

## Class Information

### *Real Analysis*

Math 131A, Spring Quarter 2015

MWF 9:00am–9:50am, MS 5147

**Instructor:** Matthias Aschenbrenner

**E-mail:** my first name @math.ucla.edu

(I will not answer questions by E-mail. *E-mail should only be used to make an appointment.*)

**Course webpage:** <http://www.math.ucla.edu/~matthias/131a.2.15s>

**Office hours:** MW 10:00am–10:50am, or by appointment, in MS 5614.

(I will *not* hold ‘virtual’ office hours.)

**Discussion section:** T 9:00am–9:50am, MS 5147

**Teaching assistant:** Jeffrey Lin (email: [jt1005@math.ucla.edu](mailto:jt1005@math.ucla.edu))

Information about TA office hours are announced by the TA in the first discussion section.

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

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

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

**Class meetings:** This course meets for lecture three days a week and for discussion section one day a week (four times total). Please feel free to ask questions in lecture, though preferably none regarding homework problems. *Turn off all cell phones, pagers, and other electronic devices before the lecture.*

On Tuesday your TA will lead a discussion section where he can answer any questions, and homework problems can be discussed. The TA will also help with those problems during his office hours.

Questions concerning homework problems and the course material should first be addressed to the TA, and then to me, if further clarification seems necessary. Questions concerning grading should be primarily addressed to me, and not the TA.

**Homework:** One of the main goals of this course, in my eyes, is to teach you how to read mathematical texts, and how to formulate clear mathematical arguments yourself. Since this is best done without time pressure, homework provides the ideal medium to practice your proof-writing skills.

There will be 9 problem sets assigned over the course of the quarter. The problems will range in difficulty from routine to more challenging. Completed solutions are to be handed in at the beginning of class on Friday’s lecture, beginning on April 10.

**No late homework will be accepted.**

However, your lowest homework score will be dropped when computing your grade. You are encouraged to work together on the exercises, but any graded assignment should represent your own work.

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

*Your Name*

Math 131A, Homework #  $x$

On each additional page, put your name in the upper right-hand corner. Work single-sided, that is, write on 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 + 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.**

More detailed instructions about the homework will be provided on a separate handout.

**Exams:** There will be two hour examinations, on *Friday, April 24* and *Friday, May 22*, in class. There will be a final exam on *Tuesday, June 9*, 11:30am-2:30pm, location to be announced.

**No make up exams will be given under any circumstances.**

For each exam, you must bring a picture ID (e.g., BruinCard). No books, calculators, scratch paper or notes will be allowed during exams.

**Disputing midterm grades:** We put a lot of effort into grading your exams. If you feel that a mistake was made in grading your hour exam, you may request a re-grade *within one week*. Similarly, you must check that your homework and exam scores were input on MyUCLA correctly; if the grades were input incorrectly, you have one week to report this. *Be aware that a re-grade means that your exam will be graded from scratch, and it is entirely possible that you will receive a lower score than originally given, if I decide that the original grade was too high.*

Final exams are kept for one quarter, stored for a second quarter to be picked up, and recycled soon thereafter.

**Grading policy:** Homework: 20%. Hour Exams: 20% each. Final: 40%.

All scores and final grades will be available on the MyUCLA gradebook.

**Letter grades:** Roughly computed as follows:

A = 90–100%, B = 80–89%, C = 70–79%, D = 60–69%, F = below 60%.

**Academic dishonesty:** Students are expected to be thoroughly familiar with the UCLA policy on academic integrity. UCLA has instituted serious penalties for academic dishonesty. *Copying work to be submitted for grade, or allowing your work to be submitted for grade to be copied, is considered academic dishonesty.* Here, ‘copying’ does not only refer to producing verbatim copies, but includes slightly adapting and submitting material originally due to someone else.