SECONDARY EDUCATION (SECONDARY EDUCATION GENERAL SCIENCE) - BACHELOR OF SCIENCE IN EDUCATION

General education and professional education requirements are similar for all degree programs in the College of Education. Students should meet with an advisor to plan appropriate general education courses for a secondary education major. The below programs are labeled as Concentrations in the catalog and on student transcripts, but are also recognized at ‘Teaching Fields’ for the Teacher Education Program.

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 121 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td></td>
<td><strong>General Education</strong></td>
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<tr>
<td></td>
<td><strong>Area I: Communications</strong></td>
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<tr>
<td></td>
<td>English Composition - Level 1</td>
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</tr>
<tr>
<td></td>
<td>ENGL 1110G Composition I</td>
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<tr>
<td></td>
<td><strong>English Composition - Level 2</strong></td>
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<tr>
<td></td>
<td>ENGL 2130G Advanced Composition</td>
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<tr>
<td></td>
<td>ENGL 2215G Advanced Technical and Professional Communication</td>
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<tr>
<td></td>
<td>ENGL 2221G Writing in the Humanities and Social Science</td>
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<tr>
<td></td>
<td><strong>Oral Communication</strong></td>
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<tr>
<td></td>
<td>COMM 1115G Introduction to Communication</td>
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<tr>
<td></td>
<td>COMM 1130G Public Speaking</td>
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<tr>
<td></td>
<td>AXED 2120G Effective Leadership and Communication in Agriculture</td>
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<tr>
<td></td>
<td>HNRS 2175G Introduction to Communications Honors</td>
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<tr>
<td></td>
<td><strong>Area II: Mathematics</strong></td>
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</tr>
<tr>
<td></td>
<td>MATH 1220G College Algebra</td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td>or MATH 1250G Trigonometry &amp; Pre-Calculus</td>
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<tr>
<td></td>
<td><strong>Area III/IV: Laboratory Sciences and Social/Behavioral Sciences</strong></td>
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<tr>
<td></td>
<td>BIOL 2610G Principles of Biology: Biodiversity, Ecology, and Evolution</td>
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<tr>
<td></td>
<td>&amp; BIOL 2610L Principles of Biology: Biodiversity, Ecology, and Evolution Laboratory</td>
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<tr>
<td></td>
<td>CHEM 1215G General Chemistry I Lecture and Laboratory for STEM Majors</td>
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<tr>
<td></td>
<td>CHEM 1215G General Chemistry I Lecture and Laboratory for STEM Majors</td>
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<tr>
<td></td>
<td>CEPY 1120G Human Growth and Behavior</td>
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<td></td>
<td><strong>Area V: Humanities</strong></td>
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<tr>
<td></td>
<td>HIST 1105G Making History</td>
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<tr>
<td></td>
<td>HIST 1110G United States History I</td>
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</tr>
<tr>
<td></td>
<td>HIST 1120G United States History II</td>
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</tbody>
</table>

|          | **HIST 1130G** World History I                 | 3       |
|          | **HIST 1140G** World History II                |         |
|          | **HIST 1150G** Western Civilization I          |         |
|          | **HIST 1160G** Western Civilization II         |         |
|          | **HIST 2245G** Islamic Civilizations to 1800  |         |
|          | **HIST 2246G** Islamic Civilizations since 1800 |         |
|          | **HIST 2250G** East Asia to 1600               |         |
|          | **HIST 2251G** East Asia since 1600            |         |

|          | **Area VI: Creative and Fine Arts**            |         |
|          | Choose one from the following:                 | 3       |
|          | ARTH 1115G Orientation in Art                  |         |
|          | DANC 1110G Dance Appreciation                  |         |
|          | MUSC 1110G Music Appreciation: Jazz           |         |
|          | MUSC 1130G Music Appreciation: Western Music   |         |
|          | THEA 1110G Introduction to Theatre             |         |

|          | **General Education Elective**                |         |
|          | Choose one additional Creative and Fine Arts course from above | 3       |

|          | **Viewing A Wider World**                    |         |
|          | LIBR 311V Information Literacy               | 3       |
|          | The 2nd VWW requirements will be satisfied with the concentration/teaching field courses | 4       |

|          | **Departmental/College Requirements**         |         |
|          | **Education Core Courses**                   |         |
|          | EDUC 1185 Introduction to Secondary Education and Youth | 3       |
|          | EDUC 315 Multicultural Education             | 3       |
|          | SPED 350 Introduction to Special Education in a Diverse Society | 3       |
|          | EDLT 368 Integrating Technology with Teaching | 3       |
|          | EDUC 381 Secondary Field Experience           | 3       |
|          | BLED 342 Sheltered English Instruction for the ESL Classroom | 3       |
|          | EDUC 402 Data Literacy and Assessment         | 3       |
|          | EDUC 476 Science for Educators               | 3       |
|          | EDUC 475 Contemporary Issues in Education     | 3       |
|          | EDUC 463 Teaching Science at the Middle and High School Level | 3       |
|          | RDG 414 Content Area Literacy                | 3       |
|          | SPED 480 Secondary Curriculum, Methods, and Materials for Special Education in a Diverse Society | 3       |

|          | **Student Teaching**                          |         |
|          | EDUC 471 Secondary Student Teaching           | 9       |
|          | EDUC 482 Middle and High School Student Teaching Seminar | 3       |

|          | **General Science Concentration/Teaching Field Courses** |         |
|          | BIOL 2110G Principles of Biology: Cellular and Molecular Biology | 4       |
|          | & BIOL 2110L Principles of Biology: Cellular and Molecular Biology Laboratory | 4       |
|          | CHEM 1225G General Chemistry II Lecture and Laboratory for STEM Majors | 4       |
|          | Choose one from the following:                 | 4       |
|          | PHYS 1230G Algebra-Based Physics I             |         |
|          | & PHYS 1230L Algebra-Based Physics I Lab      |         |
|          | PHYS 2110 Mechanics & Experimental Mechanics   |         |
|          | PHYS 1310G Calculus -Based Physics I          |         |
|          | & PHYS 1310L Calculus -Based Physics I Lab    |         |
**A Suggested Plan of Study for Students**

