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

- [ ] _______ (4) Both a biological and a physical science course with lab/applied experiences
- [ ] _______ (4) Ideas in the Arts
- [ ] IDS 230 (4) Ideas in the Arts
- [ ] One course (4) One course that fulfills the Mathematical and Formal Reasoning requirement

**Foundation Courses:**

- [ ] EDU 111 (4) Perspectives on American Education (Education Laboratory 001 included)
- [ ] EDU 120 (4) Human Growth and Development
- [ ] EDU 221 (4) Education of Students with Exceptionalities (Prerequisites: EDU 111, 120)

**Methods Courses:**

- [ ] EDU 330 (4) Reading and Writing Processes and Instruction in Grades PK--3
- [ ] EDU 331 (4) Reading and Writing Processes and Instruction in Grades 2-6
- [ ] EDU 332 (4) Social Studies in Grades PK-6
- [ ] EDU 333 (4) Science in Grades PK-6

**Spring Term Practicum/Senior Block (16 Hours):**

- [ ] EDU 430 (4) Assessment for Instructional Planning
- [ ] EDU 431 (4) Diverse School Cultures
- [ ] EDU 432 (4) Integrating Curriculum and Technology in Grades PK-6
- [ ] EDU 470 (4) Practicum in Teaching

**Student Teaching Internship (Fall Term After Graduation):**

- [ ] EDEP 670 (6) Teaching Internship

**Courses Outside the Department:**

- [ ] HSC 251 (4) Health Education and Physical Activity (Prerequisite: HSC 101)
- [ ] **MTH 301 (4) Mathematics for Elementary School Teachers I**
- [ ] **MTH 302 (4) Mathematics for Elementary School Teachers II**

**Courses Outside the Department, One of the Following:**

- [ ] ART 240 (4) Art Education for Elementary School Teachers
- [ ] MUS 430 (4) Music for Elementary Classroom Teachers
- [ ] THA 440 (4) Creative Dramatics

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**Note:** Courses with an EDU prefix and GGY-230 (Principles of Geography) may not be taken P/NP by Education majors. For Education majors selecting among ART 240, MUS 430, or THA 440, the first of these must be taken for a grade to satisfy the degree requirements. Additional courses from that list selected as electives, may be taken P/NP.

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**The Following (See Education Department):**

- Application to Furman Teacher Education Program.
- Praxis I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Attained a score of 235 or above on the science and social studies sections of the CBASE basic skills test to meet national accreditation standards (candidates will be notified of the test administration date).
- Praxis II Computerized Test: Instructional Practices and Applications (Test Code 5015 computerized only) (minimum score: 161) to be taken January or March of senior year (Registration information provided in August of senior year).
- Praxis II Paper or Computerized Test: Principles of Learning and Teaching: Grades K-6 (Test Code 0522 paper or 5622 computerized) (minimum score: 160) to be taken January or March of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teacher Certification in Elementary Education (Application and fingerprinting information provided Fall of the senior year).

*If you are interested in teaching in the early grades (Pre-K-3rd) or Special Education (Pre-K-12), please ask your advisor about Furman’s approved programs in Early Childhood Education and Special Education (one course taken at the undergraduate level may allow you to complete the Master of Arts degree as early as the second summer following graduation).
# Biology Certification
(South Carolina – Grades 9-12)

- **BIO 111** (4) Foundations of Biology
- **BIO 221** (4) Genetics (Prereq: BIO 111)

**One of the Following:**
- **BIO 340** (4) Ecology (Prereq: BIO 222)
- **BIO 341** (2) Tropical Ecology (Prereq: BIO 111 and permission of instructor)

**One of the Following:**
- **BIO 320** (4) Animal Physiology (Prereq: BIO 222)
- **BIO 321** (4) Plant Physiology (Prereq: BIO 222)

**The Following:**
- **BIO 075** (0) Seminar in Biology (Prereq: permission of instructor)

**Plus At Least Four Electives (4 Courses) From the Following:**
- **BIO 301** (4) Microbiology (Prereq: BIO 221)
- **BIO 302** (4) Molecular Genetics (Prereq: BIO 221 and 222)
- **BIO 303** (4) Biochemistry of the Cell (Prereq: BIO 222 and CHM 120)
- **BIO 400** (4) Field Botany (Prereq: BIO 111)
- **BIO 401** (4) Applied Plant Science (Prereq: BIO 111)
- **BIO 420** (4) Comparative Anatomy and Embryology (Prereq: BIO 111)
- **BIO 421** (4) Invertebrate Zoology (Prereq: BIO 222)
- **BIO 422** (4) Field Zoology (Prereq: BIO 222)
- **BIO 423** (4) Marine Biology (Prereq: Any BIO course and permission of instructor)

**Courses Outside the Department:**
- **CHM 110** (4) Foundations of Chemistry
- **CHM 115** (4) Kinetics, Thermodynamics and the Environment (Prereq: CHM 110)
- **CHM 120** (4) Organic Chemistry (Prereq: CHM 115)
- **PHY 111** (4) General Physics I (Prerequisites: MTH 150 or MTH 140/141 strongly recommended)

**One of the Following:**
- **MTH 110** (4) Finite Mathematics
- **MTH 140 and MTH 141** (4) Integrated Precalculus/Calculus I
- **MTH 140 and MTH 141** (4) Integrated Precalculus/Calculus II (Prereq: MTH 140)

**One of the Following:**
- **EES 110** (4) Earth Systems
- **EES 112** (4) Environmental Science
- **EES 113** (4) Natural Hazards and Natural Disasters

**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)

**Spring Block Practicum (Spring Term of Senior Year - 16 credit hours) (Prerequisites: EDU 111, 120, 221):**
- **EDU 350** (4) Curriculum and Methods of Teaching in Grades 9-12
- **EDU 454** (4) Teaching Science in Grades 9-12
- **EDU 460** (4) 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 I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II: Biology & General Science (Test Code 0030 paper only) (SC minimum score required: 570) to be taken November or January of senior year (Registration information provided in August of the senior year).
- Praxis II: Principles of Learning & Teaching: Grades 7-12 (Test Code 0624 paper or 5624 computerized) (SC minimum required score: 157) to be taken March or April of the senior year.
- Apply for Approved South Carolina Teacher Certification in Biology (Application and fingerprinting information provided Fall of the senior year).

Revised July 15, 2012
### Specialty Area Preparation, Chemistry: (General Education)

- **CHM 110** (4) Foundations of Chemistry
- **CHM 115** (4) Kinetics, Thermodynamics and the Environment (Prerequisite: CHM 110)  
  *(Note: Bold type indicates General Chemistry sequence (CHM 110 and CHM 115))*

### The Following:

- **CHM 120** (4) Organic Chemistry (Pre/Corequisite: CHM 115)
- **CHM 220** (4) Bio-Organic Chemistry (Prerequisite: CHM 120)
- CHM 230 (4) Inorganic Chemistry (Prerequisite: CHM 120)
- **CHM 240** (4) Experimental Techniques (Prerequisite: CHM 120)
- **CHM 310** (4) Physical Chemistry I (Prerequisites: CHM 120, MTH 151, PHY 111)
- **CHM 330** (4) Analytical Chemistry (Prerequisite: CHM 310)
- **CHM 340** OR **CHM 460** (4) Physical Chemistry II (Prerequisite: CHM 310, MTH 160 and PHY 112) OR Biological Chemistry  
  *(Prerequisites: BIO 111, CHM 220, CHM 240, and PHY 111)*
- CHM____ (4) Select from CHM: 410, 420, 430, 440, 450, 460, 470, or 471
- **CHM 075** (0) Seminar in Chemistry  
  *(Note: Bold type indicates Organic Chemistry sequence (CHM 120 and CHM 220))*

### One of the Following:

- **CHM 501** OR **CHM 502** (4) Independent Study OR Undergraduate Research  
  *(Note: Participation in summer research program may substitute for Chemistry 502)*

### Courses Outside the Department:

- **MTH 150** (4) Analytic Geometry and Calculus I
- **MTH 151** (4) Analytic Geometry and Calculus II
- MTH 160 or 241 (4) Vectors and Matrices OR Intro to Statistics
- **PHY 111** (4) General Physics I (Prerequisites: MTH 150 or MTH 140/141 strongly recommended)
- **PHY 112** (4) General Physics II (Prerequisites: PHY 111 and MTH 141 or MTH 150. MTH 151 strongly recommended)
- **BIO 111** (4) Foundations of Biology
- **EES 110** (4) Earth Systems; OR  
  EES 112 (4) Environmental Science; OR  
  EES 113 (4) Natural Hazards and Natural Disasters

### 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)

### Spring Block Practicum (Spring Term of Senior Year – 16 Credit Hours) (Prerequisites: EDU 111, 120, 221):

- **EDU 350** (4) Curriculum & Methods of Teaching in Grades 9-12
- **EDU 454** (4) Teaching Science in Grades 9-12
- **EDU 460** (4) 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 I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II: Chemistry, Physics & General Science (Test Code 0070 paper) (SC minimum required score: 540) to be taken November or January of senior year (Registration information provided in August of the senior year).
- Praxis II: Principles of Learning and Teaching: Grades 7-12 (Test Code 0624 paper or 5624 computerized) (SC minimum required score: 157) to be taken March or April of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teaching Certification in Chemistry (Application and fingerprinting information provided Fall of the senior year).
### General Education Requirements (Specific to Certification Requirements):

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

### Professional Preparation:

- [ ] EDU 111 (4) Perspectives on American Education (EDU 001 Lab Included) (GER: HB)
- [ ] EDU 120 (4) Human Growth and Development (GER: HB)
- [ ] EDU 221 (4) Education of Students with Exceptionalities (Prerequisites: EDU 111, 120)

### Senior Block Practicum (Spring Term of Senior Year – 16 Credit Hours) (Prerequisites: EDU 111, 120, 221)

- [ ] EDU 350 (4) Curriculum & Methods of Teaching in Grades 9-12
- [ ] EDU 452 (4) Teaching English in Grades 9-12
- [ ] EDU 460 (4) Critical Issues in Secondary Education
- [ ] EDU 472 (4) Practicum: Secondary Teaching

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

- [ ] EDEP 670 (6) Teaching Internship

### Specialty Area Preparation, English:

- [ ] FYW (4) First Year Seminar -- Writing

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>ENG 210</td>
<td>(4)</td>
<td>Advanced Composition</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 211</td>
<td>(4)</td>
<td>Business Communication</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 212</td>
<td>(4)</td>
<td>Journalism: Principles and Practice</td>
</tr>
<tr>
<td>ENG 361</td>
<td>(4)</td>
<td>History of the English Language (GER: HB)</td>
</tr>
<tr>
<td>ENG 362</td>
<td>(4)</td>
<td>English Language: How it Works (GER: HB)</td>
</tr>
<tr>
<td>ENG 303</td>
<td>(4)</td>
<td>Early Modern Drama (GER: TA)</td>
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<td>OR</td>
<td></td>
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</tr>
<tr>
<td>ENG 343</td>
<td>(4)</td>
<td>Drama at Stratford (GER: VP)</td>
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<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 376</td>
<td>(4)</td>
<td>Shakespeare on Film and in Production (GER: TA)</td>
</tr>
<tr>
<td>EDU 451</td>
<td>(4)</td>
<td>Literature for Young Adults (Prerequisites: EDU 111, 120, 221)</td>
</tr>
</tbody>
</table>
English Major Requirements must be fulfilled under the guidance of candidate's academic advisor. (Certifiers must reflect in the major requirements a balance of work addressing Early British, Late British, and American literature.)

Also, as part of major requirements and certification guidelines, candidates must choose THREE electives; bold-face designates multicultural and/or feminist emphasis required of ELA certifiers; certifiers need to choose courses with a balance of emphasis related to multicultural and feminist perspectives. The list below suggests some possibilities for meeting these requirements IF THEY HAVE NOT BEEN MET WITHIN THE MAJOR REQUIREMENTS THEMSELVES (including ENG-150 (Interpretative Strategies) and Senior Seminar - ENG-475)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title and Emphasis</th>
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</thead>
<tbody>
<tr>
<td>ENG 111 A</td>
<td>4</td>
<td>Texts and Meaning (GER: TA) – British Literature to 1978</td>
</tr>
<tr>
<td>ENG 111 B</td>
<td>4</td>
<td>Texts and Meaning (GER: TA) – British Literature since 1798</td>
</tr>
<tr>
<td>ENG 111 C</td>
<td>4</td>
<td>Texts and Meaning (GER: TA) – American Passages</td>
</tr>
<tr>
<td>ENG 369</td>
<td>4</td>
<td>Gender in South Asian Literature and Film (GER: TA and WC)</td>
</tr>
<tr>
<td>ENG 435</td>
<td>4</td>
<td>Writing Africa: Culture and Politics in African Literature (GER: TA and WC)</td>
</tr>
<tr>
<td>ENG 452</td>
<td>4</td>
<td>Literary Feminisms (GER: TA)</td>
</tr>
<tr>
<td>ENG 453</td>
<td>4</td>
<td>Slave Narrative to Slave Novel (GER: TA)</td>
</tr>
<tr>
<td>ENG 454</td>
<td>4</td>
<td>Caribbean Cosmopolitanisms (GER: TA)</td>
</tr>
<tr>
<td>ENG 461</td>
<td>4</td>
<td>Critical and Cultural Theory (GER: TA)</td>
</tr>
<tr>
<td>ENG 471</td>
<td>4</td>
<td>South Asian Cultural Studies: Literature and Film (GER: TA and WC)</td>
</tr>
</tbody>
</table>

