

Name: \_\_\_\_\_

ID: \_\_\_\_\_

NORTH DAKOTA STATE UNIVERSITY  
College of Science and Mathematics

Biological Sciences Major - Environmental Science Option

**Major Courses: 49 credits**

BIOL	150	3	_____	General Biology I
	150L	1	_____	General Biology I Lab
	151	3	_____	General Biology II
	151L	1	_____	General Biology II Lab
	364	3	_____	General Ecology
	459	3	_____	Evolution
	491	2	_____	Capstone Seminar
BOT	315	3	_____	Genetics
	315L	1	_____	Genetics Lab
	372	4	_____	Structure & Diversity/Plants/Fungi
GEOL	105	3	_____	Physical Geology
	105L	1	_____	Physical Geology Lab
	106	3	_____	The Earth Through Time
	106L	1	_____	The Earth Through Time Lab
SOIL	217	3	_____	Meteorology & Climatology
	410	2	_____	Soil and the Environment

Electives<sup>1</sup>: 13 creditsBiodiversity & Systematics

Choose one course with lab if separate:

BOT	314	3	_____	Systematic Botany
BOT	471	3	_____	Phycology
BOT	472	3	_____	Lichenology
ENT	350	5	_____	General Entomology
MICR	350	3	_____	General Microbiology
	350L	1	_____	Gen Microbiology Lab
ZOO	450	4	_____	Invertebrate Zoology
ZOO	452	3	_____	Ichthyology
ZOO	454	3	_____	Herpetology
ZOO	456	3	_____	Ornithology
ZOO	458	3	_____	Mammalogy

Ecology

Choose one course:

BOT	460	3	_____	Plant Ecology
MICR	452	3	_____	Microbial Biology
ZOO	470	4	_____	Limnology
ZOO	472	3	_____	Fisheries Biology
ZOO	476	3	_____	Wildlife Ecology & Management

Physiology

Choose one course:

BOT	380	4	_____	Plant Physiology
MICR	480	3	_____	Bacterial Physiology
ZOO	460	3	_____	Animal Physiology
ZOO	462	3	_____	Physiological Ecology

Structural Biology

Choose one course:

BOT	452	3	_____	Plant Structure
PPTH	453	3	_____	Microscopy
ZOO	280	4	_____	Comp Chordate Morph
ZOO	370	3	_____	Cell Biology
ZOO	482	3	_____	Developmental Biology

**Major Courses continued:**Other<sup>1</sup>

Choose from electives above or approved substitution:

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**Related Courses Required:**Chemistry

CHEM	121	3	_____	General Chemistry I
	121L	1	_____	General Chemistry I Lab
	122	3	_____	General Chemistry II
	122L	1	_____	General Chemistry II Lab

CHEM	431	3	_____	Analytical Chemistry I
	431L	2	_____	Analytical Chemistry I Lab

or

GEOL	428	3	_____	Geochemistry
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Choose one group:

Group 1:

CHEM	240	3	_____	Survey of Organic Chemistry
	260	4	_____	Elements of Biochemistry

Group 2:

CHEM	341	3	_____	Organic Chemistry I
	341L	1	_____	Organic Chemistry I Lab
	342	3	_____	Organic Chemistry II
BIOC	460	4	_____	Found/Biochem/Molecular Biol I

Math, Statistics, Computer Science

MATH	146	4	_____	Applied Calculus I
	147	4	_____	Applied Calculus II
STAT	330	3	_____	Introductory Statistics
CSCI	_____	2	_____	Computer Science elective

Physics

PHYS	211	3	_____	College Physics I
	211L	1	_____	College Physics I Lab
	212	3	_____	College Physics II
	212L	1	_____	College Physics II Lab

**Additional credits in Humanities or Social Sciences to meet the requirements of the College of Science and Mathematics.**  
**BS: 6 credits BA: 12 credits**

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To complete a degree, the general education requirements of the College of Science and Mathematics and NDSU need to be met along with this major.

Name: \_\_\_\_\_

Degree: \_\_\_\_\_

ID: \_\_\_\_\_

Date: \_\_\_\_\_

North Dakota State University  
College of Science and Mathematics  
General Education Requirements

First Year Experience - F	BS & BA: 1 credit	Total	Quantitative Reasoning - R	BS & BA: 3 credits	Total
UNIV 189 -1					
Communication - C	BS & BA: 9 credits		Science & Technology - S	BS & BA: 10 credits	
English 110 - 3			Including a course with a lab.		
English 120 - 3					
Communication 110 - 3					
Wellness - W	BS & BA: 2 credits				
Humanities & Fine Arts - A	BS & BA: 6 credits		Global Perspectives - G		
3 credits maximum from fine arts(fa) performance			3 credits included as part of general education or major		
			Electives		
Cultural Diversity - D			D transfer grades that do not meet requirements		
3 credits included as part of 6 credits for humanities or social & behavioral sciences.					
			UNIV 397 (Co-Op Optional)	4 credits maximum	
Social & Behavioral Sciences - B	BS & BA: 6 credits		Residency at NDSU:	36 credits with at least 15 credits in major	
			Credits at a 4 year university:	60 credits	
Second Year Foreign Language Proficiency	BS: Not Required BA: 6 credits or equivalent		Courses numbered 300 or higher: (15 minimum at NDSU)	37 credits	
			Total Credits Required:	122 credits minimum*	

A list of approved courses for each category is available in the Registration Schedule or at <http://www.ndsu.nodak.edu/ndsu/deott/registrar/geneds.stm>  
 \*May vary depending on the major. T= transfer credits, D grades from transfer credits do not meet requirements.

Credits Not Counted  
 Toward Graduation: MATH 099\_\_\_\_, MATH 102\_\_\_\_, Other\_\_\_\_\_

Only free electives may be taken pass/fail.  
 BS = Bachelor of Science degree      BA = Bachelor of Arts degree

Advisor: \_\_\_\_\_