

# Minnesota State University Moorhead

## MATH 316: Teaching Mathematics in the Middle Grades

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites:

This course requires either of these prerequisite categories

1. Both of these

MATH 303 - Foundations of Number Systems (Minimum grade: 1.67 GPA Equivalent)

MATH 304 - Informal Geometry

Or

2. MATH 262 - Calculus II

Corequisites: None

MnTC Goals: None

Materials and methods of teaching mathematics in grades 5-8. Open only to math majors with a concentration in teaching and to elementary education majors with a specialty in mathematics. In addition to those students who have completed the listed prerequisites, students who are majoring in secondary math education and who have Junior standing may take this course.

**B. COURSE EFFECTIVE DATES:** 11/04/2002 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Number and operation
2. Geometry
3. Algebra
4. Data Analysis and Probability
5. Pedagogical content knowledge
6. Social content knowledge

### D. LEARNING OUTCOMES (General)

1. As mandated by the Minnesota Board of Teaching, this course is also aligned with Standards of Effective Practice (StEP) and the Minnesota Mathematics Standards (MS) as identified in MSUM's Mathematics Matrix Form I-C, and Middle level endorsement license for teachers of mathematics.
2. Be able to design lessons, activities, and assessments that address the MN K-12 Academic Standards for Mathematic grades 5-8 and the Common Core for Mathematics.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted