PHILOSOPHY 110
Fall 2012
COURSE SYLLABUS

Course Number: Philosophy 110
Instructor: Judy Y. Sokei
Office: Bldg. 7, Rm 625
E-mail: jsokei@hawaii.edu

Title: Introduction to Logic
Class Hours: 1 hr in class = 2 hrs+ outside class
Phone: 845-9425 (and voice mail)
Office hours: **MW** 9:15–10:00 am
TR 10:30—11:30 am (or by appointment)

Recommended Preparation: Reading and writing skills at the college level.
Recommended Text: ***Essential Logic: Basic Reasoning Skills for the 21st Century,*** by Ronald C. Pine.

Course Description:
The course aims at developing basic analytic skills and an understanding of the principles and concepts involved in clear thinking. Emphasized will be the difference between empirical truth and logical validity, deductive and inductive reasoning, common logical fallacies, symbolic logic, and scientific method as applied to criteria of reasonable evidence.

This course fulfills the Symbolic Reasoning requirement for the Foundation requirement for Honolulu Community College and the University of Hawaii at Manoa. See the Manoa General Education requirements.

Course Purpose:
This course is based on the assumption that the less we think critically the more someone else will think for us—usually with the intention of manipulating us. From this point of view, logic can be viewed as a defensive tool enabling each of us to defend ourselves against the onslaught of persuasive appeals that bombard our minds daily. Logic is an important element in the development of individual potential—enabling us to be more decisive and freer individuals.

Course Objectives and Student Learning Outcomes: Students will

- demonstrate an understanding of the beauty and power of symbolic systems, as well as their clarity and precision, through use of techniques of logical analysis, with the intention of enhancing the student's reasoning skills and appreciation of abstraction, pattern recognition, and formal systems of analysis
- demonstrate an understanding of the concept of logical proof as a chain of inferences by producing symbolic chains of inferences of their own
- demonstrate skill in hypothetical reasoning, and gain experience in the presentation and critical evaluation of evidence
- demonstrate an ability to use symbolic techniques and formal rules in the context of problem solving by applying symbolic analysis techniques (translating, formal proof techniques, truth tables, argument pattern recognition) both to informal (fallacies) and formal reasoning.

Course Content:
A. A 2 ½ week period of introductory lectures covering basic terminology (Chapters 1-3).
   1. Reading carefully—recognizing arguments and persuasive appeals.
   2. Argument analysis—premises and conclusions.
   3. Deductive and Inductive reasoning.
   4. Valid, Invalid, and Sound arguments.

B. A 2 ½ week period covering common logical (informal) fallacies. Students will be expected to read the daily newspaper and other periodicals and be cognizant of local, national, and international issues (Chapters 4-5). Considerable emphasis will be placed on the formal presentation and critical evaluation of evidence.

Fallacies to be learned:

1. Appeals to Authority
2. Appeals to Popularity
3. Appeals to Loyalty
4. Provincialism
5. Traditional Wisdom
6. Two Wrongs Make a Right
7. Hasty Conclusion
8. Questionable Cause
9. Questionable Analogy
10. Slippery Slope
11. Ad Hominem Abusive
12. Ad Hominem Circumstantial
13. Questionable Dilemma
14. Straw Person
15. Suppressed Evidence
16. Ambiguity-Equivocation
17. Begging the Question
18. Irrelevant Reason
19. Complex Question
20. Appeal to Ignorance

C. A 10 week period covering the basic skills of symbolic logic. Although the material will be presented by lecture and class handouts, a significant portion of the work will consist of student learning groups. Students will be asked to form groups and compare answers to homework problems (Chapters 7-10).

Content:

1. Symbolic Translation
2. Truth Tables
3. Formal Proofs of Validity (Copi's Nineteen Rules of Inference)
4. Brief Truth Tables
5. Multi-valued (Fuzzy) Logic

Evaluation:

Since this course involves a step-by-step introduction of material, **class attendance is very important.** There will be ten quizzes (20pts. each = 200 pts.), a mid-term exam (Chapters 1-5, on informal fallacies = 100 pts.), and a final exam covering symbolic logic (150 pts). There will be **no make-ups of individual quizzes,** but there will be an extra-credit-day (up to 50 pts) prior to the final. Points gained on the extra-credit-day can be used to make up the points of missed quizzes, provided a student has a good reason for missing the quiz. For a student with a final grade of "C" or below, the extra credit points can be used to boost his or her grade one letter. This will be explained further in class. The final grade will be based on a percentage of the total points as follows:

90-100%--A
80-89%----B
66-79%----C
55-65%----D
-54%-------F, N or Inc.

Note: the "N" and "Inc." grades are given only for special circumstances.

Qualified students with disabilities will receive appropriate accommodations in this course. Please speak with me after class or in my office. Students with disabilities may obtain information on available services online at http://honolulu.hawaii.edu/disability. Specific inquires may be made by contacting Student ACCESS at (808) 844-2392 voice/text, by e-mail at access@hcc.hawaii.edu, or simply stopping by Student ACCESS located in Bldg. 5, Rm. 107B.