The Following: (See Education Department)

- Praxis I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II Paper or Computerized Test: English Language, Literature & Composition: Content and Analysis (Test Code 0044 paper or 5044 computerized) (SC required minimum score: 166) to be taken November or January of senior year (Registration information provided in August of the senior year).
- Praxis II Paper or Computerized Test: Principles of Learning and Teaching Grades 7-12 (Test Code 0624 paper or 5624 computerized) (SC required minimum score: 157) to be taken March or April of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teacher Certification in English (Application and fingerprinting information provided Fall of the senior year).

Rev. August 22, 2012
## General Education Requirements (Specific to certification Requirements):

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

## Specialty Area Preparation, French (One of the Following Courses):

- FRN 215 (4) Composition and Conversation
- FRN 301 (4) Travel Study in French Language
- Placement Exemption for Native or Near-Native Speakers

## One of the Following (4 credit hours):

- LNG 210 (4) General Linguistics
- LNG 405 (4) Introduction to Romance Linguistics

## The Following:

- FRN 405 (4) Introduction to French Linguistics
- FRN 305 (4) Advanced French Oral and Written Expression
- FRN 331 (4) French Literature and Civilization I: Middle Ages and Renaissance
- FRN 332 (4) French Literature and Civilization II: Classicism and Enlightenment
- FRN 333 (4) French and Francophone Literature and Civilization III: 19th and 20th Centuries
- ACTFL OPI Interview in French (minimum rating: Advanced Low – first attempt to be taken no later than January 15 of senior year)
- Planned time spent in a French-speaking culture (beyond travel or tourism)

## 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)

## Spring Term of Senior Year (Senior Block):

- EDU 350 (4) Curriculum & Methods of Teaching in Grades 9-12 (Prerequisites: EDU 111, 120, 221)
- EDU 460 (4) Critical Issues in Secondary Education
- EDU 472 (4) Secondary Practicum in Teaching
- MLL 450 (4) Teaching Foreign Languages PK-12: Methods

## 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 I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis World Languages: French (Test Code 5174 computerized) (Minimum Score: 162) to be taken during November of senior year (Registration information provided in August of the senior year).
- Praxis II Test: Principles of Learning and Teaching: Grades 7-12 (Test Code 0624 paper or 5624 computerized) (Minimum Score: 157) to be taken during March or April of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teaching Certification in French (Application and fingerprinting information provided Fall of the senior year).
### General Education Requirements (Specific to Certification Requirements):

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

### Specialty Area Preparation, Latin:

- **Intermediate Latin I**
- **Intermediate Latin II**
- **Placement Exemption**

### The Following:

- **Latin Prose Composition**
- **Praxis II Exam: Latin (Test Code 0061)**

### Either of The Following:

- **Roman Civilization**
- **Ancient Europe and the Mediterranean**

### At Least Three of the Following:

- **Literature of the Roman Republic**
- **Literature of the Augustan Age**
- **Literature of the Roman Empire**
- **Literature of the Late Antique and Medieval Period**
- **Studies in Advanced Latin**

### Professional Preparation:

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

### Spring Term of Senior Year (Senior Block):

- **Curriculum & Methods of Teaching in Grades 9-12 (Prerequisites: EDU 111, 120, 221)**
- **Critical Issues in Secondary Education**
- **Practicum: Secondary Teaching**
- **Teaching Latin in Grades PK-12: Methods**

### Teaching Internship (Fall Term after graduation):

- **Teaching Internship**

### The Following: (See Education Department)

- Apply for Admission to Furman Teacher Education Program.
- Praxis I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II Test (Test Code 0624 paper or 5624 computerized)—Principles of Learning and Teaching: Grades 7-12 (Required Score: 157) to be taken spring term of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teacher Certification in Latin (Application and fingerprinting information provided Fall of the senior year).
## General Education Requirements (Specific to Certification Requirements):

