EECS 203: Discrete Mathematics
Winter 2018

Instructors

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Course Description

Discrete Math --- Introduction to the mathematical foundations of computer science. Topics covered include: propositional and predicate logic, set theory and functions, elementary combinatorics, discrete probability theory, relations, graph theory, introduction to algorithms, and growth of functions and asymptotic notation.

Lectures

001 LEC **-** TuThu 9:00am-10:30am AUD CHRYS (Wakefield)
002 LEC – TuThu 12:00pm-1:30pm AUD CHRYS (Graetz)
003 LEC **-** TuThu 1:30pm-3:00pm 1013 DOW (Graetz)
004 LEC – TuThu 4:30pm-6:00pm 1571 GGBL (Diaz)

Office Hours

Office hours for professors and assistants will be posted on the Canvas site soon. The google calendar listing office hours will always accurately reflect scheduled office hours. You may go to any office hour you like and as many as you like.

Discussion

In addition to attending lecture, you are encouraged to attend a discussion section once a week. During discussion the course staff will go over additional example concepts introduced in lecture. You will also have the opportunity to ask additional questions and get clarification regarding concepts covered in lecture.

Attendance Policy

We strongly encourage you to attend the lecture section and discussion for which you signed up for, but we will allow students to attend other sections. However, if a room is at capacity, then priority will be given to students enrolled in that section.

Canvas

Information about the course including assigned readings, homework, and course grades will be posted on the Canvas site. There will be one common Canvas site for all four lecture sections.

Textbook

The official required textbook is Rosen, Discrete Mathematics, 7th edition. The reading and homework assignments are from Rosen 7e. We recognize that Rosen 6e is much cheaper, and not hugely different. You may use it, but only at your own risk. The same goes for international edition. Collaborate via Piazza to establish the correspondences between 6e and 7e readings and assignments.

Piazza

We will be using a class interaction tool called Piazza for questions and answers, the course site can be found on Canvas or here: tinyurl.com/EECS203-W18 . You will be able to post questions, answer other people's questions, give or ask for clarification on answers, see instructors' comments, etc. You can even ask questions privately to the staff. When making a Piazza post, please search before asking. Do not share answers to homework on Piazza. In addition to Piazza you may contact the course staff by email: you can contact all professors, GSIs, and IAs at eecs203-w18@umich.edu .

Readings

You will learn more if you read the reading assignment before lecture. The homework may call upon information in the readings, even if it was not covered in lecture. Exams will only only cover material from lecture, discussion notes, or homework assignments.

Grading

Homework (15%): Homework will be assigned at 12:05 AM Friday and will be due the following Thursday at 11:59 PM. Homework solutions will be released at noon the next day (Friday). **No late homework will be accepted for any reason.**

Canvas will be used to post the homework assignments and solutions. Gradescope will be used for submitting your homework. Ensure that on gradescope, all problems are correctly assigned to their pages. Failing to do so may result in a 0 for the problem. Your work should be submitted as a PDF document. You are encouraged to learn the math formatting tool LaTeX. It produces PDF files of beautifully formatted mathematics. Hand-written

homework, scanned to PDF, is acceptable, but must be clearly readable. You must ensure that each PDF file is relatively small (well under the 50MB limit).

Honor Code: Your submitted homework must be your own, individual work. You may study in groups, and may help each other understand the material, but you must not do, copy, or even look at each others' homework solutions or solutions from any other source. See also the section On Working Together, in this document.. Suspected Honor Code violations will be reported to the Engineering Honor Council.

In calculating your final homework score for the class, the lowest three homework grades will be dropped.

Exams (85%): There are two midterms (25% each) and a final (35%). The mid-term exams will be held on Monday evenings from 7:00 - 8:30 PM and the final exam will be held Thursday evening, April 19th.

Midterm 1	Mon, February 12	7 - 8:30 pm
Midterm 2	Mon, March 19	7 - 8:30 pm
Final Exam	Thu, April 19	7 - 9 pm

Alternate exams: Two weeks prior to each exam, you will be polled concerning potential conflicts with other academic activities or special accommodation needs. Your request will be handled on an individual basis. Please make every effort to take the exams at the posted times - do not assume that your request to take the alternative exam will be automatically granted.

Final Grades: The table below summarizes the grade computation for the course. We will use a curve to assign final grades. The distribution will be very close to the grade distribution from previous semesters.

Final Grade Percentages
Homeworks: 15%
Mid-term exam 1: 25%
Mid-term exam 2: 25%
Final exam: 35%
Total: 100%

Regrade Policy on homework and exams:
1. Regrades are submitted via Gradescope.
2. Before submitting a regrade, you must read the solution, review your submission, and read the rubric items
3. Include in your regrade request which specific rubric items you believe you should/shouldn't have gotten. Failure to do so may result in dismissal of your request.
4. Be aware that the entire assignment or exam (not just the questions you point out) might be considered for regrading, and that it is possible that on reconsideration your grade could go down.

Disability Policy

If you have any disability as defined under the Americans with Disabilities Act that might affect with your ability to participate in class, or to turn in assignments on time or in the form required, please contact your instructor and the Office of Students with Disabilities at the start of the term so that arrangements can be made to accommodate you.

Honor Code

The Honor Code outlines certain standards of ethical conduct for persons associated with the College of Engineering at the University of Michigan. The policies of the Honor Code apply to graduate and undergraduate students, faculty members, and administrators. Read about the UM Honor Code here: (http://www.crlt.umich.edu/faculty/honor.html). There is also an Engineering Honor Code: (http://www.engin.umich.edu/students/honorcode/code/). In this class, as in many others at the University, you will be expected to include and sign the Honor Pledge on each assignment you submit. The Honor Pledge is as follows:

I have neither given nor received unauthorized aid on this assignment, nor have I concealed any violations of the Honor Code.

The Honor code is based on these tenets:
o Engineers must possess personal integrity both as students and as professionals. They must be honorable people to ensure safety, health, fairness, and the proper use of available resources in their undertakings.
o Students in the College of Engineering community are honorable and trustworthy persons.
o The students, faculty members, and administrators of the College of Engineering trust each other to uphold the principles of the Honor Code. They are jointly responsible for precautions against violations of its policies.
o It is dishonorable for students to receive credit for work that is not the result of their own efforts.

Among other things, the Honor Code forbids plagiarism. To plagiarize is to use another person's ideas, writings, etc. as one's own, without crediting the other person. Thus, you must credit information obtained from other sources, including web sites, e-mail or other written communications, conversations, articles, books, etc.

On Working Together

On the one hand, an assignment turned in must be individual work. We will look for plagiarism (copying), and we will report cheating. On the other hand, one of the best ways to learn a subject is to work together with your peers to understand the material. We want you to do this. How do we reconcile these two conflicting messages?

You are urged to serve as teachers for each other. There is no better way to learn something than to teach it to someone else, especially someone who is listening carefully and asking intelligent questions when they don't understand your explanation. But a teacher does not do the homework for the student. They show the way. They help untangle the misunderstanding. The student does their own homework. If you are helping someone, work to figure out what their problem is, help them get past it, so they can do their own work in writing the program they need to write. Don't show them your solution. Explain the underlying principles. If you are asking for help, try to formulate a good question that will guide the explainer in clarifying your problem. Don't look at their solution and copy it. Get them to explain the underlying principles, so you can write your own solution.

Unfair Advantage

You may not possess, look at, use, or in any way derive advantage from the solutions of homework, exams or papers prepared in prior years, whether these solutions were former students' work products or solutions that have been made available by University of Michigan faculty or on the internet, unless this section's faculty expressly allows the use of such materials.