MAT131: Calculus I Fall 2020 – Synchronous w Enhanced Faculty Contact COURSE SYLLABUS

Course Coordinator: Deb Wertz E-Mail: debra.krieg@stonybrook.edu

Lectures:

LEC 02	MW	6:05pm- 7:25pm	Online	<u>Deb Wertz</u>
LEC 03	TuTh	9:45am-11:05am	Online	Deb Wertz

Recitation Meet Times: http://www.math.stonybrook.edu/schedules/fall20.html#MAT131

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.

Learning Objectives (Calculus):

- 1. Be able to calculate limits.
- 2. Understand continuity as it applies to functions.
- 3. Understand the derivative as a rate of change and how to apply it to solve applications.
- 4. Be able to compute the derivative of polynomials, exponentials, logarithmic functions, trigonometric functions and inverse trigonometric functions as well as their combinations (products, compositions, etc).
- 5. Be able to determine antiderivatives/integrals with an emphasis on the meaning of the integral as a Riemann sum, that is, an area under a curve.
- 6. Apply the Fundamental Theorem of Calculus to problems involving integration.
- 7. Be able to integrate using the substitution rule.

Learning Objectives (QPS):

- 1. Interpret and draw inferences from mathematical models such as formulas, graphs, tables, or schematics.
- 2. Represent mathematical information symbolically, visually, numerically, and verbally.
- 3. Employ quantitative methods such as algebra, geometry, calculus, or statistics to solve problems.
- 4. Estimate and check mathematical results for reasonableness.

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

Course Topics: see separate file entitled Curriculum

Textbook: There is no textbook to purchase for the course. An ebook will be included with the homework platform.

Technical Requirements: Webcam required – preferably on computer, if not then on phone. Installation of Gradescope will also be required for exams – an invite to join will be sent to your SB email address. Detailed instructions for setting up and using Gradescope will be available on Blackboard. A sample exam will also be provided so you can practice uploading and submitting solutions.

Calculators: There are homework questions that will require answers as a decimal approximation, which will require a calculator. Calculators (any type including graphing) will be allowed for the exam but **only for the use of checking arithmetic**. On an exam, you will be expected to be able to express an answer as an exact value (using pi, radicals, etc) as a simplified fraction where appropriate.

Blackboard: You are expected to use <u>Blackboard</u> throughout the course to access course material, view grades and announcements. Use your NetID to log into Blackboard (get your NetID and set password in SOLAR).

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

Quizzes - 30% of course grade

Midterm = 20% of course grade (held during lecture time – exam date is lecture dependent)

Final Exam = 30% of course grade (cumulative with an emphasis on material covered since midterm)

Homework = 20% of final grade

Exams and quizzes are short answer with partial credit given where appropriate.

Exams are open-book but not open-computer. Exams containing solutions that appear to have been obtained from a derivative or integral calculator such as Symbolab or Cheggs will be reported for academic dishonesty (see below). Exams will be accessed/submitted through Gradescope.

Quizzes are open book (not open computer) and will be accessed/submitted through Blackboard. Solutions must be uploaded to Blackboard by either taking a picture with the camera your phone/iPad, etc. or using an app such as CamScanner. A calculator may be used to check arithmetic.

Exams: See Curriculum file on Blackboard for exam dates. Exams will be made available <u>during the lecture time slot</u> on Gradescope. You are expected to log into the Zoom call with your video ON no less than 10 minutes before the start time with your photo ID handy. You must remain on Zoom until your proctor has confirmed that your exam has been submitted on Gradescope (send a chat after you are done uploading). Exams modified after you have logged out of Zoom will be scored with a 0. You have a fixed time to complete and upload the exam (see Curriculum).

Make-up exams/quizzes will not be given under any circumstances. If the midterm is missed due to a <u>documented</u> emergency, the final exam score will double as the midterm score. If the absence is not excused, your score will be zero.

Lecture: There is no live lecture for the course. Lectures are pre-recorded then released at the beginning of the week as a single video.

Recitation: You are enrolled in a smaller class called recitation that meets twice a week either in-person or online via Zoom, depending on which section you registered for. Zoom links for online recitations are located in the RECITATION component of Blackboard under Zoom Meeting. There are no Zoom links for in-person sections. You may not treat an in-person recitation section as an online section.

In recitation you have the opportunity to ask questions about the homework and lecture material plus there will be a weekly quiz (given at the end of the second recitation of the week) based on the previous week's material. Since quizzes are worth 30% of the course grade, study for them and take them seriously.

Office Hours: Both your lecturer and recitation instructor hold weekly office hours for you to ask about homework, material or general course questions. Times and locations can be found on Blackboard under Resources/Faculty Information – then click on the person's name. To access virtual office hours, click Personal Meeting Room during the schedule time on the person's contact card. For on-campus office hours, go to the person's office at the scheduled time or during their hours at the MLC. In all cases, you do not need an appointment.

You can also get homework help virtually from the <u>Math Learning Center</u> (see site to schedule time with one of their tutors).

Lumen: There will be a weekly web-based homework assignment corresponding to course material. The URL, Course Code and Enrollment Key can be found on Assignments in Blackboard. There is no fee to access this platform.

Homework:

- 1. Working through problems is crucial to understanding math. A weekly assignment will generally appear Friday at 4pm and is to be completed on the following Friday at 11:59pm.
- 2. The level of difficulty for some of the homework questions is higher than those given in lecture by design. Expect to need help completing the assignment. You can ask questions during recitation, office hours, via email (include a picture of your work) and/or at the Math Learning Center.
- 3. There is a document on Blackboard labeled <u>Course Curriculum</u> itemizing the topics covered during each lecture.

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

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, 128 ECC Building, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations 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 is 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

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 University Community Standards 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. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

Face Mask Policy: Students should be aware that a face mask is required while in the classroom. If a student does not comply, the student will be asked to leave the classroom.

If the student does not comply or leave the classroom, we will end the class and the students will be reported to the Office of Student Conduct and Community Standards at communitystandards@stonybrook.edu.

ACCOMMODATIONS FOR STUDENTS WITH HEARING AND COMMUNICATION IMPAIRMENTS

Some students with hearing and communication impairments may need their instructor to wear a clear mask for lip and facial expression purposes. If the student has registered with the Student Accessibility Support Center (SASC) and has requested an accommodation for clear masks, SASC will reach out to the student's instructors and provide a clear mask for them to wear while teaching and/or interacting with the student. If you have questions, please email sasc@stonybrook.edu or call (631) 632-6748.

FACE MASK ACCOMMODATIONS, MODIFICATIONS, OR EXEMPTIONS

The Student Accessibility Support Center (SASC) works with students who may require academic accommodations. If a student is unable to wear a mask for health reasons, the student should contact SASC at sasc@stonybrook.edu. SASC will work with the student to help identify arrangements to complete in-person courses in an alternate format. If, however, there is an in-person class that cannot be accommodated in an alternate format, a student may be approved by the Medical Director of Student Health Services to wear a modified face mask or no face covering. In this situation, SASC will communicate this information to the faculty member. Approved students will also be provided with a written exemption from the Medical Director of Student Health Services that indicates any modifications or exceptions, which they must carry with them to show faculty if requested. Please note that medical exemptions are rare and are based solely on medical necessity. If a student is exempt from the face mask policy, please consider how to seat students to ensure proper social distancing within a given instructional setting. If you have questions regarding accommodations, please email sasc@stonybrook.edu. For health related concerns in the classroom, please contact Dr. Rachel Bergeson, Medical Director, at rachel.bergeson@stonybrook.edu.