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two science courses (biological or physical) with one course having a separate lab experience</td>
<td>4</td>
</tr>
</tbody>
</table>

## Specialty Area Preparation, Mathematics: (Core Courses - 4 Credit Hours)

- MTH 150: Analytic Geometry and Calculus I (4)
- OR
- MTH 141: Integrated Precalculus & Calculus II (4)

## The Following Courses (40 Credit Hours):

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MTH 151</td>
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<td>MTH 160</td>
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<td>MTH 250</td>
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<td>MTH 255</td>
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<td>MTH 260</td>
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<td>MTH 325</td>
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<td>MTH 340</td>
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<tr>
<td>MTH 450</td>
<td>4</td>
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<tr>
<td>MTH 460</td>
<td>4</td>
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<tr>
<td>MTH 341</td>
<td>4</td>
</tr>
</tbody>
</table>

**One of the Following (4 Credit Hours):**

- MTH 235: Operations Research (4)
- MTH 360: Linear Algebra and Matrix Theory (4)
- MTH 320: Number Theory (4)
- MTH 330: Combinatorics & Graph Theory (4)
- MTH 350: Complex Variables (4)
- MTH 335: Mathematical Models and Applications (4)
- MTH 451: Topics in Analysis (4)
- MTH 461: Topics in Algebra (4)

**Please note that if MTH 335 is not taken, then the student must give an oral presentation in the mathematics colloquium series to gain practice in communicating mathematics using both everyday and mathematical language.**

## 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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>EDU 111</td>
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<tr>
<td>EDU 120</td>
<td>4</td>
</tr>
<tr>
<td>EDU 221</td>
<td>4</td>
</tr>
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</table>

**Senior Block Practicum: (Spring Term of Senior Year – 16 Credit Hours) (Prerequisites: EDU 111, 120, 221)**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>EDU 350</td>
<td>4</td>
</tr>
<tr>
<td>EDU 455</td>
<td>4</td>
</tr>
<tr>
<td>EDU 460</td>
<td>4</td>
</tr>
<tr>
<td>EDU 472</td>
<td>4</td>
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</tbody>
</table>

## Teaching Internship: (Fall Term After Graduation)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDEP 670</td>
<td>6</td>
</tr>
</tbody>
</table>

## The following (See Education Department):

- Apply for Admission to Furman Teacher Education Program.
- Praxis I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II Test: Mathematics: Content Knowledge (Test Code 0061) (SC required minimum score: 131) to be taken November or January of senior year.*
- Praxis II Test: Mathematics: Proofs, Models & Problems, Part 1 (Test Code 0063) (SC required minimum score 137) to be taken November or January of the senior year.*
- Praxis II Test: Principles of Learning and Teaching Grades 7-12 (Test Code 0624) (Minimum Score: 157) to be taken March or April of the senior year.*

*Registration information provided in August. of senior year.

- Apply for Approved South Carolina Teacher Certification in Mathematics (Application and fingerprinting information provided in Fall of the senior year).
## General Education Requirements (Specific to Certification Requirements):

- One science course (biological or physical) with a separate lab experience

## Specialty Area Preparation, Music:

<table>
<thead>
<tr>
<th>Course</th>
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<tr>
<td>MUS 111</td>
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<td>MUS 112</td>
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<td>MUS 321</td>
<td>2</td>
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<tr>
<td>MUS 352</td>
<td>2</td>
</tr>
</tbody>
</table>

*Bold type indicates course sequence (MUS 111/112 and MUS 211/212)*

## Music Education Majors:

- MUS 312 (2) Orchestration
- MUS 431 (2) Vocal/Choral Methods
- MUS ___ (2) Music Elective

## Band/Orchestra Emphasis (14 Semester Hours in Major Applied Instrument and 2 Hours in Performance Topics):

- MUS 330 (2) String Methods
- MUS 331 (2) Woodwind Methods
- MUS 332 (2) Brass Methods
- MUS 333 (2) Percussion Methods
- MUS 353 (2) Instrumental Conducting
- MUS 432 (4) Instrumental Music Methods

## Elementary/Choral Emphasis (14 Semester Hours in Voice (6 Minimum) and 2 Hours in Performance Topics):

- MUS 354 (2) Choral Conducting
- MUS 423 (2) Survey of Choral Literature
- MUS 433 (4) Music Education Methods
- MUS 434 (2) Elementary Music Methods
- MUS 450 (2) Vocal Pedagogy
- MUS ___ (2) Music Elective

