

ECE 312 Discrete Mathematics
Syllabus
Rutgers, Spring 2018

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: M/W 3:20-4:40 PM, at SEC 111

Office Hours: M/W 4:40-5:40 PM, at CoRE 717

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

TAs: Rawad Bitar (email: rawad.bitar@rutgers.edu) and Serge Kas Hanna (email: serge.k.hanna@rutgers.edu).

TA Office Hours: Serge Kas Hanna: Tuesday 10:00-12:00 PM, at EE 226. Rawad Bitar: Thursday 12:00-2:00 PM, at EE 226.

Piazza: I will be using Piazza for posting class announcements, problems assignments for the quizzes and class discussions. Rather than emailing me questions, I strongly encourage you to post your questions on Piazza, where you can get help fast and efficiently from your classmates and myself. Find our class page at: <https://piazza.com/rutgers/spring2018/ece312/home>.

Course Webpage: <http://ecweb1.rutgers.edu/csi/DiscMath18.html>.

I will mainly be using Piazza for posting problems assignments and course announcements. Sakai will be used for communicating grades.

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

- **Quizzes:** (15%) There will be regular in-class quizzes done every two weeks. Students will be assigned a set of problems to prepare for the quizzes.
- **Exams:** (2 at 25% each) Two exams will be given. Tentative dates for the exams are the week of February 14 and the week of March 21 (after spring break). For each exam, at least one week notice will be given in class to allow students to prepare.
- **Final Exam:** (35%) There will be a final exam.