Math 230-01 (Ellis) Introduction to Discrete Mathematics Spring 2011

	Time	Location
Lecture	MWF 1:50-2:40pm	Perlstein Hall 109

Instructor: Robert Ellis, Assistant Professor of Applied Mathematics

Office Info: Eng. 1 Bldg. Rm. 105C, 567-5336, rellis"aht"math·iit·edu (with appropriate modification)

Office hours: TBA at course homepage below
Appointments and emailed questions are also welcome. I encourage you to request joint appointments so that more people can benefit from the discussion, or simply bring others with you.

Course Home Page: http://math.iit.edu/∼rellis/230S11/ **Assignments posted here, check often!**

Course Syllabus: http://www.iit.edu/csl/am/programs/

Prerequisites: None

Text: Rosen, *Discrete Mathematics and its Applications*, 6th edition, McGraw Hill
Required online supplements to the text are linked from the course homepage.

Description. In this course you will learn the principles of mathematical logic and how to write good proofs. We will emphasize mathematical reasoning, combinatorial analysis, discrete structures, and algorithmic thinking. Extra attention to writing above and beyond other mathematics courses is required. This is the gateway course to later proofs-oriented courses such as analysis and abstract algebra.

Assignments. There are three types of assignments:
1) Look-ahead reading for each class,
2) Suggested homework problems which may be tested/quizzed later,
3) Weekly homework sets on material from the previous week.
You must do the look-ahead reading to become familiar with (but not master) upcoming material, and are advised to do the suggested homework problems to keep prepared for quizzes.

Homework grading and due dates. Homework is typically due on Fridays at 1:50pm at the beginning of class or 12:40pm in my mailbox (E1 210) unless otherwise announced. Absolutely no late homework will be accepted except in case of emergency, or an official IIT activity for which you make arrangements with me in advance. In return, the lowest homework grade will be dropped, but remember if you simply don't do a homework you will suffer on the exams. Deductions to homework score will result from:
• illegible, scratched-through, poorly formatted or organized solutions • unstapled pages
• electronic submission without prior approval • frayed loose-leaf edges
In addition, as this is a writing-intensive course, at least **one sixth** of the homework score will be for carefully organized, legible, and effectively communicated solutions, regardless of their correctness.

Grade Breakdown. Grade Breakdown. Homework, 10%. Quizzes 10%. Two in-class exams, 25% each. Final exam, 30%. The final exam will be in Perlstein 109, time TBA. Any assigned reading or suggested problems are fair material for quizzes, which may or may not be announced in advance. Quiz questions from assigned reading which is "looking ahead" of where we are in class will be more superficial than quiz questions from suggested problems. The grading scale will be no more strict than A:89-100, B:78-88, C: 67-77, D:56-66.

Class Attendance. I reserve the option to reduce the final grade of those absent 6 or more times by up to 1% for each absence past the 5th. Being ten or more minutes late twice counts as an absence, as does significant distractedness due to texting, surfing, etc. I reserve the right to slightly increase the grade of those with perfect or near-perfect attendance. These options are relevant to those who are on the borderline between two letter grades.

Homework collaboration. You may only consult the instructor and the current ARC tutors on homework questions. You may not consult students in CS 330, students who previously took the course, previous homework sets, or other sources. You are encouraged to collaborate on homework in groups of 2-3. But you must:

• Submit **exactly** one solution for each problem, and submit the assignment **in order**.

• All sign on the first page or cover page a statement saying that each group member fully participated in the homework set, meaning that each member has either solved the problem or discussed the solution with other members until understanding it (sample cover sheet: http://math.iit.edu/∼rellis/230S09/HWCoverSample.pdf). **Warning:** Homeworks submitted with 4+ authors will receive 0 credit.

Academic Integrity. The Code of Conduct and applicable penalties in the IIT Student Handbook apply.

Missed Work. Assignments and exams cannot be made up except as approved by the instructor (e.g., due to official IIT activity or documented emergency). An exam missed for an excused reason must be made up promptly upon the student's return, the time frame being at the discretion of the instructor.

Disability Assistance. IIT and this instructor are committed to accommodating students with disabilities. Reasonable accommodations will be made for students with documented disabilities. In order to receive accommodations, students must obtain a letter of accommodation from the Center for Disability Resources. The Center for Disability Resources (CDR) is located in Life Sciences Room 218, telephone 312.567.5744 or `disabilities@iit.edu`.