

# Minnesota State University Moorhead

## ED 535: Infusing Technology into Mathematics

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: 2

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

ED 519 - Creating Web-Based Curriculum Materials

Corequisites: None

MnTC Goals: None

This course will examine and evaluate both commercial and free software available for mathematics instruction. Students will design learning activities that foster equitable, ethical, and legal use of technology.

**B. COURSE EFFECTIVE DATES:** 05/05/2000 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

### D. LEARNING OUTCOMES (General)

1. Students will apply specific-purpose electronic devices (such as a graphing calculator or scientific probe ware) in appropriate content areas.
2. Students will communicate results of research electronically with classmates.
3. Students will conduct research and evaluate online sources of information that support and enhance the mathematics curriculum.
4. Students will describe current instructional principles, research, and appropriate assessment practices as related to the use of computers and technology resources in the mathematics curriculum.
5. Students will design and practice methods and strategies for teaching problem-solving principles and skills using technology resources in an ethical and appropriate manner.
6. Students will design and publish online documents that present information and include links to mathematical resources.
7. Students will explore, research, evaluate, and use computer/technology resources including applications, tools, educational software and associated documentation.
8. Students will reflect on the implementation of the technology in mathematics instruction and revise the lesson to better meet the students needs.
9. Students will develop instructional units that involve compiling, organizing, analyzing, and synthesizing of information and use technology to support these processes.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted