PHIL 1000: Logic 101

Instructor: Mr. Daniel Adsett
Time: 8:00 AM - 8:50 AM
Location: Marquette Hall 105

Days: Mondays, Wednesdays, and

**Fridays** 

Dates: January 12<sup>th</sup> – May 2<sup>nd</sup>
Office: Coughlin Hall 132F

Office Hours: Monday 10:00 AM - 11:30 AM

Tuesday 1:00 PM - 2:30 PM

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### **Required Text:**

Patrick J. Hurley. *A Concise Introduction to Logic*, 12<sup>th</sup> Edition. United States: Cengage Learning, 2015. ISBN 10: 1285196546

#### **Description:**

This course serves as an introduction to various forms of logical reasoning. We will examine the basic elements of argumentation, propositional logic, informal fallacies and, inductive reasoning. By the end of the course, students should be familiar with the fundamental characteristics of logic – what logic is and is not, logical fallacies, and symbolic logic.

### **Course Objectives:**

- 1. Knowledge of the distinguishing features of arguments
- 2. An ability to work comfortably with propositional logic
- 3. An awareness of how both formal and informal logic relate to life experiences
- 4. Knowledge of the differences and characteristics of deductive and inductive reasoning

### **Grading:**

There will be six quizzes, five problem sets, two mid-terms, and one exam. The final grade will be based on these tests, problems sets, and attendance. Beginning after Martin Luther King Jr. Day, one point will be given for each class attended for a total of 40 points (39 points plus an additional one to make it even). Students with more than six excused or unexcused absences before 4/10/15 will be withdrawn from the course. Each individual quiz and problem set will be worth 14 points but all 5 quizzes 6 problem sets, taken together, will be graded out of 110 points. Each mid-term will be worth 75 points and the final exam will be worth 200. Quizzes and mid-terms missed for unexcused reasons will not be able to be taken at an alternative time. Problem sets must be handed in during or before class on the days they are due. In all, each student's final grade will be out of 500:

Attendance: 40
Quizzes: 110
Mid-Term I: 75
Mid-Term II: 75
Final Exam: 200
Total: 500

### **Grading Scale (Letter Grade/Percentage/Points):**

Α	94-100 (467.50-500)	С	70-75 (347.50-377.49)
AB	88-93 (437.50-467.49)	CD	64-69 (317.50-347.49)
В	82-87 (407.50-437.49)	D	58-63 (287.50-317.49)
ВС	76-81 (377.50-407.49)	F	0-57 (0-287.49)

#### **Important Dates:**

Mid-Term I: February 4th

Mid-Term II: March 27<sup>th</sup>

Exam: May 5<sup>th</sup>, 10:30 AM – 12:30 PM

### **Attendance Policy:**

As already outlined in the **Grading** section, students with more than six excused or unexcused absences before 4/10/15 will be withdrawn from the course. Beginning after Martin Luther King Jr. Day, one point will be given for each class attended for a total of 40 points (39 points plus an additional one to make it even). At the instructor's discretion, failure to participate in class and repeated failure to complete homework will count against the attendance grade – losing up to one point per day – but not the possibility of being withdrawn. Quizzes and mid-terms missed for unexcused reasons will not be able to be taken at an alternative time. However, quizzes and mid-terms missed for (1) severe health reasons (more than a cold, flu, or bodily ache), (2) jury duty, or (3) university sanctioned activities and related travel will be able to be taken at an agreed upon time.

#### **Policies for Late Work and Extra Credit:**

Late problem sets will not be accepted. If it is impossible, for one reason or another, to attend class the day the problem set is due, students must either (1) submit the problem set early or (2) scan and e-mail the problem set to the professor before class on the day it is due. There will be no make-up work for students who miss quizzes and/or mid-terms for unexcused reasons. However, each quiz and problem set will be graded out of 14 points for a total of 154 points. Because all quizzes and problem sets taken together will be graded out of 110, students will be able to earn up to 44 additional or extra points that will count toward the final grade.

#### **Policy on Electronic Devices:**

Students caught using cellphones or computers in class will lose 2 points per class and should not expect to be informed when they lose these points. Students are encouraged to use the digital copy of the textbook at home but not in class.

#### **Academic Dishonesty:**

Anyone found cheating on a quiz, mid-term, or the final exam will receive a grade of zero and will be promptly reported. Those found providing answers to another student or allowing another student to cheat will also receive a grade of zero. For precise definitions of cheating, consult the definition found here: http://bulletin.marquette.edu/undergrad/academicregulations/

# **Disability/Special Needs:**

Anyone with a confirmed disability or special need should contact me promptly so that appropriate accommodations, if needed, can be supplied.

## Schedule:

Date		Topic	Pages	Deadlines		
January	12	Introduction	NA			
	14	Arguments, Premises, and	4.42			
		Conclusions	1-13			
	16	Recognizing Arguments	14-33	Quiz I		
	19	Martin Luther King Jr. Day – No Class				
	21	Deduction and Induction/Validity,	33-58			
		Truth, Soundness, Strength, Cogency	33-38			
	23	Argument Forms: Proving	FO 70	Quiz II		
		Invalidity/Extended Arguments	59-79	Quiz II		
	26	Varieties of Meaning	80-95			
	28	The Intension and Extension of	96-104			
		Terms/Definitions and Their				
		Purposes				
	30	Definitional Techniques/Criteria for	104-121	Quiz III		
		Lexical Definitions	104-121			
February	2	Review	NA			
	4	NA	NA	Mid-Term I		
	6	Symbols and Translation	316-329			
	9	Truth Functions	330-341			
	11	Truth Tables for Propositions	342-350			
	13	Truth Tables for Arguments	351-357	Problem Set I		
	16	Indirect Truth Tables	358-367			
	18	Argument Forms and Fallacies I	367-385			
	20	Argument Forms and Fallacies II	367-385	Problem Set II		
	23	Rules of Implication I	388-401			
	25	Review	NA			
	27	Rules of Implication II	401-410	Problem Set III		
March	2	Rules of Replacement I	411-424			
	4	Review	NA			
	6	Rules of Replacement II	424-437	Problem Set IV		
	9					
	11	Spring Break – No Class				
	13					
	16	Conditional Proof	437-443			
	18	Indirect Proof	443-449			
	20	Proving Logical Truths	449-453	Problem Set V		
	23	Review	NA			

	25	Review	NA			
	27	NA	NA	Mid-Term II		
	30	Fallacies in General/Fallacies of	122-142			
		Relevance				
April	1	Fallacies of Weak Induction	143-160			
	3	Easter Break – No Class				
	6					
	8	Fallacies of Presumption, Ambiguity,	160-181			
		and Illicit Transference				
	10	Fallacies in Ordinary Language	182-199	Quiz IV		
	13	Analogical Reasoning/Legal	524-543			
		Reasoning/Moral Reasoning	324-343			
	15	Review	NA			
	17	Review	NA	Quiz V		
	20	The Hypothetical				
		Method/Hypothetical Reasoning:	609-618			
		Four Examples from Science				
	22	The Proof of Hypotheses/The	618-631			
		Tentative Acceptance of Hypotheses	010-031			
	24	Causality and Mill's Methods	544-568	Quiz VI		
	27	Review – Formal Logic	NA			
	29	Review – Informal Fallacies	NA			
May	1	Overall Review	NA			