

**MAT131: Calculus I**  
**Summer Session II 2021 – Online Only; Remote, Proctored Exams**  
**COURSE SYLLABUS**

**Instructor:** Deb Wertz

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**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

**Blackboard:** You are expected to use [Blackboard](#) throughout the course to access course documents, lecture recordings, Zoom links, view grades as well as announcements. My contact information is under *Faculty Information* on the menu. Use your NetID to log into Blackboard (get your NetID and set password in SOLAR). *Lumen information* can be found on the menu as well (see below).

**Lecture:** All lecture videos are pre-recorded. It is expected that you will watch them at the pace set on the Curriculum. It doesn't matter what time of day you watch them but it's in your best interest to watch them towards the beginning of the week so you can ask lecture and homework questions during the Q&A sessions (see below). This is a condensed course – expect to spend **6-8 hours** per week watching the videos as I highly recommend that you pause and take notes as if you were in a live lecture.

**Q&A Sessions:** Held twice per week Tu/Th 9:00am ET (not held on review or exam days). This is your opportunity to get clarification on lectures as well as homework help. Q&A sessions are *optional* to attend (although you are required to attend on exam days) and will last ~45 minutes depending on how many questions are asked. Sessions are not recorded.

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

Midterm = 30% of final grade

Final Exam = 50% of final grade (cumulative with strong emphasis on material covered since midterm)

Homework = 20% of final grade

Both exams are short answer with partial credit given where appropriate. Exams are open-notes but not open-browser. You are expected to show ALL of your steps and will be given little to no credit for correct answers without proper justification.

**Calculator:** Expect to need a calculator for some homework problems to give rounded decimal approximations as answers. You are allowed to use *any* calculator during an exam but for arithmetic only. You should be able to express an EXACT answer for trigonometric evaluations. i.e., using radicals and pi

**Exams:** Proctored exams will be given remotely over Zoom with video on, without a virtual background. You will be expected to use Gradescope (see below) and Zoom to take the exam – NO exceptions. You are also expected to provide identification (see below).

Review sheets will be provided for each exam. Printed answers will be posted but not detailed solutions. The solutions will be gone over during review sessions but it will be up to you to write up your own copy so you can more deeply understand the mechanics of the material.

\*\* Note the exam dates/times on the Curriculum. Clear your schedule for these dates as it is not an acceptable excuse to miss an exam because of work conflicts, trips, etc.

**Make-up exams will not be given under any circumstances.** If the midterm is missed due to a documented emergency, the final exam score will replace that missing score. If the absence is not excused, your score will be zero. If you are excused from the final exam, you'll receive an Incomplete for the course and be expected to take the final the next semester it is offered.

**Gradescope:** A week or so before the midterm, you'll be sent an invitation *to your SB email* to join the course on Gradescope. There is no associated cost. If you haven't used it before at Stony Brook, you'll be prompted to set up an account. An optional sample will be posted so you can practice uploading in advance of the exam.

**Identification:** During exams, you will be expected to take a picture of yourself with a **photo** ID next to your face. It's preferable that the photo ID be your college ID card otherwise it can be any other standard form of photo identification such as license, permit, passport, visa, high school ID. You may block out an address by putting your finger over it (don't cover your name) or using photo edit tools.

**Lumen:** There will be a weekly web-based homework assignment corresponding to course material. *The URL and course will be posted under Blackboard Assignments during Week 1.* There is no fee to access this platform. Use your NetID as your username and SB email address to set up your account. First assignment will appear on Lumen at the end of the first week on Friday at 4pm ET.

### **Homework:**

1. In general, assignments will become available Fridays at 4pm ET and will be due the following Friday at 11:59pm ET.
2. Expect to spend **2-4 hours** per week completing homework assignments.
3. Answering the problems correctly will not be sufficient to prepare you for the exams. It is crucial to *understand* all of the workings of each problem so you are able to recognize when to use which concept in an application problem.

4. By design, the level of difficulty for some of the homework questions is higher than the lecture examples. Expect to need help completing the assignment. You can ask questions during the Tu/Thu Q&A sessions (see above) and/or at the [Math Learning Center](#).
5. **Late Passes:** It is in your best interest to complete the assignments in a timely fashion but, in the event that you don't complete an assignment before the due date, you will be given **40** Late Passes to use at your discretion to reopen older assignments for credit. There are no penalties to use Late Passes. Note: older assignments require more Late Passes than newer ones; use them wisely.

**Concerns:** I truly want you to succeed in this course. If you have ANY problem related to the course, please feel free to discuss it with me *in a timely fashion*. e.g., don't wait until after the final to tell me that you needed to get a C in the course in order to graduate

**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](mailto: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](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.

**Student Absences Statement:** Students are expected to attend every class, report for examinations and submit major graded coursework as scheduled. If a student is unable to attend lecture(s), report for any exams or complete major graded coursework as scheduled due to extenuating circumstances, the student must contact the instructor as soon as possible. Students may be requested to provide documentation to support their absence and/or may be referred to the Student Support Team for assistance. Students will be provided reasonable accommodations for missed exams, assignments or projects due to significant illness, tragedy or other personal emergencies. Please note, all students must follow Stony Brook, local, state and Centers for Disease Control and Prevention (CDC) guidelines to reduce the risk of transmission of COVID. For questions or more information [click here](#).