

PHIL 120 002 Introduction to Logic and Critical Thinking Credits: 3

Instructor: Graham Seth Moore **Email:** graham.moore@alumni.ubc.ca

Meetings: Mondays & Wednesdays 12:30 to 2:00 PM in SCI 337

Office Hours: Mondays 3:00 to 4:00 PM in ART 253

Course Objectives and Learning Outcomes

This course is an introduction to logic and critical thinking: the study of rational argumentation and reasoning in all its forms. We will survey and categorize several kinds of arguments, patterns of reasoning, and inferences. Doing so will allow us to develop the techniques for critically assessing an argument's rational strength. Particular emphasis will be placed on applying these techniques to the arguments found in everyday life.

The course is divided into two major units:

- Inductive reasoning. Topics covered in this unit include statistical reasoning, the confirmation of hypotheses, and probabilistic reasoning.
- Deductive reasoning. We will cover propositional logic and Aristotelian categorical logic.

A course in critical thinking is valuable for the skills developed therein. By the end of the course, students should be able to:

- Recognize arguments in the wild, know how to classify them, and know which tools are appropriate for assessing their validity or rational strength.
- Assess arguments as good or bad, and recognize common logical errors and fallacious patterns of reasoning.
- Use the tools of propositional and categorical logic to determine the validity of a large class of deductive arguments.

This course will be of interest to philosophy students and all students who want to sharpen their reasoning skills.

Course Format

We will meet in-person on Mondays and Wednesdays from 12:30 to 2:00 PM.

The best way to master the material is to practice often and with other people. For this reason, there will be (near) weekly in-class assignments that can be done in groups. (There is no assignment for the first week and the weeks of the midterms.) Wednesday's classes will include time to work on these assignments with your peers. The assignments are due at *midnight* the night at which they are assigned.

These assignments are to be done in groups of *no more than four*. When you complete the assignment as a group, you must each hand in *your own copy* of the answers to get credit. If you

do not hand in your own copy, you will not get credit. Please indicate who else was in your group on the assignment submission.

If you are unable to make it to a class when there is an in-class assignment, you may still complete the assignment at home, but without the benefit of a group. The due date and time will be the same for the assignment. Please contact me if you are unable to complete the assignment on time due to illness or other legitimate reasons, and we can discuss extensions. However, you must contact me *before* the assignment is due. Otherwise, I cannot accept late assignments.

The midterms will take place on October 2nd and November 4th. The final exam date and time is TBD. Each will consist of a variety of multiple choice and short answers, much like the questions of the short assignments. The final *is* cumulative.

Course Requirements

There are no prerequisites for this course. It is restricted to those with fewer than 90 credits.

Evaluation Criteria and Grading

Ten near-weekly short assignments - 25% Two Midterms - 20% each Final Exam - 35%

Class Policies on Re-grading

If you believe that an assignment or midterm has been misgraded, please contact the TA first.

Required and Recommended Readings

The textbook for this course is Merrilee H. Salmon, *Introduction to Logic and Critical Thinking*, sixth edition. An e-book version of this textbook can be obtained through UBC's bookstore for \$76.95.

Course Schedule

Week	Topic	Reading
1 Sept 4	Introduction to arguments	Salmon, Chapter 1
2 Sept 9 & 11	Introduction to arguments, ambiguity, vagueness, context dependence	Chapter 1 continued, chapter 2 (excluding IV Definitions and V Use and Mention)
3 Sept 16 & 18	Deductive arguments, inductive arguments, and fallacies	Salmon, Chapter 3

