Sophia Learning

PHIL1005: Critical Thinking (ACE recommends 3 credits)

COURSE DESCRIPTION

Critical thinking skills are essential to disciplines like computer programming, business, criminal justice, and many more. It is also one of the key skills employers look for in every industry. In Sophia Learning's Critical Thinking course, students will learn how to think more critically by questioning assumptions and biases and being aware of fallacies. Students will learn to interpret and write deductive and inductive arguments and apply them to real-life situations.

COURSE EFFECTIVE DATES: October 2025 - Present

PREREQUISITES: No prerequisites

LENGTH OF COURSE: This is a self-paced course. Students may use as much or as little time as needed to complete the course.

ACE LEARNING EVALUATIONS RECOMMENDATION: In the lower-division baccalaureate category, 3 semester hours in Critical Thinking (ACE ID: SOPH-0065).

GRADING: This is a pass/fail course. Students must complete 13 Challenges (formative assessments), 4 Milestones (summative assessments), and 2 Touchstones (written summative assessments) with an overall score of 70% or better.

Challenges	Points Possible
Challenge 1.1: Why Learn Critical Thinking?	7
Challenge 1.2: Challenges and Barriers to Critical Thinking	4
Challenge 1.3: Introduction to Fallacies	6

Challenge 2.1: Arguments	3
Challenge 2.2: Quality of Arguments	4
Challenge 2.3: Qualities of Good and Bad Arguments	3
Challenge 3.1: Formal Logic	4
Challenge 3.2: Testing for Validity	5
Challenge 3.3: Constructing Proofs	5
Challenge 3.4: Categorical Logic	4
Challenge 4.1: Types of Inductive Reasoning	6
Challenge 4.2 Probability	4
Challenge 4.3 Moral Reasoning	4
Total	**59**

Milestones	Points Possible
Milestone 1	51
Milestone 2	30
Milestone 3	54
Milestone 4	42
Total	**177**

Touchstones	Points Possible
Touchstone 2: Critique an Argument	100
Touchstone 4: Contrasting Normative Arguments in Standard Form	120
Total	**220**

Grand Total	**456**

Touchstones are projects that illustrate comprehension of the course material, help refine skills, and demonstrate application of knowledge. Read further for information on the touchstones in this course:

- **Touchstone 2: Critique an Argument (100 points):** Students read and respond to an argument written in natural language. They will identify strengths and weaknesses in the argument and make a final determination of the argument as a whole.
- **Touchstone 4: Contrasting Normative Arguments in Standard Form (120 points):** Students will make two contrasting normative arguments about what one ought to do. Both arguments will be about the same

topic; thus, at least one of the arguments will contradict their personal opinion. Students will compose the arguments in standard form, as a series of statements that end with their conclusion.

For more general information on assessments, please visit the Student Guide located on the course dashboard.

LEARNING OUTCOMES

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

1. Describe critical thinking in the context of the philosophies that form and define it, and explain why it is important to making good decisions.
2. Recognize, analyze, and construct logical arguments in standard form as distinguished from persuasive arguments.
3. Analyze and assess different types of deductive arguments for validity using truth tables, proofs, and diagrams.
4. Analyze various inductive arguments such as statistical generalizations, causal and explanatory reasoning, problems of probability, and moral arguments.

COURSE COMPETENCIES AND TOPICS

Unit	Competencies	Major Topics
1. Introduction to Critical Thinking	• Define the characteristics of critical thinking and describe its importance for professional and personal success. • Describe some of the barriers to good critical thinking, including closed-mindedness and bias. • Analyze arguments to spot common fallacies, including formal fallacies with logical errors and informal fallacies that misdirect or include irrelevant information.	• Why Learn Critical Thinking? • Challenges and Barriers to Critical Thinking • Introduction to Fallacies
2. Arguments	• Translate natural language arguments into standard form. • Evaluate arguments for validity or soundness using non-rigorous techniques. • Analyze and translate more nuanced and complicated forms of argument in natural language such as those using rhetorical techniques like assurring, guarding, and discounting, and those with hidden premises.	• Arguments • Quality of Arguments • Qualities of Good and Bad Arguments
3. Analyzing Arguments	• Interpret and translate arguments and statements in formal logic.	• Formal Logic • Testing for Validity • Constructing Proofs

	• Use a more rigorous method for testing arguments for validity. • Use the process of proofs for showing deductive reasoning based on common rules of inference. • Use diagrams and reasoning to test or prove categorical statements and relational statements.	• Categorical Logic
4. Practical Reasoning	• Analyze inductive arguments depending on their purpose, including causal reasoning, explanatory reasoning, analogical reasoning, and statistical generalizations. • Analyze inductive arguments based on laws of probability, both pure probability such as gambling scenarios and those that apply laws of probability to statistical generalizations. • Analyze statements for use of hidden premises using evaluative language. • Engage in moral reasoning based on moral truths and moral duty.	• Types of Inductive Reasoning • Probability • Moral Reasoning