

MATH 2200: Calculus, Spring 2011

Syllabus

Call number: 20-605 **Meets:** MWF 12:20-1:10 (Lecture) Chemistry 551
F 8:00-8:55 (Recitation)

Text: Larson & Edwards. *MATH 2200: Calculus with Analytics* (UGA Edition)
Instructor: Grant Fiddyment Boyd GSRC 325
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Class website: <http://www.math.uga.edu/~gfiddy/2200/home.html>

Please note that it is not necessary to buy the text since it is available online. All that you have to buy for the course is a WebAssign access code. However you get a free grace period of WebAssign use until Jan. 31, so this won't be necessary until then. Therefore you should SIGN UP FOR WEBASSIGN IMMEDIATELY – even if you think you may be switching sections or dropping the class.

Course description/objectives: This course covers the computational methods and central theorems of differential calculus. A successful student will be able to do the following:

- (1) Use the definition of the derivative: calculate it from the definition, discuss its meanings/interpretations
- (2) Apply differentiation rules
- (3) Use the language of calculus and differential equations to read and solve word problems
- (4) Use graphs of the first and second derivative of a function f to determine features of f
- (5) Apply some of the central theorems (e.g. Intermediate Value Theorem, Mean Value Theorem) in solving a problem
- (6) Solve simple differential equations and initial value problems

(A daily course outline will be available on the class website, above.)

Types of Assignments

Homework (50 pts): Homework will be assigned, submitted, and graded via WebAssign (www.webassign.net). Please log in and check the homepage regularly to see when homework is due. Learning calculus is like any endeavor: to succeed, one must practice regularly. Therefore completing homework and attending office hours are the two most crucial components of the class. Bear in mind that knowledge is constructed, NOT received.

Students are **encouraged** to work together when completing homework. This is a valuable way to learn and reinforce material. Please note, however, that each student's WebAssign problems will vary slightly.

Reading Quizzes (2 pts): Roughly once per week there will be a brief (~ 5 minutes/2 questions) quiz at the beginning of class. These quizzes will assess whether you have read and understood the relevant section(s) of the text.

In-class Quizzes (3 pts): Most Fridays there will be two quizzes (see below). At the end of recitation, you will be individually quizzed. These quizzes will generally be 15 minutes long and consist of 2-3 WebAssign homework-type problems.

Group Quizzes (5 pts): During class (after recitation), there will also be a group quiz each week. These will be similar to the In-Class Quizzes (above), although you will be allowed to work in groups

of 3-4 students. Solutions to all quizzes will be posted to the class website.

Tests (100 pts): There will be four tests given over the course of the term. The first tests is scheduled for Friday February 4. Other tests will follow roughly every four weeks (March 4, April 8, April 29) with exact dates announced a week or more in advance.

Final Exam (200 pts): On Friday May 6 (12-3 pm), there will be a comprehensive final exam with the weight of two tests.

Grading:

Homework	50 pts	(~ 7%)	A	93-100 %	C+	77-79 %
Quizzes (~10 ea.)	100 pts	(~ 13%)	A-	90-92 %	C	73-76 %
Tests (4)	400 pts	(~ 13% ea.)	B+	87-89 %	C-	70-72 %
Final Exam	200 pts	(~ 27 %)	B	83-86 %	D	60-69 %
Total	750 pts		B-	80-82 %	F	Below 60 %

Please note there will be *no* extra credit.

Testing procedure/Make-up policy: At the discretion of the instructor, 1-2 quizzes may be dropped at the end of semester. There will be no make up quizzes. However students wishing to make up an individual quiz grade (3 pts) may be able to do so by making a short (~5 min) presentation on an application of calculus/mathematics.

Office hours: To be decided. Once finalized, they will be posted on the website above.

N.B. Attending office hours is crucial to your success in this class. There is a stark difference between "knowing how to do a list of problems" and "understanding calculus." The former *might* get you through the class an assignment or test at a time and ultimately will help you very little. The latter will develop your critical thinking and broaden your analytical skills, which will benefit you as you study other disciplines. Understanding calculus, however, requires grappling with the material outside of class, confronting what you do not understand, and formulating intelligent questions about it. Attending office hours is a crucial component of this process.

Attendance: Attendance will be informally taken in the form of quizzes. So while no one has a "limited" number of absences, academic success will require regular attendance.

Academic Honesty: As a University of Georgia student, you have agreed to abide by the University's academic honesty policy: "A Culture of Honesty" and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty," found at www.uga.edu/honesty. Ignorance is no excuse for a violation! Questions related to course assignments and academic honesty policy should be directed to the instructor.

Accommodations: If you have a documented (learning) disability, you should contact the Disability Resource Center:

<http://www.drc.uga.edu/about/welcomeletter.php>

This syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.