

# Math 555/704I Course Outline

Spring 2011

Text : *A First Course in Real Analysis*  
Springer, Undergraduate Texts in Mathematics  
by: Sterling K. Berberian  
Supplemented with notes.

Professor : Anton R. Schep

Office : LeConte 300C

Email : schep@math.sc.edu

Web page : //www.math.sc.edu/~schep/math555-2011.html

Office hours : MW 10:30–12:00 (or by walk-in or appointment)

Tests : 2 one hour tests, each counting 30%, 1 Final project counting 25%

Tentative test dates: February 22, April 12

HW+Quizzes : 15%

Homework assignments : //www.math.sc.edu/~schep/homework554-2010.html

Date of Final Exam : Wednesday, May 4 - 2:00 p.m.

Instead of a cumulative final there will be final projects, Each student will pick a topic from a list of suggested topics and will prepare a written paper on this and present the topic in class. Presentations will take place on the last one or two days of classes and on the scheduled final exam time. Attendance at each of these presentations is obligatory

Material to be covered : Chapters: 8, 9, 10, 11

This course is highly recommended to students planning to go to graduate school in mathematics.

One of the goals of this course is to provide the theoretical foundation of derivatives and integrals and the Fundamental Theorem of Calculus. The emphasis will be on the definitions, theorems and proofs, which show the justification of what we do in Calculus.

Make-up policy : No make-ups for missed homework or quizzes (lowest 2 or 3 scores will be dropped), make-ups for missed hourly tests or final will be given if they were missed for legitimate reasons. In this case any effort should be made to contact me as soon as possible and you might need to provide documentation to support your reasons for missing the tests.

Learning Outcomes: Students will master concepts of real analysis pertaining to differentiation and integration, including a short introduction to the Lebesgue integral.

Cell Phone Policy: Please remember to turn off or silence your phone prior to class. No texting allowed during class.

Attendance policy : A grade penalty can be invoked, if more than 10% of classes

are missed or for missing a presentation .

Graduate Credit : Students taking Math 555 for graduate credit will have additional or some different questions on tests and quizzes.