



UNIVERSITY OF CALGARY
FACULTY OF ARTS
Department of Philosophy

PHIL 377 Lec 01
Elementary Formal Logic
Winter 2020
MW 18:00-19:15, **Given Online**

COURSE OUTLINE

Instructor Name: Dr. Teppei Hayashi (he/him)

Email: thayashi@ucalgary.ca

Office: Social Sciences 1209

Office Hours: MR 15:30-16:30 **via Zoom**

Office Phone:

Teaching Assistant Name: Bonnie Chin (she/her)

Email: kingyeebonnie.chin@ucalgary.ca

Office: Social Sciences 1231

Office Hours: **She doesn't have any particular office hours. You can reach her anytime via email.**

Office Phone: (403) 220-8622

COURSE INFORMATION

This course is an introduction to a formal system which is called *first-order logic*. We will mainly study what a valid argument is, how to prove validity of an argument, and how to translate natural language sentences into a formal one. We will also discuss some *metalogical concepts* like *decidability*, *soundness* and *completeness* of our formal systems.

All the remaining lectures will be given online via Zoom.

PREREQUISITE(S)

There are no prerequisites.

COURSE OBJECTIVES/LEARNING OUTCOMES

The main objective of this course is to make you comfortable in using/applying formal logic in/to your own field (philosophy, computer science, mathematics, linguistics, etc.). More concretely, by the end of this course, you will be able to:

- Tell good and bad arguments apart,
- Translate natural language sentences into a formal language,
- Prove various logical properties (validity, satisfiability, etc.),
- Pay close attention to minute details, and
- Think formally and systematically.

REQUIRED/RECOMMENDED TEXTBOOKS, READINGS AND MATERIALS

We will use an original textbook which will be made available for free on D2L.

I will heavily use an online learning platform; therefore, you will need stable internet access.

COURSE ASSESSMENT AND EVALUATION

There will be three in-class examinations (closed book). The first two examinations will be weighted 30% of the final mark each, and the third examination will be weighted 10% of the final mark. In addition, there will be eight equally weighted assignments. The best six of these will determine 30% of the final mark. There will be no Registrar-scheduled final examination.

The following table will be used to convert final marks into letter grades:

0-45% F	56-60% C-	71-75% B-	86-90% A-
46-50% D	61-65% C	76-80% B	91-95% A
51-55% D+	66-70% C+	81-85% B+	96-100% A+

SCHEDULE OF ASSIGNMENTS AND EXAMINATIONS

<u>Assignment</u>	<u>Given On</u>	<u>Due On</u>
#1	January 15	January 20
#2	January 22	January 27
#3	January 29	February 3
#4	February 5	February 10
#5	March 4	March 9
#6	March 11	March 16
#7	March 25	March 30
#8	April 1	April 6

<u>In-Class Test</u>	<u>Given On</u>
#1	February 12
#2	March 18
#3	April 13

All the assignments and tests are expected to be submitted *electronically*. You will be given 90 minutes to finish tests. If you are in an area whose time zone is different from that of Calgary, please be advised beforehand.

If you encounter any technical issue in submitting your work electronically through D2L or my website, please take a screenshot of the page and send it to me via email.

No late tests or assignments will be accepted under normal circumstances.

COMMUNICATION RULES

You can reach the instructor and/or the TA via email. In emailing us, please observe the following rules.

1. Please ensure that "Phil 377" or some other clearly identifying term occurs in the subject line. Otherwise there is a strong possibility that your message will be deleted unread as spam.
2. If you email to make an appointment, please indicate the times when you are available.
3. Please make sure your first and last names are clearly included in the body of any email message.

We will not respond to email after 7pm or on weekends.

OTHER INFORMATION

Academic Accommodations

It is the student's responsibility to request academic accommodations according to the University policies and procedures. The student accommodation policy can be found at ucalgary.ca/access/accommodations/policy.

Students needing an Accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities.pdf. Students needing an Accommodation in relation to their coursework or to fulfil requirements for a graduate degree, based on a protected ground other than disability, should communicate this need, preferably in writing, to their instructor.

Absence or Missed Course Assessments

Students who are absent from class assessments (tests, participation activities, or other assignments) should inform their instructors as soon as possible. Instructors may request that evidence in the form of documentation be provided. If the reason provided for the absence is acceptable, instructors may decide that any arrangements made can take forms other than make-up tests or assignments. For example, the weight of a missed grade may be added to another assignment or test. For information on possible forms of documentation, including statutory declarations, please see ucalgary.ca/pubs/calendar/current/m-1.html

Student Support and Resources

Full details and information about the following resources can be found at ucalgary.ca/Registrar/registration/course-outlines

- Wellness and Mental Health Resources
- Student Success Centre
- Student Ombuds Office
- Student Union (SU) Information
- Graduate Students' Association (GSA) Information
- Emergency Evacuation/Assembly Points
- Safewalk

Academic Advising

If you are a student in the Faculty of Arts, you can speak to an academic advisor in the Arts Students' Centre about course planning, course selection, registration, program progression and more. Visit the Faculty of Arts website at arts.ucalgary.ca/advising for contact details and information regarding common academic concerns.

For questions specific to the philosophy program, please visit phil.ucalgary.ca. Further academic guidance is available by contacting David Dick (Undergraduate Program Director dgdick@ucalgary.ca) or Jeremy Fantl (Honours Advisor jfantl@ucalgary.ca). If you have questions regarding registration, please email Rebecca Lesser (Undergraduate Program Administrator phildept@ucalgary.ca).

Writing Assessment and Support

The assessment of all written assignments—and, to a lesser extent, written exam responses—is based in part on writing skills. This includes correctness (grammar, punctuation, sentence structure, etc.), as well as general clarity and organization. Research papers must include a thorough and accurate citation of sources. Students are also encouraged to use Writing Support Services for assistance (one-on-one appointments, drop-in support and writing workshops). For more information, and other services offered by the Student Success Centre, please visit ucalgary.ca/ssc.

Online Resources and Electronic Devices

Important information and communication about this course may be posted on D2L (Desire2Learn), UCalgary's online learning management system. Visit ucalgary.service-now.com/it for how-to information and technical assistance.

The instructor reserves the right to establish specific course policies regarding the use of electronic devices. If permitted, the use of devices must be exclusively for instructional purposes, and without disruption to the instructor or fellow students. Devices should be set to silent mode during lectures. Audio or video recording of lectures is not permitted without the written permission of the instructor. Students violating this policy are subject to discipline under the University of Calgary's Non-Academic Misconduct policy.

Academic Misconduct/Honesty

Cheating or plagiarism on any assignment or examination is as an extremely serious academic offense, the penalty for which will be an F on the assignment or an F in the course, and possibly a disciplinary sanction such as probation, suspension, or expulsion. For information on academic misconduct and its consequences, please see the University of Calgary Calendar at ucalgary.ca/pubs/calendar/current/k.html.

Intellectual honesty requires that your work include adequate referencing to sources. Plagiarism occurs when you do not acknowledge or correctly reference your sources. If you have questions about referencing, please consult your instructor.

University Policies

The Instructor Intellectual Property Policy is available at ucalgary.ca/policies/files/policies/Intellectual%20Property%20Policy.pdf

The University of Calgary is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act, as outlined at ucalgary.ca/legalservices/foip. The instructor (or TA) must return graded assignments *directly* to the student UNLESS written permission to do otherwise has been provided.

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright.pdf) and requirements of the copyright act (laws-lois.justice.gc.ca/eng/acts/C-42/index.html).