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 300 = (03 x 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, lemke@hawaii.edu, or you may stop by Hale ‘Akoakoa 213 for more information.

Revised May 10, 2007
Phil. 110 Course Outcomes, 6

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.