Syllabus

Instructor

Nikolaos Baroutis
Computer Science & Electrical Engineering Department
Office: ITE 201A
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Email: nikbar1@umbc.edu
Office Hours: Monday and Wednesday 11:30am – 12:30pm, and by appointment.

Meeting Time and place

Monday and Wednesday 1:00pm – 3:20pm
Room: Performing Arts & Humanities 234

Teaching Assistant

Karan Budhraja, Room ITE 334
Email: karanb1@umbc.edu
Office hours: Monday and Wednesday 3:30pm – 4:30pm, and by appointment.

Important Dates

- Midterm Exam, Wednesday, June 22, 1:00pm – 3:20pm
- Last Class, Monday, July 18, 1:00pm – 3:20pm
- Final Exam, Wednesday, July 20, 1:00pm – 3:20pm

Prerequisites

MATH - 151 (Calculus & Analytic Geometry I) or its equivalent.

Textbook

Discrete Mathematics with Applications, 4th edition, Susanna S. Epp. Brooks Cole, 2010.

List of Topics

- Logic
- Number theory
- Proof methods
- Sequences

- Mathematical induction
- Recursion
- Set theory
- Functions
- Relations
- Counting & Probability
- Graphs

Course Objectives

This course is a prerequisite for several required courses for computer science and computer engineering majors including: CMPE 212, CMSC 313, CMSC 341 and CMSC 441. The main objectives of this course are: 1) to train the students to read and write mathematical proofs; 2) to develop the students' mathematical problem solving skills; and 3) to familiarize the students with standard concepts in discrete mathematics.

Required Work

Required work consists of (1) taking the midterm exam and final exam, (2) three in-class quizzes and (3) seven or more homework assignments. Further, you are expected to actively participate in class discussions.

Homework Policy

Assignment details, due dates, etc. will be posted at the class homepage and the course blackboard *http://blackboard.umbc.edu*. Students are strongly advised to check the class homepage/course blackboard on a regular basis. Failure to do so is not an acceptable excuse for missing an assignment or for not adhering to the assignment's instructions.

- Assignments are due at the beginning of lecture. No late assignments will be accepted, unless University Policy states otherwise.
- Partial credit will be given for serious attempts on the homework problems. So you should simply turn in whatever you have accomplished by the beginning of class.
- If you cannot attend lecture when homework is due, for some honorable reason, you must make arrangements to submit your homework directly to the instructor and TA. Do not ask another student to submit your homework for you.
- No collaboration. Each assignment is to be done and written individually by each student. Students should not collaborate on any assignment.

- Students may be asked to come in and explain their solution(s) to an assignment to the instructor and/or TA. Failure to satisfactory demonstrate authorship of a solution is a violation of Academic Integrity policy.

Students are strongly advised to keep up with the assignments and other coursework. Homework assignments do demand the amount of time allocated to them.

Quizzes

There are three in-class quizzes. The scheduled date of each quiz will be announced at least one week in advance in blackboard and in class. Cumulatively quizzes account for 15% of your total grade. Make every effort to attend — unexcused absences will result in a grade of zero for that quiz. Each quiz will be held during the last 30 minutes of the class period.

Exams

There will be a midterm exam and a final exam. All the exams will take place in class and will be closed–book and closed–notes.

Make–up exams are very rare and are possible only in the extreme conditions specified by University Policy. You should make prior arrangements with the instructor if you expect to miss an exam.

Each student should have his student photo identification card or driver's license when taking an exam. Failure to produce a proper photo ID may result in getting a zero on that exam.

Grading Policy

Final grades will be based upon homework assignments (20% total), quizzes (15% total), the midterm exam (30% total) and the final exam (35%total).

Your final letter grade is based on the standard formula:

$0 \leq F < 60, \quad 60 \leq D < 70, \quad 70 \leq C < 80, \quad 80 \leq B < 90, \quad 90 \leq A \leq 100$

Depending upon the final distribution of grades in the class, there may be a curve in your favor, but under no circumstances will grades be curved downward.

Incomplete grades will be issued only under those extreme situations described by University Policy for granting incompletes and *only if you have completed most of work for the semester*. Failure to complete assignments on time is not a sufficient reason for an incomplete.

Academic Integrity Policy

By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC's scholarly community in which everyone's academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal. There is no tolerance for academic dishonesty in this course. Any and all academic dishonesty acts will be treated severely, as prescribed in the UMBC's Student Academic Conduct Policy.

The UMBC academic integrity policy is available at:
http://oue.umbc.edu/home/academic-integrity/

ADA Compliance

We recognize that some of you may have disabilities that require special attention from the instructional staff. Please make us aware of them at your earliest so that UMBC can make suitable arrangements.