

JAMESTOWN COMMUNITY COLLEGE
State University of New York

INSTITUTIONAL COURSE SYLLABUS

Course Title: Intro to Formal Logic

Course Abbreviation and Number: PHL 2650

Credit Hours: 3

Course Type: Lecture

Course Description: Students will be introduced to modern systems of formal logic. Students will determine the formal validity of arguments in propositional and quantifier logic, make deductions in both systems, and perform translations of ordinary language arguments into formal language.

Prerequisite: ENG 1530.

Student Learning Outcomes:

Students who demonstrate understanding can:

1. Identify fallacies by type and meaning
 2. Analyze an argument and determine its form, validity (deductive) or strength (inductive), and its soundness (deductive) or cogency (inductive).
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Topics Covered:

- Arguments, Premises, and Conclusions
 - Recognizing arguments
 - Deduction and induction
 - Validity, truth, soundness, strength, and cogency
 - Extended arguments
 - Language: Meaning and Definition
 - Varieties of meaning
 - Definitions and their purposes
 - Information Fallacies
 - Categorical Propositions
 - Categorical Syllogisms
 - Standard form, mood, and figure
 - Venn diagrams
 - Logic
 - Symbols and translation
 - Truth functions
 - Truth tables
 - Argument forms and fallacies
 - Natural Deduction in Propositional Logic
 - Rules of implication
 - Rules of replacement
 - Conditional proof
 - Indirect proof
 - Proving logical truths
 - Predicate Logic
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Information for Students

- Expectations of Students
 - [Civility Statement](#)
 - [Student Responsibility Statement](#)
 - [Academic Integrity Statement](#)
 - [Accessibility Services](#)
Students who require accommodations to complete the requirements and expectations of this course because of a disability must make their accommodation requests to the Accessibility Services Coordinator.
 - [Get Help: JCC & Community Resources](#)
 - [Emergency Closing Procedures](#)
 - Course grade is determined by the instructor based on a combination of factors, including but not limited to, homework, quizzes, exams, projects, and participation. Final course grade can be translated into a grade point value according to the following:

| | | | | | | | |
|-------|--------|-----|--------|-----|--------|-----|-----|
| A=4.0 | B+=3.5 | B=3 | C+=2.5 | C=2 | D+=1.5 | D=1 | F=0 |
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 - Veterans and active duty military personnel with special circumstances (e.g., upcoming deployments, drill requirements, VA appointments) are welcome and encouraged to communicate these to the instructor.
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Effective Date: Fall 2021