This roadmap assumes student placement in MATH 1220G College Algebra and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

<table>
<thead>
<tr>
<th>Course / Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td><strong>First Year</strong></td>
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<tr>
<td>Semester 1</td>
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<tr>
<td>ENGL 1110G</td>
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<tr>
<td>CEPY 1120G</td>
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<tr>
<td>MATH 1220G</td>
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<tr>
<td>BIOL 2610G</td>
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<tr>
<td>BIOL 2610L</td>
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<tr>
<td>Students who need to enroll in 15 credits for Financial Aid purposes will need to take additional electives.</td>
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<table>
<thead>
<tr>
<th>Course / Title</th>
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<tr>
<td><strong>Second Year</strong></td>
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<tr>
<td>Semester 1</td>
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<tr>
<td>BIOL 2110G</td>
<td>4</td>
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<tr>
<td>MATH 1430G</td>
<td>3</td>
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<tr>
<td>CHEM 1215G</td>
<td>4</td>
</tr>
<tr>
<td>EDUC 1185</td>
<td>3</td>
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<tr>
<td>GEG 1130G</td>
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<tr>
<td>or GEG 1130G</td>
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<table>
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<tr>
<th>Course / Title</th>
<th>Credits</th>
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<tr>
<td><strong>Third Year</strong></td>
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<tr>
<td>Semester 1</td>
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<td>EDUC 315</td>
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<td>BIOL 301</td>
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<td>SPED 350</td>
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<tr>
<td>Area VI: Creative and Fine Arts Course 2</td>
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</tbody>
</table>

**Non-Departmental Requirements**

Choose one from the following: 3-4 credits

- MATH 1430G Applications of Calculus I
- MATH 1511G Calculus and Analytic Geometry I
- MATH 1521G Calculus and Analytic Geometry II
- MATH 2350G Statistical Methods
- A ST 311 Statistical Applications
- GEOG 1120G World Regional Geography or GEOG 1130G Human Geography

Choose an additional Area IV from the following 3 credits

- ANTH 137G Human Ancestors
- ANTH 1140G Introduction to Cultural Anthropology
- ANTH 1115G Introduction to Anthropology
- ANTH 1160G World Archaeology
- SOCI 111G Introduction to Sociology
- SOCI 2310G Contemporary Social Problems

**Electives, to bring the total credits to 121** 0 credits

**Total Credits** 121-123 credits

1. Courses are prerequisites for Teacher Education Program (TEP). 
2. MATH 1220G College Algebra or MATH 1250G Trigonometry & Pre-Calculus is required for the degree but students may need to take any prerequisites needed to enter MATH 1220G or MATH 1250G first.
3. See the General Education section of the catalog for a full list of courses.
4. The 9 credits of Upper-Division BIOL courses that are apart of the Concentration/Teaching Field coursework will meet the 2nd VWW requirement.
5. Courses require Field Experience.
6. Courses require admission to the TEP.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDUC 475</td>
<td>Contemporary Issues in Education (Spring Only)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 476</td>
<td>Science for Educators (Spring Only)</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 2240G &amp; PHYS 2240L</td>
<td>General Physics for Life Science II and Laboratory to General Physics for Life Science II</td>
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<tr>
<td></td>
<td><strong>Credits</strong></td>
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**Fourth Year**

**Semester 1**

SUBMIT STEP PACKET

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>RDG 414</td>
<td>Content Area Literacy (Fall Only)</td>
<td>3</td>
</tr>
<tr>
<td>EDUC 463</td>
<td>Teaching Science at the Middle and High School Level (Fall Only)</td>
<td>3</td>
</tr>
<tr>
<td>SPED 480</td>
<td>Secondary Curriculum, Methods, and Materials for Special Education in a Diverse Society (Fall Only)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>300-Level Plant Science Elective Course</strong></td>
<td>3</td>
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<tr>
<td>BIOL 467</td>
<td>Evolution</td>
<td>3</td>
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<td><strong>Credits</strong></td>
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</table>

**Semester 2**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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</thead>
<tbody>
<tr>
<td>EDUC 471</td>
<td>Secondary Student Teaching</td>
<td>9</td>
</tr>
<tr>
<td>EDUC 482</td>
<td>Middle and High School Student Teaching Seminar</td>
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<tr>
<td></td>
<td><strong>Credits</strong></td>
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</tr>
<tr>
<td></td>
<td><strong>Total Credits</strong></td>
<td><strong>121</strong></td>
</tr>
</tbody>
</table>

1 These courses may have prerequisites and/or co-requisites, and it is the students responsibility for checking and fulfilling all those requirements.

2 See the General Education section of the catalog for a full list of courses.