

# MATH 131A, ANALYSIS

INSTRUCTOR: RAPHAËL ROUQUIER

*Spring 2023*

**Teaching Assistant:** Ryan Arbon

**Schedule:** MWF 11-11:50am MS 5137 (lectures) and Tue 11-11:50am GEO 4645 (discussion).

**Office Hours:** WF 10am-10:50am or by appointment, office: MS 6905

**Prerequisites:** 32B, 33B. Recommended: 115A.

**Textbook:** Elementary Analysis: The Theory of Calculus, 2nd ed., by K. A. Ross, Springer-Verlag, New York, 2013.

**Description:** Rigorous introduction to foundations of real analysis; real numbers, point set topology in Euclidean space, functions, continuity.

**Homework** There will be 9 homework assignments, due in discussion session, starting Tuesday April 11. No late submissions will be accepted.

Put the following information in the upper right hand corner of the first page:

Your Name

Math 131A, Homework number.

On each additional page, put your name in the upper right-hand corner. Work single-sided: write only one side of each sheet of paper. Staple any homework that is more than one page long. Remove all perforation before submitting. Write legibly. Label the chapter and the section number as well as the problem number (e.g., 1.1 #1.12). Homework that fails to meet the above requirements will be marked "Unacceptable" and returned unread.

## Examinations

There will be two midterm examinations:

First midterm: Friday, April 28, 11-11:50am, in class

Second midterm: Friday, May 26, 11-11:50am, in class

Final Exam: Thursday, June 15, 11:30am-2:30pm (room to be announced)

## Grading

Grading: higher of the following two schemes:

- 15% homework + 20% first midterm + 20% second midterm + 45% final
- 15% homework + 30% (best of two midterms) + 55% final

There will be no make-up exams under any circumstances (neither for homework, not for the midterms, nor for the final exam).