## Specialty Area Preparation, Physics:

- **PHY 105** (4) Descriptive Astronomy
- **PHY 111** (4) General Physics I (Prerequisites: MTH 150 strongly recommended)
- **PHY 112** (4) General Physics II (Prerequisites: PHY 111 and MTH 150. MTH 151 strongly recommended)
- **PHY 241** (4) Introduction to Modern Physics (Prerequisite: PHY 112) to be taken concurrently with MTH 160
- **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: MTH 150)
- **MTH 160** (4) Vectors and Matrices (Prerequisite: MTH 151)
- **BIO 111** (4) Foundations of Biology
- **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)

### 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 454** (4) Teaching Science 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://www.furman.edu/academics/education/Documents/TEP%20ApplicationChecklist.pdf](http://www.furman.edu/academics/education/Documents/TEP%20ApplicationChecklist.pdf) for exemption requirements).
- Praxis Test (Computerized): Physics: Content Knowledge (Test Code 5265 - SC required minimum score: 130) to be taken November or January of senior year (Registration information provided in August of the senior year).
- Praxis Test (Computerized): Principles of Learning and Teaching Grades 7-12 (Test Code 5624 - SC required minimum score: 157) to be taken March of senior year (Registration information provided in August of the senior year).
- Apply for Approved South Carolina Teacher Licensure in Physics (Application and fingerprinting information provided Fall of the senior year).

*Revised February 13, 2018*