

Symbolic Logic

Philosophy 4040, Fall 2017

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Office Hours: W 2-4pm, and by appointment

Course Overview

PHIL 405 introduces students into the formal study of argument form and analysis by introducing truth-functional sentential and first-order predicate logic. If you commit to this course and seek out help before you fall behind, you will be successful. The main commitment you must make is to carefully read the material *before* coming to class and make an effort to do all assigned problems before class time.

Required Texts

You may find an open access version of our textbook: *forallx: Cambridge Edition* here: www.klindeman.com/logic.html

Assessment

- 1. Exam portion one – 30%**
- 2. Exam portion two – 30%**
- 3. Exam portion three – 30%**
- 4. In-class quizzes – 10%**

Exam Portioning

Logic is the sort of subject where understanding can come in waves. At first, you might just do your homework mechanically, and not really understand what you're doing. Then *boom*, suddenly it will all make sense.

Because the goal of this class is for you to *learn* the material and the purpose of the grade is to reflect how much you've learned by the *end* of the semester, the grade structure of the course is set up to encourage dedicated work throughout the semester while having the final grade reflect final understanding.

To that end, the material in the class is divided into three portions, and there are five opportunities to be tested on those portions. The first portion will cover material taught from 9/5-9/19, the second portion will cover material taught from 9/28/10/31, and the third portion will cover material 11/7-12/5.

There will be five opportunities to take the first portion: 9/26, 10/12, 11/2, 12/7, and during the final exam period (on 12/14). You will have three opportunities to take the second portion: 11/2, 12/7 and 12/14. You will have two opportunities to take the third portion: 12/7 and 12/14.

In order to receive a grade for the course, each portion must be taken at least once. I strongly suggest that you take each section as soon as it is available. Exam portions may be taken as many times as it is offered, and the highest grade will be recorded in your final grade.

In-class Quizzes

There will be frequent in-class quizzes, the purpose of which are to help you assess your understanding

of the material and skills introduced in the reading and give you an opportunity to see how long it takes you to solve problems in test-taking situations.

These quizzes make up a *very* small portion of your grade, but serve a *very* important function in providing feedback on your understanding of course material. Please, take them seriously but do not worry about their affect on your grade. I promise you that if you take these in-class quizzes, they will not negatively affect your grade in this class.

Class Time

The class time is run like a review session. We are moving at a quick pace that requires you to put in effort before class to become familiar with the main concepts. By attending class, you are implicitly signaling that you have read the assigned material and completed and reviewed the answers of the assigned practice exercises. I will not collect these practice exercises, but I will assume that you have done the exercises and are prepared to discuss them in class.

Class will involve a student-guided review of material that was unclear or challenging from the reading and exercises. If there are no questions, I will pose some review problems for students to explain at the board. If we exhaust the review problems, and there are no further questions from students, class will be dismissed early.

Email and Communication Policy

I try to answer all emails within 24 hours of receipt, but please know that I am human and receive an overwhelming amount of email. If you do not get an email within 24 hours, please feel free to send me a (polite) reminder email. I appreciate polite reminders. It is not personal if your email falls off my radar, and I promise I will not hold a polite reminder against you.

Office Hours

My posted office hours are times I have specifically set aside to meet with students and handle class-related matters on campus. However, I'm often in my office. You are welcome to come by my office at other times or email me for an appointment outside of my office hours. If I am unable to hold office hours at the usual time, I will email students to inform them of alternate office hours that week.

Gadgets

My typical class-room policy is to ban electronic gadgets of all kinds (laptops, cell phones, ipads, kindles, etc.) because they introduce distractions and are not conducive to class discussion and learning. However, in this course we have a textbook that is primarily available in pdf.

So, you may have a laptop or tablet-style computer to read the textbook, but you *must* have the wifi **turned off** on this device at all times during class. *There are no exceptions*, and students who violate this policy will have their grades lowered by a half letter grade for each infraction after one warning.

Other Students As Resources

If you are unable to attend class for any reason, the person you should contact is a fellow logic student. Nicely ask to copy their notes. Ask if any course details were discussed. *Please do not email me for this purpose.*

You're encouraged to work with other logic students in doing your review problems. If you don't understand something, having another student explain it to you before class will benefit you. If you understand something that your logic buddy hasn't gotten yet, explaining it to them will help strengthen your grasp on it. If neither of you understand something, that is a great question to bring up during class time to discuss with the whole class.

To this end we will be exchanging contact information with a few other students during the first class.

Academic Integrity

Academic integrity is honest, truthful and responsible conduct in all academic endeavors. The mission of Saint Louis University is "the pursuit of truth for the greater glory of God and for the service of humanity." Accordingly, all acts of falsehood demean and compromise the corporate endeavors of teaching, research, health care, and community service through which SLU embodies its mission. The University strives to prepare students for lives of personal and professional integrity and therefore regards all breaches of academic integrity as matters of serious concern. The governing University-level Academic Integrity Policy was adopted in Spring 2015, and can be accessed on the Provost's Office website: <https://www.slu.edu/the-office-of-the-provost/academic-affairs-policies>

Additionally, each SLU college, school and center has adopted its own academic integrity policies, available on their respective websites. All SLU students are expected to know and abide by these policies, which detail definitions of violations, processes for reporting violations, sanctions, and appeals. Please direct questions about any facet of academic integrity to your faculty, the chair of the department of your academic program, or the dean/director of the college, school or center in which your program is housed. Specific College of Arts and Sciences Academic Honesty Policies and Procedures may be found at http://www.slu.edu/Documents/provost/policies_procedures/Academic_Integrity_Policy.pdf

It is my policy to refer all violations of this policy to the Academic Integrity Board.

