

# MAE: Mathematics Education Courses

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## Courses

### **MAE 3905 Directed Study**

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

### **MAE 4310 Teaching Mathematics in Elementary Schools**

School of Education, Department of Teaching, Leadership, & Res

3 sh (may not be repeated for credit)

This course is a requirement for the elementary education teacher preparation program. The course is designed to provide students with the methodology requisite for effective mathematics teaching in elementary school classrooms. The coursework centers on utilizing mathematics content knowledge and process skills in the development of effective instructional strategies for the elementary level learners. This course addresses B.E.S.T. Standards for K-12 Mathematics within lesson planning assignments. Material and supply fee will be assessed.

### **MAE 4320 Teaching Mathematics in Middle and Secondary Schools**

School of Education, Department of Teaching, Leadership, & Res

3 sh (may not be repeated for credit)

Theory and methods of teaching Mathematics in the middle and secondary schools; explores current research on approaches in teaching and learning mathematics; examines the practice of mathematics, disciplinary core ideas in mathematics, and crosscutting themes in mathematics; compares various models of teaching (i.e. direct instruction, inquiry, project-based learning); Includes practices to effectively move student thinking toward meaningful understanding focusing on best practices in STEM disciplines.

### **MAE 4905 Directed Study**

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

### **MAE 6905 Directed Study**

School of Education, Department of Teaching, Leadership, & Res

1-12 sh (may be repeated indefinitely for credit)