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CUNY School of Professional Studies

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2021

### PHIL 110: Critical Thinking

CUNY School of Professional Studies

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# CUNY School of Professional Studies



## **PHIL 110: CRITICAL THINKING**

General Education -- Undergraduate

Flexible Core – Individual and Society (D)

No pre- or co-requisites

3 Credits

### **COURSE SUMMARY**

Focuses on the techniques of rational inference and analytical judgment. These include the study of informal logic (arguing cogently and recognizing common informal fallacies), formal patterns of reasoning (syllogistic and propositional logic), and some distinctive analytical methods used in scientific and professional disciplines. Provides students with the competencies that are requisite to successful career growth and life-long learning.

### **FLEXIBLE CORE AREA AND LEARNING OUTCOMES – Individual and Society (D)**

1. Gather, interpret, and assess information from a variety of sources and points of view.
2. Evaluate evidence and arguments critically or analytically.
3. Produce well-reasoned written or oral arguments using evidence to support conclusions.
4. Identify and apply the fundamental concepts and methods of a discipline or interdisciplinary field exploring the relationship between the individual and society, including, but not limited to, anthropology, communications, cultural studies, history, journalism, philosophy, political science, psychology, public affairs, religion, and sociology.
5. Articulate and assess ethical views and their underlying premises.
6. Articulate ethical uses of data and other information resources to respond to problems and questions.
7. Identify and engage with local, national, or global trends or ideologies, and analyze their impact on individual or collective decision-making.

*This course addresses all Learning Outcomes*

### **DISCIPLINE-SPECIFIC LEARNING OBJECTIVES**

Students will:

1. Use critical thinking skills to assess information, solve problems, and make decisions
2. Identify, reconstruct and appraise different argument types that appear in print/non-print media
3. Evaluate inductive and deductive inferences using the concepts of validity, soundness, reliability, strength and cogency
4. Recognize and describe common informal fallacies
5. Differentiate between syllogistic and propositional logic
6. Use rules of propositional logic to:
  - a. Distinguish between simple and compound statements, identify statement types based on their connectives, and symbolize statements using standard notation
  - b. Define and apply the concept of logical "scope"
  - c. Validate argument forms through the use of truth tables

- d. Apply rules of implication and replacement to construct proofs
- 7. Describe and exemplify distinctive analytical methods in
  - a. Analogical reasoning
  - b. Legal and moral reasoning
  - c. Causal reasoning and scientific method
  - d. Probabilistic and statistical reasoning.

## REQUIRED TEXT

This is a Zero Textbook Cost (ZTC) course. There is no required textbook, and all required readings will be provided free of charge through the course site.

## PROFESSIONAL CONNECTIONS

This course includes assignments designed to support your continued career development through a focus on competencies identified as key to career success by the National Association of Colleges and Employers (NACE). In particular, this course emphasizes **Critical Thinking/Problem Solving**. Read more about these and other competencies on the [NACE website](#).

## REQUIRED ASSIGNMENTS

REQUIRED ASSIGNMENTS	TOTAL POINTS AVAILABLE
Discussion Board Participation (11 Forums at 60 point each. The lowest scoring Discussion will be dropped)	600
Quizzes (11 multiple choice quizzes between 5 and 10 items each; open-book/open-notes; collaboration not permitted; you make take each test three times, earning your highest grade. The lowest scoring Quiz will be dropped)	100
Capstone Scaffolded Assignments (3 Assignments at 50 points each)	150
Capstone Project (1 Assignment worth 150 points)	150
<b>Total</b>	<b>1000</b>

**Discussion Board:** Each of the eleven course units has a discussion board forum. The forums require students to examine a unit-specific topic identified by the instructor, as well as reply to the posts of other students. Initial posts should be several paragraphs in length, or at least 250 words. Replies may be limited to a paragraph, but should be at least 100 words. A detailed grading rubric for the discussion board is provided in Blackboard. The discussion board assesses Flexible Core Learning Outcomes 1-8, and all Discipline-Specific Learning Objectives.

