CMSC 250 - Discrete Structures

Syllabus

Instructor

Mohammad Nayeem Teli, nayeem@cs.umd.edu, Sections 0201-0208.
Office: IRB 2224, Office phone: 301-405-0405.

Welcome

Welcome to CMSC 250. This course covers fundamental mathematical concepts related to computer science, including propositional logic, first-order logic, methods of proof, elementary number theory (including sequences, and induction), set theory with finite and infinite sets, functions, relations, introductory counting and probability theory, and an introduction to graph theory. Emphasis will be on mathematical rigor and the development of sound and elegant formal proofs.

Optional Textbook

There is no required textbook for this course and no assignments will refer to a textbook.

For students who like having a textbook as a secondary source of explanations and for practice problems, we recommend

Discrete Mathematics. Susanna S. Epp. Cengage Learning. (Any edition)

Discrete Mathematics and its applications. Kenneth H. Rosen. (Any edition)

Used books can be very economical, so you might want to find a used copy. You may also find electronic versions of the textbook for less money than a printed copy – these are fine as well.

Homeworks

There will be numerous homework assignments throughout the semester. The assignments will be submitted, and graded via GradeScope. Write neatly! If your solutions are not legible you will not receive credit for the assignment. Homework assignments are individual work; you may ask questions of us during office hours but may not work with other students on these assignments.

Quizzes

Quizzes will not be announced, but you can expect them regularly (nearly every week) during your discussion section.

All students must attend the discussion session for which they are registered; any quiz that is handed in during the wrong section will not be graded.

Grading

All assignments must be submitted before **Midnight (11:59 PM)** on the day they are due. They are to be submitted electronically according to the instructions given with the assignments. Late assignments will

be strictly penalized. Exceptional circumstances will be considered only if discussed with the instructor **before the assignment is due**. Late assignments will not be accepted

Final grades will be computed according to the following weights. (These weights are **tentative** and subject to future adjustment.)

Percentage	Component
15%	Homeworks
15%	Quizzes
20%	Midterm #1
20%	Midterm #2
30%	Final Exam

Online Posting of Homework Solutions Not Allowed

- Do not post your homework solutions online (e.g., GitHub, PasteBin) where they can be seen by others. Making your solutions accessible to others can lead to academic integrity violations.

- Even if the course is over, do not make your homework solutions available to others.

- Notice we constantly monitor online sources.

Academic Honesty

Note that academic dishonesty includes not only cheating, fabrication, and plagiarism, but also includes helping other students commit acts of academic dishonesty by allowing them to obtain copies of your work. You are allowed to use the Web for reference purposes, but you may not copy straight from any website or any other source. In short, all submitted work must be your own.

Cases of academic dishonesty will be pursued to the fullest extent possible as stipulated by the Office of Student Conduct. Without exception every case of suspected academic dishonesty will be referred to the Office. If the student is found to be responsible of academic dishonesty, the typical sanction results in a special grade "XF", indicating that the course was failed due to academic dishonesty. More serious instances can result in expulsion from the university. If you have any doubt as to whether an act of yours might constitute academic dishonesty, please contact your TA or the course coordinator.

The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit https://www.studentconduct.umd.edu/.

Examples of Academic Integrity Violations

The following are examples of academic integrity violations:

- Hardcoding of results in a project assignment. Hardcoding refers to attempting to make a solution appear as if it works correctly (e.g., printing expected results).

- Using any material available on the internet/web or any other source.

– Hiring any online service to complete an assignment for you.

– **You may not post the implementation of your assignments, materials related to the class (e.g., project description), or any other material associated with this course. Even if the class is over and you have graduated, you may NOT post any material.**

– Sharing your homework solutions with any student.

– Providing ideas/suggestions on how to solve/implement an assignment.

– Using online forums to ask for help regarding our assignments.

Class Announcements

You are responsible for keep track of the course webpage and Canvas. Please check them often (at least once a day). Important information about the course (e.g., deadlines, assignment updates, etc.) will be posted there.

Excused Absence and Academic Accommodations

1. Any student who needs to be excused for an absence from a single class session , due to a medically necessitated absence shall:

   – **Make a reasonable attempt to inform the instructor of his/her illness prior to the class**. If you are going to miss an in-class assignment then we expect to hear from you (either email or telephone message) before the class session begins.

   – Upon returning to the class, present their instructor with a self-signed note attesting to the date of their illness. The note must contain an acknowledgment by the student that the information provided is true and correct. Providing false information to University officials is prohibited under Part 9(h) of the Code of Student Conduct (V-1.00(B) University of Maryland Code of Student Conduct) and may result in disciplinary action.

   – **This self-documentation may not be used for the Major Scheduled Grading Events as defined below and it may only be used for one class meeting during the semester.**

2. Any student who needs to be excused for more than one absence, or for a "Major Scheduled Grading Event", must provide written documentation of the illness from the Health Center or from an outside health care provider. This documentation must verify dates of treatment and indicate the timeframe that the student was unable to meet academic responsibilities. The documentation should be given to the instructor, not the TA. **We will not accept a "self-signed" note for "major scheduled grading events", as defined below. The note must be signed by a health care professional.**

   The Major Scheduled Grading Events for this course include:

   – Midterm #1
   – Midterm #2
   – Final Exam
   – Homeworks

It is also the student's responsibility to inform the instructor of any intended absences from exams for religious observances **in advance**. Notice should be provided as soon as possible but no later than one week prior to the exam.

Accessibility and Disability Support

Any student eligible for and requesting reasonable academic accommodations due to a disability is requested to provide, to the instructor in office hours, a letter of accommodation from the Office of Disability Support Services (DSS) within the first two weeks of the semester.

Course Evaluations

The Department of Computer Science takes the student course evaluations very seriously. Evaluations will usually be open during the last few weeks of the course. Students can go to https://courseevalum.umd.edu/ to complete their evaluations.

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