To graduate in this program, students must earn a minimum grade of ‘C’ in BIOL 115 and BIOL 115L. Required course work includes the university requirements (see regulation J-3 ([https://catalog.uidaho.edu/general-requirements-academic-procedures/j-general-requirements-baccalaureate-degrees/])) and:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 115 &amp; 115L</td>
<td>Cells and the Evolution of Life and Cells and the Evolution of Life Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 204</td>
<td>Special Topics</td>
<td>1-16</td>
</tr>
<tr>
<td>BIOL 227</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 228</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 250 &amp; BIOL 255</td>
<td>General Microbiology and General Microbiology Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 310 &amp; BIOL 315</td>
<td>Genetics and Genetics Lab</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 312 &amp; BIOL 313</td>
<td>Molecular and Cellular Biology and Molecular and Cellular Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 380</td>
<td>Biochemistry I</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 111 &amp; 111L</td>
<td>General Chemistry I and General Chemistry I Laboratory</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 112 &amp; 112L</td>
<td>General Chemistry II and General Chemistry II Laboratory</td>
<td>5</td>
</tr>
<tr>
<td>CHEM 277 &amp; CHEM 278</td>
<td>Organic Chemistry I and Organic Chemistry I: Lab</td>
<td>4</td>
</tr>
<tr>
<td>MATH 170</td>
<td>Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>PHIL 103</td>
<td>Introduction to Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PSYC 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>STAT 251</td>
<td>Statistical Methods</td>
<td>3</td>
</tr>
<tr>
<td>or STAT 301</td>
<td>Probability and Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one of the following Physics sequences:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHYS 111 &amp; 111L</td>
<td>General Physics I and General Physics I Lab</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 112 &amp; 112L</td>
<td>General Physics II and General Physics II Lab</td>
<td>5</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYS 211 &amp; 211L</td>
<td>Engineering Physics I and Laboratory Physics I</td>
<td>4</td>
</tr>
<tr>
<td>PHYS 212 &amp; 212L</td>
<td>Engineering Physics II and Laboratory Physics II</td>
<td>4</td>
</tr>
</tbody>
</table>

Select 3 credits of Written Communication courses from the following:

- ENGL 208 Personal & Exploratory Writing
- ENGL 317 Technical Writing
- ENGL 318 Science Writing

Select one of the following Senior Capstone courses:

- BIOL 401 Undergraduate Research (Max 8 credits)
- BIOL 407 Practicum in Biology Laboratory Teaching
- BIOL 408 Human Anatomy and Physiology Laboratory Pedagogy (Max 8 credits)
- BIOL 411 Senior Capstone

Select one of the following:

- ANTH/SOC 417 Social Data Analysis
- BIOL 456 Computer Skills for Biologists
- CHEM 302 Principles of Physical Chemistry
- MATH 437 Mathematical Biology
- STAT 431 Statistical Analysis

Select 3 credits of Critical Thinking courses from the following:

- ENGL 207 Persuasive Writing
- PHIL 201 Critical Thinking
- PHIL 202 Introduction to Symbolic Logic
- PHIL 417 Philosophy of Biology

Select 2-3 credits of Leadership and Professional courses from the following:

- BIOL 398 Internship
- INTR 492 College of Science Ambassadors (Max 8 credits)
- INTR 496 Pre-Health Peer Mentors (Max 4 credits)
- MHR 311 Introduction to Management
- PHIL 361 Professional Ethics (Max 6 credits)
- PSYC 414 Traumatic Events: Preparation, Intervention, Evaluation

Select 6 credits of Psychology courses from the following:

- PSYC 305 Developmental Psychology
- PSYC 311 Abnormal Psychology
- PSYC 325 Cognitive Psychology
- PSYC 372 Physiological Psychology
- PSYC 470 Introduction to Chemical Addictions
- PSYC 472 Introduction to the Pharmacology of Psychoactive Drugs

Select 6 credits of Global and Cultural Competence courses from the following:

- ANTH 327 Belief Systems
- COMM 335 Intercultural Communication
- FCS 411 Global Nutrition
- HIST 380 Disease and Culture: History of Western Medicine
- JAMM 340 Cultural Diversity and the Media
- PHIL 367 Global Justice
- POLS 385 Political Psychology
- SOC 201 Introduction to Inequalities and Inclusion
- SOC 340 Environmental Sociology and Globalization

Select 9 credits of Biomedical Sciences courses from the following:

- BIOL 314 Ecology and Population Biology
- BIOL 324 Comparative Vertebrate Anatomy
- BIOL 421 Advanced Evolution/Population Dynamics
- BIOL 428 Microscopic Anatomy
- BIOL 432 Immunology
- BIOL 433 Pathogenic Microbiology
- BIOL 444 Genomics
- BIOL 447 Virology
- BIOL 454 Biochemistry II
- BIOL 461 Neurobiology
- BIOL 474 Developmental Biology
- BIOL 482 Protein Structure and Function
- BIOL 487 Eukaryotic Molecular Genetics
CHEM 372  Organic Chemistry II
ENT 411  Veterinary & Medical Entomology
ENT 476  Medical Parasitology
FCS 361  Advanced Nutrition
H&S 450  Critical Health Issues
H&S 451  Psychosocial Determinants of Health

Total Hours  101-117

Courses to total 120 credits for this degree

1. The student will be able to apply mathematical and chemical principles to solve biological problems with a focus on the molecular scale.
2. The student will be able to use different modes of thinking to examine concepts and issues related to the molecular and microbiological sciences, explore creative avenues, and solve complex problems.
3. The student will have a service-oriented commitment to advance and sustain local and global communities.