

Critical Reasoning

Dale Tuggy

Course Description

This course is intended to be an introduction to logic and critical thinking for non-philosophy majors. There are no prerequisites apart from a willingness to work and learn. The course will cover the various sorts of arguments that one can make, showing how to separate the strong from the weak. The focus will be on practical application of formal and informal argument evaluation techniques to arguments such as those found in newspapers editorials, political speeches, court opinions, and arguments between philosophers.

Goals

The goal of this course is to facilitate the development of your critical thinking abilities. The ability to analyze and evaluate arguments has benefits in all walks of life. At bare minimum, you will be a more intelligent consumer, and you will be less subject to manipulation by unreasonable rhetoric in politics and other arenas of debate.

Texts

David Kelley, *The Art of Reasoning*, second expanded edition.

Stephen Hicks and David Kelley *The Art of Reasoning: Readings for Logical Analysis*

Schedule

<u>Day</u>	<u>Topic</u>	<u>Reading</u>	<u>Homework due</u>
UNIT 1: CLASSIFICATION AND DEFINITION			
1.	Introduction	pp. 2-6	
2.	Classification	pp. 11-23	p. 24 1,6,8
3.	Levels of Organization, Writing	pp. 24-9	p. 30 A 5-10; B
4.	Definitions	pp. 35-56	pp. 40-1 1-6; pp. 57-8 A 1-15
5.	Evaluating definitions	H&K pp. 313-5 H&K pp. 120-5, 131-41	H&K pp. 315-6 1-5
6.	<i>Test 1</i>		
UNIT 2: PROPOSITIONS AND ARGUMENTS			
7.	Propositions and Sentences	pp. 65-83	pp. 84 A, 85 C
8.	Arguments	pp. 91-7	p. 97 1-6
9.	Logical Strength	pp. 108-19	p. 120 A 9-12
10.	Evaluating an argument, review		H&K pp. 190-211
11.	<i>Test 2</i>		

UNIT 3: FALLACIES

12.	Subjectivist fallacies	pp. 127-35	p. 136 1-10
13.	Fallacies of Credibility	pp. 136-42	p. 143 1-5
14.	Fallacies of Logical Structure	pp. 143-154	p. 153 1-10
15.	Evaluating a Supreme Court Decision, review	H&K pp. 17-31	H&K p. 30 #1
16.	<i>Test 3</i>		

UNIT 4: DEDUCTIVE LOGIC

17.	Categorical propositions, the Square of Opposition	pp. 192-217	p. 203 1-10 p. 219 D 1-10
18.	Categorical Syllogisms, Venn Diagrams	pp. 240-7	p. 246 1-10
19.	Truth-functional connectives: \neg, \vee, \wedge	pp. 319-25	p. 324 1-10
20.	Truth-functional connectives: \equiv , equivalences	pp. 325-7	p. 327 1-10 Odd
21.	truth tables, complex sentences	pp. 328-35	p. 331 1-15 Odd
22.	truth tables and validity	p. 335-43	p. 343 1-12 Odd
23.	<i>Test 4</i>		

UNIT 5: INDUCTIVE LOGIC

25.	Induction, Mill's methods	pp. 473-97	p. 498 A 1-5, B 1-5
26.	2 inductive arguments examined Analogies, review	H&K pp. 161-8 H&K pp. 153-9 pp. 505-16	p. 168 1,2,5 p. 160 1-3 pp. 508 1-8
27.	<i>Test 5</i>		

Grades

There are 400 possible points for the course, which break down in to the following assignments:

Test 1	50
Test 2	50
Test 3	50
Test 4	50
Test 5	50
Homework	100
<u>Quizzes</u>	<u>50</u>
Total	400