

Math 131A WINTER 2017

Analysis

Lecture 1: MWF 9:00-9:50AM Math Sciences Building 5138
Lecture 5: MWF 3:00-3:50PM Math Sciences Building 5147

Instructor: Evan Randles
Email: randles@math.ucla.edu
Course Websites: [https://ccle.ucla.edu/course/view/17W-MATH131A-1\(LEC1\)](https://ccle.ucla.edu/course/view/17W-MATH131A-1(LEC1))
[https://ccle.ucla.edu/course/view/17W-MATH131A-5\(LEC5\)](https://ccle.ucla.edu/course/view/17W-MATH131A-5(LEC5))
Personal Website: <http://www.math.ucla.edu/~randles>
Office: MS 6322
Office hours: Monday 12:50-2:50PM & Wednesday 10:00-11:00AM (both subject to change)

Teaching Assistant:	Sections/Location:	Time:
Casey Fu (cfu1@math.ucla.edu)	1A (for LEC 1): MS 5138	Thursday 9:00am-9:50AM
Younghak Kwon (yhwon@math.ucla.edu)	5A (for LEC 5): MS 5147	Tuesday 3:00pm-3:50PM

TA office hours will be announced in section and posted on the course website.

Course Description: This is a first course in mathematical analysis. We will make a rigorous study of the foundations of calculus, including real numbers, point set topology of Euclidean space, functions, continuity, limits, derivatives, and integrals. This course should develop your ability to write rigorous proofs.

Textbook: Kenneth A. Ross, Elementary Analysis: The Theory of Calculus, Second Edition, Springer.

Prerequisites: MATH 32B and MATH 33B.

Recommended: MATH 115A (Linear Algebra).

Grading: The final grade is determined as the maximum of the following two schemes.

Scheme 1:		Scheme 2:	
Homework	30%	Homework	30%
Midterm 1	20%	Best Midterm	30%
Midterm 2	20%	Final Exam	40%
Final Exam	30%		

Letter grades will not be assigned until the end of the quarter, at which point your composite numerical score will be converted into a letter grade based on class ranking, using the department guidelines for this course.

Exams:

Midterm 1	Monday, January 30th, 2017	6:00-7:50PM	WGYoung CS24
Midterm 2:	Wednesday, February 22nd, 2017	6:00-7:50PM	WGYoung CS24
Final Exam:	Wednesday, March 22nd, 2017	8:00-11:00AM	(location TBA)

There are no make-up midterms. If you miss a midterm, the weight from this midterm will be distributed between the homework, the other midterm and the final exam (see the grading scheme above). The date of the final exam cannot be changed. You must attend the final exam in order to pass the class.

Students must bring their UCLA ID cards to the midterms and to the final exam. Phones must be turned off. Cheating on an exam results in a score of zero on that exam.

Homework:

- Homework will be assigned weekly (usually on Friday) and collected in lecture on Friday at the beginning of the hour.
- Late homework is not accepted.
- To account for illness, emergencies, etc., your lowest homework score will be dropped.
- To succeed in this course, it is crucial that you take the homework assignments very seriously. You are permitted to discuss homework with your classmates and to consult other textbooks, however, I discourage you from searching for solutions on the internet –such behavior will only hinder your learning experience. What you turn in must be your own.
- Your solutions (proofs, etc.) should be clearly written and grammatically correct. In particular, points may be deducted for persistent errors in grammar and punctuation, e.g., incomplete sentences.
- Homework may be handwritten or typed in \LaTeX ; however, handwritten homework must be legible. Illegible homework will not be graded and returned with a score of zero.
- You are free to use any results from lecture, up to the things that we have covered in class. If you use results from the book that have not appeared in lecture, you must also produce the proof from the book, written in your own words.

Course Policies:

- **Schedule:** We will approximately follow the standard outline for this course, available at <http://www.math.ucla.edu/ugrad/courses/math/131A> . Specific reading will be assigned for each lecture.
- **Exam coverage:** This course is 28 lectures long, excluding exams. The first midterm will cover the material of approximately Lectures 1-9, the second midterm will cover the material of approximately Lectures 10-19. The final exam will be roughly sixty percent from the material of Lectures 20-28 and forty percent from the preceding lectures. More specific guidance will be given as we approach the exams.

- **Regrades:** Requests for regrades of midterms will be considered up to fourteen days from the date that the midterm is returned. Regrade requests should only be submitted if you believe that the grade has been given in error. Each request should be accompanied by a clearly written explanation (preferably typed) of why you believe the grade was given in error. The requests must be signed and submitted directly to me. Please make sure to look over your graded work carefully before the time limit passes.
- **Questions and Getting Help:** For mathematical questions, you are encouraged to attend office hours (both mine and those of your TA).
- **Use of Calculators:** You do not need a calculator for this course, and none are permitted on quizzes/exams.

Academic Integrity: Please review the regulations at the following website:

<http://www.deanofstudents.ucla.edu/Student-Conduct>