

Philosophy 110 Introduction to Logic  
03  
TTH: 11:30 – 12:45 (64089)

INSTRUCTOR: Ron Loo  
OFFICE: Palanakila 144  
OFFICE HOURS: Mon: 8:45 - 9:45 a.m., 3:00 – 4:00 p.m.  
Wed: 8:45 - 9:45 a.m., 3:00 – 4:00 p.m.  
Thurs 3:00 – 5:00 p.m.  
(Other times by mutual agreement)  
TELEPHONE: 236-9144, rloo@hawaii.edu  
EFFECTIVE DATE: Spring 2012

Windward Community College Mission Statement

Windward Community College offers innovative programs in the arts and sciences and opportunities to gain knowledge and understanding of Hawai'i and its unique heritage. With a special commitment to support the access and educational needs of Native Hawaiians, we provide O'ahu's Ko'olau region and beyond with liberal arts, career and lifelong learning in a supportive and challenging environment — inspiring students to excellence.

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. WCC: FS

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 (custom 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. Students who stop attending this class and who do not formally withdraw from the course will receive a failing grade.
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](mailto: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: Feb. 02 (TH)

UNIT 2: Symbolic Logic  
Symbolic Language  
Conjunction, Negation, Disjunction  
Material Implication  
Argument Forms and Arguments  
Material Equivalence  
Exam #2: Mar. 06 (TH)

UNIT 3: The Method Of Deduction  
Formal Proof of Validity  
The Rule of Replacement  
Proof of Invalidity  
Exam #3: May 08 (T) 11:30 a.m. – 1:20 p.m.

\*LAST DAY to submit course work for credit May 01 (T) 12:45 p.m.