

COURSE OUTLINE PHILOSOPHY 102

SECTION I

SUBJECT AREA AND COURSE NUMBER: Philosophy 102

COURSE TITLE: Fundamentals Of Logic

COURSE CATALOG DESCRIPTION: Introduction to deductive and inductive reasoning based upon exercises in class. The course stresses traditional Aristotelian logic. It also briefly introduces mathematical logic.

LECTURE HOURS PER WEEK: 3

CREDIT HOURS: 3

PREREQUISITES: none

SECTION II

- A. SCOPE:** This introductory course is primarily designed for beginners. It also might be of interest to students familiar with mathematical logic who would like to be exposed to the Aristotelian, more language-oriented approach. Classes will include the following: Study of informal fallacies, terms and propositions, categorical, hypothetical, disjunctive and conjunctive syllogisms. A brief introduction to mathematical or symbolic logic, and to dilemma, rhetorical syllogism and literary syllogism. Study of induction and its three main types. Introduction to definition and division.
- B. REQUIRED WORK:** Students will identify fallacies studied in class. Identify categorical, hypothetical, disjunctive and conjunctive propositions and syllogisms. Determine the validity of categorical, hypothetical, disjunctive and conjunctive syllogisms. Identify categorical propositions as A, E, O, or I. Distinguish between the three main types of induction and between deductive and inductive arguments.
- C. ATTENDANCE AND PARTICIPATION:** Since classroom work is an important part of the course, students who are absent, tardy, or inconsistent in completing homework assignments may hinder their own progress. Students are responsible for consulting with the instructor about completing any missed work. Students with more than 4 absences may be asked to withdraw. Students may be asked to confer with the teacher during arranged conference times. In addition, teachers are available for individual consultation during scheduled office hours.
- D. METHODS OF INSTRUCTION:** Methods of instruction will vary according to the instructor, and may include any of the following: lecture/discussion, small group tasks, experimental/exploration, student presentations, use of computer/internet. For more detail, see class syllabus.

E. OBJECTIVES, OUTCOMES, AND ASSESSMENT: The following objectives and outcomes represent the department's core requirements for student achievement.

LEARNING OBJECTIVES	LEARNING OUTCOMES	ASSESSMENT METHODS
To demonstrate an understanding of	Student will	As measured by
1. Distinguish correct and incorrect reasoning.	a) participate fully in class; b) attend regularly and on time c) complete individual and classroom projects; d) take responsibility for knowing, completing and, where necessary, making up assignments on time;	<ul style="list-style-type: none"> • attendance records • class records • assignment records
2. Recognize the most common fallacies.	a) demonstrate an understanding of the fundamentals of logic; b) distinguish logic from other branches of philosophy; c) recognize the difference between symbolic/mathematical and Aristotelian logic; d) recognize informal fallacies: of relevance, of presumption and of ambiguity; e) recognize categorical propositions and immediate inferences; f) recognize categorical syllogisms, including their rules and fallacies; g) recognize hypothetical, disjunctive and conjunctive syllogisms, including their rules and fallacies; h) recognize the non-demonstrative syllogisms: dialectical, rhetorical and literary; i) recognize induction and types of inductive arguments; also probability calculus; j) be familiar with definition and division	<ul style="list-style-type: none"> • exercises in class • take-home exercises • questions in class
3. Test, using logical techniques and methods, many different kinds of reasoning, including their own.	a) identify the informal fallacies; b) identify the four kinds of categorical propositions and determine validity or invalidity of main kinds of immediate inference; c) determine the validity or invalidity of categorical syllogisms and, if invalid, identify their violations/fallacies; d) identify hypothetical, disjunctive and conjunctive syllogisms and determine their validity or invalidity; e) identify and explain the main kinds of inductive inference and main types/kinds of definition and division; f) identify and explain non-demonstrative syllogisms	<ul style="list-style-type: none"> • exercises in class • take-home exercise • practice tests • graded tests

F. TEXTS AND MATERIALS: As selected by individual instructor.

G. INFORMATION G. TECHNOLOGY: Students will use word processing for written assignments