4 Sept 23 & 25	Continued, starting chapter 4, midterm review	Chapter 3 continued, starting chapter 4
5	Midterm #1 (Oct 2)	
Oct 2		
6 Oct 7 & 9	Inductive arguments	Salmon, Chapter 4 continued (excluding VI Pro and Con Arguments)
7	Probability	Salmon, Chapter 6
Oct 16		
8	Decision theory and confirmation	Salmon, Chapter 6 and 7
Oct 21 & 23	of hypotheses (qualitative)	
9	Confirmation of hypotheses (quantitative) and midterm review	Salmon, Chapter 7
Oct 28 & 30	(quantitutive) and inititetin review	
10	Midterm #2 (Nov 4)	Salmon, Chapter 8
Nov 4 & 6	Sentential logic	
11	Sentential logic continued	Salmon, Chapter 8
Nov 18 & 20		
12	Sentential logic continued, categorical syllogisms	Salmon, Chapter 8 and 9
Nov 25 & 27	Categorical symogisms	
13	Categorical syllogisms continued	Salmon, Chapter 9 continued
Dec 2 & 4		

UBC VALUES

UBC creates an exceptional learning environment that fosters global citizenship, advances a civil and sustainable society, and supports outstanding research to serve the people of British Columbia, Canada, and the world. UBC's core values are excellence, integrity, respect, academic freedom, and accountability.

ACADEMIC INTEGRITY

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work; nor should you help others to do the same. For example, it is prohibited to: share your past assignments and answers with other students; work with other students on an assignment when an instructor has not expressly given permission; or spread information through word of mouth, social media, websites, or other channels that subverts the fair evaluation of a class exercise, or assessment. Learn more through the <u>Academic Integrity website</u>.

Academic Misconduct:

Violations of academic integrity (i.e., <u>academic misconduct</u>) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply if the matter is referred for consideration for academic discipline. Careful records are kept to monitor and prevent recurrences. Any instance of cheating or taking credit for someone else's work, whether intentionally or unintentionally, can and often will result in at minimum a grade of zero for the assignment, and these cases will be reported to the Head of the Department and Associate Dean Academic of the Faculty

POLICIES AND REGULATIONS

Visit <u>UBC Okanagan's Academic Calendar</u> for a list of campus-wide regulations and policies, as well as term dates and deadlines.

FASS STUDENT RESOURCES

Final Examinations

The examination period for Term 1 of 2024/25 Winter Session is from Monday, December 9 to Friday, December 20 inclusive. Except in the case of examination clashes and hardships (three or more formal examinations scheduled within a 24-hour period) or unforeseen events, students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Unforeseen events include (but may not be

limited to) the following: ill health or other personal challenges that arise during a term and changes in the requirements of an ongoing job.

Students who wish to apply for out-of-time final examinations must fill an <u>online form</u> and submit it to the Associate Dean's office.

Other Academic Concession Requests

Viste the FASS Undergraduate Student Forms page

RESOURCES TO SUPPORT STUDENT SUCCESS

• Student Supports, Resources & Campus Services:

Visit the <u>Student Support and Resources</u> page to find one-on-one help or explore resources to support your experience at UBC Okanagan, as well as many other campus services available to all students.

Advising:

Visit the <u>Advising Options</u> page to find out about the variety of advising options available to students including but not limited to academic, career, and accessibility.

• Walk-In Wellness Service, UBCO Psychology Clinic:

The <u>clinic</u> offers free, brief, single-session psychological services. Sessions are led by a doctoral student in clinical psychology and supervised by a registered psychologist (UBCO Faculty member). Clinicians can provide support with stress management, sleep, self-care, depression, anxiety, interpersonal issues, substance misuse, coping with academic demands/ stressors, and provide options for connecting to additional resources.

- Virtual or in-person sessions are available at the UBCO Psychology Clinic, located in ASC 167 with or without an appointment, on Tuesdays and Thursdays between 10 am and 3 pm from September to June, excluding campus closures.
- Phone: 250-807-8241 (ext. 1). Email: ipc.ok@ubc.ca

Safewalk Services:

Call 250-807-8076 anytime from 6:00 PM until late for a co-ed pair of students <u>UBCEFRT</u> volunteers to walk you to your car, to the bus stop, to your class, to the library, or anywhere on campus!