

INTRODUCTION TO LOGIC: PHIL 2001A

Carleton University, Philosophy Department
Summer 2026, 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). Cost: \$87.00. Cheaper options: purchasing used copies, electronic PDF or Kindle versions, or semester leasing from the University Bookstore. The book is on reserve at the Library (free).
2. LogiCola program* – available free, at <http://harrycola.com/lc/index.htm> for Windows users
* Mac users: use **CuDesktop** to access (see Brightspace for instructions)
3. Various supplementary materials that will be posted on BrightSpace (free)

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) – These will be **in person**.
- Final exam, cumulative – This will be **in person**.

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. **The tests and exam will be in person**, during class time (Tuesday/Thursday, 5:35-8:25 PM). For those students who cannot attend the tests in person, there are accommodations available (you must be eligible). Please note that **the deadline to apply for this service is July 9th**. For more information and the application form see: <https://carleton.ca/ses/examination-services/distance-exams/>. Please note that distance tests and exams in this course will use a remote proctoring service provided by Scheduling and Examination Services. More information is available at <https://carleton.ca/ses/e-proctoring/>.

Note: Tablets, Chromebooks, and Smartphones are not supported. Windows-based tablets are also not supported.

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.

AI use in this course

Students may use AI tools for basic word processing functions, including grammar and spell checking (e.g. Grammarly, Microsoft Word Editor, Copilot). It is not necessary to document the use of AI for the permitted purposes listed above. If you have questions about a specific use of AI that isn’t listed above, please consult your instructor. This policy ensures that student voices and ideas are prioritized and authentically represented, maintaining the integrity of the work produced by students while allowing basic support to enhance clarity, correctness, layout and flow of ideas. The goal is to help students develop foundational skills in reasoning and critical thinking by practicing substantive content creation without the support of AI.

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 the scores through Brightspace (**not email**) before each deadline. Each homework assignment has a variable number of problem sets (46 in total for the semester). Each problem set you complete on time (at any level) counts toward 1 point for your homework grade (46 points maximum for the semester). Late sets 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 score levels 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 exercise levels are between 1 and 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.

Final grades will be calculated as follows:

Homework:	15 % – late sets will be penalized by half (all points over the semester are counted)
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
2-Jul	Syllabus, Logicola tutorial, Pre-test, What is logic		
7-Jul	Arguments, validity, soundness; Syllogisms - easier translations, star test, English arguments	1-12; 2nd: 1-14	
9-Jul	Syllogisms - harder translations, deriving conclusions, Venn diagrams, idiomatic	15-27; 2nd: 17-30	H1: BF, EF, AEM, AET, BH, BS, BE
14-Jul	Review. In-class practice test		H2: AHM, AHT, BD, BC, BI
16-Jul	Test 1 – in person		
21-Jul	Propositional - Easier translations, simple truth-tables,	112-128; 2nd: 118-135	
23-Jul	Equivalences, truth-evaluations, complex truth-tables, truth-table test, truth-assignment test	132-135; 2nd: 138-142	

28-Jul	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
30-Jul	Review. In-class practice test		H4: CHM, CHT, EI, EE, ES
4-Aug	Test 2 – in person		
6-Aug	Propositional - derivation (S- and I-) rules	136-156; 2nd: 143-162	
11-Aug	Proofs - Easier and harder proofs and refutations	161-170; 2nd: 167-175	H5: FSE, FSH, FIE, FIH, FCE, FCH
13-Aug	Review		H6: FTE, FTH, GEV, GEI, GEC, GHV, GHI, GHC, GMC
	Final Exam: 21-27 June (TBD) – in person https://carleton.ca/ses/exam-schedule/		

Department of Philosophy and Carleton University Policies (Summer 2026)

Assignments:

Please follow your professor's instructions on how assignments will be handled electronically. We no longer allow hard copies to be placed in the department's essay box.

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:

The University Academic Integrity Policy defines plagiarism as '*presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own.*' This includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source.

Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to books, articles, papers, literary compositions and phrases, performance compositions, chemical

compounds, artworks, laboratory reports, research results, calculations and the results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations

Examples of plagiarism include, but are not limited to:

- any submission prepared in whole or in part, by someone else, including the unauthorized use of generative AI tools (e.g., ChatGPT);
- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one's own;
- failing to acknowledge sources with proper citations when using another's work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course's instructor.

The Associate Dean of the Faculty follows a rigorous [process for academic integrity allegations](#), including reviewing documents and interviewing the student, when an instructor suspects a violation has been committed. Penalties for violations may include a final grade of "F" for the course.

It is the responsibility of each student to understand the full 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](#))

Statement on AI:

As our understanding of the uses of AI and its relationship to student work and academic integrity continue to evolve, students are required to discuss their use of AI in any circumstance not described in the course outline with the instructor to ensure it supports the learning goals for the course.

Mental Health:

As a student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. For more information, please consult <https://wellness.carleton.ca/>.

Academic Accommodation:

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes, including information about the Academic Consideration Policy for Students in Medical and Other Extenuating Circumstances, are outlined on the Academic Accommodations website (students.carleton.ca/course-outline). Examples of special arrangements include:

- *Pregnancy or religious obligation:* write to your professor 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 [EIC](#) website.
- *Academic accommodations for students with disabilities:* The [Paul Menton Centre](#) for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send your Letter of Accommodation at the beginning of the term, and no later than two weeks before the first in-class test or exam requiring accommodation. After requesting accommodation from PMC, meet with your professor to ensure accommodation arrangements are made.

- *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](#).
- *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 12	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 18	Statutory holiday. University closed.	July 8	Last day for registration and course changes for <u>late</u> summer courses.
May 20	Last day for registration and course changes for <u>full</u> summer courses. 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 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. 1	Last day for academic withdrawal from full and late summer courses.
June 1	Last day for academic withdrawal from <u>early</u> summer courses.	Aug. 3	Statutory holiday. University closed.
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. 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 18	Last day for <u>early</u> summer classes. Last day for handing in term work, subject to any earlier course deadline.	Aug. 14	Last day of <u>late</u> and <u>full</u> summer term classes. Classes follow a Monday schedule. 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:
<https://carleton.ca/csas/support/>
520-3822

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