

# MEASURE THEORY AND FUNCTIONAL ANALYSIS I, FALL 2018

## SYLLABUS

**Course Webpage.** [www.math.wustl.edu/~yasha/teaching/2018f/analysis/](http://www.math.wustl.edu/~yasha/teaching/2018f/analysis/).

### Course Staff.

- Instructor: Yasha Berchenko-Kogan
  - [yasha@wustl.edu](mailto:yasha@wustl.edu)
  - Cupples I, 207A
- Grader: Bei Wu
  - [bei.wu@email.wustl.edu](mailto:bei.wu@email.wustl.edu)

### Textbook.

- The textbook is *Real Analysis: Modern Techniques and Their Applications*, 2nd edition by Folland. The course will cover chapters 1, 2, 3, 5, and 6.
- A supplementary text is a preliminary edition of *Measure, Integration, & Real Analysis* by Axler, available on Blackboard under Course Documents.

### Exams.

- There will one in-class midterm, tentatively scheduled for Friday, October 19.
- The final will be on Wednesday, December 19, 9am to noon.
- If there are issues with the grading of the exams, please contact me.

### Homework.

- There will be weekly homework assignments due in class on Wednesdays.
- Extensions are at the discretion of the grader.
- The lowest two homework scores will be dropped.
- If there are issues with the grading of the written homework, please contact the grader. Contact me if you and the grader are unable to resolve the dispute.

**Collaboration.** To succeed on the homework, you should work together with your peers. However, there is a limit to how much collaboration is acceptable. Here are some general guidelines:

- While you should discuss the problems with others, you should write up your solutions on your own.
- If you get a good grade on a homework problem, you should also be able to do well on a pop quiz with that problem on it.
- You should not look at another student's written solution to a problem, but you are welcome to ask them about the general techniques they used to solve it.
- It's possible to get around the letter of this policy while violating its spirit, for example, by reading your written solution aloud to other students instead of showing it to them. Needless to say, that's also unacceptable.

### Office Hours.

- Apart from exams, office hours are your only opportunity to get personalized feedback from me on your techniques.
- It's a good idea to go to office hours occasionally regardless of how you're doing in the course.
- My office hours are listed on the calendar on the course webpage. I am happy to meet at other times by request.

### Grading.

- I will combine grades with the following weights:
  - 40% homework,
  - 20% midterm,
  - 40% final.
- I will assign grades by taking the unrounded combined grade  $G$  and using the following scale:
  - A:  $90 \leq G$ .
  - A-:  $85 \leq G < 90$ .
  - B+:  $80 \leq G < 85$ .
  - B:  $75 \leq G < 80$ .
  - B-:  $70 \leq G < 75$ .
  - C+:  $65 \leq G < 70$ .
  - C:  $60 \leq G < 65$ .
  - C-:  $55 \leq G < 60$ .
  - D:  $50 \leq G < 55$ .
  - F:  $G < 50$ .
- If the median score on a midterm or final is below 75%, then I will add the difference to each student's score so that the median is 75%.
- Your grades will be available on Blackboard.