### PHIL 103 Critical Thinking 3 Credits

Community College of Baltimore County Common Course Outline

### **Description**

**PHIL 103 – Critical Thinking:** is a course that focuses on fundamental principles of reasoning and rationality, with emphasis on logic, argumentation, and real-world applications. Students explore reasoning strategies to analyze and construct effective, evidence-based arguments in dynamic social, ethical, scientific, and technological contexts. The course is designed to encourage students to recognize the value of logical thinking in everyday life circumstances.

Co-requisites: ACLT 053 or (ESOL 052 and ESOL 054)

# **Overall Course Objectives**

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

- 1. identify common cognitive biases and their effects on reasoning;
- 2. evaluate deductive, inductive, and abductive arguments;
- 3. construct deductive, inductive, and abductive arguments;
- 4. identify value assumptions in an argument;
- 5. define truth, belief, and knowledge;
- 6. implement basic probability and statistical reasoning;
- 7. defend a thesis with sustained argumentation;
- 8. reason with and about scientific methodology and technology;
- 9. formulate solutions to conceptual, ethical, and practical problems in a variety of real-world contexts;
- 10. apply critical reasoning to issues of justice and equity arising in multicultural environments;
- 11. identify common formal and informal fallacies;
- 12. apply technology to conduct research for course assignments, group collaborations, and final paper; and
- 13. find, evaluate, use, and cite academically appropriate resources for discussing critical thinking topics.

# Major Topics

- I. Arguments
  - a. Deductive
  - b. Inductive
  - c. Abductive

- d. Evaluation and objection
- II. Barriers to effective reasoning
  - a. Heuristics and cognitive biases
  - b. Formal fallacies
  - c. Informal fallacies
- III. Epistemology
- IV. Applied reasoning in real-world contexts
- V. Basic statistical, scientific, and technological reasoning
- VI. Thesis formation and defense
- VII. Research and documentation skills

#### Course Requirements

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- two exams
- one cognitive biases and fallacies activity
- one argument construction activity
- one technology implementation assignment, such as Artificial Intelligence evaluation or basic coding lesson
- one argumentative written activity which addresses 5 of the 7 GenEd Outcomes and is worth at least 10% of the overall course grade.

Written assignments and research projects: Students are required to use appropriate academic resources in their research and cite sources according to the style selected by their professor.

#### **Other Course Information**

This course is an approved 3–credit General Education course in the Arts and Humanities.

One or more assignments will infuse CCBC General Education Program outcomes and will account for a minimum of 10% of the total course grade. The assignment(s) will allow students to demonstrate at least 5 of the 7 General Education program outcomes.

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