Math 713
Abstract and Real Analysis I

Time & place: MW 2:30–3:45, AB 634
Instructor: Alex Kumjian, e-mail: alex@unr.edu
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Text: A Course in Real Analysis, 2nd Ed.
by Neil Weiss and John McDonald

The focus of this course is on the theory of integration of real-valued functions based on Lebesgue measure. The Riemann integral, familiar from Calculus, does not behave well with respect to limits. The Lebesgue integral does, and this makes it a useful tool in Modern Analysis and Probability theory. The syllabus follows:

- Set Theory and σ-algebras
- The Real Number System and Calculus
- Lebesgue Measure
- The Lebesgue Integral
- Abstract Measure Theory
- Abstract Integral

Details will be posted on the class website:
http://wolfweb.unr.edu/homepage/alex/713/

Prerequisites: Math 311 and 440, or consent of the instructor