

Common Course Outline

Philosophy 170

Logic

3 Semester Hours

Community College of Baltimore County

Description

Logic

Introduces the basic concepts, principles and methods of deductive and inductive reasoning; emphasizes skills required for recognizing and evaluating arguments from all walks of life; provides tools such as Venn diagrams, truth tables, natural deduction, and Mill's methods of experimental inquiry.

Prerequisites: ACLT 052 or ACLT 053; MATH 081

Overall course objectives

Upon successfully completing this course the student will be able to:

- 1) Recognize arguments as they occur in everyday contexts;
- 2) Analyze arguments into their premises, conclusions, and background assumptions;
- 3) Identify enthymemes, and charitably reconstruct arguments;
- 4) Distinguish deductive from inductive arguments;
- 5) Symbolize a categorical syllogistic, truth-functional, or first order predicate deductive argument, and thereby exhibit its logical form.
- 6) Determine the validity or invalidity of a deductive argument form by applying one or more of the following decision procedures: Venn diagrams, truth tables, or natural deduction;
- 7) Identify common forms of fallacies as they occur in ordinary contexts;
- 8) Recognize and analyze different varieties of inductive arguments;
- 9) Apply Mill's methods of experimental inquiry;
- 10) Apply basic principles of scientific inquiry.

Major Topics

- 1) Truth, objectivity, and language;
- 2) Words, meanings, vagueness, ambiguity, and definitions;
- 3) Rhetoric, persuasion, and argumentation;
- 4) Categorical syllogistic, Truth functional, or Predicate logic;
- 5) Inductive logic;
- 6) Scientific method, and reasoning to the best hypothesis.

Course Requirements

Grading/exams: Grading procedures will be determined by the individual faculty member, but will include the following:

- 1) Homework including problem sets from textbooks, computer tutorial programs, and other materials;
- 2) Quizzes, midterm, and final exam;
- 3) Oral class presentations;
- 4) Collaborative learning exercises.

Writing: The individual faculty member will determine specific writing assignments.

Individual faculty members may include additional course objectives, major topics, and other course requirements to the minimum expectations stated in the Common Course Outline.

The Community College of Baltimore County is committed to providing a high-quality learning experience that results in growth in knowledge, attitudes, and skills necessary to function successfully as a transfer student, in a career and as a citizen. To accomplish this goal, we maintain high academic standards and expect students to accept responsibility for their individual growth by attending classes, completing all homework and other assignments, participating in class activities and preparing for tests.

We take seriously our responsibility to maintain high-quality programs and will periodically ask you to participate in assessment activities to determine whether our students are attaining the knowledge, attitudes and skills appropriate to various courses and programs. The assessment activities may take many different forms such as surveys, standardized or faculty-developed test, discussion groups or portfolio evaluations. We ask that you take these activities seriously so that we can obtain valid data to use for the continuous improvement of CCBC's course and programs.