

INTRODUCTION TO LOGIC: PHIL 2001A

Carleton University, Philosophy Department
Summer 2024, online blended course
Tuesdays and Thursdays, 5:35 – 8:25 PM

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Description: An introduction to the techniques and philosophical implications of formal logic with emphasis on translation of expressions into symbolic form, testing for logical correctness, the formulation and application of rules of inference, and the relation between logic and language. Special emphasis will be placed on practice. Open to first-year students.

Objectives: In this course students will develop and strengthen skills to identify, evaluate and construct arguments; cultivate a critical thinking practice through the study of varied examples; and understand argument as a dialogical process necessary for private and public decision making. More specifically, the aims of this course are to:

- Define what an argument is and distinguish it from non-argument
- Differentiate between valid and invalid arguments
- Investigate the relationship between truth and validity
- Identify formal/structural features of valid argumentation
- Recognize the more common fallacies to be avoided in reasoning
- Construct arguments consistent with best practices in a discipline, with special application in philosophy; apply logical reasoning to controversies in ethics, politics, science and others
- Formulate constructive responses to criticism
- Understand the function of logic in the context of theories of/issues about meaning, knowledge, values and/or reality

Required Material

1. Harry J. Gensler, *Introduction to Logic*, 3rd edition (or 2nd edition)
2. LogiCola program – available free, at <http://harrycola.com/lc/index.htm>
3. Various supplementary materials that will be posted on BrightSpace

Course requirements

- There will be homework due almost every week (6 assignments in total).
- Two tests, corresponding to the major sections covered in the course (syllogistic, propositional)
- Final exam, cumulative.

It is vital to keep up with the class material, because the lessons build on each other. Attending the live lectures, reviewing the posted material, paying attention, and asking questions are all crucial components for success in the course.

Course sections

1. Foundational concepts of logic
2. Syllogistic logic
3. Propositional logic
4. Propositional proofs and refutations

Online blended learning

This is an online blended course, which means that some material will be presented live (you must connect at certain times) and some will be pre-recorded lectures and informational material that you can access at any time after being uploaded. The class time (partially or entirely) will be used for review, practice, questions, etc. Since the course is skill-based, these practice sessions are essential. Tests will be online, during class time (Tuesday/Thursday, 5:35-8:25 PM).

E-Mail & BrightSpace

It is your responsibility to check your Carleton e-mail and BrightSpace regularly. Important course documents, as well as the most current class schedule and homework assignments, are posted on BrightSpace, which is up to date until at least the next test.

I can best be reached by email, but please note that I am not permanently “on-call”. I will do my very best to answer all messages in a timely manner, but it’s advisable not to leave important or emergency messages until the last minute, because they might not reach me on time.

Also note that more complex questions about the material covered in class or problem sets in the book are best addressed during practice sessions – please take advantage of those.

How to succeed in this course

1. **Read and abide by the University and Departmental Policies outlined at the end of this document.**
2. **Preparation** – Do the reading and all other assignments before you attend or play the lecture. I recommend that you first skim the text to get a general idea of the content, then read slowly and carefully, outlining major points and noting your questions. **For test preparation, do the practice tests in Brightspace.**
3. **Logicola** – The homework is done on Logicola. You get unlimited tries, you can make unlimited mistakes. The goal is to get to finish the sets and submit them on time. But: **do not rely only on Logicola!** It is an excellent tool to give you a solid base, but do **not** expect the tests to be identical to the homework.
4. **Live sessions** – Keep your device camera turned off. Keep your device microphone muted, unless you need to speak. Phones must be turned off or silenced during live sessions. You must resist the urge to constantly browsing the web, checking for messages or, even worse, sending messages during lecture. **Respect** – Please always be respectful and civilized toward other students and me. This includes, for example, not interrupting when others are talking, maintaining order and silence so others can make the best of their learning experience and, obviously, not displaying any sort of bigoted or discriminatory views. Always make sure you use the appropriate tone with your professor and your colleagues, whether live or in written communication. If unsure about the right way to communicate, google it. [Here’s](#) one good source.
5. **Academic integrity.** Plagiarism and cheating are very serious academic offenses and are unacceptable. I expect all assignments to be completed independently by each student. Any work you submit and represent as your own must actually be your own. Unless explicitly permitted by the instructor in a particular course, any use of generative AI tools to produce assessed content (e.g., text, code, equations, image, summary, video, etc.) is a violation of academic integrity standards.

