

**University of Guelph**  
**Department of Philosophy**  
**PHIL 2110-01 Formal Logic**  
**Winter 2018**

**Instructor:** Karyn Freedman

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**Office:** 354 MacKinnon

**Office Hours:** Mondays & Wednesday, 2:30 – 3:30, or by appointment

**Final Exam:** Thursday, April 19, 2:30 – 4:30, Room TBA

**Classroom:** MacKinnon 229

**Lecture:** M/W 1:00-2:20

**Course Prerequisites**

2.00 credits or (1 of [PHIL\\*1000](#), [PHIL\\*1010](#), [PHIL\\*1050](#))

**Course Description**

This course introduces the basic principles and techniques of analyzing arguments formally. Topics to be covered include: translating natural language arguments into symbolic notation, testing validity using truth tables and interpretations, and deduction rules for sentential and predicate logic. Although symbolic logic *appears* mathematical, it is rather like an artificial language and requires no special aptitude in math. This course is introductory and assumes no prior familiarity with formal logic. **Note: it is very important to not fall behind on the material; the units are cumulative, with each new lesson building on the previous one, so you will need to keep up to speed to do well.**

**Text (required)**

Virginia Klenk, *Understanding Symbolic Logic*, Pearson, 5<sup>th</sup> edition (note: this text is very expensive to purchase, but there are a variety of options for renting it for the semester, including this one: <https://www.barnesandnoble.com/w/understanding-symbolic-logic-virginia-klenk/1100057588>).

**Method of Presentation**

We will meet twice a week during the winter term in MacKinnon 229. Monday classes will be designated for lectures and discussion. Wednesday classes will be divided between lectures, assigned exercises, and a handful of quizzes throughout the term.

The great thing about the Klenk text is that it contains a ton of exercises at the end of every unit. It is crucial that you do these exercises, both in the allotted time in class and also on your own time. Although you will not be graded on assigned exercises (and I will not check to see whether you have completed them all), you will soon discover that you need to do them in order to master the material.

## Course Objectives

Our objectives in this course will be to develop your skills in reasoning logically and analyzing arguments, and to provide a basic grounding in the art of formal reasoning.

## Learning Outcomes

- *Identify* and *critically evaluate* arguments in a way that is clear and well-reasoned;
- *Be skilled* in the use of key tools for sound justification and rational persuasion, including predicate logic and propositional logic;
- *Simplify* and *clarify* the central assumptions of arguments that are couched in specialized or complex vocabulary.

## Method of Evaluation

1. 2 in-class tests (2 x 30%): 60%. The first test will cover all the units preceding it; the second test will cover all the units completed after the first test.
  - *Students unable to write tests for medical reasons must submit a medical certificate.* Students who miss a test for medical or religious reasons will be given an opportunity to do a rewrite.
2. 5 in-class quizzes (5 x 2%): 10%. These quizzes will be given in the last 30 minutes of class, and will consist of a number of (unstarred) exercises from the Klenk book. You can earn a grade of 1/2 if you complete the quiz and get at least some of it right (that is, show decent comprehension of the material), or 2/2 if you complete the quiz and get most of it right (that is, show very good comprehension of the material). You will get a 0/2 if you don't do the quiz or get it entirely wrong.
3. 1 (cumulative) final exam: 30%. This exam will cover all the material in the course.
  - Students who are unable to write the final exam due to medical or religious reasons must follow the guidelines set out in Undergraduate Calendar.

DATE	TOPIC	READINGS
January 8 January 10	Class Mechanics; Introduction Sentential Logic	Unit 1 Unit 2
January 15 January 17	Symbolizing English Sentences (cont'd) <b>quiz #1</b>	Units 3 & 4 (cont'd)
January 22 January 24	WFFs Truth Tables	Unit 21 Unit 5
January 29 January 31	Truth Tables <b>Test #1</b>	Unit 6
February 5 February 7	Proof Method (cont'd) <b>quiz #2</b>	Unit 7 (cont'd)
February 12 February 14	Replacement Rules (cont'd) <b>quiz #3</b>	Unit 8 (cont'd)
February 26 February 28	CP & IP Predicate Logic	Unit 9 Unit 10
March 5 March 7	Quantifiers <b>Test #2</b>	Unit 11
March 12 March 14	Categorical Propositions Symbolization for Predicate Logic	Unit 12 Unit 13
March 19 March 21	Quantifier Form (cont'd) <b>quiz #4</b>	Unit 14 (cont'd)
March 26 March 28	Proofs in Predicate Logic (cont'd) <b>quiz #5</b>	Unit 15 (cont'd)
April 2 April 4	Invalidity in Quantifier Logic <b>Final Exam Review</b>	Unit 16

## **College of Arts Standard Statements**

### **E-mail Communication**

As per university regulations, all students are required to check their <mail.uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

### **When You Cannot Meet a Course Requirement (NB: see below for specific details)**

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. [See the undergraduate calendar for information on regulations and procedures for Academic Consideration.](#)

### **Drop Date**

Courses that are one semester long must be dropped by the end of the fortieth class day (**Friday, 9 March 2018**); two-semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](#) are available in the Undergraduate Calendar.

### **Copies of out-of-class assignments**

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

### **Student Rights and Responsibilities**

Each student at the University of Guelph has rights which carry commensurate responsibilities that involve, broadly, being a civil and respectful member of the University community. [The Rights and Responsibilities are detailed in the Undergraduate Calendar](#)

### **Academic Misconduct**

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

[The Academic Misconduct Policy is detailed in the Undergraduate Calendar.](#)

### **Recording of Materials**

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

### **Resources**

The [Academic Calendars](#) are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.

### **Accessibility**

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

*Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day. [For more information see the SAS web site.](#)*