### General Education Requirements (Specific to Certification Requirements):

- (4) Two science courses (biological or physical) with one course having a separate lab experience

### The Following Courses (44 Credit Hours):

- **MTH 150**: Analytic Geometry and Calculus I
- **MTH 151**: Analytic Geometry and Calculus II
- **MTH 160**: Vectors and Matrices
- **MTH 250**: Vector Calculus
- **MTH 255**: Differential Equations
- **MTH 260**: Transition to Higher Mathematics
- **MTH 325**: Modern Geometry
- **MTH 340**: Probability
- **MTH 120 OR MTH 341**: Introduction to Statistics or Mathematical Statistics (Note: MTH 120 does not meet the Mathematics major requirement for graduation; if MTH 120 is taken for teacher certification, then eight credits are required below (MTH 320 - MTH 461) rather than four credits.)
- **MTH 450**: Real Analysis
- **MTH 460**: Modern Algebra

One of the Following (4 Credit Hours) if MTH 341 is also taken above; otherwise two courses are required if MTH 341 is not taken above.

- **MTH 320**: Number Theory
- **MTH 330**: Combinatorics & Graph Theory
- **MTH 335**: Mathematical Models and Applications
- **MTH 337**: Operations Research
- **MTH 350**: Complex Variables
- **MTH 360**: Linear Algebra and Matrix Theory
- **MTH 451**: Topics in Analysis
- **MTH 461**: Topics in Algebra

### Recommended Course Work: CSC 105 (Introduction to Computer Science I) Is Highly Recommended, But Is Not Required For A Mathematics Major Seeking Secondary Certification.

### Professional Preparation:

- **EDU 111**: Perspectives on American Education (EDU 001 Lab included)
- **EDU 120**: Human Development
- **EDU 221**: Students with Exceptionalities (Prerequisites: EDU 111, 120)

### Senior Year (Prerequisites: EDU 111, 120, 221)

- **EDU 350**: Curriculum and Methods of Teaching in Grades 9-12 (Fall Term of Senior Year)

**Spring Term of Senior Year (16 Credit Hours):**

- **EDU 433**: Foundations of Literacy Instruction
- **EDU 434**: Content Literacy Strategies and Modifications for Diverse Learners
- **EDU 455**: Teaching Mathematics in Grades 9-12
- **EDU 460**: Critical Issues in Secondary Education
- **EDU 472**: Practicum: Secondary Teaching

*Note: EDU-433 and EDU-434 satisfy the requirements outlined in South Carolina’s Read to Succeed legislation.*

### Teaching Internship: (Fall Term After Graduation)

- **EDEP 670**: Teaching Internship

### The Following (See Education Department):

- **Apply for Admission to Furman Teacher Education Program.**
- **Effective September 1, 2019, Praxis Core Academic Skills for Educators: Reading (Test Code 5713); Writing (Test Code 5723); and Mathematics (Test Code 5733) to be taken prior to junior year. (Note: Teacher candidates who have certain SAT and/or ACT scores may be exempt from taking Praxis Core. Please refer to [https://www.furman.edu/academics/education/program-overview/program-admission](https://www.furman.edu/academics/education/program-overview/program-admission) for exemption requirements).**
- **Praxis Test (Computerized): Mathematics: Content Knowledge (Test Code 5161) (SC required minimum score: 150) to be taken no later than January 1 of the senior year (Registration information provided August of senior year).**
- **Praxis Test (Computerized): Principles of Learning & Teaching (PLT) Grades 7-12 (Test Code 5624) (Minimum Score: 157) to be taken no later than March 15 of the senior year. (Registration information provided August of senior year).**
- **NOTE: Passing scores for both the Praxis Content and PLT exams must be on record to enter the Internship following graduation.**
- **Apply for Approved South Carolina Teacher Certification in Mathematics (Application and fingerprinting information provided in Fall of the senior year).**

Revised November 9, 2020