I reserve the right to ask students to submit evidence of their work, including rough notes, drafts, or other material as relevant to the assignment. I also reserve the right to require students to explain the reasoning process and the steps they took when completing the assignment. If I suspect a breach of academic integrity, I will send an incident report to the Dean’s Office, which will determine further action, in accordance with University Policies.

Grades

Any work submitted late will receive a **50% grade reduction**. Exceptions will be granted only if I receive the request for late submittal with a valid and properly documented reason no later than the due date. Special arrangements for make-up tests must be made in advance and with proper documentation. Personal reasons will be accepted only in extremely rare cases, at the discretion of the instructor. Due to the COVID-19 pandemic disruptions, in place of a doctor’s note or medical certificate, students will be advised to complete the [self-declaration form](#) available on the Registrar’s Office website to request academic accommodation for missed course work including exams and assignments.

You can expect a return time for test grades of **2 weeks**.

There will be **no shifting** of any portion of the grade to another assignment, as it is against this course’s policies.

Homework:

The homework will be done through the LogiCola program. You must send me the scores through Brightspace (**not email**) before each deadline. Each problem set you complete on time (at any level) counts toward 1 point for your homework grade, up to a total of 46 for the semester. Late assignments (at any level) are penalized by 50%. If you

try to fake your scores, my program will show it to me automatically and this will count as cheating (see statement above about cheating and its repercussions).

How Logicola scores count toward test grades: Before each test, I calculate the average score (level) at which you did all the assigned exercises having to do with the material on the test. The default level for this course is 6 (the maximum level is 9). Your exercise scores average, if above 6, adds a bonus to the next test grade. So: if your average level is, say, 8, then you get a +2 bonus on the following test. You will have a special place to submit missed/improved sets before each test.

Final grades will be calculated as follows:

Homework: 15 % – late assignments will be penalized by half
 Tests: 50 % (2x25%) – no make-ups, unless with prior notice and documented excuse
 Final Exam: 35 % – cumulative

Schedule: Posted and regularly updated on Brightspace. Here is the tentative schedule:

Date	Do in class	Reading for Today	HW for today
7-May	Syllabus, Logicola tutorial, Pre-test, What is logic		
9-May	Arguments, validity, soundness; Syllogisms - easier translations, star test, English arguments	1-12; 2nd: 1-14	
14-May	Syllogisms - harder translations, deriving conclusions, Venn diagrams, idiomatic	15-27; 2nd: 17-30	H1: BF, EF, AEM, AET, BH, BS, BE
16-May	Review. In-class practice test		H2: AHM, AHT, BD, BC, BI
21-May	Test 1		
23-May	Propositional - Easier translations, simple truth-tables,	112-128; 2nd: 118-135	
28-May	Equivalences, truth-evaluations, complex truth-tables, truth-table test, truth-assignment test	132-135; 2nd: 138-142	
30-May	Propositional - Harder translations, idiomatic arguments	132-135; 2nd: 138-142	H3: CEM, CET, DTE, DFE, DTH, DTM, DUE, DUM, DUH, DFM, DFH, DAE, DAM, DAH
4-Jun	Review. In-class practice test		H4: CHM, CHT, EI, EE, ES
6-Jun	Test 2		
11-Jun	Propositional - derivation (S- and I-) rules	136-156; 2nd: 143-162	
13-Jun	Proofs - Easier and harder proofs and refutations	161-170; 2nd: 167-175	H5: FSE, FSH, FIE, FIH, FCE, FCH
18-Jun	Review		H6: FTE, FTH, GEV, GEI, GEC, GHV, GHI, GHC, GMC

	Final Exam: 21-27 June https://carleton.ca/ses/exam-schedule/		
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Department of Philosophy and Carleton University Policies (Summer 2024)

Assignments:

Please follow your professor's instructions on how assignments will be handled electronically.

