

I. CATALOG DESCRIPTION:

- A. Department Information:
Division: Humanities and Social Science
Department: Philosophy/Religious Studies
Course ID: PHIL 103
Course Title: Introduction to Logic: Argument and Evidence
Units: 3
Lecture: 3 hours
Prerequisite: None.
- B. Catalog and Schedule Description:
Introduction to the techniques of critical thought, including language analysis, inductive and deductive logic, symbolic logic and the development of scientific method.

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: One

III. EXPECTED OUTCOMES FOR STUDENTS:

Upon completion of this course, students should be able to:

- A. Identify and analyze the structure of arguments, including recognizing conclusions, premises, and inference indicators;
- B. Evaluate the merits of arguments by using the categories of validity, truth (or acceptability) and soundness
- C. Apply the ideas and concepts in the process of identification, analysis, and evaluation of arguments to contemporary situations such as election campaigns, advertisements, and arguments for educational reform.

IV. COURSE CONTENT:

- A. Logic and Argument
- B. Good Argument, Deductive Validity, and Inductive Strength
- C. Categorical Logic
1. Venn Diagrams
 2. Traditional Square of Opposition
 3. Modern Square of Opposition
 4. Categorical Syllogisms
- D. Truth Functional Logic
1. Logical Operators
 2. Symbols and their Uses
 3. Truth Tables
- E. Formal Deduction
- F. Inductive Logic
- G. Informal Fallacies
- H. Evaluating Extended Arguments

V. METHODS OF INSTRUCTION:

- A. Lecture
- B. Discussions (class and group)
- C. Audio-Visuals
- D. Reading of texts, both secondary and primary
- E. Writing tasks appropriate for the material
- F. Computer Tutorials (if applicable)

VI. TYPICAL ASSIGNMENTS:

- A. Reading: Read Richard Nixon's 1952 "Checker's speech." Be able to identify the basic structure of the argument made in that speech. Be able to evaluate the merits of that argument using formal fallacies based on conditional statements. Be able to apply a valid version of logic to Nixon's argument and rewrite the speech based on that valid argument.
- B. Writing, critical thinking: Using the arguments for and against the propositions appearing on the latest California ballot, construct a cogent argument for voting a particular way on that proposition.

VII. EVALUATION:

- A. Methods of evaluation will vary from instructor to instructor, but may include true-false tests, multiple choice tests, or sentence completion tests. In addition, written components such as essay tests, writing tasks (i.e., journals, summary reviews, interpretive essays, and/or term projects) will be included. Telecomputing can include downloading and uploading reading and writing tasks, on-line discussion, and computer tutorials. Grading may be comparative within a class or may be based on an absolute standard.
 - 1. Sample objective test question: "If you are pregnant, then you are a woman. But, you are not pregnant. So, you are not a woman." This is an example of
 - A. modus tollenes
 - B. modus ponens
 - C. affirming the antecedent
 - D. affirming the consequent
 - E. none of the above
 - 2. Sample subjective test question: Write a one paragraph editorial to the San Bernardino Sun that includes at least one formal fallacy and one informal fallacy.
- B. While the frequency of evaluation will depend on the type of evaluation (i.e., "objective" or written), evaluation will take place periodically throughout the semester with enough frequency to be sufficient to measure student progress and will be sensitive to the various learning styles of students. The minimum evaluation will consist of at least two evaluative instruments (i.e., papers, projects, portfolios, or tests) chosen by the instructor of record for the class.

VIII. TYPICAL TEXT(S):

- A. Johnson, Robert M. A Logic Book: Fundamentals of Reasoning. Belmont, CA: Wadsworth Publishing Co., 1999.
- B. Tidman, Paul & Kahane, Howard. Logic and Philosophy. Belmont, CA: Wadsworth Publishing Co., 1999.

IX. OTHER SUPPLIES REQUIRED OF STUDENTS:

Supplementary material may include handouts, primary sources, maps, study guides, computer disks, and/or software.