

Math 1125Q, Section 01: Calculus Ia

Instructor and Coordinator: Dr. Erin Terwilleger Mullen

Contact Information:

Office Hours: Monday and Thursday 11-12, Tues 1-1:50, or by appointment
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Lectures: Tu,Th 2–3:15 pm, MSB 211

Course Homepage:

<http://www.math.uconn.edu/ClassHomePages/Math1125/Math1125f09/>

Section 01 Homepage:

<http://www.math.uconn.edu/~terwilleger/math1125f09/>

Text: *Single Variable Calculus, Early Transcendentals*, Sixth Edition by Stewart; Brooks/Cole, 2008. See the Course Homepage above for more information on how to purchase the text.

WebAssign Code: In addition to the text, you will need an Enhanced WebAssign (EWA) access code to do the on-line homework. When you purchase a hard copy of the text through the Coop, it comes bundled with an EWA access code. Again, see the Course Homepage for more information and other ways of purchasing EWA access.

Section 01 Class Key: uconn 4787 1846 In order to use WebAssign you must self-enroll. Go to the login page (links located at the top of Section 01 Homepage or in the left hand column of Course Homepage), enter the class key and follow the directions carefully! You will have the opportunity to enter an access code if you have one. If you do not have an access code yet, you can still self-enroll and use WebAssign for 14 days before an access code is required.

Calculators: The use of a graphics calculator (examples: TI-82, 83, 85 or 86) is required. We will not spend much time in class on how to use them. However, most of the time you should be able to work problems without using advanced functions of the calculator. You may use a calculator on your exams, but all work must be shown to receive credit. You are not allowed to use programs or alpha-numeric capabilities on exams.

Lecture Outlines: For each lesson, I have made outlines which contain definitions, important theorems and examples (not worked out) that we will cover in lecture. You can then fill in the outlines with the information given in lecture. Before each class, you are responsible for printing these and bringing them to class. You will find them under the link on the Section 01 Homepage.

Goals: The main goal for the semester is to develop, learn, understand, and apply the theory of single variable differential calculus. We will do this by first laying down the foundations of functions, then moving to the concept of a limit, and finally exploring the derivative. This course is intended as the first half of a two semester sequence. We also spend time going over algebraic and trigonometric topics when necessary.

You should not only be able to work through problems similar to ones seen in the homework, but you should have the ability to articulate the ideas presented in the course in a clear and coherent manner as well. You should also be able to think critically and analytically about problems which can be solved using the mathematics you will learn.

Rules and Expectations: I expect you to come to class on time and participate. As part of this expectation, I do not allow cellphone, MP3 player or computer use. If you must miss a class, I expect you to find out what happened, either from myself or one of your classmates. You are responsible for everything that goes on in class.

I expect you to do much of your learning outside of the classroom. You should expect to spend 6-8 hours a week studying and working on mathematics outside of class. Mathematics, like most subjects, is learned by doing it. If you have questions on the homework, you should come to see me in my office hours, make an appointment, or visit the Q-center. We will not have much class time devoted to going over homework problems.

Finally, you are responsible for reading, understanding, and following all policies in this syllabus. However, I reserve the right to make any changes to the syllabus that I deem necessary as the class goes on.

Grading: The grading scale will follow the standard scale for $+/-$ grading. Your grade will be determined as follows.

In Class Projects	5%
Quizzes	10%
WebAssign Homework	10%
Two exams	20% each
Final exam	35%

In Class Projects: We will often do in class projects which will consist of dividing the class into groups of 3-4 people and working on a worksheet. These are designed to reinforce the material in lecture, present a concept from lecture in more depth, or even explore a new topic. Many, but necessarily all, of these will be turned in for a grade.

Quizzes: There will be a quiz every Thursday except for the first and last weeks of class, the weeks of an exam, and the weeks after an exam. This amounts to 8 quizzes total. The quizzes will cover material from the homework and lectures from the previous week. All quizzes will be closed notes and closed book. Due to the no make-up policy, I will drop your lowest quiz score.

WebAssign Homework: After each section, I will place an assignment on WebAssign. These problems are even problems from the textbook and will generally be due on Mondays and Wednesdays, but always consult the due date and time on WebAssign. When you log onto WebAssign, you will find the current assignments. Within each assignment, the

numbers in red are randomized to be different for each student, so don't just copy your friend's answer! You won't learn the material this way either. Once you submit an answer for grading, it will tell you whether you are correct or not. If your answer is wrong, you will then have the opportunity to rework the problem and change your answer for a total of 5 tries. The grade that will get recorded is the last one submitted before the due date and time. Once the due date has passed, you will be able to look up the solutions on WebAssign.

Other useful features of WebAssign are that I can put up announcements, and you can look up your grades in the course. See the handout for more information on using WebAssign and how to log in. There is a link to the WebAssign log-in page at the top of our section's homepage or in the left column on the course homepage.

We will not have much class time to devote to discussing homework problems. Therefore it is imperative that you seek help as soon as possible if you do not understand a problem. On WebAssign, you have the option of emailing me about a specific problem, so this is one way to get help. Also feel free to stop by my office hours anytime or schedule an appointment. You also have the option of visiting the Q Center for free tutoring (see the information below).