## 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)
- EDU 505 (16) Teaching Internship

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The Following (See Education Department):

- Apply for Admission to Furman Teacher Education Program.
- Praxis I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis I; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II: Music: Content and Instruction (Test Code 5114 computerized or 0114 paper testing) (SC minimum score: 162) to be taken November of senior year.*
- Praxis II: Principles of Learning and Teaching (SC minimum score: 157 or 160 depending upon grade level of exam) to be taken March or April of senior year.*
- *Registration information provided in August of senior year.
- Apply for Approved South Carolina Teacher Certification in Music (Application and fingerprinting information provided March of junior year)

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Revised December 2012
Specialty Area Preparation, Physics:

- PHY 105 (4) Descriptive Astronomy
- PHY 111 (4) General Physics I (Prerequisites: MTH 150 or MTH 140 and 141 strongly recommended)
- PHY 112 (4) General Physics II (Prerequisites: PHY 111 and MTH 141 or MTH 150. MTH 151 strongly recommended)
- PHY 241 (4) Introduction to Modern Physics (Prerequisite: PHY 112)
- PHY 311 (4) Classical Mechanics I (Prerequisite: PHY 112)
- PHY 312 (4) Classical Mechanics II (Prerequisite: PHY 311)
- PHY 321 (4) Electromagnetic Theory I (Prerequisite: PHY 112)
- PHY 322 (4) Electromagnetic Theory II (Prerequisite: PHY 321)
- PHY 331 (4) Thermodynamics and Statistical Mechanics (Prerequisite: PHY 241)

**Bold indicates course sequence for PHY 311/312 and PHY 321/322**

Required Courses Beyond the Physics Department:

- MTH 150 (4) Analytic Geometry and Calculus I (Prerequisite: appropriate placement)
- MTH 151 (4) Analytic Geometry and Calculus II (Prerequisite: MATH 141 or 150)
- MTH 160 (4) Vectors and Matrices (Prerequisite: MTH 151)
- BIO 101, BIO 102 OR BIO 111 (4) Principles of Biology (101); Biology and the Environment (102); or Foundations of Biology (111)
- CHM 110 (4) Foundations of Chemistry

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)

Spring Block Practicum (Spring Term of Senior Year) (Prerequisites: EDU 111, 120, 221):

- EDU 350 (4) Curriculum & Methods of Teaching in Grades 9-12
- EDU 454 (4) Teaching Science in Grades 9-12
- EDU 460 (4) 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 I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis II: Chemistry, Physics & General Science (Test Code 0070 paper) (SC required minimum score: 540) to be taken November or January of senior year (Registration information provided in August of the senior year).
- Praxis II: Principles of Learning and Teaching Grades 7-12 (Test Code 0624 paper or 5624 computerized) (SC required minimum score: 157) to be taken March or April of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teacher Certification in Physics (Application and fingerprinting information provided Fall of the senior year).
### Social Studies Certification  
(South Carolina – Grades 9-12)

Furman students seeking South Carolina certification major in history and take additional courses in education and the social sciences (see sections III and IV). 

NOTE: Social studies certifiers should follow the guidelines in this worksheet when selecting their history courses (i.e., completing the history major requirements listed in the Furman catalog will not necessarily result in certification).

#### General Education Requirements (specific to certification requirements):

- [ ] Three (3) courses (at least 12 credit hours)
- [ ] Four (4) courses (at least 16 credit hours)

#### Specialty Area, History: (Major Required - 36 Hours/Minimum 2.5 GPA)

**I. General Courses:**

- One General Education Requirement (Furman catalog will not necessarily result in certification)

**Other Core History Requirements:**

- Required Social Science Courses:
  - [ ] HST 121
  - [ ] HST 122
  - OR
  - [ ] HST 102
  - [ ] HST 101

If students take two of these courses, only one course is required from Section VI (Note: Students taking more than two courses in this section will not be exempt from taking at least four credit hours from Section VI).

**II. Other Core History Requirements:**

- [ ] HST 121
- [ ] HST 122

Note: If students take HST 121 and HST 122, only four credit hours are required from Section V.

