

# Stony Brook

STATE UNIVERSITY OF NEW YORK

## Course Syllabus

### MAT 126: Calculus B

- **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.
- **Text:** *Single Variable Calculus* (Stony Brook Edition), by James Stewart. This is the same book as Stewart's Concepts and Contexts, 4<sup>th</sup> edition, but with a different cover and a lower price. This same book is used by MAT 125, MAT 126, MAT127, MAT131 and MAT132; Suffolk Community College also uses this book, but with the other cover. Also Check the Course Information Folder in Blackboard for more information on textbook and WebAssign Options. See below for detailed information on textbooks, especially the "Unlimited" option
- **Calculators:** You may find using a graphing calculator (TI 83, TI84 and TI-nspire are the best choices) helpful. Some of the HW problems will require a calculator for their solution but **no** quiz or test questions will require the calculator. Also, in this course, **no** calculators will be allowed on exams.
- **Homework:** You cannot 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 (in the basement of the Mathematics Tower). Almost every lecture will include homework. We will be using **WebAssign**, a web-based system in which you see the problems, submit your answers and/or solutions and get immediate feedback on your work. You will be graded on how many questions you get correct and how many tries it takes you to get the correct answer. You will receive more information concerning its use in separate documents. These will be posted in Bb (Black Board – see below for information on this) as they become available. Keep an eye on your email for announcements.
- **Recitations:** These are required sessions with your TA in which homework will be discussed and questions will be answered. There will usually be a quiz each week. Tests and quizzes will be returned during recitations.
- **Quizzes:** The grades you receive by submitting your HW through WebAssign will be half of the recitation grade. Quizzes given in recitation will be the other half.
- **Reading:** The textbook is intended to be read. Read the assigned sections corresponding to the assignments. 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 and in Bb. Success on the exams will require correct and efficient solutions to the more difficult of the homework problems.

**Evening Exams:** 8:45 pm. 2/27, 4/3.

**Final Exam:** The date and time will be announced later

### Final Grade Calculation

MT 1	MT 2	Final	Recitation
25%	25%	30%	20%

- **Math Learning Center:** The Math Learning Center, in the sublevel of the Mathematics tower, 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.
- **Cell Phones:** If you have a cell phone with you, please have it turned off or set to vibrate. Allowing your phone go off in class is inconsiderate. If you need to talk to someone on the phone please leave the room and move far enough away so that the class is not disturbed. Playing video games on the phone and text messaging are equally inappropriate.
- **DSS advisory:** If you have a physical, psychological, medical, or learning disability that may affect your course work, please contact Disability Support Services (DSS) office: ECC (Educational Communications Center) Building, room 128, telephone (631) 632-6748/TDD. DSS will determine with you what accommodations are necessary and appropriate. Arrangements should be made early in the semester (before the first exam) so that your needs can be accommodated. All information and documentation of disability is confidential. Students requiring emergency evacuation are encouraged to discuss their needs with their professors and DSS. For procedures and information, go to the following web site <http://www.ehs.sunysb.edu> and search Fire safety and Evacuation and Disabilities.
- **Conduct:** The following statement is University policy:

“Stony Brook University expects students to maintain standards of personal integrity that are in harmony with the educational goals of the institution; to observe national, state, and local laws and University regulations; and 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, and/or inhibits students’ ability to learn.”
- **Academic Integrity Statement:**

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. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at [http://www.stonybrook.edu/commcms/academic\\_integrity/index.html](http://www.stonybrook.edu/commcms/academic_integrity/index.html)
- **Email:** Please be sure to use Standard English in writing emails to me, your lecturer and TA, including correct spelling and punctuation. Also use complete sentences. Start the subject line with “MAT 126” then your subject.

- **Blackboard:** You are required to use this application throughout the course to access assignments and other material, to view grades, to contact me and to check for announcements. It is also a good way to contact other students in class to complain about the professor. It would best if you check the site and your email daily since you are responsible for any updates or other material that are posted.

**See below for more information about purchasing textbooks.**

**Textbook for MAT125, 126, 127, 131, and 132**

You have several options regarding the textbook for your calculus course.

The text for MAT125, 126, 127, 131, and 132 (and also AMS151 and AMS161) is [Single Variable Calculus\(Stony Brook Edition 4\)](#), by James Stewart.

These courses also use WebAssign for homework problems and access to **WebAssign is required** in these courses.

Note that Webassign access is **free for the first two weeks** and **includes an electronic text**. So you don't have to do anything right away.

You can purchase the textbook and webassign together or separately; buying them together tends to be less expensive, but not always.

You have several options:

- **Purchase Cengage Unlimited.** [cost: \$119.99]  
This is a digital subscription service, which gives you access to the (electronic) textbook for this course, and also WebAssign. It also gives you access to the text in any other course using a Cengage text (these include courses in many subjects-- see [an explicit list here](#). But not all courses use Cengage texts, so check first!)  
You have the option of renting or purchasing a physical text. Furthermore, you can select up to 6 texts to use for another year, which also gives you WebAssign access. Go to the [publisher's site](#) to purchase.
- **Buy a physical text and webassign access for several semesters.** [cost: \$169]  
This option is called an "ePack" on the [publisher's site](#).
- **Buy several semesters of Webassign access with an electronic text.** [Cost: \$125]  
This is called "Webassign Instant Access" on the [publisher's site](#) You can also buy this from within WebAssign for the same price. I don't know why anyone would choose this option over the Unlimited one.
- **Buy only one semster of access to Webassign, with an electronic text.** [cost: \$100]  
This can only be done within Webassign. As long as none of your other courses use Cengage texts, this could be a good option for students who are taking MAT132 and MAT127, but is typically not a good idea for students in MAT125 and MAT131 (because they usually also take MAT126 or MAT132 afterwards). Many students in MAT126 also take MAT127, in which case it would be better to purchase multi-term access; others stop with MAT126, and should buy only one semester.
- **Buy webassign without an e-book.** [cost: \$60-80]  
Students can buy the webassign-only access direct from within WebAssign. In this case, the cost

is \$60 for a single term, or \$80 for multiple terms. But you don't get access to a textbook (but see below).

If you don't buy the e-book with webassign, or a physical book from the publisher, the Stony Brook edition of the text is **identical** to the book ([Stewart's Single Variable Calculus: Concepts, 4th ed, with WebAssign](#)) **except for the cover** because we made a deal with the publisher to reduce the price for Stony Brook students. This is (or was) the same textbook used in Calculus courses at Suffolk County Community College, just with the different cover.

This might be helpful if you can find a used copy of the text, but these seem to cost [about \\$40-60](#) online (without webassign). So this may not be the most cost-effective solution.

However, the 3rd edition is very similar to the 4th edition (although the homework problems have different numbers, and some sections have changed a little). Used copies of the 3rd edition can be found for [about \\$5](#). This might be a good option if you want a paper text for reference, and purchase WebAssign separately.

Check the website below for more information on the “Unlimited” option. This seems like a good deal but it’s up to you.

<https://www.cengage.com/c/calculus-concepts-and-contexts-enhanced-edition-4e-stewart>