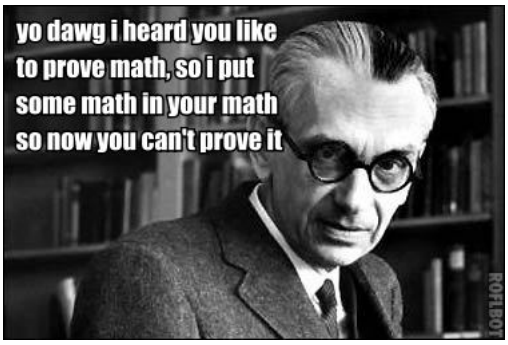

(LOLtheorist by user zzyzx-xyzzy at livejournal)

18.510 Introduction to Mathematical Logic and Set Theory

Course Information

Meetings: TR 2:30–4:00 in 4–153

There will be no class on October 15, November 26, or November 28.

Instructor: Henry Cohn

Office: E18–422 [I'm normally at Microsoft Research, so you won't find me here except for office hours and other scheduled appointments.]

Office Hours: Monday 1–2, Tuesday 4–5, and by appointment

E-mail: `cohn@microsoft.com`

Grading: nine homework assignments 50%, two exams 25% each. I'll drop the lowest homework grade, so your best eight assignments will count for 6.25% each. If you are on the border between two grades, I'll give you the higher grade if your performance improves towards the end of the course.

Due dates: homework is due at the beginning of class on the specified date. Homework turned in later on the due date will be penalized 10%, and no homework will be accepted after the due date, except because of medical or family emergencies or religious obligation.

First exam: Thursday, October 17, during class.

Second exam: Thursday, December 5, during class.

Both will be closed-book exams. The second exam will focus on the second half of the course (rather than being a comprehensive final exam).

Prerequisites: in principle, none. Everything we do will be built up from scratch and won't depend on knowledge from previous courses. In practice, 18.510 requires a certain level of mathematical maturity and comfort with abstraction and proofs. If you have not taken a proof-based mathematics class before, you will likely have trouble with this course.

Text: none. I'll distribute some lecture notes, and I'm happy to suggest relevant books. For the material on set theory towards the start of the course, here are some references:

Naive set theory, by Paul R. Halmos
Basic set theory, by A. Shen and N. K. Vereshchagin
Set theory, logic and their limitations, by Moshé Machover

Attendance policy: you are adults, so I won't take attendance or grade based on it. However, because we won't be following a textbook, I strongly recommend attending class regularly. If you miss class, you should get notes from someone.

Collaboration policy: you should write up everything on your own, and of course you should understand everything you turn in. It's OK to consult with classmates, but this should take the form of working together, rather than copying completed solutions. It's OK to use reference works, and it's possible that you will occasionally find a solution to a homework problem, but you should not deliberately search for solutions, and if you read a solution in the literature you should explain it in your own words (rather than copying it verbatim). You should not post homework questions to Q&A websites. If you collaborate with someone on a problem or learn a solution from some other source, you should acknowledge this on your problem set.