

**Course Syllabus**  
**Southeast Missouri State University**

**Department of Mathematics**  
**Title of Course: Internship in Geometry and Measurement**

**Course No. MA 616**  
**New: Fall 2013**

**I. Catalog Description and Credit Hours of Course:**

Supervised teaching practicum and online seminars in which candidate acquires experience working with a range of students and adult learners on Geometry and Measurement concepts. (1)

**II. Co-requisite(s):**

MA626 Geometry and Measurement

**III. Purposes and Objectives of the Course:**

This course is a supervised mathematics teaching practicum in which candidate acquires experience working with a range of student and adult learners including elementary students (e.g., primary, intermediate, struggling, gifted, English language learners) and elementary school teachers, both novice and experienced, in a variety of professional development settings. The mathematical focus of this practicum is Geometry and Measurement concepts.

The primary objectives of the course are to:

- A. Collaborate with individual teachers through co-planning, co-teaching, and/or coaching.
- B. Facilitate teachers' use of successful, research-based strategies.
- C. Analyze and evaluate student ideas and work, and design appropriate responses.
- D. Develop skillful and flexible use of different instructional formats—whole group, small group, partner, and individual—in support of learning goals.
- E. Design, select and/or adapt worthwhile mathematics tasks and sequences of examples that support a particular learning goal.
- F. Know the different formats, purposes, uses, and limitations of various types of assessment of student learning; be able to choose, design, and/or adapt assessment tasks for monitoring student learning.
- G. Use the formative assessment cycle (administer a formative assessment task, analyze student responses to the task, and design and reteach lessons based on this analysis) and be able to find or create appropriate resources for this purpose.
- H. Analyze formative and summative assessment results, make appropriate interpretations and communicate results to appropriate and varied audiences.

**IV. Student Learning Outcomes:**

- A. Student will demonstrate a greater understanding of how to teach and apply geometry in a classroom setting.
- B. Student will effectively communicate their mathematics related classroom experiences gained during the internship
- C. Student will effectively evaluate the impact of the internship on themselves and their classrooms.

## V. Expectations of Students:

### Working with Students:

- A. Administer the geometry interview protocol to 10 students in your class. Use your observations to determine the van Heile level at which each is working. Describe a sequence of activities to move these students forward.
- B. Collect geometry or measurement related work from 4 students in your class. Two of these should be from students whose work you feel is strong. The other two should be from students whose work is not strong. For each piece of work, write a reflection that describes the strengths and weaknesses noted in the work.
- C. Keep a weekly journal of your experiences in teaching geometry/measurement concepts to students in your classroom. What are you learning about your students and yourself as a teacher?

### Working with Adults:

- A. Work with a group of teachers to analyze testing data for your grade level or school. Analyze the data. Create an improvement plan based on your analysis.
- B. Create a presentation to be shared with school administration regarding the improvement plan created above.

## VI. Course Outline:

Topics	Class Hours
A. Assessment	
1. Interpreting summative assessment data	5
2. Creating improvement plans	5
B. Lesson Study	<u>5</u>
	15

## VII. Textbook:

None

## VIII. Basis of Student Evaluation:

A. Online participation	15 %
B. Improvement Plans	25 %
C. Lesson Studies	60 %

## IX. Grading Scale

90% - 100% = A  
80% - 89% = B  
70% - 79% = C  
0% - 69% = F

The weight of the evaluation criteria may vary according to each instructor and will be communicated at the beginning of the course.

## X. Academic Policy Statement:

Students will be expected to abide by the University Policy for Academic Honesty regarding plagiarism and academic honesty. Refer to:

<http://www6.semo.edu/judaffairs/code.html>

**XI. Student with Disabilities Statement:**

If a student has a special need addressed by the Americans with Disabilities Act (ADA) and requires materials in an alternative format, please notify the instructor at the beginning of the course. Reasonable efforts will be made to accommodate special needs.