MAT 127: Calculus C, Fall 2010
General Course Information

Course Website

You can access the course website through *blackboard*, as well as at

$$\text{http://math.sunysb.edu/}\sim\text{azinger/mat127-fall10/.}$$

Please print out the *Teaching Staff, etc.*, *Additional Course Information*, and *Frequently Asked Questions* handouts as soon as possible. All homework assignments, exam information, and a lot more will also be posted on the course website. *Please visit it at least twice a week.*

Prerequisites

In order to take MAT 127, you must have either completed MAT 126 with a grade of C or higher or achieved at least level 8 on the Mathematics Placement Examination. Furthermore, you must have a solid understanding of the topics covered in MAT 123, 125, and 126 (otherwise, you'll almost certainly fail MAT 127).

Course Description

MAT 127 is the final part of the three-part one-variable calculus sequence MAT 125-126-127. It continues where MAT 126 left off and covers the final two chapters of the textbook: 7 and 8. These chapters build on the notions developed in MAT 125 and 126 to introduce two (seemingly) separate concepts: ordinary (i.e. one independent variable) differential equations and infinite power series. These are essential in many areas of mathematics, science, and engineering and are in fact closely related, as many real-life problems can be modeled by differential equations and solutions to these equations are often described by power series.

Unlike MAT 125 and 126, there are no recitation sections in MAT 127, but the lectures themselves are quite a bit smaller. You are very much encouraged to actively participate in the class; please do ask questions during lecture (and come to office hours!).

Textbook

The textbook for this course is the *Stony Brook Edition* of J. Stewart's *Calculus: Concepts and Contexts*, 4th Edition. This is the textbook also used by MAT 125, 126, 131, and 132 this semester and last semester, but **not** the edition used by MAT 127 last semester. The textbook is required and is available at the campus bookstore and possibly for less at Stony Books. We will also use notes on second-order differential equations and the ratio test; these are available on the course website. Anything else posted on the course website, even temporarily, is required reading as well; this will include exam information, summaries of parts of the course, solutions to the problem sets, etc.

Special Needs

If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services at (631) 632-6748 or

$$\text{http://studentaffairs.stonybrook.edu/dss/.}$$

They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. Students who require assistance during emergency evacuation are encouraged to discuss their needs with their instructors and Disability Support Services. For procedures and information go to the following website:

$$\text{http://www.sunysb.edu/ehs/fire/disabilities.shtml.}$$

Homework

As in MAT 125 in Fall 09 and 126 in Spring 10, the problem sets will consist of two parts. You will have to complete one of the parts online through *webassign* and to hand in the other part to your instructor. The *webassign* portion will be due at the same time for all sections of the course and before the written homework is due for any of the sections. Unlike MAT 125/126, the proportion of online exercises may vary greatly between different problem sets and will generally be smaller.

You should be able to access your *webassign* account through *blackboard* starting Monday, August 30, provided you registered for this course sufficiently in advance. If you registered late, you should be able to access your *webassign* account within 24 hours of your name appearing on the *blackboard* class list. After you login the first time, take a note of your *webassign* username; you can use it to gain direct access to your *websassign* account by clicking on *Forgot Your Password?* on the *websassign* homepage.

You will need to purchase a webassign access code if you do not already have one. The Stony Brook edition of the textbook comes with a multi-term access code. You can also purchase an access code directly through *webassign* ($37 for one semester; possibly more if purchased through the campus bookstore).

Grading Policy

> *Homework* 15%, *Early Exam* 10%, *Midterm I* 20%, *Midterm II* 20%, *Final* 35%

Your grades will be available through the *blackboard* website, linked from the MAT 127 website.

NO late homework will be accepted; a deadline is a deadline and even 1 second late (according to the *webassign* clock for online hw and your instructor's cell phone for paper hw) is late. However, your lowest homework score will be dropped. If you will be out of town when a paper homework is due, you can turn it in to your instructor any time before it is due (which you are welcome to do even if you won't be out of town).

Your letter grade for the semester will be determined exclusively by your weighted total (rounded to 1 decimal point), with the following exception **only**. If your weighted total is x points below the next letter grade cut-off and your final exam score as a percent of the maximum possible score is at least $10x$ points higher than the corresponding cut-off on the final exam, then you'll receive that letter grade for the term. This exception may increase your letter grade one step only (e.g. from C+ to B-). As it already gives you an extra chance to get a better letter grade, this exception will be implemented without any flexibility (e.g. if your weighted total is .5 below the C cut-off for the semester, while your rescaled final exam score is 4.67 points above the C cut-off for the final (7 points out of 150), you will not receive a C).

This class is not "curved". The letter grade cut-offs for the exams and the homework will be determined based on how difficult these are and how harshly they are graded; in turn, these cut-offs will determine the cut-offs for the semester. If you receive a C in this course, this means you are qualified to take any course for which MAT 127 is a prerequisite (assuming you have met the other prerequisites); this has nothing to do with how many other students do better or worse than you or withdraw from the class (and thus lower your relative standing in the class). Similarly, A means "superior work"; this also has nothing to do with how many people do better or worse than you.