

PRINCIPLES OF ANALYSIS
MA 575 SECTION 001 – FALL 2016

Syllabus

Instructor: Francis Chung
Office: 727 Patterson Office Tower
Office Hours: Tues 10-11, Wed 4:30-5:30, Thurs 3-4.
Email: fj.chung@uky.edu
Class Meetings: MWF 11-12, CB 347.

Textbook: *Analysis: An Introduction*, Richard Beals. We will cover roughly the first eight chapters of Beals, although I do not intend to follow the book particularly closely. Some other books covering similar material include *Calculus*, by Michael Spivak, and *Analysis, Volume I* by Terry Tao; these may be useful as references. The course notes upon which Tao's book is based are also available online at <http://www.math.ucla.edu/~7Etao/resource/general/131ah.1.03w/>

Material: The goal of this course is to start from “scratch” (we'll discuss what that means) and develop rigorous ways to talk about real numbers, continuous functions, differentiability, integrals, sequences, and series. Whenever possible, we'll use the language of (point-set) topology and metric spaces: this means we'll discuss ideas like open and closed sets, connectedness, compactness, and convergence. Roughly speaking this corresponds to the first eight chapters of Beals's book.

Grades:	Problem Sets	35 %
	Class Participation	10 %
	Quizzes	10 %
	Midterm	15 %
	Exam	30 %

Letter grades will be assigned to percentages in the following manner: 80-100% corresponds to an A, 70-79% corresponds to a B; less than 70% corresponds to a C.

Problem sets will be assigned roughly once per week, to be turned in at the beginning of class on the due date. Late problem sets will not be accepted. You are allowed and in fact encouraged to discuss problems with others, but your solutions must be written up independently. Solutions should be written clearly, in complete sentences. Quizzes will also occur roughly once per week and will be discussed the class before.

There will be a midterm exam on or around October 21, with precise arrangements to be made later. The final exam is scheduled by the university to occur on December 14, 2016, from 10:30-12:30.

Accommodations: If you have a documented disability that requires academic accommodations, please see me as soon as possible. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center for coordination of campus disability services available to students with disabilities.

Updates to this document, along with announcements and problem sets, will be posted on my website, under teaching.