

# Bemidji State University

## MATH 4470: Advanced Calculus

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

Properties of limits, vector valued functions, infinite series, Taylor series, uniform convergence, improper integrals, convergence in the mean and Fourier series. Prerequisite: MATH 2210 and MATH 2480. (Might not be offered every year.)

**B. COURSE EFFECTIVE DATES:** 08/22/1997 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Limits and their properties
2. Taylor and Fourier Series
3. Gamma and beta functions
4. Line and surface integrals
5. Improper integrals

### D. LEARNING OUTCOMES (General)

1. Have a heightened level of mathematical maturity
2. Have an extension of content from the calculus sequence

### E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted