

UNIVERSITY OF CALIFORNIA, MERCED
Math 11 – Calculus I
Spring 2026

Instructor: Dr. Chris Sandoval (e-mail: csandoval6@ucmerced.edu)

Office: ACS 330B

1. **Learning Objectives:** Upon completion of this course, students should understand
 - The concept of a function and the various types of functions used by mathematicians and scientists
 - The concept of a limit and its interpretation and applications
 - The concept of a derivative and its various interpretations
 - How the derivative is used to analyze functions in a variety of settings
 - The concept of an antiderivative and the definite integral
2. **Learning Outcomes:** Upon completion of this course, students should be able to
 - Compute the limit of a given function
 - Compute the derivative of a given function
 - Perform linear approximations and other derivative applications
 - Solve related rates and optimization problems
 - Apply the Fundamental Theorem of Calculus
 - Find the antiderivative of specific functions.
 - Compute the definite integral of specific functions.
3. **Program Outcomes:** This course is aligned with the following applied math program learning outcomes:
 - (1) Solve mathematical problems using analytical methods.
 - (2) Recognize the relationships between different areas of mathematics and the connections between mathematics and other disciplines.
 - (3) Give clear and organized written and verbal explanations of mathematical ideas to a variety of audiences.
4. **Assessment:** The course grades will be calculated by the following weights.
 - 10% — Discussion section attendance
 - 10% — Lecture section attendance
 - 10% — Supplemental problem sets.
 - 20% — Quizzes
 - 30% — Midterms
 - 20% — Final exam

The course will start with a standard, grading scale:

A	90%-100%
B	80%-89%
C	70%-79%
D	60%-69%

However, the teacher reserves the ability to “curve” the grading partition to reflect the difficulty of the course. A plus/minus system will be implemented, with the upper and lower 2.5% of each grade being allocated for these. Please be aware that you need a “C-” or better to pass Calculus I (Math 11).

- (a) **Attendance:** The students’ presence in lecture and discussion sections will be tabulated. Discussion section attendance will be judged by the discussion leader.
- (b) **Discussion sections:** Discussion sections will be held for 1.5 hours each week. Students will develop problem-solving skills through group work on worksheets. These worksheet questions may be more difficult than homework questions. Worksheets will be posted online before the discussion section meets. Students are expected to have a copy of each worksheet, either an electronic (laptop computer and/or smart phone) or a hard copy (print out the worksheet), before each discussion section.

5. Learning Management System

- (a) **CatCourses** — Course documents and grades will be available at CatCourses: <https://catcourses.ucmerced.edu/>.
- (b) **Knewton Alta** — Students are expected to purchase the online software for Supplemental Problems Set access.

6. **Quizzes and Exams:** Quizzes will be administered during discussion sessions. The lowest quiz score will be dropped. There will be midterms and a final exam on the dates listed. Graphing and online calculators, computers, and other electronic devices are not permitted during those sessions. There will be no make-up exams! If you are sick during a unit exam, please provide a note from your doctor verifying your illness. Your course grade will then be determined by the rest of your course work at the instructor’s discretion. Special needs accommodations for people with documented disabilities will be provided for each exam. See your instructor and course web page for more information.

7. Class policies

- (a) **Electronics:** Only handheld scientific calculators (non-graphing, non-online) equivalent to a model TI-35 are acceptable during exams and quizzes, while all other portable electronic devices and computers must be turned off and put away. Electronic devices are permitted during discussion sections (except during the quiz), but only if they are being used toward completion of the week’s worksheet.
- (b) **Special Accommodations:** Any student who feels he or she may need an accommodation based on the impact of a disability should contact me privately to discuss his or her specific needs. Also contact Disability Services at (209) 228-7884 as soon as possible to become registered and thereby ensure that such accommodations are implemented in a timely fashion. The instructor will make every effort to accommodate all students who, because of religious obligations, have conflicts with scheduled exams, assignments, or required attendance. Please speak with the instructor during the first week of class regarding any potential academic adjustments of accommodations that may arise due to religious beliefs during this term.

- (c) **Academic Integrity:** Academic integrity is the foundation of an academic community and without it none of the educational or research goals of the university can be achieved. All members of the community are responsible for its academic integrity. Existing policies forbid cheating on examinations, plagiarism and other forms of academic dishonesty. This includes the use of outside resources to perform computations, symbolic manipulations, and referencing. The UC Merced Academic Honesty Policy and Adjudication procedures available on the website: <http://studentlife.ucmerced.edu> by following the link to Student Judicial Affairs. Infractions against academic integrity will incur consequences such as an “F” on the assignment/quiz/exam and/or a report to the Academic Senate.