

# Philosophy 2100: Introduction to Logic Syllabus

**Course Director:** Henry Jackman

**Course Location:** on line

**Course Time:** on line

**Office:** 434 South Ross

**Office hours:** By appointment

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**NOTE:** This is a 'hybrid' course in that (A) the main lectures are delivered on-line, and (B) students must also enrol in a tutorial section that meets for 50 minutes each week. The on-line material can be accessed via the university's Moodle server, and for information about logging on to that, see:

[http://www.ats.yorku.ca/learn\\_moodle/documents/moodle\\_for\\_york\\_students.pdf](http://www.ats.yorku.ca/learn_moodle/documents/moodle_for_york_students.pdf)

## REQUIRED TEXTS:

Jackman: *A Concise Introduction to the Study of Logic*. (Available on-line)

## Brief Course Description

Arguments are central to intelligent discourse and debate, and this course involves the study of a very important aspect of arguments - their logical structure. An argument with true premises (reasons) isn't worth much unless those premises lead logically to the conclusion, so a good understanding of logic is required for a good understanding of arguments. Logical methods are very helpful in determining whether a conclusion really follows from a set of premises, and whether a set of claims is consistent or not.

We will learn to translate English arguments into the languages of symbolic logic, and vice versa. Then we will learn to analyze the notions of equivalence, logical truth, and validity using these languages. We will also learn to construct a special type of argument, called a derivation, in our symbolic languages.

## Course Requirements:

Homework: 30%

Quizzes: 20%

Final exam: 50%

**Homeworks:** Each homework assignment will be worth 3% of your grade. Since solutions will be posted on the web immediately after the due date, late homework's will not be accepted.

**Quizzes:** There will 5 in-tutorial quizzes, the best four of which will count towards your grade. Each quiz that counts will be worth 5%.

**Final Exams:** This exam will be given during the exam period (Dec 5-22). *Students are strongly advised not to make any travel plans until the university has scheduled the date for this exam.*

**Contacting Me:** I check my office voice mail about twice a week, while I check my email about four times a day, so email is by far the best way to get in touch with me. If you do email me, *please include your name, this class's name, and your TA's name with your message.*

### **Class Schedule**

Week 1:	Introduction & Basic Concepts
Week 2:	Sentence Logic: Translations
Week 3:	Sentence Logic: Truth Tables
Week 4:	Sentence Logic: Derivations (Rules of Implication)
Week 5:	Sentence Logic: Derivations (Rules of Equivalence)
Week 6:	Sentence Logic: Derivations (Conditional and Indirect Proof)
Week 7:	Predicate Logic: Translations
Week 8:	Predicate Logic: Derivations (Existential Introduction, Universal Elimination)
Week 9:	Predicate Logic: Derivations (Existential Elimination, Universal Introduction)
Week 10:	Predicate Logic: Derivations (Quantifier Equivalence Rules)
Week 11:	Predicate Logic: Translations and Derivations with relational predicates
Week 12:	Predicate Logic: Translations and Derivations with identity
Dec 5-22:	Exam period

### **Dates to remember:**

September 18:	Last day to enroll without my permission.
October 3:	Last day to enroll with my permission.
November 7:	Last day to drop class without receiving a grade.