### Program of Study

# **Bachelor of Arts in Mathematics – Secondary Teaching Option**

The Bachelor of Arts in Mathematics – Secondary Teaching Option provides a broad mathematical foundation for teaching at the secondary level. Students entering as Mathematics majors should take MATH 151- Calculus I as soon as possible.

MAJOR REQUIREMENTS FOR SECONDARY MATHEMATICS TEACHING OPTION (42 credits)

## **Required Mathematics Courses**

- MATH 141 Introductory Statistics (may also be fulfilled by completing PSYC 251)
- MATH 151 Calculus I (4 credits)
- MATH 152 Calculus II (4 credits)
- MATH 225 Introduction to Abstract Mathematics
- MATH 231 Linear Algebra
- MATH 251 Calculus III (4 credits)
- MATH 265 Mathematical Modeling
- MATH 310 History of Mathematics
- MATH 320 Geometry
- MATH 331 Modern Algebra
- MATH 341 Mathematical Probability
- MATH 351 Intermediate Analysis
- MATH 475 Issues and Trends in Math Education

### **Required Education Courses**

Orientation

ESEC 100 Introduction to Teaching

Learners

ESEC 150 Development, Exceptionality, and Learning I\*\* ESEC 250 Development, Exceptionality, and Learning II

Fundamentals

ESEC 282 Literacy in Content Areas

Settings

ESEC 320 Education Environments/Practices

Methodology

ESEC 385 Methods: Secondary ESEC 386 Methods: Field Experience

Systems

ESEC 450 Seminar: Educational Principles

Practice

ESEC 460 Student Teaching

• Pedagogy (highly recommended but not required)

ESEC 387 Creating Social Contexts for Learning

#### GENERAL EDUCATION REQUIREMENTS (minimum) 43 credits

- CS 140 and PHYS 241 are required for the major and may apply toward the Sciences/Mathematics component of the General Education requirements.
- Refer to the <u>Teacher Education Programs</u> in this catalog for courses that must be included in general education.

#### **ELECTIVES**

Select courses to reach a total of 120 credits for the degree.

### DEGREE REQUIREMENTS

120 credits

<sup>\*\*(</sup>course requires a minimum of one to three hours of field work in schools or service learning)