

Philosophy 110 Introduction to Logic
03
TTH: 11:15 – 12:30 (62030)

INSTRUCTOR: Ron Loo
OFFICE: Palanakila 144
OFFICE HOURS: Mon: 1:00 - 3:00
Tues: 9:10 - 9:40, 2:45 – 4:15
Wed: 1:00 - 3:00
TELEPHONE: 236-9144, rloo@hawaii.edu
EFFECTIVE DATE: Fall 2009

Windward Community College Mission Statement

Windward Community College is committed to excellence in the liberal arts and career development; we support and challenge individuals to develop skills, fulfill their potential, enrich their lives, and become contributing, culturally aware members of our community.

CATALOGUE DESCRIPTION:

A study of the foundations and development of rational thought and communication and their applications. Includes analysis of deductive reasoning, formal and informal fallacies, and the use of symbolic systems. This course meets the AA degree Quantitative Reasoning requirement.

ACTIVITIES REQUIRED AT OTHER THAN REGULARLY SCHEDULED CLASS TIMES:

Study Sessions: Highly recommended.

STUDENT LEARNING OUTCOMES:

At the completion of this course, you should be able to:

1. Recognize fallacies of relevance, presumption, and ambiguity.
2. Employ rules of logic in deductive analysis.
3. Construct truth tables for deductive analysis.
4. Use symbolic systems for deductive analysis.

COURSE CONTENT:

Concepts or Topics

- Basic Logical Concepts
Arguments, Premises, Conclusions
Deductive and Inductive Arguments
Validity and Truth
- Analyzing Arguments
Paraphrasing and Diagramming
Arguments
Recognizing Arguments
Arguments and Explanations
- Fallacies
Fallacies of Relevance
Fallacies of Presumption
Fallacies of Ambiguity
- Symbolic Logic
Modern Logic and Its Symbolic
Language
The Symbols for Conjunction,
Negation, and Disjunction
Conditional Statements and
Material Implication
Testing Argument Validity on
Truth Tables
Statement Forms and Material
Equivalence
- Methods of Deduction
Formal Proof of Validity
The Rules of Inference
The Rules of Replacement
Proof of Invalidity

Skills

1. Recognize premises and conclusions.
2. Differentiate inductive from deductive arguments.
3. Recognize invalid deductive arguments.
4. Paraphrase and diagram single arguments.
5. Recognize an argument.
6. Identify and explain fallacies of relevance, presumption, and ambiguity.
7. Construct your own examples of fallacies of relevance, presumption, and ambiguity.
8. Symbolize propositions and arguments.
9. Use truth tables to determine the validity of arguments.
10. Use truth tables to characterize statement forms as tautologous, self contradictory, or contingent.
11. Construct formal proofs of validity (by using the rules of inference and the rules of replacement).
12. Prove invalidity (by the method of assigning truth values).

COURSE TASKS:

1. Complete all in-class objective quizzes. (These quizzes will require students to recognize and identify fallacies, recognize language functions, symbolize statements and arguments, diagram single arguments, construct truth tables, construct formal proofs of validity, prove invalidity.)
2. Complete all assigned homework from the text, The Worksheet covering chapters 1, 3, 6, 8, 9. (These assignments will test the same skills as those tested in quizzes.) See comment on assigned homework in OTHER INFORMATION.
3. Complete three (3) in-class exams. (The material in this course will be presented in 3 units. An exam will be given upon completion of a unit of study.

MODE OF INSTRUCTION:

Because of the nature of the subject, regular class attendance is essential. Instruction will consist of lectures and problem solving.

METHOD OF GRADING:

1. Letter grades will be assigned based on the number of points accumulated for the course.

A: 450 - 500

B: 399 - 449

C: 348 - 398

D: 297 - 347

F: 246 - 296

W: Formal withdrawal from the course.

METHOD OF GRADING:

2. Weight of tasks:

Homework (or quizzes) 200 = (10 x 20)

Exams $\frac{300}{500} = (03 \times 100)$

LEARNING RESOURCES AND MATERIALS:

Required: Copi, I.M. and Carl Cohen; Introduction to Logic
MacMillan (12th ed.)

Loo, R.J.K. The Worksheet (2nd ed.)

OTHER INFORMATION:

1. Office hours:
to be announced in class.
2. Class attendance:
Regular attendance is expected of all students. Students who are absent often rarely do well in the course.
3. Class preparation:
Students are expected to prepare for each class. This means that students should complete reading and/or writing assignments prior to class.
4. Study sessions:
Study sessions will be offered during the semester to reinforce concepts/principles presented in class. A total of five (5) points can be earned by attending 10 study sessions.
5. Assigned homework:
Assigned homework will consist of completion of only the following exercises from The Worksheet: 1.2, 1.6, 3.2 (P1), 3.3, 8.3 or 8.4, 8.5, 9.1 (P1), 9.1 (P3), 9.2 (P2) or (P3), 9.3. Late homework will be penalized two (2) points per week.

OTHER INFORMATION:

6. Learning assistance:
Because of the nature of the subject matter, students are advised to seek learning assistance from the instructor as soon as they encounter difficulty with reading an/or writing assignments.
7. Absences:
If you are absent, borrow a classmate's notes and copy those for the day you were absent. Students who miss scheduled exams due to unexcused absences will be penalized five (5) points per week for late exams.
8. Cell phones:
Please set your cell phone to "silent" so that the class can focus on the lesson of the day.

DISABILITIES ACCOMMODATION STATEMENT

If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, [HYPERLINK"mailto:lemke@hawaii.edu"](mailto:lemke@hawaii.edu) lemke@hawaii.edu, or you may stop by Hale 'Akoakoa 213 for more information.

Revised May 10, 2007

Philosophy 110
Overview

UNIT 1: What Is Logic?
Arguments, Premises, and Conclusions
Deduction and Induction
Paraphrasing and Diagramming Arguments
Recognizing Arguments
Arguments and Explanations

What Is A Fallacy?
Fallacies of Relevance
Fallacies of Presumption
Fallacies of Ambiguity
Exam #1: Sept. 17 (TH)

UNIT 2: Symbolic Logic
Symbolic Language
Conjunction, Negation, Disjunction
Material Implication
Argument Forms and Arguments
Material Equivalence
Exam #2: Oct. 15 (TH)

UNIT 3: The Method Of Deduction
Formal Proof of Validity
The Rule of Replacement
Proof of Invalidity
Exam #3: Dec. 15 (T) 11:30 - 1:20

*LAST DAY to submit course work for credit: Dec. 10 (TH), 12:30 p.m.