

BIOLOGY, BACHELOR OF ARTS

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

Biology, Bachelor of Arts Requirements

Code	Title	Credits
GENERAL EDUCATION REQUIREMENTS - 46 Hours Required		
Minimum of "C-" required		
Fundamental Academic Skills		15
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	ENGLISH COMPOSITION II	
Writing in the Discipline Course		
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS ARGUMENTATION AND DEBATE	
MATH 1120 or MATH 1100 or MATH 1130 or MATH 1140 or MATH 1300 or STAT 1100 or STAT 1530	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING DATA LITERACY AND VISUALIZATION QUANTITATIVE LITERACY QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS COLLEGE ALGEBRA WITH SUPPORT DATA LITERACY AND VISUALIZATION ELEMENTARY STATISTICS	
Distribution Requirements		31
Natural Science - From two disciplines and at least one lab - 7 hrs		
Social Science - from two disciplines - 9 hrs		
Humanities and Fine Arts - From two disciplines - 9 hrs		
Global Diversity - 3 hrs		
US Diversity 3 hrs		
Major Requirements - 61-71 Hours Required		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
Required Biology Coursework:		18
BIOL 1450	BIOLOGY I (**)	
BIOL 1750	BIOLOGY II (^)	
BIOL 2140	GENETICS (^)	
BIOL 3340	ECOLOGY (^)	
Additional Biology Coursework - 18 Hours Required		18
The remaining 18 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, BIOL 2740, and BIOL 2840.		
Required Chemistry Coursework		14-16
Select one of the following sequences in Chemistry		
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 (^)	
CHEM 3650 & CHEM 3654	FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY 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 Physics Coursework		5-10
Select one of the following Sequences in Physics:		
Sequence 1		
PHYS 1050 & PHYS 1054	INTRODUCTION TO PHYSICS and INTRODUCTION TO PHYSICS LABORATORY (** ^)	
Sequence 2		
PHYS 1110 & PHYS 1154	GENERAL PHYSICS I and GENERAL PHYSICS LABORATORY I (**^)	
PHYS 1120 & PHYS 1164	GENERAL PHYSICS II and GENERAL PHYSICS LABORATORY II (^)	
Sequence 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 (^)	
Select one of the following courses in Mathematics or Computer Science		3-5
MATH 1300	COLLEGE ALGEBRA WITH SUPPORT (**)	
MATH 1320	PRE-CALCULUS ALGEBRA (^)	
MATH 1330	TRIGONOMETRY (^)	
MATH 1340	ALGEBRA AND TRIGONOMETRY FOR CALCULUS (^)	

MATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES (^)	
MATH 1940	CALCULUS FOR BIOMEDICINE (^)	
MATH 1950	CALCULUS I (^)	
CSCI 1200	COMPUTER SCIENCE PRINCIPLES (** ^)	
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II (^)	
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I (^)	
Select one of the following courses in Statistics		3-4
STAT 3000	STATISTICAL METHODS I (^)	
PSYC 3130	STATISTICS FOR THE BEHAVIORAL SCIENCES (^)	
SOC 2130	SOCIAL STATISTICS (^)	
College Breadth (choose one option)		15-30+
Option 1: Complete any UNO minor or undergraduate certificate - 15+ Hours		
Option 2: Additional General Education Requirements - 19+ Hours		
Additional quantitative literacy - 3 hours		
Additional Social Science Gen. Ed. from 3rd Discipline - 3 hours		
Additional Humanities Gen. Ed. from 3rd Discipline - 3 hours		
HIST 1000 and HIST 1010 - 6 hours		
Additional Nat. and Physical Science w/ Lab - 4-5 hours		
Option 3: CAS comprehensive major (50+ hours) OR any second UNO major (30+ hours)		
Bachelor Arts Language Requirements		16
FREN, GERM, Or SPAN, 1110**, 1120, 2110, 2120		
Electives		
Elective hours as required to reach a total of 120 hours		

Biology, Bachelor of Arts Four Year Plan

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 (**) or COLLEGE ALGEBRA WITH SUPPORT	3-4
BIOL 1450	BIOLOGY I (***)	5
*ENGL 1150: requires placement via EPPE, ACT, 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.		
		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 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. 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

Sophomore

Fall

CHEM 1140 & CHEM 1144	FUNDAMENTALS OF COLLEGE CHEMISTRY and FUNDAMENTALS OF COLLEGE CHEMISTRY LABORATORY (*)	5
Foreign Language 1110**		5
Humanities and Fine Arts		3
Social Science with US Diversity		3

*CHEM 1140: Requires MATH 1220 (or MATH 1300) or higher. 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 chemistry sequence options to complete this requirement—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

CHEM 2210 & CHEM 2214	FUNDAMENTALS OF ORGANIC CHEMISTRY and FUNDAMENTALS OF ORGANIC CHEMISTRY LABORATORY (*)	5
BIOL 2140	GENETICS (**)	4
Foreign Language course 1120		5

*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.

Credits 14

Junior

Fall

CHEM 3650 & CHEM 3654	FUNDAMENTALS OF BIOCHEMISTRY and FUNDAMENTALS OF BIOCHEMISTRY LABORATORY (*)	4
BIOL 3340	ECOLOGY (**)	4
Foreign Language Course 2110		3
Elective(***)		3

*CHEM 3650: requires CHEM 2210 & CHEM 2214 or CHEM 2260 & CHEM 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.

***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**	3
Foreign Language 2120	3
Social Science	3

*BIOL Electives- Lower-level options can include only one from: BIOL 2440, BIOL 2740, or BIOL 2840. Upper-level options cannot include BIOL 3150. For upper-level BIOL elective options and restrictions, please refer to the Catalog or curriculum guide from the Biology advisors.

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

Credits **15-16**

Senior

Fall

Upper-Level BIOL Elective with 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. See Catalog or curriculum guide from Biology advisors for upper-level biology course list and restrictions.

**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 Minor/2nd Major**	3
HIST 1010 or Minor/2nd Major Course***	3
Elective (#)	3

*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 total credits with at least 27 upper-level credits throughout their A&S degree. A minimum of 18 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.

Credits **15**

Total Credits **120-122**

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