MAT2440 Section D638

Meetings: N418 MW 10:00-11:40
Instructor: Dr. Johann Thiel
Office Hours: 1:00-3:00 M in N724 (or by appointment)
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Office #: 718-260-4963
Description: This course introduces the foundations of discrete mathematics as they apply to computer science, focusing on providing a solid theoretical foundation for further work. Topics include functions, relations, sets, simple proof techniques, Boolean algebra, propositional logic, elementary number theory, writing, analyzing and testing algorithms.
Text: Discrete Mathematics and its Applications, 7th edition, Kenneth H. Rosen
CAS/Programming: We will be using computer algebra systems (like MATLAB) in this course. See me for how to get a free copy for your home computer. We will also learn basic programming.
Prerequisites: CST2403 and MAT1375
Evaluation: Your final grade will be calculated as:

Homework (10%) + Quizzes (5%) + Projects (5%) + Exams (50%) + Final Exam (30%).

Then I will assign a letter grade based on the following scale:

A	=	93	–	100	C+	=	77	–	79.9
A-	=	90	–	92.9	C	=	70	–	76.9
B+	=	87	–	89.9	D	=	60	–	69.9
B	=	83	–	86.9	F	=	0	–	59.9
B-	=	80	–	82.9					

W = withdrawal up to April 24, 2014

- **Practice Problems:** It is crucial that you stay on top of the homework in this class. A list of practice homework problems assigned from the textbook is distributed on the first day. You should solve as many problems as possible. They will not **all** be collected, but they will help you prepare for exams and quizzes.
- **Homework:** Homework assignments will similar to the practice problems mentioned above. There will be 5 homework assignments given throughout the semester with the lowest grade being dropped. Late homework will not be accepted.
- **Quizzes:** Problems on the quizzes will be similar to practice problems. Quizzes serve as a check that you understand the material. There will be 5 quizzes given throughout the semester with the lowest grade being dropped. Make-up quizzes will not be given.

- **Projects:** Projects will be assigned throughout the semester. Students will work in small groups to solve a problem using methods learned from class. These assignments will involve turning in a neat write-up of your results. Details to follow.

- **Exams:** There will be three 100-minute exams on **February 20**, **March 19**, and **April 28**. Your lowest test grade will be dropped, making your two best exam scores worth 25% of the course each. Make-up exams will not be given.

- **Final Exam:** The final exam will be a one-session exam based on the whole term. It will be on the last day of classes, **May 21**. It is the responsibility of each student to be available at the time of the examination. You must take the final exam in order to pass the course.

- **Class participation:** At the discretion of the instructor, there will be extra credit available (to a maximum of 2 points on your final grade) for writing homework solutions on the blackboard and answering questions in class.

Attendance: You are expected to attend all classes and are responsible for all the material covered. Attendance is required and will be taken at the beginning of each class. Lateness and students leaving before the end of the class period will be recorded. If you arrive late, you are responsible for letting me know at the end of the class. The official Mathematics Department policy is that two lateness (this includes arriving late or leaving early) is equivalent to one absence. In this course a student may have 3 absences during the semester without penalty. After 3 absences, the penalty will result in a grade reduction; in excessive cases, you may be asked to withdraw from the course. Students are responsible for obtaining all the information from classes that they miss with classmates as soon as possible.

Academic Integrity: Academic dishonesty is prohibited in The City University of New York and at New York City College of Technology and is punishable by penalties, including failing grades, suspension, and expulsion. The complete text of the College policy on Academic Integrity may be found in the catalog.

Preparation

You will be expected to come to class having already completed the reading and having looked at the textbook practice problems for the upcoming lesson. By studying the material before each class you will be ready to discuss the material in more depth and have specific questions to ask about parts of the material that may be giving you difficulty.

Participation

A part of the class that will benefit you comes from how you interact with the others. I encourage you to present problems, contribute your ideas and insights, work in groups, and ask questions.

Course Website:

The course website can be found by looking at my homepage here:

`http://websupport1.citytech.cuny.edu/Faculty/jthiel/welcome.html`