Science Education: Physics Concentration (9-12)

**Intro to Education (C or better required)**

- (2) ED 100 (Fall Freshmen) OR
- (2) ED 150/151-SAY Village (Fall & Spring Freshmen)

**Academic Writing/Communication**

- (4) ENG 101 Academic Writing & Research
  
  C- or better required

- (3) COM 110 Public Speaking

**Mathematics**

- (4) MA 141 Calculus I
- (4) MA 241 Calculus II
- (4) MA 242 Calculus III
- (3) MA 341 Applied Differential Equations

**Sciences (C or better required)**

- (4) BIO 181 Intro Biology: Ecology, Evolution, and Biodiversity
- (4) BIO 183 Intro Biology: Cellular and Molecular
  
  Prerequisite: BIO 181 or CH 101
- (4) CH 101/102 Chemistry
- (4) CH 201/202 Quantitative Chemistry
  
  Prerequisite: CH 101 with C- or better
- (4) MEA 101/MEA 110 Geology
- (4) PY 205/206 or PY 201
  
  Prerequisite: MA 141 with a grade of C- or better or MA 241PL
- (4) PY 208/209 or PY 202
  
  Prerequisite: C- or better in PY 205 and C- or better in MA 241
- (3) PY 123 or PY 124 Astronomy
- (3) ES 200 Climate Change and Sustainability

**Physics Electives (8 cr. hrs. total) (see degree audit)**

- (3) EDM 311/ED 312.

**History/Philosophy of Science and Social Science Elective**

- (3) HI 321, HI 322, HI 341, PHI 340, or STS 301
- (3) _________ Social Sciences Elective (see degree audit)

**GEP Courses**

- (3) _________ Choose a course from the GEP Humanities list
- (3) _________ Choose a course from the GEP Humanities list
- (1) _________ Any 100 level Health & Exercise Studies
- (1) _________ Any HE Course
- (3) _________ Additional Breadth – Choose one Humanities, Social Sciences, or Visual Performing Arts course from the GEP list

**Foreign Language Proficiency**

USD and GK may “double-count” for both co-req and another GEP Requirement

- (3) US Diversity Co-Requisite
- (3) Global Knowledge Co-Requisite

- (3) Foreign Language Proficiency

---

**C or better required in all courses below unless otherwise stated**

### SOPHOMORE YEAR

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ (3) EMS 373 Instr. Materials in Science</td>
<td>___ (3) ELP 344 School and Society</td>
</tr>
<tr>
<td>___ (3) EMS 375 Methods of Teaching Science (Fall Only)</td>
<td>___ (3) EMS 375 Methods in Teaching Science Prerequisite: EMS 205, ED 204</td>
</tr>
<tr>
<td>___ (3) EMS 475 Methods of Teaching Science (Fall Only)</td>
<td>___ (3) ECI 416 Teaching Exceptional Students</td>
</tr>
<tr>
<td>___ (3) EMS 476 Student Teaching in Science (Spring Only)</td>
<td>___ (2) ED 311 Classroom Assessment Prerequisite: ATC</td>
</tr>
<tr>
<td>___ (3) EDP 304 Education Psychology</td>
<td>___ (1) ED 312 Classroom Assessment Lab</td>
</tr>
</tbody>
</table>

### JUNIOR YEAR

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ (3) EMS 373 Instr. Materials in Science</td>
<td>___ (3) EMS 375 Methods of Teaching Science</td>
</tr>
<tr>
<td>___ (3) EMS 476 Student Teaching in Science</td>
<td>___ (3) ECI 416 Teaching Exceptional Students</td>
</tr>
<tr>
<td>___ (2) ED 204 Intro to 21st Century Teaching</td>
<td>___ (2) ED 311 Classroom Assessment Prerequisite: ATC</td>
</tr>
<tr>
<td>___ (3) EDP 304 Education Psychology</td>
<td>___ (1) ED 312 Classroom Assessment Lab</td>
</tr>
</tbody>
</table>

### SENIOR YEAR

<table>
<thead>
<tr>
<th>Fall Semester</th>
<th>Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ (3) EMS 373 Instr. Materials in Science</td>
<td>___ (10) EMS 476 Student Teaching in Science (Spring Only)</td>
</tr>
<tr>
<td>___ (3) EMS 475 Methods of Teaching Science (Fall Only)</td>
<td>___ (Prerequisite: EMS 475; and Corequisite: EMS 495)</td>
</tr>
</tbody>
</table>

**Double majoring in Physics**, choose electives from PY 203, 328, 401, 407, 411, 413, 414.

**Not double majoring in Physics**, chose electives from PY 125, 126, 133, 203, 328, 341, 401, 402, 407, 411, 412, 413, 414, 415, 463, 499.

*A grade of C (2.0) or better is required for science core content courses, up to two courses with a grade below a C is permitted.*

Completed ______ out of 4.5

**PROFESSIONAL GROWTH UNITS (PGU’s):** must earn 4.5 PGU’s by graduation. Register for sessions and track PGU’s in SAGE → “Professional Development” tab

**ATC REQUIREMENTS (Admission to Teacher Candidacy):**

- ENG 101
- 2 Math courses
- EMS 205/ED 204

**GPA at least 2.75**

- Praxis I

Must have met ATC in order to register for ED 311/312. View your progress in SAGE → “Gateways” tab