Math 1030Q-Elementary Discrete Mathematics-Fall 2012

Announcements:

Final Exam Review Part 2 and Solutions. We will provide you with this formula sheet.

Final Exam Review part 1 and Solutions

Project 2 is due on Friday, December 7.

Exam 3 is on Monday November 12 and it will test material from Sections 4.1, 4.3- 4.6 (all sections). **You will be allowed to use a calculator (cellphones will not be allowed).** Exam 3 Prep. and Solutions.

Exam 2 is on Wednesday 10/17 and it will test material from Section 2.2 (only Jefferson's Method) and Chapter 3 (all sections). **You will be allowed to use a calculator (cellphones will not be allowed).** Exam 2 Prep. and Solutions.

Project 1 is due on Wednesday, October 24.

Exam 1 is on Wednesday 9/19 and it will test material from Sections 1.1-1.4 (all), 2.1. The exam will consist of about 3-4 problems, with multiple parts, and you will have 50 minutes to complete it. **You will be allowed to use a calculator (cellphones will not be allowed).** Exam 1 Prep. and Solutions.

Welcome to Math 1030Q!

Text:

Mathematics Beyond the Numbers, Custom Ed, by Gilbert and Hatcher. You can purchase this in the bookstore, bundled with a solutions manual.

You'll also need a calculator for several of the sections. Nothing fancy, but you need something that can do logarithms and exponents.

Course Objectives:

This course will stress problem solving skills and the development of reasoning skills in an interactive setting. The mathematics involved are not difficult, but are probably different than the work to which you are accustomed. We will see how some of these mathematical ideas have very real and useful applications to the world around us.

Homework:

The material covered in this course takes practice! The course outline contains reading assignments and recommended practice problems for each section. Homework problems will not be collected, but you will do yourself a disservice by neglecting them as working through examples is the best way to learn these concepts. Homework problems will be discussed at the beginning of each class.

Projects:

Small take-home projects may be assigned throughout the semester to reinforce understanding of the topics. As always, feel free to ask your instructor for assistance.

Exams:

There will be 3 in-class, 50 minutes-long exams. They are tentatively scheduled for::

- Wednesday, September 19
- Wednesday, October 17
- Monday, November 12

A comprehensive final exam will be given (tentatively) during the common MATH block on **Saturday, December 15**. Attendance at all exams is mandatory (see the missed exam/quiz policy below).

Quizzes:

Short quizzes will be given at the start of class each Wednesday, and will be based on the homework assignments. There will be no make-ups for missed quizzes. If you miss a quiz for a university accepted reason, then your quiz grade will be computed ignoring that quiz. See the missed exam/quiz policy below for more details.

Makeup Exams/Quiz Policy:

The only valid excuses for missing an exam or quiz are a family-related crisis or a serious health problem. If this is the case, you will need a note from the Office of Student Services and Advocacy (OSSA) or University Health Services official and you should notify your instructor as soon as possible.

Grades:

Your final grade will be calculated as follows:

- Best 2 In-Class Exams - 20% each
- Other In-Class Exam - 10%
- Quizzes and Projects - 20%
- Final Exam - 30%

Office Hours and Additional Help:

We strongly encourage you to attend the office hours of your instructor. All of us are also available to meet by appointment (send an email!).

Extra help is also available through the Q-Center. The Q-Center provides free tutoring on a drop-in basis and exam review sessions.

Academic Integrity:

Please be familiar with the university policy on academic integrity (http://www.community.uconn.edu/academic_integrity.html). All breaches of this code of conduct will be taken seriously and handled as per university regulations.

Special Accommodations:

Student Athletes and Students with Disabilities should inform your instructor of your commitments as an athlete, any special needs that you have, etc**. within the first two weeks of the semester.** You will be expected to bring in a letter from the Athletics Department or the Center for Students with Disabilities.

The University Senate passed a motion on about religious observances which stipulated that Students anticipating such a conflict should inform their instructor in writing within the first three weeks of the semester, and prior to the anticipated absence, and should take the initiative to work out with the instructor a schedule for making up missed work. For conflicts with final examinations, students should, as usual, contact the Office of Student Services and Advocacy.

Contact:

Any questions or concerns about the course should be sent to either your instructor or the course coordinator Dr. Konstantina Christodoulopoulou.

Department of Mathematics
196 Auditorium Road, Unit 3009
Storrs, CT 06269-3009
Phone: (860) 486-3923
Fax: (860) 486-4238
Comments to webmaster@math.uconn.edu

Below is a **tentative** schedule for the class. Make sure you check it regularly for updates!

We strongly recommned that **before** every lecture you take a half-hour or so to look at the sections that will be covered on that day.

Week	Sections	Topics	Homework
1	1.1 1.2	Plurality, Runoff methods Borda's Method	pg 15: # 1, 3, 6, 7, 11, 15 pg 28: # 1, 3, 5, 9, 12
2	1.3 1.4	Head-to-head Comparisons Approval Voting	pg 41: # 1, 3, 7, 9, 11, 15 pg 53: # 2, 5, 7, 9, 11, 15
3	2.1 2.2	Quota methods Early Divisor Methods	pg 95: # 1, 3, 5, 8, 9 pg 117: # 1, 3, 5, 7, 11, 13
4	 3.1	Review **Exam 1** Algebra Review	 pg 166: # 1-29 odd
5	3.2 3.3	Simple Interest Compound Interest	pg 171: # 1, 7, 11, 15, 17, 21, 23, 27, 30 pg 186: # 1, 5, 9, 13, 17,21, 31, 35, 39, 52
6	3.4 3.5	Systematic Savings Amortized Loans	pg 197: # 1, 5, 9, 13, 15, 19, 21 pg 212: #1, 5, 9, 13, 17, 23
7	4.1 4.3	Elementary Probability The Addition Rule	pg 239: # 1, 3, 5, 9, 11, 13, 17, 19, 23,29 pg 254: # 1, 3, 5, 7, 11, 13, 15
8		Review **Exam 2**	
9	4.4 4.5	Conditional Probability, BayesTheorem Counting Techniques	pg 264: # 1, 3, 7, 11, 13, 19, 23, 27, 34 pg 282: # 1, 5, 9, 13, 17, 21, 25, 29, 35
10	4.6	More Probability	pg 293: # 1, 5, 9, 13, 17, 21, 25, 28,31,33

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	4.7	Expected Value	pg 301: # 1, 5, 9, 12, 13 17,23
11	4.8	Genetics **Review**	pg 314: # 1,3- 6, 7, 11-13, 17, 21, 25
12	6.1	**Exam 3** Euler Paths and Circuits	pg 455: # 1, 5, 7, 11, 13, 15, 17,23,28, 31
13		Happy Thanksgiving!	
13	6.2 6.3	Traveling Salesman Spanning Trees	pg 481: # 1, 5, 7, 9, 15, 19, 21,23 pg 511: # 1, 3, 5, 7, 11, 15, 21
14		**Catch-up/Review**	

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