

COURSE SYLLABUS



Course Title:	Logic	Date submitted:	May 2019 (AAC: 19-25)	
Department:	Humanities			
Curriculum:	Philosophy			
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101) PHL*131 Course Type: L/D A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: Internship M: Seminar P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio	Prerequisites:		
	Elective Type: G/HU/LAS AH: Art History E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science	C- or better in Composition (ENG*101)		
	Credit Hours: 3 Developmental: (yes/no) No Lecture: 3 Clinical: 0	Corequisites:		
	Contact Hours: Lab: 0 Studio: 0 Other: 0 TOTAL:	None		
	Class Maximum: 35 Semesters Offered: F/S	Other Requirements:		
		None		
	Catalog Course Description:	Logic is the study of reasoning. It promotes skill in evaluating persuasive language according to general standards of validity. This course introduces forms of deductive and inductive reasoning and methods of evaluation. Attention is given to argument recognition, fallacy identification, and the analysis of reasoning in ordinary language.		
	Topical Outline: List course content in outline format.	1) Logical Concepts (Proposition and Inference) A) Proposition i) Defined ii) Contrasted with its expression in sentences B) Inference, or Argument i) Consists of propositions related as premises to conclusion ii) Contrasted with other sorts of discourse such as narrative and description		

- C) Extensive practice in recognizing arguments, premises, and conclusions in ordinary language
- D) Basic distinctions in reasoning, between:
 - i) Deductive and inductive reasoning, including:
 - (1) The problem of induction, and a brief overview of the debate as to whether induction constitutes logic at all
 - ii) Merely logically valid reasoning and valid reasoning from true premises
 - iii) Inference and Explanation (covering law model)
- 2) Argument Diagramming
 - A) Techniques for analyzing and diagramming arguments from ordinary language (may include at least i. and may include also ii. and/or iii.)
 - i) Venn diagram
 - ii) Parsing of idiomatic arguments Aristotelian view on validity
 - B) Application of above recognition techniques to more complex patterns of inference
 - C) Some practice in solving logical puzzles using these techniques
- 3) Logic and Language
 - A) Distinctions useful for thinking about argumentation and reasoning in rhetorical situations
 - i) Emotive language
 - ii) Language serving multiple functions
 - iii) Types of definitions
 - iv) Various types of informal logical fallacies
- 4) Techniques of Deductive Logic
 - A) Traditional categorical propositions and methods of diagramming and testing categorical reasoning
 - B) Extensive practice in translating categorical reasoning from ordinary language into clearly structured arguments
 - C) Basic propositional logic: the logic of the relations among propositions of whatever form
 - i) Introduce elementary argument patterns and basic laws of equivalence
 - ii) Implication
 - D) Introduction to logical proofs
 - E) Fundamentals of predicate logic
 - i) Bird's-eye view: formal quantification over subject and predicate terms
 - ii) Framing of concept of predicate logic as material in courses beyond this

	<p>5) Induction</p> <p>A) Rudiments of inductive reasoning</p> <p>B) The problem of induction redux: why some refer to induction as “methodology” rather than logic</p> <p>C) Types of induction, such as:</p> <ul style="list-style-type: none"> i) Reasoning from analogy ii) Cause/effect iii) Residue iv) Variation, v) Others <p>D) Rudiments of scientific explanation, e.g.:</p> <ul style="list-style-type: none"> i) Distinctions between and among theory, hypothesis and observation <p>E) Several examples to introduce forms of inductive reasoning</p>
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <p>COURSE:</p> <ol style="list-style-type: none"> 1. recognize syllogistic inferences 2. analyze arguments for logical structure 3. identify and respond to arguments as they appear in ordinary language, particularly in those found in such communications as persuasive essays, position papers, editorials, political speeches, and advertisements 4. identify the basis of Western logic in Greek philosophy <hr/> <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p> <p>N/A</p> <hr/> <p>GENERAL EDUCATION:</p> <p>2. Critical Analysis/ Logical Thinking - Students will be able to organize, interpret, and evaluate evidence and ideas within and across disciplines; draw reasoned inferences and defensible conclusions; and solve problems and make decisions based on analytical processes.</p> <p>Demonstrates: Identifies the issue(s); formulates an argument; explains and analyzes relationships clearly; draws reasonable inferences and conclusions that are logical and defensible; provides support by evaluating credible sources of evidence necessary to justify conclusions.</p> <p>Does Not Demonstrate: Identifies few or no issues; formulates an argument without significant focus; provides an unclear explanation of analysis and relationships; drawing few reasonable inferences and conclusions that are illogical and indefensible; provides little to no support using credible sources of evidence necessary to justify conclusions.</p> <p>11. Written Communication (embedded) - Students will be prepared to develop written texts of varying lengths and styles that communicate effectively and appropriately across a variety of settings.</p> <p>Demonstrates: Writes articulate texts using appropriate evidence and appeals as determined by the rhetorical situation.</p> <p>Does Not Demonstrate: Writes texts lacking appropriate evidence and appeals as determined by the rhetorical situation.</p>

<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on the following criteria: Student performance will be measured by means of problem sets; exercises; tests; a “logic log” of evidence-based reflections that document the student’s growth mastering logical forms (and bridging such forms to arguments from everyday discourse, the media, and public and professional settings); and, at the instructor’s discretion, quizzes, short papers, short projects, group assignments, and other comparable activities.</p>
<p>Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p>Required: Current library and technological resources are adequate for this course.</p> <p>Desired: None</p>
<p>Textbook(s)</p>	<p><i>Introduction to Logic</i>, by Irving M. Copi and Carl Cohen or comparable text</p>