For a full list of courses see University Core.

- 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.................................................................................................. 9-15

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

Students majoring in the General Science 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 1453  Applied Algebra OR
- MATH 1513  College Algebra AND
- MATH 1593  Plane Trigonometry

Major Requirements

Science Education - General Science ................................................. 64

Science Education Core .......................................................................... 34
- Biology ......................................................................................................................... 9
  Required courses:
  BIO 1204  Biology for Majors: Principles
  BIO 1225  Biology for Majors: Diversity
- 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
- Mathematics ............................................................................................................. 3
  Required course:
  STAT 2103  Introduction to Statistics for Sciences

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 Required Hours

<table>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>PHY 3014</td>
<td>Earth Science</td>
</tr>
</tbody>
</table>

Science Education - General Science ................................................. 30

Required courses:
- 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
- CHEM 2104  Quantitative Analysis and Lab
- CHEM 3303  Organic Chemistry I OR
- CHEM 3312  Organic Chemistry I Lab OR
- CHEM 3022  Organic Chemistry for Life Sciences Laboratory
- PHY 1304  Descriptive Astronomy

Professional Education ................................................................. 31

- PTE 1010  Introduction to Teacher Education
- PTE 3023  Foundations of American Education/Clinical Exp
- PTE 3153  Adolescent Psychology
- SPED 4123  Teaching Individuals with Disabilities
- BIO 4812  Teaching and Learning in Science Classrooms
- BIO 4853  General Methods of Teaching Science and Lab
- PTE 4172  Educational Assessment
- PTE 4533  Contemporary Learning Sciences
- PTE 4811  Contemporary Issues
- PTE 4838  Internship/Student Teaching Secondary
- PTE 4853  Classroom Management & Instruction

^ Admission to Teacher Education required
#To be taken the same semester

- CONTINUED ON NEXT PAGE -
Minimum Hours required ...................... 127*

*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.

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 Academic Degree Requirements.