

PHIL 1011: INTRODUCTION TO LOGIC

SPRING 2023 (online)

Instructor

Matthew Willis

willi4m7@mail.uc.edu

Office hours: Thursdays 1-2PM and by appointment

Course Description

This is an introductory course to the basics of logic. You will learn how to analyze arguments, symbolize them into formal language, and to construct proofs of them in both Aristotelean and modern logic. These skills will help you to critically evaluate arguments in daily life and to formulate your own arguments clearly and rigorously. Mastery of logic requires effort and it is easy to fall behind should you become lax. You will need to read the assigned readings and invest time into the assigned homework problems each week, but you are always encouraged to reach out to me by email or during scheduled office hours should you ever have any questions.

Course Texts

We will be using *forall x: Calgary* (2021) by Tim Button. It is an open-access textbook that you can find (for free) on our Canvas page.

Course Requirements and Grading

Exams (50,50,75, & 75 points): There will be four exams in this course. Each exam will focus primarily on the material covered since the prior exam, but prior material may also appear on each exam. Exams will be submitted on Canvas.

Out of 250 possible points.

232-250 points – A

224-231 points – A-

216-223 points – B+

208-215 points – B

200-207 points – B-

192-199 points – C+

183-191 points – C

175-182 points – C-

150-174 points – D

149 points or fewer – F

Course Policies

Late Work: It is incredibly important that you turn your exams in on time. I will not accept a late exam unless you have some extenuating circumstance that calls for such an arrangement. In such

an event, you should contact me as soon as possible in order to arrange for an alternative assignment.

Necessary Technology: Given that this is an online course, there are some obvious technological necessities required for your success in the course (reliable access to a computer with the Internet, etc.), but you will also need access to some form of technology that allows you to transform handwritten work into a digital form (a smartphone camera, scanner, etc.).

Contact: As this is an asynchronous online class, all communication will be digital. I highly encourage you to utilize my email if you have any questions whatsoever related to the course. I will make every effort to respond to you in a timely manner, though you should not expect immediate responses during the weekend or late at night. *When emailing me, it would be immensely helpful if you could include the course name in your subject or message body.*

I will host weekly Zoom sessions for office hours, Thursdays 1-2PM. A link will be provided for these meetings on our course Canvas page. You may also schedule an individual Zoom meeting with me by email.

All assignments, readings, course adjustments, etc. will be announced through Canvas. I will also provide you with ample feedback on your assignments for this course through Canvas.

Academic Integrity: The University of Cincinnati's code of conduct will be in effect. Those in violation will fail the course and be subject to applicable penalties from the University. UC's rules are available at the following link: [http://www.uc.edu/conduct/Academic Integrity.html](http://www.uc.edu/conduct/Academic%20Integrity.html).

Special Needs and Accommodations

I want all students to have an equal opportunity to succeed in this course. If you have a disability (visual, hearing, physical, psychological, cognitive, learning, ADD, medical condition, etc.) which may influence your performance in this course, the university will make reasonable accommodations for you to ensure an equitable opportunity to meet all the requirements of this course. If you require accommodations due to disability, please contact Accessibility Resources at 513-556-6823, Campus Location: [Commons Edge North](#). You will be provided an Accommodation Form indicating your accommodation needs for the semester. Please present this form to me as soon as possible to ensure your accommodation needs are discussed, agreed upon, and provided.

Any student requiring accommodation for religious observances should notify the instructor in advance so that adequate accommodation can be provided.

This syllabus (including the Course Schedule below) may change at the instructor's discretion, though students will be promptly notified of such changes.

Course Schedule

Week & Dates	Notes & Holidays	Topic	Reading
Week 1		Arguments, validity, and soundness	Chapters 1-2
Week 2	MLK Day (1/16)	Necessity and contingency	Chapter 3
Week 3		Categorical propositions	"Categorical Propositions" on Canvas
Week 4		Categorical syllogisms	"Categorical Syllogisms" on Canvas
<i>Exam 1 posted Due on 2/10 by 11:59PM.</i>			
Week 5		Introduction to TFL	Chapters 4-6
Week 6		Truth tables	Chapters 9 & 11
Week 7		Truth tables and semantic concepts	Chapters 12 & 14
<i>Exam 2 posted Due on 3/3 by 11:59PM.</i>			
Week 8		Introduction to natural deduction: reiteration and conjunction	Chapters 15-16.3
Week 9		Conditionals and assumptions	Chapters 16.4-16.5
Week 10		Biconditional and disjunction	Chapters 16.6-16.7
Week 11	Spring Break (no classes)		
Week 12		Contradiction and negation	Chapter 16.8
<i>Exam 3 posted Due on 4/7 by 11:59PM.</i>			

Week 13	Proofs	Chapter 17
Week 14	Additional proof rules	Chapter 18
Week 15	Introduction to FOL	Chapter 22
<i>Exam 4 posted / Due on 4/28 by 11:59PM.</i>		