Instructor: Hongjie Dong
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Division of Applied Mathematics
Brown University
182 George St., Room 227.

Lectures: Tuesday and Thursday, 10:30–11:50 am, Barus & Holley 161.
Office hours: Tuesday and Thursday, 9:30–10:30 am.


Outline of the course: This is the first part of a year-long course (APMA 2110–2120), which provides the basis of real analysis: metric spaces, measure theory, and the theory of integration and differentiation, which is fundamental to many of the other courses in the program.

We will cover most materials in Chapters 0-4, and 6 of Folland’s book. If time permitted, some materials in Chapters 7 and 8 will also be studied.

Reference books:


Prerequisite: Single variable and multi-variable Calculus (limits and continuity, differentiation and integration, series, uniform convergence, etc.), Linear Algebra (vector spaces, linear mappings, matrices, determinants, etc.), and some knowledge of set theory.

Grades: There will be an in-class midterm on October 21st and a final exam on December 20th, 2014. Weekly homework will be assigned during the semester. The final grade will be based on your overall performance (Homeworks 30%, Midterm 30%, Final exam 40%).

Date: August 25, 2014.