PHIL G115: LOGIC AND CRITICAL THINKING

Item	Value
Curriculum Committee Approval Date	12/05/2023
Top Code	150900 - Philosophy
Units	3 Total Units
Hours	54 Total Hours (Lecture Hours 54)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)
Local General Education (GE)	• Area 1B Critical Thinking (GA3)
California State University General Education Breadth (CSU GE-Breadth)	• CSU A3 Critical Thinking (A3)

Course Description

Formerly: Introduction to Logic. This course will focus on the use of arguments both in their occurrence in ordinary discourse and the academic disciplines within the humanities, social sciences and natural sciences with particular focus on deductive logic. The emphasis will be on the role of formal and informal logic in the basic learning skills of oral communication (speech/listening) and written communication (reading/writing). Deductive and inductive reasoning techniques will be critically examined to establish their logical correctness or identify their fallaciousness. Transfer Credit: CSU; UC. C-ID: PHIL 110. **C-ID:** PHIL 110.

Course Level Student Learning Outcome(s)

1. Course Outcomes
2. Employ methodologies of deductive formal logical systems.
3. Employ methods of inductive argumentation.
4. Analyze ordinary language and philosophical arguments.
5. Analyze arguments for informal fallacies.

Course Objectives

- 1. Explain the structure of deductive argumentation and competence in some methods of formal logic.
- 2. Compare and contrast inductive and deductive logic.
- 3. Apply critical reasoning methodologies to works of philosophy, literature, the social sciences, and other persuasive media.
- 4. Write argumentative essays employing critical reasoning while recognizing common fallacies.
- 5. Evaluate one's own system of beliefs, assumptions, inferences, and justifications using the methods of critical reasoning.

Lecture Content

Introduction - The Nature of Logic Deduction - Common Argument Forms Modus Ponens Modus Tollens Disjunctive Syllogism Hypothetical Syllogism Formal Fallacies Arguments in Ordinary Language Deduction - The Sentential Calculus Sentences and Symbols Logical Connectives Statement Forms and Argument Forms Truth Tables Deductive Inferences and Proof Methods Informal Logic Informal Fallacies Analogy and Probable Inference Science and Hypothesis The Role of Logic in Humanities Disciplines Analyzing Arguments in Philosophy Arguments in historical and contemporary moral philosophy Arguments in historical and contemporary political philosophy Arguments in historical and contemporary metaphysics Analyzing Arguments in Literature Arguments with fictional narrative Arguments using metaphors Logic and Culture Non-Western Approaches to Logic Feminist Approaches to Logic

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)

Reading Assignments

Any text, including Open Educational Resources, that contains descriptions of informal and formal logical methodologies with sample problems.

Writing Assignments

Weekly reading quizzes, problem sets, paper, exams.

Out-of-class Assignments

Writing assignments, discussions, quizzes, online assessments.

Demonstration of Critical Thinking

Assess deductive and inductive arguments Analyze philosophical arguments; identify premises and conclusions Evaluate philosophical arguments Distinguish arguments from non-arguments Understand deductive inferences and proofs Identify and analyze informal fallacies

Required Writing, Problem Solving, Skills Demonstration

Truth table and proof completion Short answer/multiple choice quizzes and exams Reading and writing assignments demonstrating the ability to analyze informal logic and fallacies

Eligible Disciplines

Philosophy: Master's degree in philosophy OR bachelor's degree in philosophy AND master's degree in humanities or religious studies, OR the equivalent. Master's degree required.

Textbooks Resources

1. Required Levin, N., Sheley, J.. Introduction to Logic and Critical Thinking: An Open Educational Resource, v1.2 ed. NGE Far Press, 2022

Other Resources

1. Selections from primary sources (Open Educational Resources)