MAT 125: Calculus A Stony Brook, Spring 2007

Text: Single Variable Calculus (Stony Brook Edition), by James Stewart.

This is the same book as Stewart's Concepts and Contexts, 3rd ed, but with a different cover and a lower price (a new copy should be about \$100 in the bookstore or Stony Books). This same book is used by MAT125, MAT127, MAT131 and MAT132; Suffolk Community College also uses this book, but with the other cover.

Calculators: You may find using a graphing calculator helpful. However, be careful how you use it. Many students become dependant on their calculators, and wind up being unable to do anything without them. In this course, no calculators will be allowed on exams.

About this course: The goal of this course is to develop your understanding of the concepts of Calculus and your ability to apply them to problems both within and outside of Mathematics. Functions are presented and analyzed as tables, graphs, and formulas. You need to continue to develop your proficiency at manipulating formulas and equations, which are the language of science. Fluency in this language is essential for success in science or engineering.

Homework: You can not learn calculus without working problems. Expect to spend at least 8 hours a week solving problems; do all of the assigned problems, as well as additional ones to study. If you do not understand how to do something, get help from your TA, your lecturer, your classmates, or in the Math Learning Center. You are encouraged to study with and discuss problems with others from the class, but write up your own homework by yourself. Specific problem assignments can always be found on the web at http://www.math.sunysb.edu/calculus/mat125. A significant fraction of the homework problems will be turned in on and graded by the computer. See the web page for more details.

Reading: The textbook is intended to be read. Read the assigned sections **before the lecture!** This will greatly increase your comprehension, and enable you to ask intelligent questions in class. Furthermore, the lectures will not always be able to cover all of the material for which you will be responsible.

Examinations and grading: There will be two evening exams, and the ever-popular final exam. The dates and times are listed below; the locations will be announced in lecture. Success on the exams will require correct and efficient solutions to the more difficult of the homework problems. Part of your grade will be based on class participation in both recitation and lecture.

| What | When | | % of Final Grade |
|--------------------------------|---------------------|----------------|------------------|
| Exam 1 | Monday, February 19 | 8:30–10:00 pm | 25% |
| Exam 2 | Tuesday, March 20 | 8:30-10:00 pm | 25% |
| Final Exam | Monday, May 14 | 2:00-4:30 pm | 35% |
| Homeworks, Participation, etc. | | | 15% |

Make sure that you can attend the exams at the scheduled times; **make-ups will not be given**. If you have evening classes, resolve any conflicts *now*. If one midterm exam is missed because of a serious (documented) illness or emergency, the semester grade will be determined based on the balance of the work in the course.

Math Learning Center: The Math Learning Center, in Math S-240A, is there for you to get help with Calculus. It is staffed most days and some evenings— your lecturer or TA may hold some of his or her office hours there. A schedule should be posted outside the room and at the Math Undergraduate Office.

Disabilities: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students requiring emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information, go to the following web site:

http://www.stonybrook.edu/ehs/fire/disabilities.shtml