



PHL 135 Introduction to Modern Logic

Summer 2024

Course Credits: 4

Contact Hours: 56 hours

Instructor: TBA

Email: TBA

COURSE OBJECTIVES

This course provides an introduction to modern logic, the systematic study of the laws of truth and reasoning. Logic is the foundation of good reasoning and argumentation, ensuring that conclusions are valid and reliably follow from true premises. Through this course, students will develop essential skills in identifying and constructing valid arguments, employing techniques such as truth tables, models, and truth trees. It is designed to equip students with the essential skills to analyze and construct rigorous arguments, reason critically, and solve complex problems in various fields

Upon Completion of this Course, students will be able to:

1. Understand the fundamental principles of modern logic and its relevance in various fields;
2. Identify and analyze valid and invalid arguments using symbolic logic;
3. Utilize truth tables, models, and truth trees as problem-solving tools;
4. Apply logical reasoning to real-world problems in philosophy, linguistics, mathematics, and computing;
5. Enhance critical thinking and analytical skills through logical analysis.

PREREQUISITES

N/A

GRADING

Grades will be determined by accumulating points, with 100 points being the



maximum, as follows:

ITEM	POINTS
2 Assignments	20 Points
Midterm Exam	20 Points
3 Essays	30 Points
Final Exam	30 Points
Total	100 Points

Late submissions will be graded at the end of the course. Grades will be assigned according to the following rule:

$$A \geq 90 > B \geq 80 > C \geq 70 > D \geq 60 > F.$$

We reserve the right to make adjustments to the overall grading policy.

COURSE MATERIALS

Required Texts:

Patrick Hurley, *A Concise Introduction to Logic*, 13th Edition, Cengage Learning, 2018.

Recommended (Optional) Texts or Other Materials:

None

COURSE TOPICS

MODULE	TASKS
Module 1	<p>Topics: Topic 1: Arguments, Premises, and Conclusions Topic 2: Recognizing Arguments Topic 3: Validity, Truth, Soundness, Strength, Cogency Topic 4: Argument Forms: Proving Invalidity</p> <p>Assessments: Assignment#1</p>
Module 2	<p>Topics: Topic 5: Language: Meaning and Definition Topic 6: The Intension and Extension of Terms Topic 7: Definitions and Their Purposes Topic 8: Criteria for Lexical Definitions</p>



	Assessments: Assignment#2 Essay#1
Module 3	Topics: Topic 9: Fallacies of Relevance Topic 10: Formal Logic Topic 11: Categorical Propositions Topic 12: Propositional Logic Assessments: Essay#2 Midterm Exam
Module 4	Topics: Topic 13: Truth Functions, Truth Tables for Propositions and Truth Tables for Arguments Topic 14: Predicate Logic Topic 15: Using the Rules of Inference Topic 16: Quantifier Negation Rule Assessments: Essay#3
Module 5	Topics: Topic 17: Inductive Logic Topic 18: Analogy and Legal and Moral Reasoning Topic 19: Causality and Mill's Methods Topic 20: Hypothetical/Scientific Reasoning Assessments: Final Exam

ATTENDANCE

1) Class attendance is required. Missing classes without permission will lead to decrease in overall grade.

Missing less than two classes: no penalty.

Missing more than two classes: 7% will be taken off from the overall grade.

If the instructor reports a student's frequent missing of class to the Soochow University Academic Administration Office, the student might get a written warning and might be prohibited from attending final exam.

2) Participants in this course are expected to arrive in class promptly and adequately prepared. The primary objective of this course is to critically engage with the readings and the subject matter. Therefore, course participants are expected to have completed



the reading prior to class and prepare thoughtful reflections/commentaries to share with fellow colleagues.

LEARNING REQUIREMENTS

- 1) Late assignments are not acceptable and are subjected to grade deductions.
- 2) Assignments submitted in the wrong format will be counted as not submitted.
- 3) Failure to submit or fulfill any required course component results in failure of the class.
- 4) Make-up for midterm and final exams only with valid excuses, as defined by the University.
- 5) In order to earn a Certificate of Completion, participants must thoughtfully complete all assignments by stated deadlines and earn an average quiz score of 50% or greater.

TECHNOLOGY POLICY

The use of electronic devices in class is distracting, both for the user and for the rest of the class. Only non-programmable calculators can be used in the tests and exam. Any attempts to use cell phones and other electronic communication devices will be seemed as cheating. Laptops are discouraged, unless you use them for activities DIRECTLY related to the course (eg., note taking, reading course documents).

ACADEMIC INTEGRITY POLICY

Soochow University highly values the academic integrity and aims to promote the academic fairness, honesty and responsibility. Any academic dishonesty behaviors and any attempts to cheats and plagiarism will be reported to the university administration office. A written warning and the relevant penalties will be imposed. The record might be shown on the official university transcript.

DISABILITY ACCOMMODATION

Soochow University is committed to maintaining a barrier-free environment so that students with disabilities can fully access programs, courses, services, and activities at Soochow University. Students with disabilities who require accommodations for



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access to and/or participation in this course are welcome.

Note:

Please contact the University Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material.