





Philosophy (PHIL) 254

Symbolic Logic (Revision 2)

Status:

Replaced with new revision, see the [course listing](#)  for the current revision 

Delivery mode:

Individualized study online 

Credits:

3

Areas of study:

Arts or Humanities

Prerequisites:

None

Precluded:

None

Challenge:

PHIL 254 has a challenge for credit option.

Faculty:

Faculty of Humanities and Social Sciences 

Overview

Philosophy 254: Symbolic Logic is an introduction to reasoning in formal symbolic logic. We will cover the syntax and semantics of classical sentential and predicate logic, translation of English sentences into symbolic form, and procedures for evaluating sentences and arguments, principally natural deduction.

Outline

This course is divided into nine units:



- Unit 1: Introduction to Deductive Logic
- Unit 2: The Language SL
- Unit 3: Truth Tables
- Unit 4: The System SD
- Unit 5: Using SD for Fun and Profit
- Unit 6: SD+
- Unit 7: PL
- Unit 8: Informal Semantics for PL
- Unit 9: PD and PD+

Learning outcomes


Philosophy 254: Symbolic Logic is an introductory course in the formal techniques of argument analysis and evaluation. When you have completed PHIL 254, you should be able to:

- Symbolize English sentences and arguments using symbolic notation
- Use truth tables to evaluate for formal logical properties such as entailment and consistency
- Construct derivations to show that arguments in sentential and predicate logic are valid
- Construct interpretations for predicate logic to demonstrate properties such as consistency and invalidity

Evaluation

Your final mark in PHIL 254 will be based on five equally weighted assignments and a final assessment. To **receive credit**  for this course, you must complete every assignment and the final assessment, receiving an average grade of **D (50 percent)**  on this work. All assignments are graded out of 100 percent.

Activity	Weight	Complete by
Assignment 1	12%	After Unit 3
Assignment 2	12%	After Unit 5
Assignment 3	12%	After Unit 6
Assignment 4	12%	After Unit 8
Assignment 5	12%	After Unit 9
Final Assessment	40%	After completion of all course units and assignments
Total	100%	

To learn more about assignments and examinations, please refer to Athabasca University's **online Calendar** .

Materials

Bergmann, Merrie, James Moor, and Jack Nelson. *The Logic Book*. 6th ed.

Columbus, OH: McGraw-Hill, 2014.  (eText)

Other Materials

All other materials are available online.

Challenge for credit

Overview

The challenge for credit process allows you to demonstrate that you have acquired a command of the general subject matter, knowledge, intellectual and/or other skills that would normally be found in a university-level course.

Full information about **challenge for credit** [↗](#) can be found in the Undergraduate Calendar.

Evaluation

To **receive credit** [↗](#) for the PHIL 254 challenge registration, you must achieve an overall grade of at least **D (50 percent)** [↗](#).

Activity	Weight
Written Assignment	30%
Final Exam	70%
Total	100%



Challenge for credit course registration form

Important links

- > [Academic advising](#) [↗](#)
- > [Program planning](#) [↗](#)
- > [Request assistance](#) [↗](#)
- > [Support services](#) [↗](#)

› **Introduction Video**

Athabasca University reserves the right to amend course outlines occasionally and without notice. Courses offered by other delivery methods may vary from their individualized study counterparts.

Opened in Revision 2, June 11, 2020

Updated October 2, 2024

View **previous revision** [↗](#)