Exams: There will be two evening exams scheduled

Exam 1: Wednesday, October 7 6-7:30 pm in PB 36

Exam 2: Wednesday, November 18 6-7:30 pm in PB 36

Because of the evening exams, there will be no class on Thursday, October 8 and Thursday, November 19. If you have a time conflict with the evening exam due to another class, please contact me as soon as possible. There will be a makeup exam held immediately after the scheduled exam, but I need to verify your conflict ahead of time so that the proctors have your name. The final exam tentatively on Friday, December 18 from 1-3 pm will be comprehensive.

Q-Center: The Q-Center (Q for Quantitative) operates in conjunction with various departments on campus (e.g., biology, chemistry, economics, mathematics, physics, statistics, and the School of Business) and provides the following resources to help students succeed in their Q-courses:

- Tutoring- on a drop in basis
- Assistance with homework
- Exam review sessions (including a bank of previous exams)
- Forming and assisting study groups from within your Q-classes

Students visiting the Q-Center should bring their textbooks, class notes, and calculators. Although we will be using online homework, it is essential that if you go to get help on a problem because your answer is wrong, you must be able to produce a sheet of paper with the problem worked out in an orderly fashion, at least as much as you can do. The tutors cannot help you if they can't see your work. If you are having trouble getting started, then the tutors can help with that, too. The Q-Center is located in Homer Babbidge

Library's Learning Resources Center, 1st (Umbrella) floor. The staff is made up of well-trained graduate and undergraduate students who provide a welcoming environment and are interested in helping students achieve in their courses. You can find out more about this center by visiting the following website: <http://qcenter.uconn.edu/>

Makeup Policy: Late work will **NOT** be accepted. If a true emergency arises, and you must miss an exam, you are responsible for notifying me **beforehand**, supplying the proper documentation, and scheduling a makeup exam. I reserve the right to refuse a makeup exam.

On February 2, 2009, the University Senate passed a motion 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 (formerly the Dean of Students Office).

Final Exam Policy: The following is a message from the Dean of Students: "Attention Students. Final exam week for Fall 2009 takes place from Monday, December 14, through Saturday, December 19. Students are required to be available for their exam during that time. Students must visit the Office of Student Services and Advocacy if they cannot make their exam. The Office of Student Services and Advocacy will give the student his or her instructions thereafter. Please note: vacations, previously purchased tickets or reservations, weddings (unless part of the wedding party), and other large or small scale social events, are not viable excuses for missing a final exam. Please contact the Office of Student Services and Advocacy office with any questions. Thank you in advance for your cooperation."

Course Policy on Academic Integrity: A fundamental tenet of all educational institutions is academic honesty; academic work depends upon respect for and acknowledgment of the work and ideas of others. Misrepresenting someone else's work as one's own is a serious offense in any academic setting and it will not be condoned.

Academic misconduct includes, but is not limited to, providing or receiving assistance in a manner not authorized by the instructor in the creation of work to be submitted for academic evaluation (e.g. papers, projects, examinations and assessments - whether online or in class); presenting, as one's own, the ideas, words or calculations of another for academic evaluation; doing unauthorized academic work for which another person will receive credit or be evaluated; using unauthorized aids in preparing work for evaluation (e.g. unauthorized formula sheets, unauthorized calculators, unauthorized programs or formulas loaded into your calculator, etc.); and presenting the same or substantially the same papers or projects in two or more courses without the explicit permission of the instructors involved.

A student who knowingly assists another student in committing an act of academic misconduct shall be equally accountable for the violation, and shall be subject to the sanctions and other remedies described in The Student Code.

Sanctions shall include, but are not limited to, a letter sent to the Office of Student Services and Advocacy of the University; a grade of 0 on the assignment, quiz or exam; a grade of F for the course.

Tentative Class Schedule

Date	Section	Topic
09/01	1.1	Four Ways to Represent a Function
09/03	1.2	Mathematical Models: A catalog of essential functions
09/08	1.3	New Functions From Old Functions
09/10	1.4	Graphing Calculators, Quiz 1
09/15	1.5	Exponential Functions
09/17	1.6	Inverse Functions and Logarithms, Quiz 2
09/22	1.6	Inverse Trigonometric Functions
09/24	2.2	The Limit of a Function, Quiz 3
09/29	2.3	Calculating Limits Using the Limit Laws
10/01		catch-up day, Quiz 4
10/06		review
10/07		Exam 1
10/13	2.4	The Precise Definition of a Limit
10/15	2.5	Continuity
10/20	2.6	Limits at Infinity
10/22	2.1 2.7	The Tangent and Velocity Problems Derivatives and Rates of Change, Quiz 5
10/27	2.8	The Derivative as a Function
10/29	3.1	Derivatives of Polynomials and Exponential Functions, Quiz 6
11/03	3.2	The Product and Quotient Rules
11/05	3.3	Derivative of Trigonometric Functions, Quiz 7
11/10	3.4	The Chain Rule
11/12		catch up day, Quiz 8
11/17		review
11/18		Exam 2
11/23		Thanksgiving Break begins
12/01	3.5	Implicit Differentiation
12/03	3.6	Derivatives of Logarithmic Functions
12/08		review, evaluations
12/10		review, preview of next semester if time