Title IX Statement

Saint Louis University and its faculty are committed to supporting our students and seeking an environment that is free of bias, discrimination and harassment. If you have encountered any form of sexual misconduct (e.g. sexual assault, sexual harassment, stalking, domestic or dating violence), we encourage you to report this to the University.

If you speak with a faculty member about an incident of misconduct, that faculty member must notify SLU's Title IX coordinator, Anna R. Kratky (DuBourg Hall, room 36; anna.kratky@slu.edu; 314-977-3886) and share the basic fact of your experience with her. The Title IX coordinator will then be available to assist you in understanding all of your options and in connecting you with all possible resources on and off campus.

If you wish to speak with a confidential source, you may contact the counselors at the University Counseling Center at 314-977-TALK. View SLU's [sexual misconduct](#) policy here: <http://www.slu.edu/general-counsel-home/office-of-institutional-equity-and-diversity/sexual-misconduct-policy>.

Student Success Center

In recognition that people learn in a variety of ways and that learning is influenced by multiple factors (e.g., prior experience, study skills, learning disability), resources to support student success are available on campus. The Student Success Center assists students with academic related services, and is located in the Busch Student Center (Suite, 331) and the School of Nursing (Suite, 114). Students who think they might benefit from these resources can find out more about:

- Course-level support (e.g., faculty member, departmental resources, etc.) by asking your course instructor.
- University-level support (e.g., tutoring services, university writing services, disability services, academic coaching, career services, and/or facets of curriculum planning) by visiting the Student Success Center.

Disability Services Academic Accommodations

Students with a documented disability who wish to request academic accommodations are encouraged to contact Disability Services to discuss accommodation requests and eligibility requirements. Please contact Disability Services, located within the Student Success Center, at disability_services@slu.edu or 314-977-3484 to schedule an appointment. Confidentiality will be observed in all inquiries.

Once approved, information about academic accommodations will be shared with course instructors via email from Disability Services and viewed within Banner via the instructor's course roster.

Tentative Reading Schedule

We might get slightly ahead of (or more likely behind) schedule. If so, adjustments will be made.

	Date	Topic	Required Reading	Assignments Due
1	08/28/17	Introductions		Read this Syllabus and establish email contact with your logic buddies.
	08/31/17	Mass of the Holy Spirit	<i>No Class</i>	
2	09/05/17	Arguments	<i>forallx</i> Ch 1, section 1, 2	Practice exercises on p3 and p6
3	09/07/17	Truth, Falsehood, Contingency	<i>forallx</i> Ch 1, section 3	Practice exercises on p10
4	09/12/17	Logical Symbols	<i>forallx</i> Ch 2, section 4, 5	Practice exercises on p23-24 A, B, C
5	09/14/17	Logical Connectives	<i>forallx</i> Ch 2, section 5	Practice exercises on p24-25 D, E, F (optional: G)
6	09/19/17	Sentences in Symbols	<i>forallx</i> Ch 2, section 6, 7	Practice exercises on p29
7	09/21/17	Exam Review	Review Ch 1 & Ch 2	<i>Practice Exam</i>
8	09/26/17	In-class exam period		<i>none</i>
9	09/28/17	Truth Tables	<i>forallx</i> Ch 3, section 8, 9, 10	Practice exercises on p45
10	10/03/17	Constructing Truth Tables	<i>forallx</i> Ch 3, section 11-12	Practice exercises on p50-51 (try the ones on p55)
11	10/05/17	Short cuts to Truth Tables	<i>forallx</i> Ch 3, section 13	Practice exercises on p55, 58
12	10/10/17	First-Order Logic	<i>forallx</i> Ch 4 section 14, 15	Practice exercises on p71-72 B, C
13	10/12/17	In-class exam period		<i>none</i>
14	10/17/17	Quantifiers	<i>forallx</i> Ch 4 section 15	Practice exercises on p71-72 A, D
15	10/19/17	Generality	<i>forallx</i> Ch 4 section 16	Practice exercises on p78-80
	10/24/17	Fall Break	No Class	<i>none</i>
16	10/26/17	Definite Description	<i>forallx</i> Ch 4 section 17-19	Practice exercises on p84 and p89-90

17	10/31/17	Exam Review	Review Ch 3 & Ch 4	<i>Practice Exam</i>
18	11/02/17	In-class exam period		<i>none</i>
19	11/07/17	Truth Interpretations	<i>forallx</i> Ch 5 section 20-21	Practice exercises on p 106-107
20	11/09/17	Reasoning with Interpretations	<i>forallx</i> Ch 5, section 22-24	Practice exercises on p112-113
21	11/14/17	Natural Deduction	<i>forallx</i> Ch 6, section 25-26	Practice exercises on p136-138
22	11/17/17	Applying Rules	<i>forallx</i> Ch6 section 27	Practice exercises on p142
23	11/21/17	Deductions in TFL	<i>forallx</i> Ch 6 section 28-30	Practice exercises on p 144-145 (Optional: exercises on p150)
	11/23/17		<i>Thanksgiving</i>	*gobble*
24	11/28/17	Quantified Deductions	<i>forallx</i> Ch 7 section 31	Practice exercises on p159-161
25	11/30/17	Quantifier Rules	<i>forallx</i> Ch 7 section 32	Practice exercises on p163
26	12/05/17	Deduction Theory	<i>forallx</i> Ch 7 section 33-35	Practice exercises on p167
27	12/07/17	In-class exam period		

The Final Exam for this class will be given on December 14th from 12:00PM – 1:50PM.