

## **MA 425 Methods & Materials for Teaching Secondary Mathematics**

***Course Description:*** (3 semester hours) Practical aspects of teaching and learning mathematics at the secondary level. Topics covered include secondary mathematics curricula, preparation and presentation of lesson material, classroom management, and professional behaviors. This class includes five 3 hour blocks of

12. Mathematics as a Language: Students will demonstrate knowledge of mathematics vocabulary and symbols and mathematics as the basic language of science and the relationship of mathematics to emerging technologies.
13. Communication: Students will demonstrate the ability to use language and symbols of mathematics accurately in communications.
14. Problem Solving: Students will demonstrate the ability to integrate problem-solving strategies learned in mathematics into the solution of problems encountered in daily living.
15. Content Standards: Knowledge of the content standards and the scope and sequences of the mathematics area as defined in the Alabama course of study.

**Course Content:**

1. The Secondary Mathematics Curriculum and Teaching
2. Development of Mathematics and Recent Research Concerning How Humans Learn Mathematics
3. Student Conceptions
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