BIOLOGY, BACHELOR OF ARTS

To obtain a BA with a major in Biology, a student must fulfill university, college, and departmental requirements. Minimum hour requirements follow:

• 46 hours of University General Education courses—Most commonly, Biology majors do not complete 46 hours of coursework solely for the purpose of meeting university General Education requirements. Instead, they often do the following:
  • Test out of at least three hours of fundamental academic skills,
  • Take six hours of coursework that meets both the six hours of diversity requirements and six hours of distribution requirements,
  • Apply up to five hours of foreign language coursework toward meeting the nine-hour General Education humanities requirement,
  • Meet the seven-hour University General Education natural sciences distribution requirement through completing major courses.

In such cases, the number of credit hours taken solely to meet General Education requirements is reduced to 25 or fewer.

• 16 hours foreign language requirement (Four years of a single language in high school or four college semesters will satisfy this requirement.)
• 12 hours college breadth requirement
• 51 hours of major courses
• Elective hours as required to reach a total of 120 hours

TOTAL HOURS: 120

Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 1450</td>
<td>BIOLOGY I</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 1750</td>
<td>BIOLOGY II</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 2140</td>
<td>GENETICS</td>
<td>4</td>
</tr>
<tr>
<td>BIOL 3340</td>
<td>ECOLOGY</td>
<td>4</td>
</tr>
</tbody>
</table>

The remaining 18 elective credits in biology should be chosen in consultation with a Biology advisor and must include at least 14 credits from BIOL 3000-4000 level courses, including at least one lab course (in addition to BIOL 3340). Up to three credits of BIOL 4030, up to three credits of either BIOL 4050 or BIOL 4800 and one credit of BIOL 4040 can be included. BIOL 3150 may not be used to satisfy the requirement for 3000-4000 level biology credits. Courses at the 1000-2000 level are restricted to:

BIOL 2440  THE BIOLOGY OF MICROORGANISMS
BIOL 2740  HUMAN ANATOMY AND PHYSIOLOGY I
BIOL 2840  HUMAN ANATOMY AND PHYSIOLOGY II

Chemistry Requirements

Select one of the following required chemistry sequences: 14-16

Sequence 1:

CHEM 1140 & CHEM 1144  FUNDAMENTALS OF COLLEGE CHEMISTRY and FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY

CHEM 2210 & CHEM 2214  FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY

Sequence 2:

CHEM 1180 & CHEM 1184  GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY

CHEM 1190 & CHEM 1194  GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY

CHEM 2250  ORGANIC CHEMISTRY I

CHEM 2260  ORGANIC CHEMISTRY II

CHEM 2274  ORGANIC CHEMISTRY LABORATORY

Sequence 3:

CHEM 1180 & CHEM 1184  GENERAL CHEMISTRY I and GENERAL CHEMISTRY I LABORATORY

CHEM 1190 & CHEM 1194  GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY

CHEM 2210 & CHEM 2214  FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY

CHEM 3650 & CHEM 3654  FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY

Required Lecture and Lab Coursework in Physics

Select one of the following pairings or groupings: 5-10

Option 1:

PHYS 1050 & PHYS 1054  INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY

Option 2:

PHYS 1110 & PHYS 1154  GENERAL PHYSICS I WITH ALGEBRA and GENERAL PHYSICS LABORATORY I

PHYS 1120 & PHYS 1164  GENERAL PHYSICS and GENERAL PHYSICS LABORATORY II

Option 3:

PHYS 2110 & PHYS 1154  GENERAL PHYSICS I - CALCULUS LEVEL and GENERAL PHYSICS LABORATORY I

PHYS 2120 & PHYS 1164  GENERAL PHYSICS-CALCULUS LEVEL and GENERAL PHYSICS LABORATORY II

Additional Requirements

One approved course in statistics from the following options: 3-4

BIOL 4110, STAT 3000, PSYC 3130, SOC 2130

One approved math or computer science course from the following options: MATH 1220, 1320, 1330, 1340, 1930, 1940, 1950; CSCI 1200 or above

Total Credits 61-71

For a B.A., the college requires completion of a foreign language through the intermediate level.

Freshman

Fall

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1150</td>
<td>ENGLISH COMPOSITION I (*)</td>
<td>3</td>
</tr>
<tr>
<td>CMST 1110</td>
<td>PUBLIC SPEAKING FUNDS</td>
<td>3</td>
</tr>
<tr>
<td>or CMST 2120</td>
<td>or ARGUMENTATION AND DEBATE</td>
<td></td>
</tr>
<tr>
<td>MATH 1220</td>
<td>COLLEGE ALGEBRA (**)</td>
<td>3</td>
</tr>
<tr>
<td>BIOL 1450</td>
<td>BIOLOGY I (**)</td>
<td>5</td>
</tr>
</tbody>
</table>

*ENGL 1150: requires placement via EPPE or AP.
**MATH 1220: requires appropriate placement. Higher levels of Math may substitute. Please see your advisor for options.**

***Biol 1450: counts as a Natural & Physical Science Lecture and Lab course as well as a major requirement.

### Credits 14

#### Spring

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ENGL 1160</td>
<td>3</td>
</tr>
<tr>
<td>PHYS 1050 &amp; PHYS 1054</td>
<td>5</td>
</tr>
<tr>
<td>BIOL 1750</td>
<td>5</td>
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</tbody>
</table>

Humanities and Fine Arts 3

*ENGL 1160: requires ENGL 1150 with grade of C- or higher or placement via EPPE or AP.*

There are other options for this major requirement – make sure you talk with an advisor before planning to take this class. The Physics requirement will satisfy the 2nd Natural and Physical Science requirement.

