

Welcome to Math 104!

Lecture: Tuesdays and Thursdays 8-9:30 at 247 Cory

Instructor: Yu-Wei Fan

Course Website: <https://ywfan-math.github.io/104f19.html>

I will frequently update the course website with class information and new materials (e.g. new homework assignment, change of office hours, etc.). You are responsible for making sure you are up to date with it.

Office Hours: Tuesdays 2:30-4pm and Wednesdays 12-1:30pm at 735 Evans (subject to change)

You are encouraged to drop by!!

Graduate Student Instructor: TBA

Course Prerequisites: Math 53 and 54

Textbook: Ross, *Elementary Analysis: The Theory of Calculus* (Second Edition)

You can download a copy of this book for free on campus through the UC library.

Topics: The real number system. Sequences, limits, and continuous functions in \mathbb{R} . The concept of a metric space. Uniform convergence, interchange of limit operations. Infinite series. Mean value theorem and applications. The Riemann integral.

Homework: Homework consists of reading and problems sets. There will be reading assigned for each lecture. You should come to the class having read the assigned sections of the textbook.

Problem sets will be assigned weekly. Assignments will be posted no later than midnight on Tuesday and will be due at the beginning of the class on the following Tuesday. You have to staple your work if it is more than a page. A random subset of problems from each assignment will be graded. The lowest homework grade will be dropped.

As a rule late homework will not be accepted. If you are late to class on Tuesday, your homework is late and will not be graded. If you have a medical circumstance that prevents you from turning in homework, you will need a doctor's note to receive an extension. Furthermore, a note that merely says "Student visited today" is not very helpful; it's better to have a note that says something like "Student may be unable to complete assignments for the next N days." This will help me decide what length of extension is appropriate.

You are encouraged to work together on the assignments. In your solutions, you should acknowledge the students with whom you worked, and you should write your solutions on your own. For any solution you submit, you should understand it well enough that you can explain it to someone else and answer questions about it. If you find yourself writing down things that you can't explain, you should go back and think more about the problem. Otherwise you're doing yourself a disservice, and you might suffer more when it comes time to take the midterms/exam.

Exams: We will have two in-class midterms and a final exam. No books, notes, or any electronic

devices (including but not limited to calculators and phones) are allowed during the tests.

First Midterm: October 1, in class

Second Midterm: November 5, in class

Final: December 18, 3-6pm

There will be no makeup exams. However, you can miss one midterm without too much damage, as explained in the grading policy below. On the other hand, missing both midterms or missing the final will seriously harm your grade. **Please check the dates now to make sure that you have no unavoidable conflicts!** (Check the final exam schedule at: <https://registrar.berkeley.edu/scheduling/academic-scheduling/final-exam-guide-schedules>)

Grading: Homework 20%, First Midterm 20%, Second Midterm 20%, Final exam 40%

The lower score of the two midterms will be replaced by the score of the final if this increases your total score. The lowest homework grade will be dropped.

Honour Code: All students are expected to act honourably and not cheat. Any evidence of cheating or other violations will be reported to the Office of Student Conduct and Student Community Standards, and if found responsible for academic misconduct may receive sanctions ranging up to suspension or dismissal from the university. Cheating includes, but is not limited to: using an unapproved calculator, books, or any form of notes on tests; copying directly from any source, including friends, classmates, tutors, or a solutions manual; allowing another person to copy your work; taking a test in someone else's name, or having someone else take a test in your name; or asking for a regrade of a paper that has been altered from its original form.

Attendance: You are expected to come prepared and actively participate in every lecture. In the event of an absence, you are responsible for all missed material, assignments, and any announcements made in class.

Regrading: If an error in grading has been made, you must submit a regrade request to me, along with the homework or midterm, within one week of the date it was returned in class. You may not change or add to your work.

Students in need of Special Accommodations: UC Berkeley complies with the regulations of the Americans with Disabilities Act of 1990 and offers accommodations to students with disabilities. If you are in need of classroom or testing accommodations, please make an appointment with the DSP office to discuss the appropriate procedures. More information is available on their website: <http://dsp.berkeley.edu>. Please also make an appointment with me to discuss your accommodation, if necessary, no later than one week into the semester.

Incomplete grades, according to university policy, can be given only if *unanticipated events beyond your control* (e.g. a medical emergency) make it impossible for you to complete the course, *and if you are otherwise passing* (with a C or above).