**III. Required Social Science Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>HST 101</td>
<td>(4)</td>
</tr>
<tr>
<td>(4)</td>
<td>HST 154</td>
<td>(4)</td>
</tr>
<tr>
<td>(4)</td>
<td>HST 161</td>
<td>(4)</td>
</tr>
</tbody>
</table>

**IV. Professional Preparation (34 Hours/Grade of “C” or better in each):**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>EDU 111</td>
<td>(4)</td>
</tr>
<tr>
<td>(4)</td>
<td>EDU 120</td>
<td>(4)</td>
</tr>
<tr>
<td>(4)</td>
<td>EDU 221</td>
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<tr>
<td>(4)</td>
<td>EDU 472</td>
<td>(4)</td>
</tr>
<tr>
<td>(4)</td>
<td>EDU 670</td>
<td>(4)</td>
</tr>
</tbody>
</table>

**V. U.S. History – At least eight credit hours from the following:**

- AP U.S. History
- HST 221
- HST 223
- HST 224
- HST 225
- HST 227
- HST 228
- HST 229

**VI. European History – At least eight credit hours from the following:**

- AP European History
- HST 201
- HST 203
- HST 206
- HST 207
- HST 208
- HST 209

**VII. Asia, Africa, and the Americas – At least one course from the following:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)</td>
<td>History of South Asia</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>Ancient and Early Japan</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>Modern Japan</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>Ancient and Imperial China</td>
<td></td>
</tr>
</tbody>
</table>

**VIII. Other Certification Requirements:**

- [ ] 4 Praxis I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis I; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- [ ] Praxis II Test: Social Studies: Content and Interpretation (Test Code 0086) (SC required minimum score: 153) to be taken November or January of the senior year.*
- [ ] Praxis II Test: Principles of Learning & Teaching: Grades 7-12 (Test Code 0224) (SC required minimum score: 157) to be taken March or April of the senior year.*

*Registration information provided in August of the senior year.

Revised September 17, 2012
## Spanish Certification
(South Carolina – Grades pre-K – 12)

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

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

### Specialty Area Preparation, Spanish (One of the Following Courses):

- [ ] SPN 215 (4) Composition and Conversation
- [ ] SPN 301 (4) Travel Study in Spanish Language
- [ ] Placement Exemption for Native or Near-Native Speakers

### One of the Following:
- [ ] LNG 210 (4) General Linguistics
- [ ] LNG 405 (4) Introduction to Romance Linguistics

### One of the Following:
- [ ] SPN 220 (4) Spanish Civilization
- [ ] SPN 240 (4) Latin American Civilization
- [ ] SPN 350 (4) Travel Study in Contemporary Spanish-American Culture
- [ ] SPN 320 (4) Travel Study in Spanish Civilization

### One of the Following:
- [ ] SPN 332 (4) Survey of Spanish Literature II
- [ ] SPN 361 (4) Survey of Spanish-American Literature

### The Following:

- [ ] SPN 405 (4) Introduction to Spanish Linguistics
- [ ] SPN 305 (4) Advanced Spanish Oral and Written Expression
- [ ] SPN 331 (4) Survey of Spanish Literature I
- [ ] ACTFL OPI Interview in Spanish (minimum rating: Advanced Low – first attempt to be taken no later than January 15 of senior year)
- [ ] Planned time spent in a Spanish-speaking culture (beyond travel or tourism)

### 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)

### Spring Term of Senior Year (Senior Block):

- [ ] EDU 350 (4) Curriculum & Methods of Teaching in Grades 9-12 (Prerequisites: EDU 111, 120, 221)
- [ ] EDU 460 (4) Critical Issues in Secondary Education
- [ ] EDU 472 (4) Secondary Practicum in Teaching
- [ ] MLL 450 (4) Teaching Foreign Languages PK-12: Methods

### 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 I Tests (reading, mathematics and writing) to be taken prior to junior year. Teacher candidates who attain an 1100 or above on the two-part SAT or a comparable score of 24 on the ACT are not required to take the Praxis One; teacher candidates who attain a 1650 or above on the three-part SAT taken after March 1, 2005 are also exempt.
- Praxis World Languages: Spanish (Test Code 5195 computerized) (Minimum Score: 168) to be taken November of the senior year.*
- Praxis II Test: Principles of Learning and Teaching: Grades 7-12 (Test Code 0624 paper or 5624 computerized) (Minimum Score: 157) to be taken March or April of the senior year.
- Apply for Approved South Carolina Teacher Certification in Spanish.

*Effective September 1, 2010