

MAT131: Calculus I
Fall 2018
COURSE SYLLABUS

Overview: MAT 131 is the first course in the 2-semester single variable calculus sequence. It covers limits, continuous functions, derivatives and their applications, antiderivatives and the fundamental theorem of calculus. The course moves rather quickly. Students who would like to learn the same material at a somewhat slower pace should take MAT 125. The three-semester sequence MAT 125-126-127 covers the same material as the two-semester sequence MAT 131-132.

Pre-requisite: B or higher in MAT 123 or level 5 on the mathematics placement examination.

Blackboard: You are required to use [Blackboard](#) throughout the course to access assignments and other material, to view grades and are expected to check the site on a regular basis since you are responsible for any material posted. Use your NetID to log into Blackboard (get your NetID and set password in SOLAR). MyLabMath will be accessed from Blackboard as well (see below). All online materials and instructions will be listed under “Resources”. Periodically, time sensitive announcements will be sent to you through Blackboard – they will go to your stonybrook.edu email.

Textbook: James Stewart, Single Variable Calculus (Stony Brook Edition 4) You do NOT need to get a hard copy of the book. You will, however, be required to purchase an online homework access code. When you purchase the access code, it will be bundled with an electronic version of the text. For best pricing, purchase the code/ebook directly through Cengage*. ([more info on textbook purchase options](#))

Calculators: While some of the homework problems will require a calculator, you will NOT be allowed to use a calculator on exams.

Grading: Your course grade will be determined from the following items:

Exam 1 = 20%

Exam 2 = 20%

Final Exam = 40%

Homework/Quizzes = 20%

Exams: See Curriculum file on Blackboard for exam dates. **BOTH MIDTERMS ARE AT 8:45PM!** Be sure to clear up any work conflicts as make-up exams will not be given under any circumstances. If a midterm is missed due to a documented emergency, the final exam score will replace that missing score.

Recitation: In addition to attending lecture, you are enrolled in a smaller class called recitation that meets twice a week. In recitation you have the opportunity to ask questions about the homework and lecture material plus there will be a weekly quiz.

Office Hours: Both your lecturer and recitation instructor hold weekly office hours for you to ask about homework, material or general course questions. You do not need to make an appointment. Times and locations can be found on Blackboard under Faculty Information (or just ask). You can also get homework help at the [Math Learning Center](#).

Lecture 01: Ben McMillan	benjamin.mcmillan@stonybrook.edu	Office: Math Tower 2-116
Lecture 02: Holly Chen	holly@math.stonybrook.edu	Office: Math Tower 2-121
Lecture 03: Deb Wertz	debra.krieg@stonybrook.edu	Office: Math Tower 2-121

***WebAssign:** There will be a web-based homework assignment corresponding to **each week**. WebAssign, offered exclusively from Cengage (the publisher of the Stewart Calculus text) can be accessed through "Tools" in [Blackboard](#) - with this procedure you will not need a course key or login. Purchasing the access code is required as the vast majority of the homework will be done online.

There are multiple purchasing options ([click here for full explanation of options](#)). Take into account that MAT132 (Calculus II) also uses the Stewart Calculus text with WebAssign.

To purchase one of these options, use the following link:

<http://www.cengagebrain.com/course/2790041>

How to access your course materials after purchase

- Sign in to Blackboard and click your course.
- Go to tools, and click Access WebAssign.
- Additional help <https://www.cengage.com/student-training/webassign/blackboard/ia-no>
- When at WebAssign, click verify payment, otherwise if you purchased before the instant access will apply to your college account.

Customer/Technical support

WE'RE HERE
24/7

 1-800-354-9706

 **Chat support** for Student Registration and Access Code questions.

 support.cengage.com

Homework Guidelines:

1. Working through problems is crucial to understanding math. An assignment will appear each Saturday morning and is to be completed by Friday evening (11:59pm) of the following week.
2. You will have the opportunity to ask homework questions during recitation, which is held twice a week. Print out the assignment, try to work through all the problems and bring the printout to recitation along with your work so you can get the most out of the class.

3. The [Math Learning Center](#), located on the Sub level of the Math Tower, is a great resource for free homework help.
4. While you are *encouraged* to use a calculator on the homework, it will not be allowed during exams so be sure you also know how to solve the problems without the calculator.
5. Comprehension of homework questions as well as the examples covered in lecture will be instrumental in preparing you to do well on the exams. You are encouraged to take good notes and form study groups.
6. There is a document on Blackboard in "Resources" labeled Curriculum itemizing the topics covered during each lecture.

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

Note: once you are registered with them, you must also schedule a time to take an exam **every time**.

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.

IMPORTANT: It is the **student's** responsibility to keep the instructor informed of situations and events that prohibit student learning including family emergencies, illnesses and disabilities (please see the statement regarding students with disabilities above). Communication is a must and initial communication is the student's responsibility. When emergencies occur that prohibit student learning and performance, it is the student's responsibility to email me informing me of the situation **before returning to class**.

Week #	Topics	Section
week of	27-Aug	
1	go over syllabus	
	function representation	1.1
	essential functions	1.2
	transformation/composition	1.3
	<i>*independent reading: Appendices A, B</i>	
week of	3-Sep	
2	exponential functions	1.5
	inverse functions/logarithms	1.6
	<i>*independent reading: Appendices C, E</i>	
Labor Day: no class 3-Sep		
week of	10-Sep	
3	limit of a function	2.2
	limit laws	2.3
10-Sep last day to add, drop or withdraw wo W		
week of	17-Sep	
4	continuity	2.4
	limits involving infinity	2.5
	<i>*independent reading: Appendix D</i>	
week of	24-Sep	
5	Derivatives/Rate of Change	2.6
	Derivative as a Function	2.7
	f' versus f	2.8
week of	1-Oct	
6	Exam 1 - Mon 10/1 8:45-10:15 PM	
	polynomial/exponential derivatives	3.1
	product/quotient rules	3.2
week of	8-Oct	
7	go over exam in recitation	
	derivatives of trig functions	3.3
	chain rule	3.4
Fall break 8-Oct to 9-Oct		
12-Oct last day to move up or drop down		

Week #	Topics	Section
week of	15-Oct	
8	implicit differentiation	3.5
	derivatives of inverse trig functions	3.6
	derivatives of log functions	3.7
week of	22-Oct	
9	differentials only	3.9
	Related Rates	4.1
	Min/Max	4.2
26-Oct last day to GPNC or withdraw w W		
week of	29-Oct	
10	Derivative vs Shape of Curve	4.3
	L'Hospital's Rule	4.5
	Exam 2 - Th 11/1 8:45-10:15 PM	
week of	5-Nov	
11	go over exam in recitation	
	Antiderivatives	4.8
week of	12-Nov	
12	Riemann Sum	5.1
week of	19-Nov	
13	Definite Integral	5.2
	Evaluating Definite Integrals	5.3
	Thanksgiving break 21-Nov to 25-Nov	
week of	26-Nov	
14	Fundamental Theorem of Calculus	5.4
	Substitution Rule	5.5
week of	3-Dec	
15	review	
week of	10-Dec	
(note: last day of class is Monday 10-Dec)		
16	Final Exam - Th 12/13 11:15 AM	