# 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 exclusively to meet university General Education requirements, but may reduce this number, possibly to 25 hours or fewer, in following ways:
- Test out of at least 3 hours of fundamental academic skills,
- Take 6 hours of coursework that meets both the 6 hours of diversity requirements and six hours of distribution requirements,
- Apply up to 5 hours of foreign language coursework toward meeting the 9 -hour General Education humanities requirement,
- Meet the 7-hour University General Education natural sciences distribution requirement through completing major courses.
- 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

| Code | Title | Credits |
| :---: | :---: | :---: |
| Biology Requirements |  |  |
| BIOL 1450 | BIOLOGY I | 5 |
| BIOL 1750 | BIOLOGY II | 5 |
| BIOL 2140 | GENETICS | 4 |
| BIOL 3340 | ECOLOGY | 4 |
| 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: |  | 18 |
| BIOL 2440 | THE BIOLOGY OF MICROORGANISMS |  |
| BIOL 2740 | HUMAN ANATOMY AND PHYSIOLOGY I |  |
| BIOL 2840 | HUMAN ANATOMY AND PHYSIOLOGY II |  |
| Requirements in Chemistry |  |  |
| Select one of the following required chemistry sequences: |  | 14-16 |
| Sequence 1: |  |  |
| CHEM 1140 <br> \& CHEM 1144 | FUNDAMENTALS OF COLLEGE CHEMISTRY <br> and FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY |  |
| CHEM 2210 \& CHEM 2214 | FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY |  |
| CHEM 3650 <br> \& CHEM 3654 | FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY |  |
| Sequence 2: |  |  |


| CHEM 1180 <br> \& 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 <br> \& CHEM 1194 | GENERAL CHEMISTRY II and GENERAL CHEMISTRY II LABORATORY |
| CHEM 2210 <br> \& CHEM 2214 | FUNDAMENTALS OF ORGANIC CHEMISTRY <br> and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY |
| CHEM 3650 <br> \& CHEM 3654 | FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY |

Cognate Requirements in Physics
Select one of the following: 5-10
Option 1:

| PHYS 1050 | INTRODUCTION TO PHYSICS |
| :--- | :--- |
| \& PHYS 1054 | and INTRODUCTION TO PHYSICS |
|  | LABORATORY |

Option 2:

| PHYS 1110 | GENERAL PHYSICS I |
| :--- | :--- |
| \& PHYS 1154 | and GENERAL PHYSICS LABORATORY I |
| PHYS 1120 | GENERAL PHYSICS II |
| \& PHYS 1164 | and GENERAL PHYSICS LABORATORY II |
| Option 3: |  |
| PHYS 2110 | GENERAL PHYSICS I - CALCULUS LEVEL |
| \& PHYS 1154 | and GENERAL PHYSICS LABORATORY I |
| PHYS 2120 | GENERAL PHYSICS-CALCULUS LEVEL |
| \& PHYS 1164 | and GENERAL PHYSICS LABORATORY II |

## Math and Statistics

One approved math or computer science course from the 3-5 following options: MATH 1220, 1300, 1320, 1330, 1340, 1930, 1940, 1950; CSCI 1200, 1620; CIST 1400; BIOL 4110

One approved course in statistics from the following options:
BIOL 4110, STAT 3000, PSYC 3130, SOC 2130
BIOL 4110 may fulfill a math, statistics, or upper-level biology requirement, but may not fulfill more than one of these.

Total Credits
61-71

For a BA degree, the College of Arts and Sciences requires completion of a foreign language through the intermediate level.

