

MA575: Principles of Analysis

Fall 2008

Instructor P. D. Hislop
Office: 753 POT
7-5637 or hislop@ms.uky.edu
Text: R. Beals: *Analysis: an Introduction*, Cambridge 2004.
Class Meetings: MWF 2:00–2:50PM CB 347
Office Hours: MWF 3-4; and feel free to stop by, call, or email me.

Course Topics

The goal of this course is to provide everyone with a firm foundation in the theory of functions of a single real variable. Although a lot of this is familiar from the calculus, we'll carefully and rigorously study properties of functions, like continuity and differentiability, and the Riemann integral. We'll also look at questions of convergence of sequences of numbers and functions, including the important topic of uniform convergence of functions. These are fundamental ideas that all mathematicians should be familiar with. This will be a self-contained course. The core material will include the first eight chapters of Beals' book (skipping some subsections).

Course Requirements: There will be 10 problems sets, one midterm (closed book) exam, and one final (closed book) exam.

Grading Policy

Item	Date	Total Points
Problem Sets	10 and each worth 10 points	100
Hour Exam	17 October-in class (tentative)	100
Final Exam	19 December-in class 8:00–10:00AM	100
TOTAL		300

The minimum cut-offs for letter grades are: A 270–300; B 240–269; C less than 240. If your final total of all scores is within one of these intervals you are guaranteed to receive the corresponding letter grade or higher.

PROBLEM SESSION: We will meet once a week (time to be decided) to discuss homework problems.

1 September	Labor Day - No classes
20 October	Midterm of Fall 2008 Semester
4 November	Presidential Election Day - No Classes
7 November	Last day to drop with no W
26–29 November	Thanksgiving Holiday - Break-No Classes
12 December	Last Class
19 December	8-10 AM Final Exam