

	Time	Location
Lecture	MWF 10:00-10:50am	Life Sciences 152

Instructor: Robert Ellis, Assistant Professor of Applied Mathematics

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

Office hours: Updated at course home page below.

Should be settled by 1/29/08

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/230S08/> **Check often for assignments.**

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 from material we've just covered, and 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 due on Fridays at 10am in class or 9:50am 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 two homework grades will be dropped, but remember if you simply don't do a homework you will suffer on the exams. To avoid losing points, homeworks must be:

- stapled,
- without frayed loose-leaf edges,
- written legibly without major erasing, cross-throughs, or problems out of order.

This is a writing course, so as far as legibility and style goes, garbage in (low legibility) = garbage out (low grade). Some leeway on this will be given for exams due to the time constraint.

Grade Breakdown. Homework, 10%. Quizzes 10%. Two in-class exams, 25% each. Final exam, 30%. The final will take place Thursday, May 15, 10:30am-12:30pm in LS 152. 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:87-100, B:77-87, C: 67-76, D:57-66.

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. 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 are encouraged to discuss homework problems but **only** with another student in **this** class (not CS 330) or the instructor. When you **write up** the solution, however, **you must not consult any notes or other aids from these discussions.** Then you may only use the textbook unless otherwise instructed. For example, if you start to write the solution, get stuck, and consult someone half-way, you must start the solution over without referring to the first attempt. You may not consult 3rd party resources such as the internet to find solutions to homework problems. Use your common sense to extrapolate from these guidelines or contact the instructor regarding uncertainties. You are recommended not to violate this policy both because of possible prosecution and because of the resulting ill-preparedness for exams.

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. Arrangements must be made ahead of time for non-emergencies.

Disability Assistance. IIT and this instructor are committed to accommodating students with disabilities. Students desiring such consideration must immediately contact the Center for Disability Resources and Educational Development at 567-5744. (Their approval must be had for any exceptions regarding exam guidelines.)