MAT 125: Calculus A Stony Brook, Fall 2009

About this course: The goal of this course is to develop your understanding of the concepts of differential 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.

Text: Single Variable Calculus (Stony Brook Edition 4), by James Stewart.

This is the same book as Stewart's Single Variable Calculus: Concepts and Contexts, 4th ed, but with a different cover. However, the Stony Brook Edition comes with an access code for WebAssign and a \$10 coupon that can be applied to a clicker; this is available at the campus bookstore or Stony Books (where it is \$5 cheaper). You can also use the older version (the 3rd edition) although you'll have to get WebAssign separately (\$35 or ask someone taking MAT131 to give you theirs). There are also electronic-only versions of the text available at WebAssign (\$60–85 including WebAssign access), CourseSmart (\$92, WebAssign not included), or you can buy individual (electronic) chapters for \$14 each (no WebAssign).

Calculators: A calculator is **not required** for this course, but 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**.

Clickers: Lecture 1 (R01-R09) and Lecture 3 (R20-27) will be using a "clicker" during the lecture (the other lectures are not using clickers). This device allows you to interact with the lecturer in a way similar to "Ask the Audience" in *Who Wants to be a Millionaire*. Clicker answers will count for a portion of your final grade. These are used in several other courses, such as economics, physics, and chemistry. You can use the same clicker for all your courses; Stony Books and the campus bookstore both sell them for about \$25. Details about registering your clicker will be on the class web page sometime soon.

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, and make sure you understand how to do the problems. 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 done on WebAssign; see the class web page for details.

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 later. 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	Tuesday, October 13	8:30–10:00 pm	25%
Exam 2	Monday, November 16	8:30-10:00 pm	25%
Final Exam	Monday, December 14	8:00-10:30 am	35%
homeworks (WebAssign and paper)			10%
participation in lecture and recitation			5%

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.

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.

Office Hours: All lectures and TAs must hold at least three scheduled office hours per week. They are there to help *you*, so make use of these hours. You may go to any hours for any of the people associated with the course; the various office hours are listed on the Teaching Staff section of the class web page. You can also make appointments at other times.

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 at http://studentaffairs.stonybrook.edu/dss/or (631) 632-6748. 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 professors and Disability Support Services. For procedures and information go to the following website:

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

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at

http://www.stonybrook.edu/uaa/academicjudiciary/

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.