## Mathematics Licensure
(South Carolina – Grades 9-12)

### General Education Requirements (Specific to Licensure Requirements):
- Two science courses (biological or physical) with one course having a separate lab experience

### The Following Courses (44 Credit Hours):
- MTH 150 (4) Analytic Geometry and Calculus I
- MTH 151 (4) Analytic Geometry and Calculus II
- MTH 160 (4) Vectors and Matrices
- MTH 250 (4) Vector Calculus
- MTH 255 (4) Differential Equations
- MTH 260 (4) Transition to Higher Mathematics
- MTH 325 (4) Modern Geometry
- MTH 340 (4) Probability
- MTH 120 OR MTH 341 (4) 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 (4) Real Analysis
- MTH 460 (4) 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 (4) Number Theory
- MTH 330 (4) Combinatorics & Graph Theory
- MTH 335 (4) Mathematical Models and Applications
- MTH 337 (4) Operations Research
- MTH 350 (4) Complex Variables
- MTH 360 (4) Linear Algebra and Matrix Theory
- MTH 451 (4) Topics in Analysis
- MTH 461 (4) 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 Licensure.

### Professional Preparation:
- EDU 111 (4) Perspectives on American Education (EDU 001 Lab included)
- EDU 120 (4) Human Growth and Development
- EDU 221 (4) Education of Students with Exceptionalities (Prerequisites: EDU 111, 120)

### Senior Year (Prerequisites: EDU 111, 120, 221)
- EDU 350 (2) Curriculum and Methods of Teaching in Grades 9-12 (Fall Term of Senior Year)

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

- EDU 433 (3) Foundations of Literacy Instruction
- EDU 434 (3) Content Literacy Strategies and Modifications for Diverse Learners
- EDU 455 (4) Teaching Mathematics in Grades 9-12
- EDU 460 (2) Critical Issues in Secondary Education
- EDU 472 (4) Practicum: Secondary Teaching

### Teaching Internship: (Fall Term After Graduation)
- EDEP 670 (6) Teaching Internship

### The following (See Education Department):
- Apply for Admission to Furman Teacher Education Program.
- Praxis Core Academic Skills for Educators: Reading (Test Code 5712); Writing (Test Code 5722); and Mathematics (Test Code 5732) 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 [http://www2.furman.edu/academics/education/Documents/TEP%20ApplicationChecklist.pdf](http://www2.furman.edu/academics/education/Documents/TEP%20ApplicationChecklist.pdf) 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 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 Licensure in Mathematics (Application and fingerprinting information provided in Fall of the senior year).

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