

# Major Study Requirements for B.A. or B.S. in Biology with a Concentration in Conservation

(Reflects Requirements for Catalog Years Fall 2021 and forward)

2020-2021 Faculty Advisor: Dr. Joseph Cook, CERIA 229, cookjose@unm.edu

#### **Concentration in Conservation Biology**

Students may receive either the B.A. or B.S. in Biology with a concentration in Conservation Biology. The concentration provides students with a strong background in biology as well as the complementary interdisciplinary skills critical to understanding and addressing contemporary conservation questions. The Concentration in Conservation provides additional specialization in the importance of biological diversity from ecological, aesthetic, economic and political viewpoints; Extinction as a past, present and future process, and the roles of genetics, levels of biological organization, reserves and laws in the protection and recovery of endangered organisms. Possible career pathways include conservation scientist, biological technician, wildlife biologist and other careers managing natural resources and endangered species.

\*Faculty advisement is required for students who wish to complete the concentration in Conservation

## Requirements

Credit Hours

### 1. Successful completion of the **four-course** introductory Biology sequence:

BIOL 2110C	Cell & Molecular Biology	
BIOL 2410C	Genetics	
BIOL 303/303L	Ecology & Evolution (UNM/University level only)	
BIOL 304/304L	Plant & Animal Form & Function (UNM/University level only)	
	Subtotal required for this category:	16

#### 2. Successful completion of the following required courses:

BIOL 409	T: Principles of Ecology	3-4
BIOL 360L	General Botany	4
BIOL 379	Conservation	
BIOL 402	Conservation Biology Seminar	
	Subtotal required for this category:	13-14

3. Successful completion of at least **one** BIOL 300-level with Lab from the following:

BIOL 351/352L	General Microbiology with Lab	
BIOL 371L	nvertebrate Biology	
BIOL 386L	General Vertebrate Zoology	
	Subtotal required for this category:	

4. Successful completion of at least **two** BIOL 400-level Courses (for the BA) or **three** BIOL 400-level Courses (for the BS).

BS Conservation must represent three BIOL 400-level Courses from three different categories: 1) Cell/Molecular (CM), 2) Physiology (PH), 3) Organismal, 4) Ecology/Evolution (EE), or 5) Interdisciplinary Science (ID)

5. Two Complementary Interdisciplinary Electives selected from the list at biology.unm.edu.

Subtotal required for this category:	6-8

- 6. Successful completion of additional **Biology (BIOL) courses** so that the total number of Biology credit hours is greater than or equal to **45** hours for the Bachelor of Science in Conservation or **37** for the Bachelor of Arts in Conservation.
- 7. Successful completion of supportive courses in Math, Physics, and Chemistry:

MATH	1430 and 1440 (or 1350)	OR	MATH	1512 and 1522 (or 1350)	6-8
PHYS	1230 and 1240	OR	PHYS	1310 and 1320	6
CHEM	1215/1215L	AND	СНЕМ	1225/1225L	8
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PLUS one semester Organic Chemistry with Lab (CHEM 301/303L) (4)

## Plan of Study for BS/BA degree in Conservation Biology

(Please list course and semester completed)

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Plan of Study for B.A. or B.S. (Circle One)

1. Four-course introductory Biology sequence

		Date of Completion
BIOL 2110C	Cell & Molecular Biology	
BIOL 2410C	Genetics	
BIOL 303/303L	Ecology & Evolution	
BIOL 304/304L	Plant & Animal Form & Function	

2. Successful completion of the following required courses:

		Date of Completion	
BIOL 310 (or 409)	T: Principles of Ecology		
BIOL 360L	General Botany		
BIOL 379	Conservation		
BIOL 402 (3) Conservation Biology Seminar			
(Or substitution approved by <u>faculty</u> advisor)			

3. Successful completion of at least one BIOL 300-level with Lab from the following:

		Date of Completion
BIOL 351/352L	General Microbiology with Lab	
BIOL 371L	Invertebrate Biology	
BIOL 386L	General Vertebrate Zoology	

 Successful completion of at least two BIOL 400-level Course (for the BA) or three BIOL 400-level Courses (for the BS). BS Conservation must represent three BIOL 400-level Courses from three different categories: 1) Cell/Molecular (CM), 2) Physiology (PH), 3) Organismal (OR), 4) Ecology/Evolution (EE), or 5) Interdisciplinary Science (ID)

	Course Number and Title	Date of Completion
BIOL 400-level Course		
BIOL 400-level Course		
BIOL 400-level Course		_

5.	Two Complementary Interdisciplinary Electives (from approved list (please see biology.unm.edu)
	<b>or</b> substitution approved by <u>faculty</u> advisor):

Course	Date of Completion
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6. Additional BIOL courses to reach a total of 45 for the BS in Conservation and 37 for the BA in Conservation.

Course Number and Title	Date of Completion

7. Successful completion of supportive courses in Math, Physics, and Chemistry

Subject	Courses	Date of Completion
Math		
Physics		
Chemistry	CHEM 1215/1215L	
	CHEM 1225/1225L	
	CHEM 301/303L <b>OR</b> CHEM 2120	

Signatures:	
Student	Date
A&S Undergraduate Advisor- Biology	Date
Dr. Joseph Cook- Conservation Faculty Advisor	Date
(Updated 7/19/2021)	