

# BUTTE COLLEGE

## COURSE OUTLINE

### I. CATALOG DESCRIPTION

**PHIL 6 - Introduction To Logic**

**3 Unit(s)**

**Prerequisite(s):** NONE

**Recommended Prep:** Reading Level IV; English Level IV

**Transfer Status:** CSU/UC

51 hours Lecture

A study of traditional logic with both deductive and inductive reasoning, syllogisms, and fallacies. Practical application of basic skills in orderly and accurate reasoning and communication.

### II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Evaluate, analyze and criticize arguments.
- B. Organize beliefs and ideas in an orderly manner.
- C. Distinguish and evaluate deductive and inductive arguments.
- D. Identify and label various informal fallacies.

### III. COURSE CONTENT

#### **A. Unit Titles/Suggested Time Schedule**

<u>Topics</u>	Lecture	<u>Hours</u>
1. Introduction		8.00
A. General nature of arguments		
B. Arguments vs. expositions		
C. Truth of premises vs. validity of inference		
D. Logical necessity vs. empirical necessity		
E. Deduction vs. induction		
2. Informal Fallacies		10.00
A. fallacies of irrelevance: Appeal to force, ad hominem, argument from ignorance, appeal to pity, appeal to public opinion, appeal to authority, complex question, etc.		
B. Fallacies of ambiguity: Equivocation, composition, division, etc.		
3. Categorical Propositions and Square of Opposition		6.00
A. A,E,I,O propositions		
B. Square of opposition		
4. Categorical Syllogisms		12.00
A. Standard form and order		
B. Immediate inferences		
C. Logical analogies as means of proving invalidity		
D. Venn diagrams		
E. Rules of inference		
5. Propositional logic		9.00
A. Logical Connectives		
B. Symbolizing sentences		
C. Truth tables		
D. Basic argument forms		

6. Induction	6.00
A. Analogical arguments	
B. Inductive generalizations	
C. Causal connections and Mill's Methods	
Total Hours	51.00

#### IV. **METHODS OF INSTRUCTION**

- A. Lecture
- B. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- C. Discussion
- D. Reading Assignments
- E. Multimedia Presentations

#### V. **METHODS OF EVALUATION**

- A. Exams/Tests
- B. Quizzes
- C. Portfolios
- D. Papers
- E. Class participation
- F. Mid-term and final examinations
- G. Students will write at least 1,500 words. This requirement will be met either by essay examinations, take-home tests, short papers, or book reports. (Note: all written work will be evaluated on both its form and content.)

#### VI. **EXAMPLES OF ASSIGNMENTS**

- A. Reading Assignments
- B. Writing Assignments
- C. Out-of-Class Assignments

#### VII. **RECOMMENDED MATERIALS OF INSTRUCTION**

Textbooks:

- A. Hurley, P. J.. A Concise Introduction to Logic. 10 Edition. Wadsworth, 2009.
- B. Copi, I. & Cohen, C.. Introduction to Logic. 13 Edition. Prentice-Hall, 2008.
- C. Howard-Snyder, F., Howard-Snyder, D., & Wasserman, R.. The Power of Logic. 4 Edition. McGraw-Hill, 2008.

Materials Other Than Textbooks:

- A. Supplemental print or online materials

**Created/Revised by:** Daniel Barnett

**Date:** 10/05/2009