March 28, 2017

MATH 131BH - SPRING 2017

MWF 10:00 MS 6627, and

Tues 10:00 MS 5128 $\,$

Office hours:

J. Garnett MW 2:00 - 3:00in MS 7941, and by appointment jbg@math.ucla.edu Christopher Shriver TBA in MS 2961, cshriver@math.ucla.edu

Text: W. Rudin, Principles of Mathematical Analysis, 3rd Edition (required).

Material: The object of the course is to get you to understand the logical foundations of analysis, including basic calculus. Proofs will be important, and the best attitude to bring to this class is to not believe any theorem that you don't know how to prove.

We will begin by finishing Chapter 4 of Rudin (starting on page reviewing the last lecture of 131AH (on page 94 of Rudin to be exact), and then cover most of chapters 5, 6, 7 8, and 9.

Grade: Homework 40%, final 40%, midterm 20%. You must present at least one homework problem at the blackboard in quiz section.

For the midterm and the final you may bring a $4 \ge 6$ file card with notes written on both sides, but no books, other notes, phones or calculators. The final exam is June 14, 3:00-6:00. It will cover the entire course. The midterm will be Wednesday, May 10.

Prerequisite: 131AH or permission.

Homework: Assigned weekly, due at the beginning of quiz section the following week. The first assignment will be due April 18.

You may work on the homework problems together, but you must write up your solutions alone. No credit will be given for solutions copied from other people's solutions or from online sources. You will be asked to present a homework solution at the blackboard in the discussion section.

Because I will be away 3 or 4 days during the quarter, we will have lectures on the first two Tuesdays, April 4 and April 11.

John Garnett