**Major/Degree: Biology BS: Science Education Concentration**

This major requires **72** units. **A total of 120 units are required for a bachelor's degree.**

Major Academic Plans (MAP) show a general recommended pathway to graduation. Meet with your major advisor each semester to discuss your progress and degree plan for future semesters. Consult the HSU catalog for complete list of major program courses. See the current schedule of classes for courses offered in General Education, American Institutions, and Diversity & Common Ground requirements.

**Academic Year: 2020-21**

### Freshman Year

<table>
<thead>
<tr>
<th>Fall (semester 1)</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD GE E</td>
<td>SCI100</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>LD GE B: Math [1]</td>
<td>MATH 102</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>LD GE B: Life Forms &amp; Major: BOT 105 or</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD GE B: Physical Univ. &amp; Major: CHEM 109</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD GE D/DCG</td>
<td>NAS 104</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 14-15**

<table>
<thead>
<tr>
<th>Spring (semester 2)</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD GE A1 [1]</td>
<td>ENGL 102 (+optional ENGL 110)</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>LD GE A3 [1]</td>
<td>MATH 105 or</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Major [Core]</td>
<td>CHEM 109</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Major [Core]</td>
<td>BOT 105 and/or</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CHEM 110</td>
<td>0-5</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 14-20**

### Sophomore Year

<table>
<thead>
<tr>
<th>Fall (semester 3)</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD GE A1 [1]</td>
<td>ENGL 102 (+optional ENGL 110)</td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>LD GE C1 or C2 [4]</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD GE B: Life &amp; Major</td>
<td>BIOL 105</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Major [Core]</td>
<td>BOT 105 or CHEM 110</td>
<td>4-5</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 14-16**

<table>
<thead>
<tr>
<th>Spring (semester 4)</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD GE A2 [1]</td>
<td>COMM 100</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Major [Core]</td>
<td>STAT 109</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Major [Core]</td>
<td>CHEM 110</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>ZOOL 110</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 17**

### Junior Year

<table>
<thead>
<tr>
<th>Fall (semester 5)</th>
<th>To Do: Apply to graduate.</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Institutions [2]</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD GE C1 or C2 [4]</td>
<td>UD GE C or D [4]</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Institutions</td>
<td>Major [Core]</td>
<td>BIOL 340</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Major [Core]</td>
<td>CHEM 228</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>BIOL 330</td>
<td>4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 17**

<table>
<thead>
<tr>
<th>Spring (semester 6)</th>
<th>To Do: Take the GWPE.</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UD GE C or D [4]</td>
<td>BIOL 307</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>BIOL 350</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>PHYX 107</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>Elective or SED 410 [8]</td>
<td>0-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 17**

### Senior Year

<table>
<thead>
<tr>
<th>Fall (semester 7)</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>UD GE C or D [4]</td>
<td>BIOL 307</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>UD GE B: Major</td>
<td>BIOL 350</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>PHYX 107</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Prerequisite</td>
<td>Elective or SED 410 [8]</td>
<td>0-3</td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 14-17**

<table>
<thead>
<tr>
<th>Spring (semester 8)</th>
<th>To Do: Register for commencement.</th>
<th>Description</th>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major [Concentration]</td>
<td>BOT 350</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>GEOL 109</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>ZOOL 312</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major [Concentration]</td>
<td>BIOL 499</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective if needed</td>
<td>Elective if needed</td>
<td>0-3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Semester Total: 14-17**

**A1=Oral Communication; A2 = Written Communication; A3 = Critical Thinking; C1 = Arts; C2 = Humanities; DCG = Diversity & Common Ground; GE = General Education; LD = Lower Division; UD = Upper Division. See page 2 for notes.**
Major: Biology BS: Science Education Concentration

Notes

[1] Requirement: Complete LD GE A1, A2, A3 & B: Math with C- or higher in each course; Complete by 60 units earned.

[2] One American Institution course will also count for LD GE D.


[4] Complete 2 DCG courses, (one must be domestic) with courses that also meet GE. DCG units can be reduced with double count GE.

[5] Credit earned for math support course does not count toward unit requirements for graduation, GE, or major.

[6] Select major elective in consultation with major advisor

[7] Degree requirements listed here do not include professional education courses required for the credential.

[8] Not a major requirement but, a prerequisite for applying to the Secondary Education Credential Program.