

MATH 245B, WINTER 2022

WILFRID GANGBO

1. Until further notice (UCLA decision), this course meets online for lectures on MWFs from 11am to 11:50am (access the Zoom link from your CCLE account). The first part of the course will be based on the book *Measure Theory and Fine Properties of Functions, Revised Edition*, by Lawrence C. Evans and Ronald F. Gariepy. Regarding the second part, I will pick up material from various other books and I will cover topics such as the Lebesgue–Stieltjes measures, Covering theorems, Differentiation theorem, the Riesz representation. We will also cover topics on Banach spaces, the Weak and Weak* topologies, Ascoli–Arzela theorem and Hilbert spaces.

2. My office is MS 7945, and my office hours will be MFs from 1:30pm to 2:30pm. During the first two weeks, I will only have online hours by Zoom (accessible from your CCLE account). In case we resume to in-person meeting, only the Wednesday’s office hours will be on Zoom. I may be reached by email at wgangbo@math.ucla.edu but you can also meet me by appointment.

3. **Homework and Recorded Lectures.** Homework will be assigned and collected every other week. It will be graded and promptly returned to you, usually the following week. The assignments will be announced in class well in advance, and posted on the course website. Your score on each homework assignment will be based on a few randomly chosen problems. **Late homework will not be accepted.** The HW problems can be found at my website

<http://www.math.ucla.edu/~wgangbo/academic/math245B/>

or (including recorded lectures) in the shared folder at

<https://ucla.box.com/s/zdnxao1bq33dgzr9cmcqf1gtcqgijkl6w>

4. **Grading.** Your final average in this class will be computed using the following scheme:

Homework: 40 %
Final Exam: 60 %

The final letter grades will be based on the overall average at the end of the quarter, according to the following scheme: 90% or above – at least an A, 80 % or above – at least a B, 70 % or above – at least a C, 60 % or above – at least a D, below 30 % – F. I may ”curve up”, but scores below 30 % will not be curved up to pass.

5. **Exam.** During the final exam, you may not use notes, calculators, cell phones, or anything other than paper and pen/pencil. **You must take the final exam in order to pass the class.** Make-ups for the final exam are permitted only under exceptional circumstances, as outlined in the UCLA student handbook. Please bring a photo ID to every exam.

6. Your TA is Ben Bowman; Email: benbowman314@g.ucla.edu

7. **Academic integrity.** See <http://www.deanofstudents.ucla.edu/Student-Conduct>

8. **Notes.** You are not allowed to use cell phone in the classroom. Your homework should be your own work and you are not allowed to copy from your classmate.

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