OUTLINE: This course is meant not only as an introduction to mathematical analysis, but also as an introduction to mathematical proof. This can be a difficult subject to understand, but our aim is to do just that through learning the basics of rigorous analysis. To begin, we will introduce the real numbers and study them thoroughly. The jumping-off point for the class is basically the Heine-Borel Theorem categorizing compact sets on the real number line. We will follow this by studies of functions and continuity, differentiation and integration and finally sequences. While there will be some overlap with calculus, we will emphasis proof throughout all of these sections.

EVALUATION: The graded assignments for the course will consist of homework problem sets, two exams and a final. The problem sets will be approximately weekly and will consist of problems related to the material covered in class. The exams will be in-class and will occur in the weeks beginning February 13 and March 27. The final is comprehensive and will take place at the scheduled time during finals week. The exams and the final will be worth approximately 60% of the final grade, with the homework worth the remaining 40%.

OFFICE HOURS: MWF 10:30-11:30am and by appointment. Students are encouraged to come by the office whenever they have a problem and either ask questions immediately or set up an appointment. Of course, questions can also be asked over email or the phone, but being able to discuss the problem with a board around is preferable.

NB: Even though this is meant only as a very rough outline of the layout of this course, the instructor reserves the right to change any of the above during the semester subject to informing the students.