

Math. 4000,5000 Foundations

Prof. Monk

July 9, 2014

What the course is about. The main aim of the course is to prove Gödel's completeness theorem for first-order logic. We begin with the simpler case of sentential logic. Towards the end of the course we formulate Gödel's incompleteness theorem, and give as much of the proof as time allows.

There is no textbook for the course. Lecture notes are available on the web page <http://euclid.colorado.edu/~monkd/logic.html>

Exercises will be assigned on a weekly basis on the above web site. Students signed up for math 5000 will be asked to do more and harder exercises. Exercises will constitute 20% of the course grade. There will be two midterms, on Sept. 29 and Nov. 3. Each midterm will count 20% of the grade. The final exam is scheduled for Tuesday, Dec. 16, 10:30 - 1, in the usual classroom, ECCR110; it will count as 40% of the grade.

I will have office hours as follows: MWF11, or by appointment; my office is Math202. email address: don.monk@colorado.edu.

Standard Administration Statements

(1) **DISABILITIES:** If you qualify for accommodations because of a disability, please submit to your professor a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu.

If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with your professor.

(2) **CELL PHONES:** please turn off your cell phone before coming to this class. If you forget and it rings, either turn it off, or leave the classroom and only talk when out of hearing of the class.

(3) **RELIGIOUS HOLIDAYS:** the University policy on missing class or exams because of religious holidays can be found at http://www.colorado.edu/policies/fac_relig.html

(4) **CLASSROOM BEHAVIOR:** the University policy on this can be found at <http://www.colorado.edu/policies/classbehavior.html>

(5) **HONOR CODE:** the University policy on this can be found at <http://www.colorado.edu/policies/honor.html>

(6) **SPORTS:** Please let me know as far in advance as possible about any plans to miss exams or assignments because of participation in sports.