

PHILO 171 Introduction to Symbolic Logic

Course Description: In this course we will learn how to use symbolic languages for propositional and predicate logic to represent the structure of sentences and arguments in ordinary English. We will then learn to use truth tables and truth trees to test for the key logical properties of logical truth and falsehood, logical equivalence, consistency, logical entailment and validity.

Course Objectives:

1. To be able to define and apply the key concepts of propositional and predicate logic.
2. To be able to use the logical languages of propositional and predicate logic to represent the logical structure of English sentences and to make clear differences in meaning between similar sounding sentences.
3. To be able to translate a sentence in either of our logical languages into ordinary English.
4. To be able to use truth tables and truth trees to test for the key logical properties of sentences, sets of sentences and arguments.
5. To be able to explain how truth tables and truth trees work.