

MATH3322 Analysis II
Spring 2015
331 Cushing MWF11

Dan Chambers

chambers@bc.edu
<http://www2.bc.edu/daniel-chambers>

About the course

This is a followup to MT321, Analysis I. Building on that material, we will cover integral calculus (Riemann and Riemann-Stieltjes integrals), sequences of functions (including uniform convergence of these), the Stone-Weierstrass theorem, power series, exponential and logarithmic functions, Fourier series, linear transformations and differentiation in \mathbb{R}^k , and an introduction to Lebesgue measure and integration.

Text

The text we'll continue to use is *Principles of Mathematical Analysis*, third edition, by Walter Rudin.

Prerequisite

MT321 is the prerequisite.

Office and office hours

My office is **365 Carney; 2-3769**; email (chambers@bc.edu) is the most reliable method of reaching me. My office hours are Mondays 3-4, Wednesdays 12-1, Fridays 1-2, and by appointment.

Our TA, Mustafa Cengiz (Carney 360), has office hours: Thursdays 12-2 and Fridays 10-11.

Homework

Homework will be assigned and collected regularly (roughly weekly). I will return correct solutions with your papers and you should look over any mistakes and make sure you understand the solutions. Submissions must be typeset in \LaTeX . If you are having trouble with the homework problems, I'm available for assistance and hints. You are also allowed to discuss the problems with other students, but **you alone are to write up your work**; discussion with other students is simply to understand the concepts and techniques so that

you can solve the problems. **Papers containing transparent copying will be returned with zero credit.** Late homework will generally not be accepted. University procedures will be followed in integrity cases: see www.bc.edu/integrity for these.

Exams

There will be two semester exams and a cumulative final. You are only allowed a make-up for a missed exam for a serious reason. If you must miss one, please clear it with me beforehand. Tentative dates are:

- Midterm 1: Wednesday, **February 18**;
- Midterm 2: Friday, **April 10**;
- Final: Wednesday, **May 6, 12:30 p.m.**

Grades

Semester grades will be based on homework (18%), semester exams (26% each), and final exam (30%).

Disabilities

If you are a student with a documented learning disability seeking accommodations in this course, please contact the Connors Family Learning Center (617-552-8093); regarding all other types of disabilities, please contact the Disability Services Office (617-552- 3470).