

MA 354: Methods and Materials in Teaching Middle School Mathematics
Winter 2013

Instructor Information:

Dr. David Buhl

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Hours: M,W,Th,F 9-10 and 11-12

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Course Goal:

The primary purpose of this course is to help prepare middle school teaching candidates to become effective mathematics educators. Current issues, approaches, and materials in school mathematics teaching are addressed. This is an applied course, in that students will come away from the course with specific activities, lessons, and teaching techniques that can be used in the middle school mathematics teaching classroom.

Course Objectives:

1. Understand the content, methods, and materials necessary to teach middle school mathematics
2. Learn about research on students' mathematical thinking and reform principles about teaching and learning mathematics
3. Understand connections between mathematical concepts and procedures within a problem-solving environment
4. Understand the role of mathematical discourse in students' learning to communicate and make sense of mathematical ideas
5. Learn how to make instructional decisions about the use of curricular materials, such as textbooks, other resources, manipulative materials, and technology in the teaching of middle school mathematics

Catalog Description:

The catalog description is located at

http://math.nmu.edu/Academics/courses/descriptions/ma_ed_courses/ma354.html

Required Text:

Krullil, S., Rudnick, J., & Milou, E. (2003). *Teaching Mathematics in Middle School: A Practical Guide*.

Attendance:

Attendance and participation are required and necessary to achieve a passing grade.

Evaluation:

Various instruments will be used to evaluate each student's performance on the learning objectives of the course. These instruments include but are not limited to: participation in activities, reading assignments/reflection, weekly assignments and content quizzes/exams. The traditional percentages for grades include 100-90 A, 90 – 80 B, 80-70 C, 70-60 D. A minimum score of 75 is needed for a C in the course.