MATH 1070Q - Mathematics for Business and Economics (Spring 2018)

Description:

Linear equations and inequalities, exponents and logarithms, matrices and determinants, linear programming. Applications.

Sections:

There are several sections for this course.

Discussion Sections 011D-022D: Lectures in person taught by **Professor Michael Biro**.

Discussion Sections 031D-042D: Lectures in person taught by **Professor Benjamin Russo**.

Students are also required to attend a discussion section that meets once per week.

Homework and WebAssign:

WebAssign: Online homework and MATH 1070 are assigned and completed using WebAssign. **WebAssign must be accessed through HuskyCT**. To get to WebAssign, go to the HuskyCT site for your discussion section (not your lecture section), and click the link on the left navigation menu which says "WebAssign Homework". This will take you directly to the WebAssign homework assigned for your class. You will usually have 5 attempts to answer each non-multiple choice question. For multiple choice questions the number of attempts will vary based on the content. After each attempt, you will be told whether your answer is correct or not. If you are not able to get the correct answer after a couple attempts, come talk to your professor or TA. We're here to help! You might also find some help at the Q-Center.

Homework: There will be homework assignments for each section of the text in WebAssign. These will be due on Friday nights at 11:59 pm on the week after the material was covered in lecture. Be sure to start the assignments early so that you can ask questions in discussion.

In-Class Quizzes: Short, weekly in-class quizzes will be given in discussion sections on material covered during the previous week.

Late Work Policy: Homework extensions will not be granted, and there will be no makeup quizzes, except for in extenuating circumstances. However, **one homework and one quiz score will be dropped** at the end of the semester to accommodate any issues that may arise. It is important that you manage your time effectively to complete the homework before it is due and attend discussion to take quizzes when they are given. Choosing not to do either is up to you, but there will not be any opportunities to recover missed points.

Calculator Policy:

A scientific calculator is allowed and recommended for quizzes and exams. You may **not** use a graphing calculator (TI-84, TI-Nspire, etc) on quizzes or exams, but these devices can be helpful while doing the homework and practicing the concepts. However, keep in mind that you will not be able to use them on quizzes or exams, so make sure to learn how to use the functions on a scientific calculator as well. Sharing of calculators will not be permitted, so make sure to have your own if you want one.

Grading:

Online Homework	WebAssign	10%
In-Class Quizzes	Discussion	10%
Clicker Questions	Lecture	5%
Exam 1: (Feb 22)	Lecture	25%
Exam 2: (Apr 5)	Lecture	25%
Final Exam: (Date TBA)	Common exam	25%

Exam 1 is scheduled for Feb 22, and Exam 2 is scheduled for Apr 5. The exams will be in lecture and multiple choice in format. **You must show work or explain your thought process on each question to receive credit.**

The final exam will be scheduled by the Registrar at some point during the semester.

Note: If you think a mistake has been made in grading or in recording any grades in WebAssign, please bring this to your instructor's attention as soon as possible. All grades must be corrected and updated before the final exam is administered; no changes will be made after that time.

Tentative Outline

Week	Section	Topic
1	4.1	Introduction to Sets
	4.2	The Number of Elements in a Set
2	4.3	Sample Spaces and Events
	4.4	Basics of Probability
3	5.1	The Multiplication Principle and Permutations
	5.2	Combinations
4	4.5	Rules for Probability
	4.6	Conditional Probability
	4.7	Bayes' Theorem
5	5.3	Probability Applications of Counting Principles
	5.4	Bernoulli Trials
6		**Review, Exam I (Feb 22nd)**
7	6.1	Random Variables and Histograms

Week	Section	Topic
	6.2	Measure of Central Tendency
	6.3	Measure of Spread
	6.4	The Normal Distribution
8	F1	Simple Interest
	F2	Compound Interest
	F3	Annuities
9		**Spring Recess**
10	F4	Present Value of Annuities and Amortization
	N/A	Examples with Mortgages and Student Loans
11	1.1	Mathematical Models
	1.2	Systems of Linear Equations
12		**Review, Exam II (Apr 5th)**
13	3.1	Linear Programming Problems
	3.2	Graphing Linear Inequalities
	3.3	Graphical Solutions of Linear Programming Problems

Week	Section	Topic
14	2.1	Introduction to Matrices
	2.2	Matrix Multiplication
15	1.3	Gauss Elimination for system of Linear Equations
	1.4	System of Equations with Non-Unique Solutions
		Final Exam: Date and Time TBD

Exam Dates:

Exam 1 Sections 4.1-4.7 and 5.1-5.4	Feb 22nd
Exam 2 Sections 6.1-6.4, F1-F4, and 1.1-1.2	Apr 5th
Final Exam	TBA

Calculator Policy:

You may use a scientific calculator, but you are not allowed to use a graphing calculator or any other form of technology, like a phone, tablet, computer, etc. **If you use a graphing calculator at any point during the final exam, you will receive a zero as your score.**

Need a scientific calculator? There are plenty of great/cheap models on Amazon, but you can find them in many other places, too!