## Freshman

| Fall |  | Credits |
| :---: | :---: | :---: |
| ENGL 1150 | ENGLISH COMPOSITION I (*) | 3 |
| CMST 1110 or CMST 2120 | PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE | 3 |
| MATH 1220 or MATH 1300 | COLLEGE ALGEBRA (**) <br> or COLLEGE ALGEBRA WITH SUPPORT | 3-4 |
| BIOL 1450 | BIOLOGY I (***) | 5 |


| ${ }^{\star \star}$ 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 | 14-15 |
| Spring |  |  |
| ENGL 1160 | ENGLISH COMPOSITION II (*) | 3 |
| PHYS 1050 \& PHYS 1054 | INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY (**) | 5 |
| BIOL 1750 | BIOLOGY II | 5 |
| Humanities and |  | 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. Alternatively, students may take PHYS 1110 \& PHYS 1154 followed by PHYS 1120 \& PHYS 1164. This class also satisfies the 2nd Natural and Physical Science General Education requirement. |  |  |

Credits 16

**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

| Spring |  | 5 |
| :--- | :--- | ---: |
| CHEM 2210 | FUNDAMENTALS OF ORGANIC |  |
| \& CHEM 2214 | CHEMISTRY <br> and FUNDAMENTALS OF ORGANIC |  |
|  | CHEMISTRY LABORATORY $\left(^{\star}\right)$ |  |

*CHEM 2210: requires CHEM 1140 \& CHEM 1144 or
CHEM 1190 \& CHEM 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.

## Junior

## Fall

CHEM 3650
\& CHEM 3654
\& CHEM 3654
BIOL 3340 ECOLOGY $\left(^{\star \star}\right)$ 4
Foreign Language Course 2110 ..... 3
Elective(***) ..... 3
*CHEM 3650: requires CHEM 2210 \& CHEM 2214 orwith a grade of C- or better. CHEM 3654 to be takenconcurrently. Please refer to your advisor and the catalog forother Chemistry options.
**BIOL 3340: requires BIOL 1450 and 1750; junior-senior standing or graduate student.
${ }^{\star \star \star}$ A minimum of 27 upper-level credits is required in the overall degree, with at least 18 upper-level credits within the major. Depending on options selected throughout degree, upper-level electives may be needed in order to reach this minimum credit requirement.
Credits ..... 14
Spring
Lower or Upper-Level BIOL Elective* ..... 3-4
Upper-Level BIOL Elective no Lab* ..... 3
Statistics Course ${ }^{\star \star}$ ..... 3
Foreign Language 2120 ..... 3
Social Science ..... 3
*BIOL Electives- Lower-level options can include only onefrom: BIOL 2440, BIOL 2740, or BIOL 2840. Upper-leveloptions cannot include BIOL 3150. For upper-level BIOLelective options and restrictions, please refer to the Catalogor curriculum guide from the Biology advisors.
**Approved Statistics Courses: BIOL 4110, STAT 3000, PSYC 3130, SOC 2130. Placement is required.

## Credits

## Senior

## Fall

Upper-Level BIOL Elective with Lab* ..... 4
Upper-Level BIOL Elective no Lab* ..... 3
Social Science Course* ${ }^{\star \star}$ ..... 3
Additional Humanities/Fine Arts Course for A\&S or Course ..... 3
towards Minor/2nd Major ${ }^{\star \star \star}$3
*Upper-Level BIOL Electives cannot include BIOL 3150. SeeCatalog or curriculum guide from Biology advisors for upper-level biology course list and restrictions.
${ }^{\star *}$ 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 (*) w ..... 3
Upper-Level BIOL Elective no Lab (*) w ..... 3
Additional Social Science Course for A\&S or Course towards ..... 3
Minor/2nd Major**
HIST 1010 or Minor/2nd Major Course*** ..... 3
Elective (\#) ..... 3

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*Upper-Level BIOL Electives cannot include BIOL 3150. See
Catalog or curriculum guide from Biology advisors for upper-
level biology course list and restrictions.
*w Meets Advanced Writing requirement: see curriculum
guide 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\mathrm{ total credits with at least
27 upper-level credits throughout their A&S degree. A
minimum of }18\mathrm{ upper-level credits is required within their
major. Depending on options selected throughout degree,
upper-level electives may be needed in order to reach this
minimum credit requirement.
\begin{tabular}{llr}
\hline Credits & 15 \\
\hline Total Credits & \(120-122\)
\end{tabular}
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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

