## B.S. and B.A. Biology Four-Year Sample Curriculum 2023-2024

Requirements subject to change. See UI Catalog for complete degree requirements and additional information. Updated 12/7/22

<table>
<thead>
<tr>
<th>1st Year – Fall Semester</th>
<th>1st Year – Spring Semester</th>
</tr>
</thead>
</table>
| BIOL 101 | Opportunities in Biological Sciences | 1 | BIOL 115/115L | Cells & the Evolution of Life & Lab  
Prereq: CHEM 101 or CHEM 111  
minimum ‘C’ required to graduate |
| BIOL 114 | Organisms and Environments  
minimum ‘C’ required to graduate | 4 | CHEM 112/112L | Principles of Chemistry II & Lab  
Prereq: Chem 111/111L |
| CHEM 111/111L | Principles of Chemistry I & Lab  
Prereq: math test or min ‘C’ in CHEM 101, MATH 143 or 170 | 4 | STAT 251 or *STAT 301 | Statistical Methods or Probability & Statistics  
Prereq: MATH 108, 137, 143, 160, or 170; MATH 175 for STATS 301 |
| MATH 170 | Analytic Geometry and Calculus I  
Prereq: math test or min ‘C’ in MATH 143 and MATH 144 (co-req possible). | 4 | General Education Course/Elective |
| ENGL 102 | College Writing and Rhetoric  
Prereq: ENGL 101 or test scores | 3 | General Education Course/Elective |

**Total Credits 16**  

<table>
<thead>
<tr>
<th>2nd Year – Fall Semester</th>
<th>2nd Year – Spring Semester</th>
</tr>
</thead>
</table>
| BIOL 310/315 | Genetics & Lab  
Prereq: BIOL 115/115L or BIOL 250 | 4 | BIOL 213 | Principles of Biological Structure and Function  
Prereq: BIOL 114 or BIOL 115/BIOI 115L |
| CHEM 277/278 | Organic Chemistry I & Lab  
Prereq: CHEM 112/112L | 4 | BIOL 314 | Ecology and Population Biology  
Prereq: BIOL 114 and BIOL 115/115L; STAT 251 or STAT 301; and MATH 160 or MATH 170 |
| PHYS 111/111L | General Physics I & Lab  
Prereq: MATH 143 (GP); MATH 170 (EP)  
PHYS 211/211L  
Prereq: CHEM 112/112L | 4 | PHYS 112/112L | General Physics II & Lab or Eng. Physics II & Lab  
Prereq: PHYS 111/111L (GP); PHYS 211/211L and MATH 175 (EP) |
| General Education Course/Elective | General Education Course/Elective |

**Total Credits 16**  

<table>
<thead>
<tr>
<th>3rd Year – Fall Semester</th>
<th>3rd Year – Spring Semester</th>
</tr>
</thead>
</table>
| BIOL 300 or BIOL 380 | Survey of Biochemistry or Biochemistry I  
Prereq: CHEM 275 or 277 (SB); CHEM 112/112L and CHEM 277 (BI) | 3 | BIOL 312/313 | Molecular and Cellular Biology & Lab  
Prereq: BIOL 115/115L and BIOL 310/315 or GENE 314 or BIOL 250 |
| *see below | Upper Division Biology Elective | 3 | *see below | Upper Division Biology Elective |
| ENGL 207 or 208 | Writing Course  
Prereq: ENGL 102; Junior stand.317,318 | 3 | General Education Course/Elective |
| or 317 or 318 | General Education Course/Elective |
| General Education Course/Elective | General Education Course/Elective |

**Total Credits 16**  

<table>
<thead>
<tr>
<th>4th Year – Fall Semester</th>
<th>4th Year – Spring Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>*see below</td>
<td>Upper Division Biology Elective</td>
</tr>
<tr>
<td>Upper Division Biology Elective</td>
<td>General Education Course/Elective</td>
</tr>
</tbody>
</table>
| General Education Course/Elective | BIOL 421 | Advanced Evolution/Population Dynamics  
Prereq: One of BIOL 310 or BIOL 314 |
| General Education Course/Elective | General Education Course/Elective |
| General Education Course/Elective | General Education Course/Elective |

**Total Credits 15**  

B.A. students use their electives to complete an additional 6 credits in humanities and 3 credits in social sciences beyond the university minimum, and up to 16 credits in a foreign language.


Additional classes can be substituted with prior approval from advisor and chairperson.