Math 131A, Lecture 1: Analysis

Instructor: Kristen Hendricks
E-mail: hendricks@math.ucla.edu
Office: 6617D
Office Hours: M 11-12, W 10-11, R 4-5

TA: Jianfeng Lin
E-mail: juliuslin@math.ucla.edu
Office: MS 2954
Office Hours: T 1-2, F 2-3

Course Webpage: www.math.ucla.edu/~hendricks/Math131A.html Most course content can be found both here and on ccle. We will also use the my.ucla.edu gradebook for this class.

Location and Time: MWF 9-9:50 in 5138. TA discussion section R 9-9:50 in MS 5138.

Content: This course is a rigorous introduction to analysis on the real line, and covers sequences, limits, continuity, derivatives and integration. It is intended as a potential first course in abstract mathematics, and will focus on building skills for reading and writing proofs.

Textbook: K. A. Ross, *Elementary Analysis: The Theory of Calculus.* Springer-Verlag 1980. **Second Edition.**

Prerequisites: Math 32B and 33B (or equivalent). Math 115A is recommended but not required.

Homework: Homework will be assigned weekly and due at the beginning of Friday's lecture. There will be ten homeworks. (The first one will be very short.) Do not submit homework by e-mail. **No late homework will be accepted.** However, your lowest homework score will be dropped when computing your grade.

You are encouraged to work in groups on your homework – this is generally beneficial to your understanding and helps you learn how to communicate clearly about mathematics. However, you must write up all solutions yourself. Moreover, since crediting your collaborators is an important element of academic ethics, you should write down with whom you worked at the top of each assignment. You must also cite any sources you use other than the lecture or the textbook (other textbooks, a blog about analysis, etc.)

Exams: There will be two in-class midterms on **Wedneday, January 28** and **Wednesday, February 25**. There will also be a final exam **Wedneday March 18, 8:00-11:00 a.m**. There will be not be any make-up exams except in extreme and documented circumstances. In particular, note that university policy requires that a student who has an undocumented absence from the final exam be given a failing grade in the course.

Grading: Grades will be computed as follows:

- Homework: 20%
- Midterms 1 & 2: 20% each
- Final: 40%

A curve compatible with the department guidelines will be applied to the composite numerical grades. The average will be a B- (unless something surprising happens).

Schedule: We will approximately follow the schedule of topics at http://www.math.ucla.edu/ugrad/courses/math/131A .