

CS 250 & 250H: Discrete Structures (Fall 2014)

Overview

This course will focus on the fundamental mathematical structures, logical principles, and proof techniques that are relevant to the field of Computer Science. By the end of the semester, students are expected to have become more comfortable with skills such as abstract reasoning and the ability to carry out formal mathematical proofs of statements based on stated premises.

Expected Course Topics include:

- Propositional logic
- Proof methods
- Sets
- Induction proofs
- Functions
- Counting (permutations/combinations and pigeon hole principle)
- Graphs

Honors Section: The honors section of this course (250H) will cover the same topics as the other sections, except to a greater degree of depth. Special applications of the material will also be presented. In addition to the homeworks completed by other sections, the honors students will complete a special homework supplement.

Textbook: *Discrete Mathematics and Its Applications*. Kenneth H. Rosen.

Pre/Corequisites

Prerequisites: Grades of C- or higher in CMSC131 and MATH141.

Grading:

Grades will be based on homeworks, quizzes, and exams. Your lowest scoring homework and quiz will not be used to determine your grade. Note that this means your grade will not be significantly affected by missing a single homework or quiz.

There will be two midterms exams and one final exam on the following dates:

Midterm #1: Wed, Oct 22, 6-8pm

Midterm #2: Wed, Nov 19, 6-8pm

Final Exam: Wed, Dec 17, 4-6pm

There will be homework assigned most weeks. **Homeworks will be assigned on Wednesday (assignments may be posted early) and collected the following Wednesday in your recitation sections.** Homework assignments must be typed or hand written legibly. You may

discuss homework with other students or work in groups to complete assignments. However, you are expected to write up your solutions in your own words.

There will be a quiz most weeks. **Quizzes will be given on Mondays and returned the following Wednesday.** This will typically be administered in your lab section by your TA. Quizzes are individual work and closed-note/book.

Particular grading procedures and grade cutoffs are at the discretion of the instructors, and are subject to change at any time. The **Approximate** weighting used to compute grades is

Homework	10%
Quizzes	10%
Midterm #1	25%
Midterm #2	25%
Final Exam	30%

Contact Information:

We highly advise that students contact their TA's to resolve any issues before contacting the course instructor.

Clyde Kruskal:

Email: [kruskal at cs dot umd dot edu](mailto:kruskal@cs.umd.edu)

Office: 3215

Tom Goldstein:

Email: [tomg at cs dot umd dot edu](mailto:tomg@cs.umd.edu)

Office: 3141 A.V. Williams Building.

Excused Absence and Academic Accommodations

Within 24 hours of the missed discussion or homework, the student must inform the instructor of the missed assessment(s) by using email and by using the "Report Absence" button on the grades server. Each note must contain an acknowledgment by the student that the information provided is true and correct. The student is responsible for following up with the instructor and/or the TA to make sure they have all information missed from that day.

This self-documentation may not be used for any exams or projects, and it may be used for only 1 discussion where a quiz and/or homework assignment exercise was due during the entire semester. Any student who needs to be excused for a prolonged absence (2 or more consecutive class meetings), or for additional quizzes or homework assignments, or for an

exam, must obtain special permission from the instructor and may be required to provide written documentation of the illness from the Health Center or from an outside health care provider.

Required Documents/Details

We do not require that documentation regarding illness include specific details of the medical condition. But, the documentation must provide the dates during which the student was unable to perform academic work, and the name and contact information of the health care provider.

Accommodations

Students with accommodations through DSS should provide relevant documentation within the first two weeks to their Instructor in regular Lecture. Please note: these students are expected to make their own arrangements with DSS at least one week prior to major scheduled grading events, in particular midterm and final exams. You are responsible for managing your accommodations.

Academic Integrity

Violations of Academic Integrity are taken seriously and will be pursued by staff when evident. Note, in addition to obvious practices, the sharing of academically relevant information through any means, including but not limited to email and Internet applications, such as Piazza, may result in proceedings against the student(s) involved. When in doubt, ask your Teaching Assistants or Instructors.