BIOLOGY (SCIENCE EDUCATION), B.S.

This program is designed for students interested in science education and certification to teach secondary science.

Requirements for a Major in Biology (Science Education)

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thirteen semester hours including the following:</td>
<td></td>
</tr>
</tbody>
</table>

**Required Courses**

- BIO 1305 & BIO 1105 Modern Concepts of Bioscience and Modern Concepts of Bioscience Laboratory 4
- or BIO 1405 Investigations of Modern Biology Concepts I 4
- BIO 1306 & BIO 1106 Modern Concepts of Bioscience, continued and Modern Concepts of Bioscience Laboratory 4
- or BIO 1406 Investigations of Modern Biology Concepts II 4
- BIO 2306 Genetics & BIO 2106 and Genetics Laboratory 4
- BIO 3366 Foundations of Evolutionary Biology & BIO 3166 Topics in Evolution 3
- or BIO 4365 Topics in Evolution 3
- BIO 4333 Science Leadership: Improvement of Science Education 3
- BIO 3V9R Research 1
- BIO 4001 Achievement Test 0

Select four hours from each group (a course may not be used to fulfill more than one group): 12

**Group 1**

- BIO 3324 Entomology & BIO 3124 and Laboratory for Entomology
- BIO 3429 Comparative Chordate Anatomy
- BIO 4308 Genes and Development & BIO 4108 and Genes and Development Laboratory
- BIO 4426 Vertebrate Histology
- BIO 4432 General Human Anatomy

**Group 2**

- BIO 3322 Human Physiology & BIO 3122 and Human Physiology Lab
- BIO 4306 Molecular Genetics and Genomics & BIO 4106 and Molecular Genetics and Genomics Laboratory
- BIO 4431 Comparative Vertebrate Physiology

**Group 3**

- BIO 3303 Ecology & BIO 3103 and Ecology Laboratory
- BIO 3324 Entomology & BIO 3124 and Laboratory for Entomology
- BIO 4405 Limnology
- BIO 4406 Aquatic Biology
- BIO 4418 Biology of Wetland and Aquatic Vascular Plants

**Subtotal** 31

**Required Courses in Other Fields** 2

- CHE 1301 & CHE 1101 Basic Principles of Modern Chemistry I and General Chemistry Laboratory I 4
- CHE 1302 & CHE 1102 Basic Principles of Modern Chemistry II and General Chemistry Laboratory II 4
- CHE 3331 Organic Chemistry I 3
- CHE 3332 Organic Chemistry II 3
- CHE 3238 Organic Chemistry Laboratory 2
- GEO 1306 The Earth Through Time & GEO 1106 and The Earth Through Time, Laboratory 4
- or GEO 1307 & GEO 1106 Evolution and Extinction and The Earth Through Time, Laboratory 4
- GEO 1408 Earth Science & PHY 1455 Descriptive Astronomy 4
- MTH 1321 Calculus I 3
- MTH 1322 Calculus II 3
- or STA 2381 Introductory Statistical Methods

Select one of the following sequences: 8

- PHY 1408 General Physics for Natural and Behavioral Sciences I & PHY 1409 and General Physics for Natural and Behavioral Sciences II
- PHY 1420 General Physics I & PHY 1430 and General Physics II
- PHY 1420 General Physics I & PHY 1409 and General Physics for Natural and Behavioral Sciences II

Completion of the Minor in Science Education 3

**Total Hours** 69

1. A grade of "C" or better in 31 hours of biology courses used in the major and a GPA of 2.0 or higher on all BIO courses.
2. A grade of "C" or better in all courses required in other fields.
3. School of Education - contact the advising department in the School of Education - Office of Student and Information Services, located in Draper 100.