

MAT122: Overview of Calculus with Applications
Spring 2019
COURSE SYLLABUS

Lecturer: Deb Wertz debra.krieg@stonybrook.edu **Office:** Math Tower 2-121 (second floor)

Recitation: Michael Albanese michael.albanese@math.stonybrook.edu

Overview: This course covers both differential and integral calculus and explores the relationship between them.

Pre-requisite: C or better in MAP103 or 3 or better on placement exam.

Textbook: *Calculus and its Applications, 11e* by Bittinger/Ellenbogen/Surgent but it is not required you to purchase a hard copy. You may choose to get the electronic copy with the online homework access.

Calculator: No calculators will be allowed for the exams but some homework questions will require the use a calculator.

Blackboard: Material relevant to the course including grades, documents and announcements will be posted on Blackboard. WebAssign will be accessed from Blackboard as well (see below).

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

Lowest Midterm Score = 10% of course grade

Middle Midterm Score = 15% of course grade

Highest Midterm Score = **20%** of course grade

Final Exam = 40% of final grade (final exam is cumulative and given during class)

MyLab, Quizzes, Participation = 15% of final grade

Exams: See [Course Curriculum](#) on Blackboard for exam dates. All 3 midterms are given during **recitation** time at the testing center. **Make-up exams will not be given under any circumstances.** If a midterm is missed due to a documented emergency, the course grade will be computed based on the balance of the course work. **Note that the final will be held in class on the last day of class, not during final exam week.**

MyLab will be used for web-based homework assignments and can be accessed through "Tools" in [Blackboard](#) - with this procedure you will not need a course key or login. It is most cost effective to buy the access code directly through MyLab.

Recitation: A short quiz will be given most weeks. Recitation is also a prime opportunity to ask questions regarding homework problems as well as to get any clarification on lecture material. Print out homework assignments from MyLab and try to formulate questions in advance so you can get the most out of the session.

Homework Guidelines:

1. Working through problems is crucial to understanding math. An assignment will appear after each lecture and is to be completed either Tuesday or Thursday evening (11:59pm).
2. You will always have the opportunity to ask homework questions during recitation before the assignment is due. Print out the assignment, try to work through all the problems and bring it to class along with your work so you can get the most out of the Q&A session.
3. While it is 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.
4. Comprehension of homework questions as well as the examples covered in lecture will be instrumental in preparing you to do well on the exams. I encourage you to take good notes and form study groups.
5. There is a document on Blackboard labeled Course Curriculum itemizing the topics covered during each lecture.

Concerns: If you have ANY problem related to the course, please feel free to discuss it with me. I truly want you to succeed in this course and I will do whatever I can to help resolve the problem. You can talk to me before or after class, during office hours or via email.

Cell Phones: During class, cell phones should be either turned off or set to vibrate. Do not text, listen to music or engage in social media during class time. Headphones are not permitted.

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, room 128, (631) 632-6748. They will determine with you what accommodations, if any, are necessary and appropriate. All information and documentation is confidential.

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**.

<u>Tuesday</u>	<u>Thursday</u>
29-Jan administration	31-Jan Lecture #1 domain/range functions
5-Feb Lecture #2 compose functions linear function	7-Feb Lecture #3 8-feb 4pm: last day withdraw wo "W" inverse functions transformations
12-Feb Class Canceled	14-Feb Review
19-Feb Lecture #4 Exam 1 - during recitation*	21-Feb Lecture #5 limits
linear applications quadratic function polynomial function	
26-Feb Lecture #6 limits	28-Feb Lecture #7 average rate of change
5-Mar Lecture #8 difference quotient def'n of derivative	7-Mar 8-mar 4pm: last day move up/down Review
12-Mar Lecture #9 Exam 2 - during recitation*	14-Mar Lecture #10 chain rule higher order derivs
power rule product rule quotient rule	
19-Mar Spring Break NO CLASS	21-Mar Spring Break NO CLASS
26-Mar Lecture #11 exponential functions	28-Mar Lecture #12 3/29 4pm: last day GPNC/W exp/log functions
2-Apr Lecture #13 logarithmic functions	4-Apr Lecture #14 applications

<u>Tuesday</u>	<u>Thursday</u>
9-Apr Lecture #15 derivatives of exp/log functions	11-Apr Review
16-Apr Lecture #16 antiderivatives	18-Apr Lecture #17 Exam 3 - during recitation* area definite integrals
23-Apr Lecture #18 integrals using substitution	25-Apr Lecture #19 integrals using substitution
30-Apr Lecture #20 integration appl	2-May Lecture #21 integration appl
7-May Final Review	9-May Final Exam cumulative - IN CLASS

* Exams 2 and 3 now taken in regular recitation room