U.C. BERKELEY MATHEMATICS 104
INTRODUCTION TO ANALYSIS, SPRING 2018: SYLLABUS

Lecturer: Alan Hammond, alanmh@math.berkeley.edu. Office: 899 Evans

Office hours: Tuesday and Thursday, 11:30 - 12:30.

Textbook: Charles C. Pugh, Real Mathematical Analysis, 2nd edition.

Prerequisites and main themes: Formally the prequisites for this class are Math 53 and 54. The linear algebra content in Math 54 is not of huge relevance for the class, however. An interest in proofs and an inclination to learn more about the rigorous structures that underpine calculus is more important, since this is what Math 104 is about: making rigorous sense of constructions such as the real numbers, convergence of sequences and series, and the differentiation and integration of real-valued functions.

Homework: A weekly homework assignment will be posted on bcourses in most weeks. Students are encouraged to discuss approaches to the problems in small groups but each student must write solutions individually: copying of solutions is prohibited. Homework that is late or submitted electronically will not be accepted, but the lowest two homework scores will be omitted when the grade is computed. Homework assignments will be due *in class* on Tuesdays, with the first assignment due on 30th January.

Midterm: One fifty minute midterm will take place in class, on Thursday 8th March. No textbooks, notebooks or calculators will be permitted at the midterm.

Final: The final examination will last three hours.

Final grade: The final grade will be determined by the following percentage weights: Final 55, Midterm 20, Homeworks 25. If, however, the final performance is relatively strong compared to the midterm, this information will be taken into account when the grade is assigned.

Incomplete grades: Such grades are typically given to students who are on course to pass the class and experience a medical emergency which means that they are unable to complete the class during the semester. They are not given because a student is experiencing a high workload in this or other courses.