**Quizzes:** Each of the eleven course units has a low-stakes quiz. The quizzes allow students to review their learning and mastery of the unit material as we move through the course. Each quiz may be attempted multiple times; students will receive the highest of the scores. Each quiz attempt must be taken in a single sitting. Each quiz will be available for multiple consecutive days from 12am of the start date to 11:59pm of the finish date. Quizzes are open-book, open-notes exams. Students may NOT consult with anyone during the test. The tests assess Flexible Core Learning Outcome 4 and Discipline-Specific Learning Objectives 2-6.

**Capstone Scaffolded Assignments:** Students will incrementally submit assignments which will culminate in the Capstone Project. Mastery of these scaffolded assignments is necessary to successfully complete the Capstone

Project. The Capstone Scaffolds assess all Flexible Core Learning Outcomes, and all Discipline-Specific Learning Objectives.

**Capstone Project:** In their capstone project, students demonstrate their mastery of critical thinking in a summative expression of what they have learned in the course. They analyze, reconstruct and critique a complex argument on a contemporary issue. A detailed grading rubric for the essay is provided on p. 8. The Capstone project assesses all Flexible Core Learning Outcomes, and all Discipline-Specific Learning Objectives.

## GRADING DISTRIBUTION

Letter Grade	Ranges %	GPA
A	93-100 percent	4
A-	90-92.9	3.7
B+	87-89.9	3.3
B	83-86.9	3
B-	80-82.9	2.7
C+	77-79.9	2.3
C	73-76.9	2
C-	70-72.9	1.7
D	60-69.9	1
F	Below 60	0

## OTHER REQUIREMENTS

You will need the following to access the online materials for this course:

1. A computer
2. Access to the Internet via a high-speed (broadband) connection (e.g., fiber, cable or DSL);
3. A recent version of a web browser (Internet Explorer, Safari, FireFox, or Chrome); and
4. A CUNY Portal ID to enable you to login to Blackboard, where course materials are kept.

## TIPS FOR SUCCESS

To succeed in this course, **you will need to devote at least 9 to 12 hours per week to the required reading, viewing, and reasoning.** Please devise a schedule (for instance, 2 to 2.5 hours per day, 5 days a week) and keep to it.

In this course, the online Learning Modules are crucial, because they contain the content that you will be conversing about in the Discussion Board. The online video lectures are required viewing, since they supplement the text in important ways. It is your responsibility to access Blackboard regularly and to keep up with the succession of materials, for this is the key to making meaningful contributions to the learning community that will develop in the Discussion Board. And, as you shall discover, the Discussion Board is the most important tool you will have for learning how to **think critically.**

**How to Proceed:** Login to the [CUNY Portal](#) with your portal ID and go to **Blackboard**. The system will recognize you and populate your personal page with the courses you are taking.

**Important Note:** Each unit has a deadline associated with it, and all work should be completed by midnight of the deadline. If you miss a deadline, don't despair. You can always submit, but you'll be penalized for late submissions and for failing to contribute in a timely fashion to our learning community.

**Course Login Policy:** Ideally, students should login daily; a minimum of 4 times per week is recommended. Logins are the online equivalent of attendance. **Infrequent logins will lead to a low final grade.**

## **ACCESSIBILITY AND ACCOMMODATIONS**

The CUNY School of Professional Studies is firmly committed to making higher education accessible to students with disabilities by removing architectural barriers and providing programs and support services necessary for them to benefit from the instruction and resources of the University. Early planning is essential for many of the resources and accommodations provided. For more information, please see: [Disability Services on the CUNY SPS Website](#).

## **ONLINE ETIQUETTE AND ANTI-HARASSMENT POLICY**

The University strictly prohibits the use of University online resources or facilities, including Blackboard, for the purpose of harassment of any individual or for the posting of any material that is scandalous, libelous, offensive or otherwise against the University's policies. Please see: ["Netiquette in an Online Academic Setting: A Guide for CUNY School of Professional Studies Students."](#)

## **ACADEMIC INTEGRITY**

Academic dishonesty is unacceptable and will not be tolerated. Cheating, forgery, plagiarism and collusion in dishonest acts undermine the educational mission of the City University of New York and the students' personal and intellectual growth. Please see: [Academic Integrity on the CUNY SPS Website](#).

