Syllabus for MAT 126 Fall 2014

MAT 126: Calculus B

About the Course

The goal of this course is to extend your knowledge from Differential Calculus to Integral Calculus. You will develop a deeper understanding of Calculus and learn to apply what you learn in a variety of areas. You will develop deeper skills in algebraic manipulation of formulas and equations, working in two and three dimensions. And you will enhance those skills to enable you to pursue further study of mathematics, science, and engineering.

A C or better in MAT126 fulfills the Master Quantitative Problem Solving (QPS) objective. In this course you will:

- Interpret and draw inferences from mathematical models such as formulas, graphs, tables, or schematics through the use of Differential and Integral Calculus
- Learn to represent mathematical information symbolically, visually, numerically, and verbally.
- Employ the methods of calculus to solve problems.
- Estimate and check the results of your mathematical analysis for reasonableness.
- Recognize the limits of mathematical methods in solving problems.

The text is Single Variable Calculus (Stony Brook Edition) by James Stewart. It is the same text that you used for MAT 125/131.

You may use calculators to help you with learning the material or for homework and WebAssign problems. You may **NOT** use calculator on exams.

Homework

Each week you will have paper homework problems that you can hand in at recitation or put in your TA's mailbox. ***Homework is due by Noon on the Friday of the week that it is assigned.*** You will also be required to use WebAssign for further homework problems. ***Each WebAssign assignment is due at 10 am on the Wednesday of the week that it is assigned***.

If you are having difficulty understanding a topic, we suggest that you meet go to your recitation section, meet with your TA, go to the Math Learning Center (located in the basement of the Mathematics Tower), or go to your professor's office hours.

Recitations

Recitation is very valuable. There, your TA will go over the homework problems and will be available to answer your questions.

Exams

There are two midterms and a final. The schedule is:

Midterm 1	September 23	8:45 – 10:15 PM
Midterm 2	October 29,	8:45 – 10:15 PM
Final	December 10,	2:15 – 5:00 PM

We do not give make up exams but instead replace an exam missed for a valid reason by a grade computed on the balance of the work in the course.

http://sb.cc.stonybrook.edu/bulletin/current/policiesandregulations/policies_expectations/min_instructional_student_resp.php

Note that the Midterms are at night, not in the morning!

How your grade will be calculated

Homework - 100 points
Midterm 1 – 200 points
Midterm 2 – 200 points
WebAssign – 100 points
Final – 400 points

Total for the course – 1000 points

Blackboard

Please check Blackboard regularly. Assignments, announcements, grades, etc. will be posted on Blackboard. When items are posted, you will receive an email informing you of the fact. At that point, you will be presumed to know what has been posted. We suggest that you check Blackboard before you email your TA or professor.

Professors and Teaching Assistants

The Course Coordinator is David Kahn

Lecture 01	TuTh	10:00am-11:20am	Simons Centr 103	Yaar Solomon (Professor)
Recitation 01	F	10:00am-10:53am	Lgt Engr Lab 152	David Hu
Recitation 02	M	10:00am-10:53am	Earth&Space 069	Dyi-Shing Ou
Recitation 03	Tu	1:00pm- 1:53pm	Mathematics P131	John Sheridan
Recitation 04	Th	4:00pm- 4:53pm	Physics P112	Xingjia Tang

Recitation 05	W	5:30pm- 6:23pm	Physics	P112	Dyi-Shing Ou
Lecture 02	MWF	10:00am-10:53am	Simons Centr	103	David Kahn (Professor)
Recitation 06	M	12:00pm-12:53pm	Physics	P112	Xuntao Hu
Recitation 07	Th	10:00am-10:53am	Physics	P112	Chengjian Yao
Recitation 08	Tu	8:30am- 9:23am	Physics	P112	Yuan Gao
Recitation 09	W	12:00pm-12:53pm	Physics	P117	Fadi Elkhatib
Recitation 10	W	11:00am-11:53am	Mathematics	P131	Cameron Crowe
Lecture 03	TuTh	5:30pm- 6:50pm	Engr 145	Robert	Andersen (Professor)
Recitation 12	M	5:30pm- 6:23pm	Staller Ctr	3220	Zhongshan An
Recitation 13	M	4:00pm- 4:53pm	Lgt Engr Lab	152	Xuntao Hu
Recitation 14	Th	2:30pm- 3:23pm	Lgt Engr Lab	152	Debra Wertz
Recitation 16	Th	7:00pm- 7:53pm	Physics	P112	Yuan Gao

Course Schedule

Date	Topic	Chapter
Week of August 25,	Area Under a Curve	5.1
Week of September 1	Definite Integrals/Simpson's Rule	5.2, 5.9
Week of September 8	Integration	4.8, 5.3
Week of September 15	Fundamental Theorem of Calculus/Review	5.4
September 22	Review for Midterm	
September 23	Midterm 1 8:45 – 10:15 PM	
September 24,	Go over Midterm	
September 26,	U Substitution	5.5
Week of September 29	U Substitution/ Integration by Parts	5.6
Week of October 6	Trigonometric Integrals/ Partial Fractions	5.7
Week of October 13	Partial Fractions/Improper Integrals	5.7, 5.10
Week of October 20	Areas	6.1
October 27,	Review for Midterm	
October 29,	Midterm 2 8:45 – 10:15 PM	
October 31,	Go over Midterm	
Week of November 3	Volumes	6.2, 6.3
Week of November 10	Arc Length/Average Value	6.4, 6.5
Week of November 17	Applications	6.7, 6.8
Week of November 24	Review/Thanksgiving	
Week of December 1	Appendices (if we have time)/Review	
December 8,	Reading Day	
December 10,	Final Exam 2:15 – 5:00 PM	

How your grade will be calculated

Homework - 200 points
Midterm 1 – 200 points
Midterm 2 – 200 points
WebAssign – 200 points
Final – 400 points

Total for the course – 1200 points

Americans with Disabilities Act:

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, room128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential. Students requiring emergency evacuation are encouraged to discuss their needs with their professors and DSS. For procedures and information, go to: http://www.ehs.sunysb.edu and look at Fire Safety and Evacuatino and Disabilities

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. 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/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. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.

Conduct

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, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures.