Formal Logic:
Philosophy 313
Curtis Franks

CONTACT INFORMATION

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OFFICE HOURS

T 2pm–3pm & W 12pm–1pm & Th 2pm–3pm & by appointment

THIS COURSE

Formal Logic is the Philosophy Department's basic course in logic. Logic is one of the central philosophical topics, thus standing alongside aesthetics, epistemology, ethics, hermeneutics, and metaphysics. It is the study of the relationships that attain among facts, beliefs, and propositions independently of contingent features of reality. The modern approach to this study is through the development of formal languages, their interpretation, and their systematic implementation. Such will be the approach of this course. The formal language that we'll develop is that of classical, first-order logic. We will also learn to recognize the features of other logical systems (free, intuitionistic, modal, second-order, and multi-valued logics) and to appreciate their significance.

TEXTBOOK

We will refer to and have assigned readings from the (free) textbook *forall x: Calgary* (P. D. Magnus, R. Zach, et al.). You will see that this book contains 48 very short chapters. We will read several chapters per week and cover nearly the entire book. In class we will discuss some topics in depth that aren't covered in this textbook. I will direct you to some (optional) supporting reading for that material. A succinct reference not designed for pedagogical purposes covering about three questers of the topics of this course is my own Stanford Encyclopedia of Philosophy article on "propositional logic."

SOFTWARE

You will complete weekly problem sets with the (free) software Carnap. Make sure you register on-line for the Carnap course "Formal Logic F23" that I created to accompany this class.

REQUIREMENTS

You must participate in our scheduled lectures. I don't take attendance, and you needn't notify me when you have to miss a class. But to pass the class you need to be part of it in some meaningful way. A useful paradigm is "good attendance and an occasional remark." I will assign weekly problem sets to be graded. **You may, and in fact are encouraged to, collaborate on these.** Submit solutions to problem sets *via* the Carnap software. I will also assign two "exams" (more challenging take-home assignments that require explanations in a form that cannot be submitted with the software). **You may not collaborate on exams.** To answer the questions on these exams, you will need to reflect on the properties of the formal language and techniques of deployment that we develop in the class. You will also need to be able to demonstrate an understanding of some of the philosophical topics that come up now and again during lectures and discussions. The exams are each worth one eighth of your grade. The problem sets and exams together determine your final grade for the course. Thus the weekly problem sets, which should be fairly routine, will determine three quarters of your grade.

NOTE

Please be aware of the University's policies regarding academic honesty, anti-discrimination, and access to education for students with disabilities. Here is the web-page of the office for students with disabilities:

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http://www.nd.edu/~osd/NEWHOMEPAGE.htm
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Here is the Philosophy Department's web-page devoted to academic honesty, with links to information about plagiarism and the University's honor code:

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http://philosophy.nd.edu/undergraduate-program/honesty/
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In addition I am someone you can approach if you have concerns about discrimination or proper scholarly behavior, whether or not the concern is related to this course.

IMPORTANT DATES

August 24th: no class
December 15th: final exam due