## **TUTORING**

CUNY SPS offers all students a variety of tutoring services, free of charge, both online and in person. Please see: [Tutoring](#).

## **HELP DESK**

For assistance with access to CUNY SPS and CUNY computing resources, please see the [Help Desk](#) website for contact details and semester hours.

## **STUDENT SUPPORT SERVICES**

If you need any additional help, please visit [Student Support Services](#).

## COURSE SCHEDULE

Weeks	Readings/Videos	Assignments
1	<p><b>Unit 0: Orientation and Introduction</b></p> <ul style="list-style-type: none"> <li>• Welcome to PHIL 110, “Critical Thinking”</li> </ul>	<p>First discussion forum post due Thursday by 11:59pm Final discussion forum due Sunday by 11:59pm</p>
	<p><b>Unit 1: Questions, Problems and World Views</b></p> <ul style="list-style-type: none"> <li>• Chapters 1 and 2, PHIL 110 Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• PHIL 110, Habits of Good and Bad Thinking</li> </ul>	<p>Unit 1 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Friday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
2	<p><b>Unit 2: Argument Reconstruction, Mapping, and Evaluation</b></p> <ul style="list-style-type: none"> <li>• Chapter 3, PHIL 110 Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• PHIL 110: Unit 2.1 Basics of Argumentation</li> </ul>	<p>Unit 2 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
3	<p><b>Unit 3: Induction and Deduction</b></p> <ul style="list-style-type: none"> <li>• Chapter 4, PHIL 110 Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• Unit 3.1 Principles of Argument Reconstruction</li> <li>• Unit 3.2 Missing Premises and Conclusions</li> <li>• Unit 3.3 Evaluative Arguments and the Is-Ought Gap</li> <li>• Unit 3.4 Extended Arguments</li> <li>• Unit 3.5 Deduction, Validity, Truth and Soundness</li> <li>• Unit 3.6 Invalidity and Counterexamples</li> <li>• Unit 3.7 Induction, Strength and Cogency</li> <li>• Unit 3.8 Self-Test and Summary</li> </ul>	<p>Unit 3 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
4	<p><b>Capstone Project Part 1</b></p> <ul style="list-style-type: none"> <li>• Rubric for Capstone Project</li> <li>• Capstone Project Overview</li> <li>• Part 1 of the Capstone Project</li> </ul>	<p>Capstone Project Part 1 Discussion Forum due by Sunday at 11:59pm</p> <p>Assignment due by Sunday at 11:59pm</p>

Weeks	Readings/Videos	Assignments
5	<p><b>Unit 4: Patterns of Inductions Part 1: Inductive Generalization and Statistical Syllogism</b></p> <ul style="list-style-type: none"> <li>• Chapter 5, PHIL 110 Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• Unit 4.1 Introduction to Inductive Generalization and Statistical Syllogism</li> <li>• Unit 4.2 Statement Types</li> <li>• Unit 4.3 Inductive Generalization</li> <li>• Unit 4.4 Counterexamples</li> <li>• Unit 4.5 Statistical Syllogism</li> </ul>	<p>Unit 4 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
6	<p><b>Unit 5: Patterns of Inductions Part 2: Causal Reasoning and Science</b></p> <ul style="list-style-type: none"> <li>• Chapter 6, PHIL 110 Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• Unit 5.1 Causal Reasoning – Necessary and Sufficient Conditions</li> <li>• Unit 5.2 Mills Methods</li> <li>• Unit 5.3 Correlation and Causation</li> </ul>	<p>Unit 5 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
7	<p><b>Unit 6: Patterns of Induction, Part 3: Analogy</b></p> <ul style="list-style-type: none"> <li>• Chapter 7, PHIL Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• Unit 6: Reasoning by Analogy</li> </ul>	<p>Unit 6 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
8	<p><b>Capstone Project Part 2</b></p> <ul style="list-style-type: none"> <li>• Review the Capstone Project Rubric</li> <li>• Part 2 of the Capstone Project</li> </ul>	<p>Capstone Project Part 2 Discussion Forum due by Sunday at 11:59pm</p> <p>Assignment due by Sunday at 11:59pm</p>
9	<p><b>Unit 7: Flawed Inductive Reasoning, Part 1: Induction – fallacies of distraction, AKA fallacies of relevance</b></p> <ul style="list-style-type: none"> <li>• Chapter 8, PHIL 110 Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• Unit 7.1 Appeal to Emotion Fallacy (ad populum)</li> <li>• Unit 7.2 Fallacies of Appeal to Force and Straw Man</li> <li>• Unit 7.3 Red Herring Fallacy</li> <li>• Unit 7.4 Ad Hominem Fallacy</li> </ul>	<p>Unit 7 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>