### Credits 16

#### Sophomore

**Fall**

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
<td>CHEM 1140 or CHEM 1144</td>
<td>5</td>
</tr>
<tr>
<td>FUNDAMENTALS OF COLLEGE CHEMISTRY (*) or FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY **</td>
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</tbody>
</table>

Foreign Language 1110 ¬ 5

Humanities and Fine Arts 3

Social Science with US Diversity 3

*CHEM 1140: Requires MATH 1220 or higher within last 2 years. ACT, SAT, AP or Math Placement Exam scores may substitute for the Math prereq to Chemistry 1140. Concurrent enrollment in CHEM 1144 required. There are other ways to complete this requirement – make sure to consult with an advisor before planning to take this class.*

*Level 1110 foreign language courses count as a Humanity/Fine Arts course, Global Diversity, and toward the student’s BA requirement. If student is fulfilling the BA requirement via alternative methods, then 16 additional credits including a HFA and Global Diversity will need to be factored in to this degree plan.

### Credits 16

#### Spring

<table>
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<tr>
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<tr>
<td>CHEM 2210 &amp; CHEM 2214</td>
<td>5</td>
</tr>
<tr>
<td>FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY (*)</td>
<td></td>
</tr>
<tr>
<td>BIOL 2140</td>
<td>4</td>
</tr>
<tr>
<td>FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY (*)</td>
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</tbody>
</table>

Foreign Language course 1120 5

*CHEM 2210: requires CHEM 1140-1144 or CHEM 1190-1194, either of which must be earned with a C- or better. CHEM 2214 to be taken concurrently. Please refer to your advisor or the catalog for other Chemistry options.*

**BIOL 2140: requires BIOL 1450 and 1750, as well as CHEM 1140 or 1180.

### Credits 14

#### Junior

**Fall**

<table>
<thead>
<tr>
<th>Course</th>
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</tr>
</thead>
<tbody>
<tr>
<td>CHEM 3650 &amp; CHEM 3654</td>
<td>4</td>
</tr>
<tr>
<td>FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY (*)</td>
<td></td>
</tr>
<tr>
<td>BIOL 3340</td>
<td>4</td>
</tr>
</tbody>
</table>

Foreign Language Course 2110 3

Elective*** 3

*CHEM 3650: requires CHEM 2210-2214 or CHEM 2260-2274, either of which must be earned with a grade of C- or better. CHEM 3654 to be taken concurrently. Please refer to your advisor and the catalog for other Chemistry options.*

**BIOL 3340: requires BIOL 1450 and 1750; junior-senior standing or graduate student.

***Students must have at least 120 total credits with no less than 27 upper level credits throughout their A&S degree. A minimum of 18 upper level credits are required within their major. Depending on options selected throughout degree, electives may need to be upper level in order to reach this minimum credit requirement.

### Credits 14

#### Spring

Upper-Level BIOL Elective no Lab** 3

Upper-Level BIOL Elective no Lab** 3

Statistics Course** 3

Foreign Language 2120 3

Social Science 3

*Upper-Level BIOL Electives cannot include BIOL 3150. Can include up to one of the following: BIOL 2440, BIOL 2740, or BIOL 2840. Prereqs vary.*

**Approved Statistics Courses: BIOL 4110, STAT 3000, PSYC 3130, SOC 2130. Placement is required.

### Credits 15

#### Senior

**Fall**

Upper-Level BIOL Elective + Lab* 4

Upper-Level BIOL Elective no Lab* 3

Social Science Course** 3

Additional Humanities/Fine Arts Course for A&S or Course towards Minor/2nd Major*** 3

HIST 1000 or Minor/2nd Major Course‡ 3

*Upper-Level BIOL Electives cannot include BIOL 3150. Can include up to one of the following: BIOL 2440, BIOL 2740, or BIOL 2840.

**Social Science course must be in a 2nd discipline

***A&S College Requirement Options. Additional HFA course must be in a 3rd discipline.

‡A&S College Requirement Options

### Credits 16

#### Spring

Upper-Level BIOL Elective no Lab* 3

Upper-Level BIOL Elective no Lab* 3

*Upper-Level BIOL Electives cannot include BIOL 3150. Can include up to one of the following: BIOL 2440, BIOL 2740, or BIOL 2840.

Additional Social Science Course for A&S or Course towards Minor/2nd Major** 3

HIST 1010 or Minor/2nd Major Course*** 3

*Meets Advanced Writing requirement: see “purple sheet” from Biology advisors for list of writing-approved courses

**A&S College Requirement Options. Additional Social Science course must be in a 3rd discipline.

***A&S College Requirement Options.
Students must have at least 120 total credits with no less than 27 upper level credits throughout their A&S degree. A minimum of 18 upper level credits are required within their major. Depending on options selected throughout degree, electives may need to be upper level in order to reach this minimum credit requirement.

<table>
<thead>
<tr>
<th>Credits</th>
<th>15</th>
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<tbody>
<tr>
<td>Total Credits</td>
<td>120</td>
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</table>

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change.

Additional Information About this Plan:

University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

Placement Exams: For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php

**Transfer credit or placement exam scores may change suggested plan of study**