

CMSC 250-Discrete Structures, Spring 2012

Syllabus: SHORT VERSION

See the course website for the long version of the syllabus.

1 Description

We will study fundamental mathematical concepts that are relevant to computer science. In particular we will cover propositional and predicate logic, proof techniques, mathematical induction, elementary number theory, relations, functions, combinatorics, probability, and graph theory (time permitting).

1. Propositional logic, circuits, and predicate logic (Chapters 1 and 2), approx. 3 weeks
2. Elementary number theory (Chapter 3), approx. 2 weeks
3. Summations, recurrences, and mathematical induction (Chapter 4), approx. $2\frac{1}{2}$ weeks
4. Sets, Venn diagrams, Cartesian products, powersets (Chapter 5), approx. 1 week
5. Counting and combinations (Chapter 6), approx. 1 week
6. Functions and the pigeonhole principle (Chapter 7), approx. 2 weeks
7. Relations, reflexivity, symmetry, and transitivity (Chapter 10), approx. 1 week
8. Graph theory (Chapter 11), approx. 1 week

2 Instructor and TA Information

Sections 0101, 0102	Sections 0201, 0202, and 0101 Honors
Michelle Hugue 1109A A. V. Williams, 405–3012 meesh@cs.umd.edu Office Hours: TBA	Clyde Kruskal 3215 A. V. Williams, 405–2685 kruskal@cs.umd.edu Office Hours: W 3-5pm

<u>Discussion sections</u>	<u>Name</u>	<u>Email address</u>	<u>Office hours</u>
TA 0101, 0102	Anupam Guha	anupam.guha@yahoo.co.in	Tu,W,Th 5pm-6pm
TA 0103	Sana Malik	maliks@cs.umd.edu	M,W 11am-12:30pm
TA 0201, 0202	Gregory Benjamin	gregben21@gmail.com	M,F 2-3:30pm
TA 0101H	Yuk Hei Chan (Tom)	yhchan@cs.umd.edu	M 9:30-11am, Tu 3:30-5pm
Grader	Rahmatri Diko	mardiko@cs.umd.edu	Tu,Th 11am-12:30pm
Grader	Judith Beaudoin	jbeaudoi@terpmail.umd.edu	Tu 12:20-3:20pm

All of the TAs' office hours will be held in 1112 A.V. Williams. Office hours are also by appointment.

3 Recommended Textbook, Class Webpage, and Piazza

Text: *Discrete Mathematics with Applications*, Susanna Epp, Brooks/Cole–Thomson Learning. ANY EDITION OKAY.

Webpage: <http://www.cs.umd.edu/class/spring2012/cmsc250/>

You are expected to visit the class webpage regularly for updates on course information.

Piazza: <http://piazza.com/class#spring2012/cmsc250>

Course wide announcements will be issued from piazza. The fastest way to get help with homework and course content will be by posting to piazza.

4 Grading

4.1 Weights

Homework:	assigned weekly	13%	(equally weighted)
Quizzes:	weekly in discussion section	13%	(equally weighted)
Midterms:	two midterms	44%	(22% each)
Final:	will be comprehensive	30%	

4.2 Exams

Exam dates:

- Midterm #1: Thursday, March 8.
- Midterm #2: Thursday, April 12.
- Final: Tuesday, May 15, 4:00-6:00pm, Room TBA.

The final exam will be rescheduled **only** for students having another final at **exactly** the same time, or for students with more than three final exams scheduled on the same day. If this is the case let Professors Hugue *and* Kruskal know by Feb 15, 2012.

5 Quizzes, HW, Excused Absence, Disability policy, Academic Integrity, Advice, Laptop Policy

There will be quizzes every Monday in recitation. Homework will be posted Tuesday nights and collected the following Wednesday. **We will drop the scores on the two lowest homeworks and on the two lowest quizzes.**

See long version of syllabus for Excused Absence policy, Students with Disability policy, and Academic Integrity. For help on studying contact the Learning Assistance Service in 2201 Shoemaker Building at (301) 314-7693. Laptops in class are only to be used for classroom activities.