



UNIVERSITY OF CALGARY
FACULTY OF ARTS
Department of Philosophy

PHIL 279 Lec 01

“Logic I”

Winter Term 2019

Course Outline

Lectures: MW 8:00–9:15, AD 142

Instructor: Samara Burns
Office: Social Sciences 1230
Office Phone: (403) 220-3170
Email: seburns@ucalgary.ca
Office Hours: M 10:00–12:00, or by appointment

Teaching Assistant: Bonnie Chin
Office: Social Sciences 1231
Office Phone: (403) 220-8622
Email: kingyeebonnie.chin@ucalgary.ca
Office Hours: TBD
Tutorials: T01: R 09:00, SA 109
T02: R 10:00, SA 109
T03: F 10:00, SH 288

Course Description

In this course students will learn the basics of truth-functional logic and first-order logic with identity. We will discuss the difference between formal languages and natural language, how to symbolize natural language sentences in a formal language, some basic properties of formal languages, natural deduction and some basic metatheoretic concepts.

A detailed course schedule will be posted to D2L.

Prerequisites

None

Course Learning Outcomes

- Develop competency working with the formal languages of truth-functional and first-order logic, with the ability to translate natural language sentences into a formal language.
- The ability to use truth tables to evaluate sentences in truth-functional logic.
- An understanding of basic semantic concepts such as validity, entailment and logical equivalence, when they apply and how they can be used.
- The ability to construct correct derivations in a natural deduction system for truth-functional and first-order logic, with or without identity.
- The ability to use a proof system to determine whether or not a sentence is a logical truth, whether an argument is valid, and whether two formal sentences are equivalent.
- A basic understanding of some metatheoretic results, including but not limited to, soundness and completeness of a natural deduction system for truth-functional logic.

Required/Recommended Texts

for all x Calgary Remix: *An Introduction to Formal Logic* by P.D. Magnus and Tim Button, with additions by J. Robert Loftis, remixed and revised by Aaron Thomas-Bolduc and Richard Zach. (Required)

The course textbook will be made available for free on D2L.

Course Assessment

Marks will be based on a combination of in-class tests and assignments.

- **Tests:** There will be three in-class tests, on **February 13**, **March 20** and **April 10**. The first and second tests will be worth 20% of the final mark, the third will be worth 10% of the final mark. Tests are closed book - no reference materials will be allowed during the tests. There will be to Registrar scheduled final exam.
- **Assignments:** There will be 5 assignments, each worth 10% of the final mark for a total of 50%.

Assignments are due by 4:00 p.m. on the following dates: **January 23 (A1)**, **February 6 (A2)**, **February 27 (A3)**, **March 13 (A4)**, and **April 3 (A5)**. Assignments may be submitted to the Phil 279, L01 dropbox in the hallway outside SS 1253, or they may be handed in to the TA or instructor in advance of the due date. Assignments will not be accepted electronically. Collaboration on assignments is encouraged, but you must write up your own solutions. At the top of your assignment, please list the names of students that you collaborated with.

Late work

No late assignments will be accepted without first consulting your TA or the instructor in advance of the due date.

Grading Method

Numerical and grade equivalents in the course are as follows: A+ = 95-100; A = 90-94.9; A- = 85-89.9; B+ = 80-84.9; B = 75-79.9; B- = 70-74.9; C+ = 67-69.9; C = 64-66.9; C- = 60-63.9; D+ = 55-59.9; D = 50-54.9; F = 0-49.9.

Students are not required to pass one particular component in order to pass the course.

IMPORTANT DEPARTMENTAL, FACULTY AND UNIVERSITY INFORMATION

Academic Honesty

Cheating or plagiarism on any assignment or examination is regarded 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. See the relevant section K.5 on "Academic Misconduct" in the current University Calendar

<http://www.ucalgary.ca/pubs/calendar/current/k-5.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 correct referencing, consult your instructor.

Academic Accommodation

The student accommodation policy can be found at: <http://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: <http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf>.

Students needing an Accommodation based on a Protected Ground other than Disability should communicate this need, preferably in writing, to their instructor.

D2L Help

Desire2Learn is UCalgary's online learning management system. Important information and communications about this course may be posted on D2L. Go to <https://ucalgary.service-now.com/it> for help.

General Academic Concerns and Program Planning

Have a question but not sure where to start? The Arts Students Centre is your information resource for everything in the Faculty of Arts. Drop in at SS102, call 403-220-3580, or email ascarts@ucalgary.ca. Advisors in the ASC can also provide assistance and advice in planning your program through to graduation. Visit the Faculty of Arts website at <https://arts.ucalgary.ca/advising> for detailed information on common academic concerns

Advice on Philosophy Courses

You may find answers to your more specific questions about a philosophy degree on the Department of Philosophy's website <http://phil.ucalgary.ca>, or contact one of Philosophy's Undergraduate Advisors, David Dick – Undergraduate Program Director (dgdick@ucalgary.ca), Megan Delehanty - Honors Advisor (mdelehan@ucalgary.ca), or Allen Habib (anhabib@ucalgary.ca).

Writing

All written assignments (including, although to a lesser extent, written exam responses) will be assessed at least partly on writing skills. Writing skills include not only surface correctness (grammar, punctuation, sentence structure, etc.) but also general clarity and organization. Research papers must be properly documented. Students are also encouraged to use Writing Support Services and other Student Success Centre Services, located on the 3rd floor of the Taylor Family Digital Library. Writing Support Services assist with a variety of assignments, from essays to lab reports. Students can book 30-minute one-on-one appointments online, sign up for 15-minute drop-in appointments, and register for a variety of writing workshops. For more information on this and other Student Success Centre services, please visit <http://www.ucalgary.ca/ssc>.

Protection of Privacy

The University of Calgary is under the jurisdiction of the provincial Freedom of Information and Protection of Privacy (FOIP) Act. The Department of Philosophy ensures the student's right to privacy by requiring all graded assignments be returned to the student directly from the instructor or teaching assistant.

Internet and Electronic Communication Devices

The instructor reserves the right to establish course policies regarding the use of devices such as laptops, tablets, and smartbooks. If allowed, these devices must be used exclusively for instructional purposes and must not cause disruption to the instructor or to fellow students. Cell phones and paging 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.

Emergency Evacuation:

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at

<http://www.ucalgary.ca/emergencyplan/assemblypoints>. Please check this website and note the nearest assembly point for this course.

Other Helpful Contacts

- Safewalk and Campus Security: 403-220-5333.
- Faculty of Arts Student Representatives: 403-220-6552, arts1@su.ucalgary.ca, arts2@su.ucalgary.ca, arts3@su.ucalgary.ca, arts4@su.ucalgary.ca
- Student Union: <https://www.su.ucalgary.ca/> or 403-220-6551.
- Student Ombudsman: <http://www.ucalgary.ca/provost/students/ombuds>
- Campus Mental Health Strategy: <https://www.ucalgary.ca/mentalhealth/>