Math 1071Q — Calculus for Business and Economics (Spring 2017)

Home

Outline

Homework

Exam Info

Instructors

About the course

Welcome! This course is a very basic and important introduction to calculus and its applications. It is designed primarily for students majoring in business, economics, engineering, computer science, mathematics, biology and social sciences. It is also very useful for students wishing to take later a real analysis course with a more in depth study of differentiation and integration and for students that are still undecided on their major. We will cover essential concepts of differential and integral calculus, accompanied by many examples, among which – examples in the business and economics fields.

The focus will be on the derivative and its role in curve sketching, optimization and (through the definite integral) computation of areas.

Textbook

Calculus, Applications and Technology (3rd edition) by Edmond C. Tomastik, bundled with *WebAssign* code.

There are three ways to purchase the text and the WebAssign access code:

1. Get the text and WebAssign access code bundled together at the UConn Co-op.
2. Get the text and WebAssign access code from the publisher's ~~special website~~.
3. Get the text separately from anywhere, and buy the WebAssign access code when you access your homework through HuskyCT.

We do not recommend using the third option above, because if you buy the WebAssign access code separately then you will have to buy it for 95 dollars for one semester of calculus or 110 dollars for two or three semesters of calculus; by comparison, the cost of the book and WebAssign access code bundled together (from the publisher's website or from the UConn Co-op) is less than 95 dollars. The option to buy the text and WebAssign access code bundled together lets you use that access code for the life of the edition of the textbook.

If you purchase a code for WebAssign from WebAssign, then please note that the code will appear to be for a different book (Finite Mathematics and Applied Calculus – 5e by Waner and Costenoble). The reason this discrepancy exists is because the current Tomastik book is not currently available as an e-book but it was necessary to select some book for access code purposes only.

You will have **two weeks of free access** to WebAssign, so you can get started right away in case you need some time to arrange to buy textbook with the access code.

Calculators

Graphing calculators (TI 82, 83, 84, 84 plus, 85 or 86 recommended). (Models TI-89 and above are not permitted on the exams and quizzes). **If your calculator can do symbolic calculus, then it is not allowed in the exams and quizzes.**

Homework and WebAssign

Registration
The homework for Math 1071 is assigned online using the online home work system WebAssign. To access your homework online you must go to Husky CT.
Browsers
Please note that many students have experienced problems using WebAssign with Internet Explorer or Safari. We recommend that you use Firefox or Chrome.
Homework
There will be homework assignments for each section of the text. Each assignment will be made available on several days before the section is covered in class. The due date for each assignment will be set by your instructor and will generally be two or three days after the material is covered in class. **You will get 5 attempts to answer each non-multiple choice question and two attempts for each multiple choice question.** 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 your initial attempts, we recommend

that you seek help from your instructor, the Q-Center or another student.

Quizzes

There will be a quiz on each homework assignment. Do it as a practice in view of the examinations to follow. It will not participate into the computation of your grade. The quizzes that will participate in the computation of your grade are the ones you will take in class. You will have 4 such quizzes, their schedule is available in the course outline. Each in-class quiz duration is 25 min.

Number of attempts

Please note that you will (usually) have 5 attempts at each homework question and 2 attempts at each quiz question. Multiple choice questions will allow for fewer attempts.

Grading

Homework	WebAssign	10%
3 Quizzes	in-class	30%
Exam 1 (Oct 4)	50 min, in class	20%
Exam 2 (Nov 8)	50 min, in class	20%
Exam 3 (Dec 6)	2 hours	20%

Notes on the final exam:

- The final exam will be **cumulative**.
- **Rescheduling your final exam:** You **must** get permission from the Dean of Students Office in order to reschedule a final exam.

Academic integrity

Please be familiar with the ~~university policy on academic integrity.~~ 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 three 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 Dean of Students.

Contact

Any questions, concerns, suggestions or remarks about the course should be sent to either your instructor or the course coordinator, Dr. Jeana Alice Vatamanelu (jeana.vatamanelu@uconn.edu)

Tentative Outline – Fall 2017

Calculus: Applications and Technology (3rd edition), by E. Tomastik

Week	Section	Topic
1		Introduction
	A6	Lines
	1.1	Functions
2		Labor Day
	1.2	Mathematical models
	1.3	Exponential models
3	1.5	Logarithms
		Quiz 1
	3.1	Limits
4	3.2	Rates of change
	3.3	The derivative
	4.1	Derivatives of powers, exponents and sums
5	4.2	Derivatives of products and quotients
	4.3	Chain rule
		Review
6		Review
		Exam 1 (Wed, Oct 4, in class)
		Exam 1 feedback
7	4.4	Derivatives of exponential and logarithmic functions
	5.1	The first derivative
	5.2	The second derivative
8	5.3	Limits at infinity
		Quiz 2
	5.4	Curve sketching I
9	5.4	Curve sketching II
	5.5	Absolute Extrema I
	5.5	Absolute Extrema II
10	5.6	Optimization and modeling
		Quiz 3
		Review
11		Review
		Exam 2 (Wed, Nov 8, in class)

		Exam 2 feedback
12	6.1	Antiderivatives
	6.2	Substitution
	6.4	The definite integral
13		Thanksgiving break
		Thanksgiving break
		Thanksgiving break
14	6.5	The fundamental theorem of calculus
	6.6	Area between two curves
		Review
15		Review
		Exam 3 (Wed, Dec 6, in class)
		Exam 3 feedback
16		Free