

**Math 713**  
**Abstract and Real Analysis I**

Time & place: TT 11:00–12:15, AB 638

Text: *A Course in Real Analysis*,  
by Neil Weiss and John McDonald

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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:

- (1) Set Theory
- (2) The Real Number System
- (3) Lebesgue Measure
- (4) The Lebesgue Integral
- (5) Measure Theory

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