Symbolic Logic

PHIL 301 – Symbolic Logic
PHIL 444 – Topics in Logic
Fall 2019
MWF 1:40-2:30 pm in Mundelein 205
Fr. Harry J. Gensler, S.J.

Office hours: MWF 2:50-3:50 in Crown 469
Phone: 440-544-6750 (rings all my phones, can text)
E-mail: hgensler@luc.edu
Web: http://www.harryhiker.com
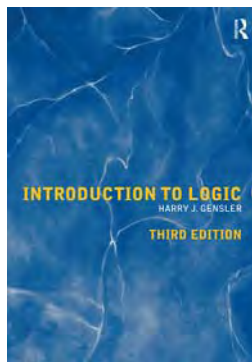Homework: http://www.harryhiker.com/hw

We'll study various systems of logic (propositional, quantificational, modal, deontic, and epistemic) and use these to analyze hundreds of arguments, many on philosophical topics like morality, free will, and the existence of God. We'll also work out a logical formalization of an ethical theory. Our text is *Introduction to Logic* (by Harry J. Gensler, Routledge 2017, make sure to get the third edition).

This course presumes no previous study of logic. If you've had a previous logic course (e.g., PHIL 274), then some of the beginning material should be familiar; but we'll cover these areas more quickly.

We'll have six half-period quizzes plus a comprehensive final exam (which counts as three quizzes). Missed quizzes count as zero. If you can't take a quiz on time, contact me before the morning of the next class and we might be able to set up another time; but you can't take a quiz after I hand them back. Cheating on a quiz will earn you a grade in the F range. I will use this grading scale: A = 90s or above (90-92 = A-), B = 80s (87-89 = B+, 80-82 = B-), C = 70s (77-79 = C+, 70-72 = C-), D = 60s (67-69 = D+), F = 50s or below.

If you're undergraduate and take the course as PHIL 301, then you needn't do a paper. To figure out your grade, then write each quiz score, write the final exam score three times, drop the lowest number, and average the others. (So your lowest quiz drops if it's lower than the final; if the final is lower than any quiz, then it counts as only two quizzes.)

If you're graduate or take the course as PHIL 444, then you must do a paper of at least eight pages on a topic that connects with logic and that I approve in advance; you are to meet with me to help plan your paper and relate it to your interests. You might, for example, take one of the Chapters 16 to 18, begin with a short summary of the chapter, and then go into a more specific topic. Chapter 16 is about history of logic, from Aristotle and traditional logic, through the emergence of classical symbolic logic in Frege and Russell, and then into recent work. Chapter 17 is about deviant logic, including multi-valued logic, paraconsistent logic, intuitionist logic, and relevance logic. Chapter 18 is about philosophy of logic, which deals with epistemological and metaphysical issues about topics like abstract entities, the justification of logical laws, the nature of truth, and the scope of logic. Or you might do something in inductive logic (Chapter 5), or you might use logical tools to analyze arguments in some area or figure that you're interested in (see the end of Chapter 4). Again, see me about topics.

If you're graduate or take the course as PHIL 444, then your paper counts as three quizzes. To figure out your grade, then write each quiz score, write the final exam score three times, write the paper score three times, drop the lowest number, and average the others. (So your lowest quiz drops if it's lower than the final and the paper; if the final is your lowest score, then it counts as only two quizzes; if your paper is the lowest score, then it counts as only two quizzes.)

You'll do much of your homework on computer using the LogiCola program. Download LogiCola from http://www.harryhiker.com/lc. E-mail me your scores when you take the corresponding written test; I won't accept scores after I return the quiz. Try to do the exercises at an average level of 7 or higher (levels go from 1 to 9). Your exercise scores add a bonus or penalty to your exam score. Let's say your average level (dropping fractions) is N. You get a +1 bonus for each number N is above 7; so you get a +2 bonus if N=9. You get a -1 penalty for each number N is below 7; so you get a -3 penalty if N=4. If you fake scores, your course grade will be lowered by one grade.

You're required to attend class regularly. You can miss 5 classes without this itself hurting your grade (these 5 are for sickness, funerals, etc.). After that, each unexcused absence subtracts one point from your final course average. You can be excused for university functions. Perfect attendance adds a four point bonus to your final course average.

No use of electronic devices is allowed during class, unless you have an official accommodation letter. Students seeking academic accommodations for a disability must in the first week meet with Services for Students with Disabilities (Sullivan 117) and then meet with me about accommodations.

PHIL 301-444 Calendar

August 2019

Sun	Mon	Tu	Wed	Th	Fri	Sat
	26 first class	27	28	29	30	31

September 2019

Sun	Mon	Tu	Wed	Th	Fri	Sat
1	Labor Day, no class	3	4	5	6	7
8	9	10	11 quiz	12	13	14
15	16	17	18	19	20	21
22	23 quiz	24	25	26	27	28

October 2019

Sun	Mon	Tu	Wed	Th	Fri	Sat
29	30	1	2	3	4	5
	fall break, no class		9 quiz	10	11	12
13	14	15	16	17	18	19
20	21 quiz	22	23	24	25	26

November 2019

Sun	Mon	Tu	Wed	Th	Fri	Sat
27	28	29	30	31	1	2
3	4 quiz	5	6	7	8	9
10	11	12	13	14	15 quiz	16
17	18	19	20	21	22	23
24	25	26	Thanksgiving break – no class			

December 2019

Sun	Mon	Tu	Wed	Th	Fri	Sat
1	2	3	4	5	6 last class	7
8	9	10	11	12 final at 1 pm		

Christmas Vacation!