

MORAVIAN COLLEGE
COURSE SYLLABUS
SPRING 2009

PHIL 110 Introduction to Logic
MW 5b (12:50 PM-2:00 PM)
Classroom: Comenius 201
Instructor: Dr. Bernie Cantens
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Office Hours: M and W 11:00 AM – 12:00 PM
T and TR 10:30 AM – 11:30 AM

Text

The Power of Logic (4th Edition) Editors Frances Howard-Snyder, Daniel Howard Snyder and Ryan Wasserman (New York: McGraw-Hill, 2009)

ISBN 978-0-07-3407737-1

Course Description:

In-depth analysis of various types of arguments, including those in knowledge theory and ethics, which relate to professional and social issues; verbal puzzles; categorizing schemas.

Course Goals

- 1)- To help students understand the nature of reasoning.
- 2)- To provide students with the tools for correct reasoning.
- 3)- To help students articulate their thoughts in a clear, organized, and logically persuasive ways.
- 4)-To raise students' awareness of the different forms of pseudoreasoning.
- 5)- To analyze in-depth deductive and inductive arguments and proofs.

Learning Outcomes/Competency

The following outcomes are expected of students who complete this course:

- 1)- Understand the nature of reasoning.
- 2)- Articulate his/her thoughts in a logical and clear fashion.
- 3)- Recognize fallacies
- 4)- Construct good arguments.
- 5)- Evaluate deductive arguments.
- 6)- Evaluate inductive arguments.

Topics:

- 1)- Basic Logical Concepts
- 2)- Identifying Arguments
- 3)- Informal Fallacies

- 5)- Categorical Logic
- 6)- Statement Logic
- 7)- Statement Logic Proofs

Learning Methods:

Readings, lectures, discussions, exercises, and exams.

Attendance Policy:

Attendance is mandatory. Students will lose 1 point for every unexcused absence up to a possible 5 points. Students can make up lost points in unexcused absences by actively participating in class discussions. Unexcused absences included only the following: (1) sickness with a doctors' note, (2) death in the family, or (3) some other extraordinary event.

Academic Dishonesty Policy

See Student Handbook pp. 32 – 38

Student Behavior:

See Student Handbook pp. 38 – 40

Grading/Measures of evaluations:

- Test 1: February 4 20%
- Test 2: February 23 20%
- Test 3: March 23 20%
- Test 4: April 8 20%
- Test 5: May 5 20%

A=100-95; A- =94-90; B+=89-87; B=86-84; B- = 83-80; C+=79-77; C = 76-74; C- = 73-70; D+=69-67; D=66-64; D- 63-60; F=<59

PROGRAM AND READING ASSIGNMENTS

DATE	TOPIC	HOME WORK
	BASIC CONCEPTS	
January 19	Introduction	
January 21	1.1 Validity and Soundness	
January 26	1.2 Forms and Validity Some Logic	1.1(A) 1-10 1.1(B) All 1.1(C) 1-10

January 28	1.3 Counterexamples and invalidity 1.4 Strength and Cogency	1.2(A) 1-10 1.2(B) 1-5 1.2(C) 1-5 1.2(D) 1-5
February 2	Review	1.3(A) 1-10 1.3(B) 1-10 1.4(A) ALL 1.4(B) 1-12 1.4(C) 1-10
February 4	TEST 1	
	IDENTIFYING ARGUMENTS	
February 9	2.1 Arguments and Nonarguments 2.2 Well-Crafted Arguments	
	INFORMAL FALLACIES	
February 11	4.1 Fallacies of Irrelevance 4.2 Fallacies of Ambiguity	2.1(A) 1-10 2.1(B) 1-10
February 16	4.3 Fallacies Involving Unwarranted Assumptions	4.1(A) 1-20 4.1(B) 1-10 4.2(A) 1-10
February 18	Review	4.3(a) 1-10
February 23	TEST 2	
February 25	No Class	
March 3	Recess	
March 5	Recess	
	CATEGORICAL LOGIC	
March 9	5.1 Standard Forms of Categorical Statements	

	5.2 Traditional Square of Opposition 5.3 Further Immediate Inferences	
	CATEGORICAL LOGIC: SYLLOGISM	
March 11	6.1 Standard Form, Mood, and Figure	5.1(A) 1-10 5.2(A) 1-15 5.2(B) 1-10 5.2(C) 1-4
March 16	6.2 Venn Diagrams and Categorical Statements 6.3 Venn Diagrams and Categorical Syllogisms	6.1(A) 1-10 6.1(B) 1-15
March 18	6.4 Modern Square of Opposition	6.3(A) 1-10 6.4(A) 1-5
March 23	TEST 3	
	STATEMENT LOGIC	
March 25	7.1 Symbolizing English Arguments	
March 30	7.2 Truth Tables	7.1(A) 1-20 7.1(C) 1-10 7.1(D) 1-10
April 1	7.3 Truth Tables and Arguments 7.5 Logically Significant Categories	7.2(A) 1-25
April 6	Review	7.3(A,B) 1-20 7.5 (A,B,C, 1-10)
April 8	TEST 4	
	STATEMENT LOGIC: PROOFS	

April 13	8.1 Implicational Rules of Inference	
April 15	8.2 Five Equivalence Rules 8.3 Five More Equivalent Rules	8.1(A) 1-10 8.1(C) 1-20 8.1(D) 1-25
April 20	8.4 Conditional Proofs 8.5 <i>Reductio ad Absurdum</i>	8.2(C) 1-10 8.2(D) 1-10 8.3(C) 1-10 8.3(D) 1-10
April 22	8.6 Proving Theorems	8.4(A) 1-20 8.5(A) 1-10
April 27		8.6(A) 1-20 8.6(B) Challenging Theorems
April 29	Review	
May 5 Tuesday 1:30 PM	TEST 5	

PLEASE, as a courtesy to the other students in the class, turn off all phones upon entering class!