Program: Science Education  
Major: Science Education - Biology  
Degree: Bachelor of Science in Education (B.S.Ed.)

Department: Biology  
College: Mathematics and Science  
Major Code: 6040

University Core  (Total Listed 42-44)

Specific courses within the University Core are listed on pages 96-97.
- Courses from the major may apply to the areas marked in the University Core.

- Written and Oral Communication................................. 9

Quantitative Reasoning/Scientific Method .......................... 10-11
- Math............................................................................. 3
- Life Science..................................................................... 4
- Physical Science.......................................................... 3-4

Critical Inquiry and Aesthetic Analysis............................... 6
Aesthetic Analysis............................................................. 3
Critical Inquiry................................................................. 3

Support Courses

Support Courses..........................................................9-15

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCOM 1113</td>
<td>Fundamentals of Speech</td>
<td></td>
</tr>
<tr>
<td>ENG 1113</td>
<td>English Composition</td>
<td></td>
</tr>
<tr>
<td>ENG 1213</td>
<td>English Composition and Research</td>
<td></td>
</tr>
</tbody>
</table>

Students majoring in the Biology Education program are encouraged to complete the following courses in high school.

Two years of high school Algebra and one year of Trigonometry OR
- MATH 1513 College Algebra
- MATH 1593 Plane Trigonometry

Major Requirements

Science Education - Biology .......................65

Biology.........................................................26

Required courses:
- BIO 1204 Biology for Majors: Principles
- BIO 1225 Biology for Majors: Diversity
- BIO 2203 Cell Biology
- BIO 2211 Cell Biology Laboratory
- BIO 3054 Microbiology for Majors and Lab
- BIO 3303 Genetics
- BIO 3543 General Ecology
- BIO 3703 Evolution

Chemistry.................................................................10

Required courses:
- CHEM 1103 General Chemistry I AND
- CHEM 1112 General Chemistry I Recitation/Lab
- CHEM 1223 General Chemistry II AND
- CHEM 1232 General Chemistry II Recitation/Lab

Physics.................................................................8

Required courses:
- PHY 1114 General Physics I and Lab OR
- PHY 2014 Physics for Science and Engineering I and Lab
- PHY 1214 General Physics II and Lab OR
- PHY 2114 Physics for Science and Engineering II and Lab

American Historical and Political Analysis ......................... 6
- American National Government ..................................... 3
- American History...................................................... 3

Cultural and Language Analysis ........................................3-4
- Second Language....................................................... 4
- OR
  Cultural Analysis..................................................... 3

Social and Behavioral Analysis ........................................... 3

Life Skills ....................................................................... 5
- Required Health Course............................................... 2
- Elective Life Skills...................................................... 3

Minimum Hours required ................... 128*

*Total hours required for this major may exceed the minimum 124 credit hour institutional requirement and will vary according to course selection. It is recommended students complete high school algebra II, trigonometry, and two years of a second language in high school.

- CONTINUED ON NEXT PAGE -
Program: Science Education - continued  
Major: Science Education - Biology  
Degree: Bachelor of Science in Education (B.S.Ed.)

- CONTINUED FROM PREVIOUS PAGE -

Graduating seniors must take a national assessment exam in Biology as a degree requirement for the B.S.Ed. in Science Education - Biology.

**Minimum Graduation Requirements**

1. Overall GPA in all college course work ........................................ 2.50  
2. Average in course work at UCO .................................................. 2.00  
3. Courses in English Composition, Fundamentals of Speech, Professional Education, and area of specialization (major)........... “C”  
4. Proficiency in foreign language ............................................... Novice 4 level

For other regulations pertaining to graduation, see pages 68-69 of the 2018-2019 catalog.