In Math 2200, I will introduce you to mathematical proof through a study of topics in discrete mathematics. You will write many short proofs, struggle to understand harder proofs, and become acquainted with many basic and wonderful elements of mathematics such as: sets and functions, number theory and cryptography, combinatorics, and graph theory. This course should provide you with a good foundation for higher mathematics courses.

- **Prerequisites**: “C” or better in (MATH 1220 OR MATH 1250 OR MATH 1270 OR MATH 1311 OR MATH 2210) OR AP Calc BC score of 5.

- **Instructor**: Thomas Goller.

- **Time and Place**: M,W,F 9:40 AM - 10:30 AM; JTB 120.

- **Textbook**: My notes, which I will post online as a pdf.

- **Homework**: Weekly problem sets requiring you to solve problems and write formal proofs. Assigned on Monday, due the following Monday in class or by 5 PM in my office. No late assignments will be accepted, but I will drop your lowest assignment score. The idea is for you to work on problems as we cover the relevant material in lecture. In mathematics, one cannot always expect to solve problems immediately and without help, so getting an early start is essential! Please collaborate, but you must write your own solutions! I will try to have your homework graded by the next class period. Homework will be given a score between 0 and 3, as follows:

  - *0*: Nothing submitted, barely recognizable effort, or too sloppy for me to read. Does not deserve to be called a homework assignment.

  - *1*: Very sloppy or minimal effort, but at least you looked at the problems and turned something in.

  - *2*: You tried most or all of the problems, but don’t seem comfortable with the material. Please read the material carefully, talk to a friend, and/or come to office hours!

  - *3*: You tried all the problems, your effort is obvious, and you have a good grasp of the material. You may have made some mistakes, but that is okay!
• **Learning Celebrations (LCs)**: There will be five learning celebrations throughout the semester, each happening on a Monday and taking up the entire class period. There will be no homework due the week of an LC. Any material covered in lecture or in the homework may appear. I will ask you to write proofs, state definitions and theorems, give examples, and occasionally perform computations. Concepts whose importance I’ve continually stressed are particularly likely to appear, as are homework problems that you found tricky.

• **Midterms**: Ugly, repulsive things!

• **Final Learning Celebration (FLC)**: Wednesday, May 1, 2013 from 8-10 AM in the usual room.

• **Grading**: 30% Homework, 40% LCs, 30% FLC. I will grade on a curve, so forget about that awful “≥ 95% is an ‘A’, don’t you dare make any mistakes!” nonsense. Last semester, students with at least 85% received an ‘A’ and around 75% was good enough for a ‘B’.

• **Office Hours**: No official office hours, but my unofficial office hours are any time. E-mail me to set up an appointment, or just drop by my office, JWB 307, at the risk that I’ll be busy right at that moment. The best times for me are MW 10:30 AM - 3:30 PM, TH 9 - 10:30 AM and 12:30 PM - 4:30 PM, and F 10:30 AM - 5 PM. Be brave and venture into the depths of JWB to see me!

This syllabus is still evolving! Keep your eyes and ears open!