laptops, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

#### **Statement on Use of Personal Response Systems ("Clickers")**

Personal Response Systems ("clickers") may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else's clicker in class constitutes a scholastic offence
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

#### **Academic Consideration for Missed Work**

Students who are seeking academic consideration for missed work during the semester may submit a self-reported absence form online provided that the absence is **48 hours or less** and the other conditions specified in the Senate policy at

https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_illness.pdf are met.

Students whose absences are expected to last **longer than 48 hours**, or where the other conditions detailed in the policy are not met (e.g., work is worth more than 30% of the final grade, the student has already used 2 self-reported absences, the absence is during the final exam period), may receive academic consideration by submitting a Student Medical Certificate (for illness) or other appropriate documentation (for compassionate grounds). The Student Medical Certificate is available online at <a href="https://www.uwo.ca/univsec/pdf/academic policies/appeals/medicalform.pdf">https://www.uwo.ca/univsec/pdf/academic policies/appeals/medicalform.pdf</a>.

All students pursuing academic consideration, regardless of type, must contact their instructors no less than 24 hours following the end of the period of absence to clarify how they will be expected to fulfill the academic responsibilities missed during their absence. Students are reminded that they should consider carefully the implications of postponing tests or midterm exams or delaying submission of work, and are encouraged to make appropriate decisions based on their specific circumstances.

Students who have conditions for which academic accommodation is appropriate, such as disabilities or ongoing or chronic health conditions, should work with Accessible Education Services to determine appropriate forms of accommodation. Further details concerning policies and procedures may be found at: <a href="http://academicsupport.uwo.ca/">http://academicsupport.uwo.ca/</a>.

#### Policy on Academic Consideration for a Medical/ Non-Medical Absence

(a) Consideration on <u>Medical Grounds</u> for assignments worth *less than 10%* of final grade: Consult Instructor Directly and Contact Academic Advising

When seeking consideration on **medical grounds** for assignments worth *less than 10%* of the final course grade, and if the student has exceeded the maximum number of permissible Self-Reported absences, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor **may** require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. If documentation is requested, the student will need to complete and submit the <u>Student Medical Certificate</u>. The instructor may <u>not</u> collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation.

# (b) Consideration on Non-Medical Grounds: Consult Huron Support Services/Academic Advising, or email <a href="mailto:huronsss@uwo.ca">huronsss@uwo.ca</a>.

Students seeking academic consideration for a **non-medical** absence (e.g. varsity sports, religious, compassionate, or bereavement) will be required to provide appropriate documentation where the conditions for a Self-Reported Absence have not been met, including where the student has exceeded the maximum number of permissible Self-Reported. All consideration requests must include a completed <a href="Consideration Request Form">Consideration Request Form</a>. Late penalties may apply at the discretion of the instructor.

Please review the full policy on Academic Consideration for medical and non-medical absence at: <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_illness.pdf">https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/accommodation\_illness.pdf</a>. Consult <a href="https://www.uwo.ca/univsec/pdf/academic\_policies/appeals/academic\_polici

#### **Support Services**

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation, students should email an Academic Advisor in Huron's Student Support Services at <a href="https://huronatwestern.ca/student-life/student-services/">https://huronatwestern.ca/student-life/student-services/</a>.

Department Chairs, Program Directors and Coordinators are also able to answer questions about individual programs. Contact information can be found on the Huron website at: <a href="https://huronatwestern.ca/contact/faculty-staff-directory/">https://huronatwestern.ca/contact/faculty-staff-directory/</a>.

If you think that you are too far behind to catch up or that your workload is not manageable, you should consult your Academic Advisor. If you are considering reducing your workload by dropping one or more courses, this must be done by the appropriate deadlines. Please refer to the Advising website, <a href="https://huronatwestern.ca/student-life/student-services/academic-advising/">https://huronatwestern.ca/student-life/student-services/academic-advising/</a> or review the list of official Sessional Dates on the Academic Calendar, available here: <a href="http://www.westerncalendar.uwo.ca/SessionalDates.cfm">http://www.westerncalendar.uwo.ca/SessionalDates.cfm</a>.

You should consult with the course instructor and the Academic Advisor who can help you consider alternatives to dropping one or more courses. Note that dropping a course may affect OSAP and/or Scholarship/Bursary eligibility.

Huron Student Support Services: <a href="https://huronatwestern.ca/student-life/student-services/">https://huronatwestern.ca/student-life/student-services/</a>

Office of the Registrar: <a href="https://registrar.uwo.ca/">https://registrar.uwo.ca/</a>

Student Quick Reference Guide: <a href="https://huronatwestern.ca/student-life/student-services/#1">https://huronatwestern.ca/student-life/student-services/#1</a>

Learning Development and Success: https://www.uwo.ca/sdc/learning/

Accessible Education: http://academicsupport.uwo.ca/

Western USC: <a href="http://westernusc.ca/your-services/#studentservices">http://westernusc.ca/your-services/#studentservices</a>

#### Mental Health & Wellness Support at Huron and Western

University students may encounter setbacks from time to time that can impact academic performance. Huron offers a variety of services that are here to support your success and wellbeing. Please visit <a href="https://huronatwestern.ca/student-life-campus/student-services/wellness-safety">https://huronatwestern.ca/student-life-campus/student-services/wellness-safety</a> for more information or contact staff directly:

Wellness Services: <a href="mailto:huron.uwo.ca">huron.uwo.ca</a> Community Safety Office: <a href="mailto:safety@huron.uwo.ca">safety@huron.uwo.ca</a>

Chaplaincy: <a href="mailto:gthorne@huron.uwo.ca">gthorne@huron.uwo.ca</a>

Additional supports for Health and Wellness may be found and accessed at Western through, <a href="https://www.uwo.ca/health/">https://www.uwo.ca/health/</a>.