MAT 126: Calculus B Stony Brook, Spring 2010

About this course: This course is a continuation of MAT125, covering integral calculus: the definition of the integral, the fundamental theorem, symbolic and numeric methods of integration, area under a curve, volume, and applications such as arc length and work.

Prerequisites: In order to succeed in MAT126, you *must* have a solid mastery of derivatives. Specifically, you need a C or higher in MAT125 (or MAT131, MAT141, AMS151) or a level 6 or higher on the math placement exam.

Text: *Single Variable Calculus (Stony Brook Edition 4)*, by James Stewart. (chaps. 5&6)
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 electronic version of the text, as well as a $10 coupon that can be applied to a clicker; this is available at the campus bookstore or Stony Books You can also use the older version (the 3rd edition) although you'll have to get WebAssign separately ($35). There is also an electronic-only version of the text available at WebAssign ($60–85 including WebAssign access).

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-R06) and Lecture 3 (R14-32) will be using a "clicker" during the lecture (the other lectures are not using clickers). 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. You should register your clicker for the course via Blackboard; see the class web page for details.

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/mat126/`. 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	Wednesday, February 24	8:30–10:00 pm	25%
Exam 2	Thursday, March 25	8:30–10:00 pm	25%
Final Exam	Monday, May 17	8:30–11:00 pm	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.