Weeks	Readings/Videos	Assignments
	<ul style="list-style-type: none"> <li>• Unit 7.5 The Genetic Fallacy and the Appeal to Consequences</li> </ul>	
10	<p><b>Unit 8: Flawed Inductive Reasoning, Part 2: fallacies of weak induction/fallacies of failed induction</b></p> <ul style="list-style-type: none"> <li>• Chapter 9, PHIL 110 Course Reader</li> <li>• Video Lecture note-taking Sheet</li> <li>• Unit 8.1 Fallacies of Weak Induction, Part 1</li> <li>• Unit 8.2 Fallacies of Weak Induction, Part 2</li> </ul>	<p>Unit 8 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
11	<p><b>Unit 9: Flawed Inductive Reasoning, Part 3: fallacies of illicit presumption/fallacies of unclear language</b></p> <ul style="list-style-type: none"> <li>• Chapter 10, PHIL Course Reader</li> <li>• Video Lecture Note-taking Sheet</li> <li>• Unit 9.1 Fallacies of Illicit Presumption, Part 1</li> <li>• Unit 9.2 Fallacies of Illicit Presumption, Part 2</li> <li>• Unit 9.3 Fallacies of Illicit Presumption, Part 3</li> </ul>	<p>Unit 9 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
12	<p><b>Capstone Project Part 3</b></p> <ul style="list-style-type: none"> <li>• Review the Capstone Project Rubric</li> <li>• Part 3 of the Capstone Project</li> </ul>	<p>Capstone Project Part 3 Discussion Forum due by Sunday at 11:59pm</p> <p>Assignment due by Sunday at 11:59pm</p>
13	<p><b>Unit 10: Deduction, Part 1: Basics of Sentential Logic</b></p> <ul style="list-style-type: none"> <li>• Chapter 11, PHIL 110 Course Reader</li> <li>• Unit 10.1 Sentential Logic, Part 1</li> <li>• Unit 10.2 Sentential Logic, Part 2</li> <li>• Unit 10.3 Sentential Logic, Part 3</li> <li>• Unit 10.4 Sentential Logic, Part 4</li> <li>• Unit 10.5 Sentential Logical, Part 5</li> </ul>	<p>Unit 10 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm Final discussion forum participation due Sunday by 11:59pm</p>
14	<p><b>Unit 11: Deduction, Part 2: Applying Sentential Logic</b></p> <ul style="list-style-type: none"> <li>• Chapter 12, PHIL 110 Course Reader</li> <li>• Unit 11.1 Introduction to Truth Tables</li> <li>• Unit 11.2 How to Construct a Truth Table</li> <li>• Unit 11.3 The Concept of Scope</li> <li>• Unit 11.4 Contingent Sentences</li> </ul>	<p>Unit 11 Quiz due Friday by 11:59pm</p> <p>First discussion forum post due Wednesday by 11:59pm</p>



Weeks	Readings/Videos	Assignments
	<ul style="list-style-type: none"> <li>• Unit 11.5 Logical Equivalence and Logical Consistency</li> <li>• Unit 11.6 Using Truth Tables to Validate Arguments</li> </ul>	Final discussion forum participation due Sunday by 11:59pm
15	<p><b>Capstone Project Submission and Showcase</b></p> <ul style="list-style-type: none"> <li>• Review the Capstone Project Rubric</li> <li>• Capstone Project</li> </ul>	<p>Capstone Project – Submission and Showcase due by Sunday at 11:59pm</p> <p>Due by Sunday at 11:59pm</p>