Math 704 Course Outline

Spring 2009 TTH 4:40-5:55

Text: Real Analysis, Measure Theory, Integration, and Hilbert Spaces

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Office hours: MW 10:30–12:00, or by appointment (or just see whether I am

available)

Homework assignments http://www.math.sc.edu/~schep/homework704-2009.html

 $\underline{\text{Tests}}$: 2 one hour and 15 minute tests, each counting 25%, 1 Final exam

counting 30%

 $\underline{\text{Tentative test dates:}} \text{ Test 1, Tuesday February 17; Test 2, Thursday, April}$

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<u>HW</u>: 20%. Note: homework is extremely important in this course! I strongly encourage cooperation on homework, but you should always write the solutions in your own words, i.e., if I detect literally copied solutions neither student will get credit for the solutions.

Date of Final Exam: Saturday, May 2 - 9:00 a.m.

Material to be covered not very closely: Chapters: 1, 2, 3, 4 section 1, 6 sections 1-3, possibly part of section 4

Attendance policy: A grade penalty can be invoked, if more than 10% of classes are missed. As I will not follow the text very closely, it is very important to miss the least possible number of classes.

<u>Learning Objectives</u>: The objective of this course is to prepare you for the qualifying exam in Analysis. If you are successful you will be able to answer the questions on the Qualifying Examination dealing with measure theory, Lebesgue integration, L^p -spaces and convergence theorems.

<u>Cellphone policy</u>: Please turn your phone off or on silent mode while in class.