Math 140B Section B Winter 2025

Instuctor: Yunze Lu Office: APM 6351 Email: vul248@ucsd.edu

Office Hours: APM 6351, Monday 10:00-11:00am, Tuesday 1:00-2:00pm (or by appointment)

Teaching Assistant: Cheng Li (chl119@ucsd.edu) Office Hours: HSS 5062, Tuesday 2:00-4:00pm

Lecture: MWF 12:00-12:50pm at WLH (Warren Lecture Hall) 2111.

Discussion: Discussion section meets every Tuesday and is led by a teaching assistant (TA). Discussion section activities are designed to help you succeed in and keep up with the course.

Final Exam: Wednesday, March 19, 11:30am-2:30pm. There is **NO** make up final exam. It is your responsibility to ensure that you do not have a schedule conflict during the final examination; you should not enroll in this class if you cannot sit for the final examination at its scheduled time.

Prerequisite: Math 140A.

Textbook: Walter Rudin, *Principles of Mathematical Analysis*; 3rd edition.

Course Content: Topics include differentiation, the Riemann-Stieltjes integral, sequences and series of functions, power series, Fourier series, and special functions. This roughly corresponds to Chapter 5-8 in Rudin's book.

Homework: Problem sets will be posted on Canvas and should be completed by the indicated due date. Please submit your homework to Gradescope. **NO** late homework will be accepted. There will be around 8 problem sets, and the lowest score will be dropped.

You will be expected to take them seriously and to write them up neatly. You must **NOT** copy or paraphrase solutions from any source.

Midterm Exams: There will be two in-class midterms: the first on Wednesday, January 29th, and the second on Wednesday, February 26th. There will be no make-up exams. If, for any reason, you cannot make it to one of the midterms, you will automatically receive grading option (2).

Grading: The final numerical grade will be computed as the highest of the following options:

Option 1: Homework 30% + Midterm 1 15% + Midterm 2 15% + Final Exam 40%.

Option 2: Homework 30% + Best Midterm 20% + Final Exam 50%.

In addition, you MUST pass the final examination in order to pass the course.

Piazza: We will use Piazza, an online discussion board. It will allow you to post messages (openly or anonymously) and answer posts made by your fellow students, about course content, homework, exams, etc. You are strongly encouraged to ask questions and discuss on this platform. Here is the link.

Accommodations: Students requesting accommodations for this course due to a disability need to provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD). You should make arrangements in advance to discuss your accommodations with me no later than the end of Week 3. We will make every effort to arrange for whatever accommodations are recommended by the OSD.

Academic Integrity: Academic integrity is highly valued at UCSD and academic dishonesty is considered a serious offense. Students involved in an academic integrity violation will face an administrative sanction which may include suspension or, in very serious cases, expulsion from the university.

Name and Gender Pronouns: UC San Diego is committed to supporting its students' name and gender preferences. Class rosters provided to your instructor and TAs have students' legal names, but we will strive to honor your request to be addressed using a preferred name or gender pronoun. Please let your instructor and TA know your preferences so that we can make changes to our records. (Certain university records may be beyond our ability to change, however.)

Equity, Inclusion and Respect: We are committed to the UC San Diego Principles of Community. To foster the best possible working and learning environment, UC San Diego strives to maintain a climate of fairness, cooperation, and professionalism.