

**MORAVIAN COLLEGE**  
**COURSE SYLLABUS**  
SPRING 2010

PHIL 210 Symbolic Logic  
T TR 6b (2:35 PM - 3:45 PM)  
Classroom: Memorial 301  
Instructor: Dr. Bernie Cantens  
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Office Hours: T and TR 1:00 PM – 2:00 PM

**Text**

*The Power of Logic* (4<sup>th</sup> 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.

**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 doctor's 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

**Disability**

Students who wish to request accommodations in this class for a disability should contact Mr. Joe Kempfer, Assistant Director of Learning Services for Disability Support, 1307 Main Street (extension 1510). Accommodations cannot be provided until authorization is received from the office of Learning Services.

**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%

It is within the instructor's purview to apply qualitative judgment in determining grades for an assignment or for the course.

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**

<b>DATE</b>	<b>TOPIC</b>	<b>HOME WORK DUE</b>
	<b>BASIC CONCEPTS</b>	
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	<b>TEST 1</b>	
	<b>IDENTIFYING ARGUMENTS</b>	
February 9	2.1 Arguments and Nonarguments 2.2 Well-Crafted Arguments	
	<b>INFORMAL FALLACIES</b>	
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	<b>TEST 2</b>	
February 25	<b>No Class</b>	
	<b>CATEGORICAL LOGIC</b>	
March 2	5.1 Standard Forms of Categorical	

	Statements 5.2 Traditional Square of Opposition 5.3 Further Immediate Inferences	
	<b>CATEGORICAL LOGIC: SYLLOGISM</b>	
March 5	6.1 Standard Form, Mood, and Figure 6.2 Venn Diagrams and Categorical Statements 6.3 Venn Diagrams and Categorical Syllogisms	5.1(A) 1-10 5.2(A) 1-15 5.2(B) 1-10 5.2(C) 1-4
March 9	<b>Recess</b>	
March 11	<b>Recess</b>	
March 16	6.4 Modern Square of Opposition	6.1(A) 1-10 6.1(B) 1-15 6.3(A) 1-10
March 18	Review	6.4(A) 1-5
March 23	<b>TEST 3</b>	
	<b>STATEMENT LOGIC</b>	
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	<b>TEST 4</b>	
	<b>STATEMENT LOGIC: PROOFS</b>	
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 Proving Theorems (continued)	8.6(A) 1-20 8.6(B) Challenging Theorems
April 29	Last day of Class: Review	
May 7 Friday 6:30 PM	<b>TEST 5</b>	

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