

Math 311: I, R, A, S, S (4-0-4) 01/24/12

Catalog Description: A one term stand-alone course on topics in real analysis, covering properties of real numbers, completeness axiom, continuity, convergence of sequences and series of numbers, convergence of sequences and series of functions. Emphasis will be placed on proofs.

Course Objectives: After completing this course, students will be able to

1. State definitions and theorems.
2. Provide examples and counter-examples.
3. Construct mathematically sound proofs.
4. Demonstrate proper use of mathematical language, notation, and symbols.

Learning Outcomes and Performance Criteria

1. Demonstrate a working knowledge of the real number system.

Core Criteria:

- (a) State the field-axioms of the real numbers.
- (b)

