

Math 30 – Calculus I

Fall 2017

Instructor: Dr. Corey Shanbrom

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Office Hours: Monday 12-1pm, Wednesday 11am-12pm, and Thursday 1-2pm, or by appointment

Prerequisites: Math 29 or four years of high school mathematics which includes two years of algebra, one year of geometry, and one year of mathematical analysis; *and* a passing diagnostic exam score. Every student taking Math 30 must pass either the Calculus Readiness Test (CR) or the ALEKS PPL placement assessment. Enrollment in Math 30 (with a letter grade) in the previous semester is also acceptable.

For ALEKS PPL, a score of 76 is passing. A CR score of 41 is passing; a score of 36-40 is advisory qualification and admission is left to the instructor's discretion. It is the student's responsibility to prove to the instructor that they have passed. Any student who does not demonstrate a passing score on either exam by the end of the first week of classes will be dropped.

Lectures: Section 07: MWTh 4-5:15pm in BRH 209

Text: There is no required text for this class. The official text is Calculus, Early Transcendentals, James Stewart, 8th edition. This is the official text, but it is not necessary to succeed in this course. In fact, almost any other modern calculus book (including older editions of Stewart) will suffice. We will not be using any text directly, as this is a lecture-based course with online homework. However, I do recommend owning some calculus book for the nice pictures and worked examples. Further, we will be covering chapters 2-5 of Stewart and following the book's structure fairly closely. Reading ahead is highly recommended. Also note that future calculus courses may require the 8th edition of Stewart.

Grading: Homework 25%, Midterms 45%, Final 30%. This is an approximation. Letter grades will be determined by a curve at the instructor's discretion.

Exams: There will be three midterms, each worth about 15% of your final grade. No notes, books, electronic devices, or bathroom breaks will be permitted during any exam. Exam make-ups will be permitted only in the case of a documented emergency. Midterm dates will depend on our progress, but will be announced at least one week before the exam. The final will be comprehensive and held Wednesday, December 13, 3-5pm.

Homework: Homework answers are submitted and graded online, accessed through SacCT. All problems are multiple-choice. Detailed instructions appear on another document, entitled "Submitting Your Homework Using SacCT." Free SacCT training workshops are provided by IRT. Problem sets will be available on SacCT. Due dates will be announced in class and also posted to SacCT. A solution to each problem will be available immediately after submission. Completion of certain problems will require a basic calculator.

You must *also* turn in written work for each problem by the assignment's due date. I will skim this and provide some feedback on the quality and clarity of your work, as I would on an exam. You must submit complete written work to get full credit for the assignment. Late homework will be accepted at a penalty.

Resources: I am your primary source for help with the material, but other resources are available. The Math Lab in Brighton 118 offers free drop-in tutoring from math majors, grad students, and sometimes faculty. It is open M-Th 9am-5pm and F 9am-1pm. You can and should form study groups; these can meet in the Math Lab as well. Other textbooks and websites (eg, Wikipedia, Mathworld, even Youtube) are helpful.

Peer Assisted Learning (PAL) Program: There are optional adjunct sections (NSM 12E, Peer-Assisted Learning MATH 30) that students can take concurrently with Math 30. These are offered several times per week (see class schedule.) NSM 12E is a one-unit course, graded Credit/No Credit, which is facilitated by undergraduate students who have successfully mastered the material in Math 30. In these PAL sections, Math 30 students will work in small groups on worksheets dealing with the course topics.

Even if you do not enroll in NSM 12E, you may still go to the PAL facilitator office hours for help. Office hours of the PAL leaders are held in SQU 315 and the times will be announced when they become available. Times of office hours will also be posted outside the doors of my office and SQU 315.

Catalog Description: Functions and their graphs; limits; the derivative and some of its applications; trigonometric and hyperbolic functions and their inverses; the integral; the fundamental theorem; some applications of the integral.

General Education:

GE Area: B4 (Mathematical Concepts and Quantitative Reasoning)

Writing Component: This class has a writing component. This means that you will have to write. On every exam you will find questions that require a few sentences explaining a concept, theorem, or method.

Learning Outcomes: Solve problems by thinking logically, making conjectures, and construction valid mathematical arguments. Make valid inferences from numerical, graphical, and symbolic information. Apply mathematical reasoning to both abstract and applied problems, and to both scientific and non-scientific problems.

Remarks: If you have a disability and require accommodations, you need to provide disability documentation to SSWD, Lassen Hall 1008, and discuss your needs with me as soon as possible.

Cheating of any type will result in disciplinary action and an automatic fail. This will show up on future background checks, grad school applications, etc. If you are unsure what constitutes cheating, please see Sac State's Academic Honesty Policy; I have provided a link on SacCT.