MATH 2200 Syllabus, Fall 2012

October 18, 2012

Math 2200 is a course on the fundamentals of discrete mathematics. You will learn how to understand and write short proofs, and you will become acquainted with many basic and wonderful elements of mathematics such as: sets and functions, number theory and cryptography, combinatorics, and discrete probability. 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**: T,H 12:25 PM - 1:45 PM; BEH S 109.

- **Textbook**: Kenneth Rosen’s *Discrete Mathematics and Its Applications*, Seventh Edition. I will also post lecture notes online at the end of each week.

- **Homework**: Weekly problem sets requiring you to solve problems and write formal proofs. Assigned on Tuesday, due the following Tuesday. No late assignments will be accepted! The problem sets will cover the current week’s material. 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, especially proofs! Homework will be given a score between 0 and 3, roughly 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!
• **Quizzes**: There will be three quizzes during the semester, intended to give you a sense of what the final will be like (the September 13 quiz will count as homework, not as a quiz). Any material covered in lecture or in the homework may appear on the quiz. Make use of the lecture notes I post online! I may ask you to state definitions or theorems, give examples, perform computations, or write proofs. Concepts whose importance I’ve continually stressed are particularly likely to appear on a quiz, as are homework problems that you found tricky.

• **Midterms**: There will be no midterms! (Admittedly, those quizzes are a little like midterms...)

• **Final Exam**: Wednesday, December 12, 2012 from 1:00 - 3:00 PM in the usual room.

• **Grading**: 45% Homework, 25% Quizzes, 30% Final. An “A” on the homework will be an average of roughly 2.5, after dropping the lowest two scores. A “B” will be an average of roughly 2.

• **Office Hours**: Mondays 4-5 PM, Fridays 9-10 AM in JWB 307.

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