

# OFFICIAL SYLLABUS

## MATH 534-CALCULUS CONTENT, PEDAGOGY, AND CONNECTIONS

Effective Fall 2012

**CATALOG DESCRIPTION:** A focused look at calculus content through multivariable calculus, best practices in pedagogy, and connections in other areas.

**Prerequisites:** MATH 350 with a C or better or consent of instructor; within the Department of Mathematics and Statistics credit can only be earned for the Postsecondary Mathematics Education option.

**Textbook:** A Radical Approach to Real Analysis, by Bressoud, 2nd Edition

**Chapter 1:** Crisis in Mathematics: Fourier's Series

**Chapter 2:** Infinite Summations

**Chapter 3:** Differentiability and Continuity

**Chapter 4:** The Convergence of Infinite Series

**Chapter 5:** Understanding Infinite Series

**Chapter 6:** Return to Fourier Series