Evaluation:

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean.

Deferrals for Term Work:

If students are unable to complete term work because of illness or other circumstances beyond their control, they should contact their course instructor no later than *three working days* of the due date. Normally, any deferred term work will be completed by the last day of the term. Term work cannot be deferred by the Registrar.

Deferrals for Final Exams:

Students are expected to be available for the duration of a course including the examination period. Occasionally, students encounter circumstances beyond their control where they may not be able to write a final examination or submit a take-home examination. Examples of this would be a serious illness or the death of a family member. If you miss a final examination and/or fail to submit a take-home examination by the due date, you may apply for a deferral no later than *three working days* after the original due date (as per the University Regulations in [Section 4.3 of the Undergraduate Calendar](#)). Visit the [Registrar's Office](#) for further information.

Plagiarism:

It is the responsibility of each student to understand the meaning of 'plagiarism' as defined in the Undergraduate or Graduate Calendars, and to avoid both committing plagiarism and aiding or abetting plagiarism by other students. ([Section 10.1 of the Undergraduate Calendar Academic Regulations](#))

Academic Accommodation:

You may need special arrangements to meet your academic obligations during the term:

- *Pregnancy or religious obligation:* Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the [Equity Services website](#).
- *Academic accommodations for students with disabilities:* If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the [Paul Menton Centre website](#).
- *Survivors of Sexual Violence:* As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support
- *Accommodation for [Student Activities](#):* Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic

accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

Important Dates:

May 6	Classes start.	July 1	Statutory holiday, University closed.
May 10	Last day for registration and course changes for <u>early</u> summer courses.	July 2	Late summer courses begin and full summer courses resume.
May 17	Last day for registration and course changes for <u>full</u> summer courses.	July 8	Last day for registration and course changes for <u>late</u> summer courses.
May 17	Last day for a full fee adjustment when withdrawing from <u>early</u> summer courses. Withdrawals after this date will result in a permanent notation of WDN on the official transcript.	July 15	Last day to withdraw from <u>late</u> summer courses with a full fee adjustment. Withdrawals after this date will result in a permanent notation of WDN on the official transcript.
May 20	Statutory holiday, University closed.	Aug. 1	Last day for academic withdrawal from full and late summer courses.
May 31	Last day to withdraw from full summer courses with a full fee adjustment. Withdrawals after this date will result in a permanent notation of WDN on the official transcript.	Aug. 5	Civic holiday, University closed.
		Aug. 7	Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade for <u>late</u> summer and <u>full</u> summer courses before the official examination period.
June 11	Last day for summative tests or examinations, or formative tests or examinations totaling more than 15% of the final grade for <u>early</u> summer courses before the official examination period.	Aug. 14	Last day of <u>late</u> and <u>full</u> summer term classes. Classes follow a Monday schedule.
June 18	Last day for <u>early</u> summer classes. Last day for handing in term work, subject to any earlier course deadline.		Last day for handing in term work, subject to any earlier course deadline.
June 19-20	No classes or examinations take place.	Aug. 15-16	No classes or examinations take place.
June 21-27	Final examinations.	Aug. 17-23	Final examinations.
June 27	Take-home examinations for <u>early</u> summer courses are due.	Aug. 23	Take-home examinations for <u>late</u> or <u>full</u> summer courses are due.

Addresses:

Department of Philosophy:
www.carleton.ca/philosophy
520-2110

Registrar's Office:
www.carleton.ca/registrar
520-3500

Academic Advising Centre:
www.carleton.ca/academicadvising
520-7850

Writing Services:
<http://www.carleton.ca/csas/writing-services/>
520-3822

MacOdrum Library
<http://www.library.carleton.ca/>
520-2735