

**14:332:312 Discrete Mathematics
Information Sheet and Syllabus
Spring 2013**

Instructor: Salim El Rouayheb, Email: salim.elrouayheb@rutgers.edu

Course Description : Basic mathematical modeling is at the heart of engineering. In both electrical and computer engineering, many systems must be modeled using discrete formulations. This course will give students the foundations in discrete mathematics needed to model modern computer systems. Students will be introduced to the mathematical tools of logic and set theory, combinatorics, number theory, and graph theory.

Place & Time : TuTh 1:40-3:00PM, at EN-B120

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Office Hours: TuTh 3:15-4:15PM, at EE-122

Textbook: Kenneth R. Rosen, *Discrete Mathematics and its Applications*, Seventh Edition, McGraw-Hill, 2007.

Teaching Assistants: Parul Pandey (parul_pandey@cac.rutgers.edu) and Orsan Aytakin (aytekin@eee.metu.edu.tr). Teaching assistant office hours will be announced during the first week of class. It is HIGHLY recommended that you take advantage of these office hours in order to get more experience with the material covered in class.

Handouts & Materials: All course related materials will be available at the course website <http://www.princeton.edu/~salim/DiscMath.html>. Homework assignments will be posted on this website and announced in class.

Grading: The grade for the class will be based upon homework, two midterm exams and a final exam:

- Homework: (15%) There will be regular homework assignments. Students will have roughly 1 week to solve each homework set (the due date will be provided on the assignment).
- Midterms: (2 midterms at 25% each) Two midterms will be given. For each midterm, at least one week notice will be given in class to allow students to prepare.
- Final Exam: (35%) There will be a final exam.

Policies:

- **Students are expected to work independently on both homework and examinations. No collaboration is permitted. Your work must be your own.**
- You have one week after the day each homework or examination is returned to you to ask for a grade change. Grades will be changed only during this week if and only if: (a) We added up your score wrong. (b) We made an error in grading a particular problem.
- Homework is due at the beginning of lecture on the due date. Late homework gets a 0 grade. The only exceptions are for documented accidents, illnesses, or deaths in the family.
- If you are ill on the date of an examination, or if you must be away, please notify the professor **BEFORE** the examination, if possible, or at least as **EARLY** as possible. Medical or employer interview slips for absences from the examination are required if you were ill or unavoidably absent.