MAT 21A: Calculus

Summer Session II 2021

Instructor: Hans Oberschelp

Basic Information:

- Lecture Times: MTWF 6:10pm - 7:50pm (all times PDT) online via Zoom
- Email: hoberschelp@math.ucdavis.edu
- Office Hours: Monday 10:00am - 12:00pm, Thursday 4:00pm - 6:00pm, or by appointment.
- Textbook: *Thomas' Calculus Early Transcendentals*, 14th Edition (owning textbook is not required)

Prerequisites:

A score of 35 or higher with a trig subscore of 3 or higher on the Math Placement Exam is required. No exceptions. If you do not satisfy this requirement by 11:00am on August 3rd **you will be administratively dropped from this class.**

Course Description and Topics:

This course is an introduction to calculus. The course will be roughly divided into three sections. The first will focus on limits and continuity. The second will cover differentiation. The third will look at applications of differentiation, including optimization. For a more detailed list of topics, check out the math department recommended syllabus at: https://www.math.ucdavis.edu/courses/syllabus_detail?cm_id=6 which this course will follow.

Grading:

Your grade will be weighted as follows:

- Homework: 10%
- Midterm 1: 25%
- Midterm 2: 25%
- Final Exam: 40%

After the final exam, you will receive *at least* the following letter grade (possibly with a + or -):

- A: 90% - 100%
- B: 80% - 90%
- C: 70% - 80%
- D: 60% - 70%
- F: 0% - 60%

I will assign +'s and -'s within each bracket (for example, I might decide to give everyone from 77%-80% a C+) but I will decide the cutoffs for these after the final exam is taken. I also may decide to lower the cutoffs, and give higher grades than this chart indicates (for example, I might decide to give everyone from 87% to 91% an A-) but I will NOT raise the cutoffs (so if you get 80.2%, the lowest grade you can possible receive is a B-).

Homework:

I will assign problem sets twice weekly that will be due the following week. Submit homework by uploading a pdf to Gradescope. As long as you are able to create a legible pdf, how you write down your solutions is up to you. You can write on a piece of paper and then scan it (using phone apps to scan is fine if you don't have a printer with a scanner), you can write on a tablet, whatever works for you! Just please make sure it is easy to read. With regards to grading the homework, I will choose a random selection of problems to be graded on each assignment, and the reader for this course (not me) will grade these problems. *Your lowest homework score will be dropped* to accommodate for possible problems or emergencies. For this reason, late homework will not be accepted.

Optional WeBWorK Practice:

I will regularly assign problems on the online platform WeBWorK that you can solve as practice. These problems will not be graded. With some problems, you will also have to option to generate new, similar problems endlessly. My suggestion would be to focus on the problems that you struggle to solve. If you drill yourself on these you will be well prepared for the exams!

Exams:

The exams will be held on the following dates:

- Midterm 1: Tuesday, August 17th 6:50pm - 7:50pm
- Midterm 2: Tuesday, August 31st 6:50pm - 7:50pm
- Final Exam: Friday, September 10th 6:10pm - 7:50pm

The exams will be closed book and closed note, with no calculators allowed. To take the exams you will need to have access to the internet, and a device with a camera that can use Zoom and access Canvas. Other than this device, the only things you can have at your desk are blank paper and writing utensils. During the exams you will be required to stay in a Zoom room with your camera on. After the exam ends, you will have 10 minutes to scan and upload your answers to Gradescope. You must stay in the Zoom room with your camera on until your test is uploaded.

I believe it is necessary to have live exams to preserve the integrity of this class. But I want to be flexible to accommodate for any situations that might make it difficult for you to take the exam at the given times (like if you live in Europe and the test would be in the middle of the night.) If you are worried about your ability to take the exam live at the listed times, please tell me well in advance of the exam and I will figure something out. It is important that you tell me as early as you can, otherwise it might be too late to set up an alternative. Similarly, if you have any SDC accommodations please let me know in advance of Midterm 1 so that I can insure you have your accommodations available.

Tips:

- The Academic Assistance and Tutoring Center offers free calculus tutoring during Summer Session II. Check it out here: https://tutoring.ucdavis.edu/math
- If you get stuck on the homework, ask for help! You can come to my office hours, use the aforementioned tutoring service, or ask your classmates. 10 minutes of help can save hours of headache.
- Show up to the lectures and ask questions. If you are confused, it is likely some of your classmates are confused too so asking for clarification helps everybody. If you can't make it to the lectures, watch the recordings. The best way to guess what might be on the exams is to see what I cover in lectures.
- To help prepare for the final, you can find old 21A finals here: https://www.math.ucdavis.edu/resources/learning/sample-exams

Academic Conduct:

Cheating will not be tolerated. The *minimum* punishment for cheating will be a 0% on the assignment in question and a report to OSSJA. Please review the Code of Academic Conduct Here: https://ossja.ucdavis.edu/code-academic-conduct

Using Chegg or any similar site to obtain solutions to any assigned problem (except for Webwork problems, which are ungraded) is banned. Rest assured, the math department has access to these sites and I will be monitoring them.