

ZOO AND CONSERVATION SCIENCE BACHELOR OF SCIENCE

Program Overview

This interdisciplinary major prepares students in a liberal arts tradition for entry level positions leading to leadership positions in zoos and conservation organizations. Coursework is strongly interdisciplinary, drawing upon biology, behavioral science, and environmental science and ecology classes to prepare them for the multi-faceted world of captive management of exotic species. Students develop technical and quantitative skills including laboratory and field methods, statistical analysis, and professional communication. Hands-on experience is a key component of this program: The program includes two internships; this provides real-world experience in zoo and conservation settings and connects students with ongoing projects at the Blank Park Zoo (<https://www.blankparkzoo.com/>) and the Ape Cognition and Conservation Initiative (<https://www.apecognition.org/>), both of which are AZA-recognized Drake partners located in Des Moines.

Drake's Zoo and Conservation Science concentration is distinguished by its fundamental interdisciplinarity, emphasis on field experiences, opportunities for research and independent study, and service-learning approach in the internship sequence. Graduates of the program will be well prepared to work in animal-related conservation organizations such as zoos, as well as areas such as animal behavior and wildlife rehabilitation, or to pursue advanced education in veterinary school or graduate study in diverse fields of zoological and environmental sciences.

The major must include at least 15 credit hours that are not counted toward any other major, minor, or concentration. The distribution of credits among departments varies due to cross-listing of courses.

Code	Title	Hours
BIO 025/PSY 024	ANIMAL BEHAVIOR	3
BIO 026L/ ENSS 026	ETHOLOGICAL METHODS	3
ENSS 128	ZOO DESIGN AND OPERATIONS	3
Select one of the following:		3-4
ENSS 127	ENDANGERED SPECIES CONSERVATION	
ENSS 125	CONSERVATION BIOLOGY	
MGMT 110	ORGANIZATIONAL BEHAVIOR	3
Life Science Base		
BIO 012	GENERAL/PRE-PROFESSIONAL BIOLOGY I	3
BIO 012L	GENERAL/PRE-PROFESSIONAL BIOLOGY I LAB	1
BIO 013	GENERAL/PRE-PROFESSIONAL BIOLOGY II	3
BIO 013L	GENERAL/PRE-PROFESSIONAL BIOLOGY II LAB	1
BIO 117 & BIO 118L	ECOLOGY and ECOLOGY LAB	5
Select one of the following:		4
BIO 140	BIOLOGY RESEARCH AND STATISTICAL METHODS	
PSY 011	INTRODUCTORY STATISTICS	
CHEM 001	GENERAL CHEMISTRY I	3

CHEM 003	GENERAL CHEMISTRY I LAB	1
PSY 001	INTRODUCTION TO PSYCHOLOGY	4

Disciplinary Background Courses

Select one course from each of the following areas:

Behavioral Science:	3-4
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PSY 060	PRINCIPLES OF BEHAVIOR	
PSY 120 & PSY 121	CONDITIONING AND LEARNING LAB and CONDITIONING AND LEARNING	
PSY 123	BIOLOGICAL BASIS OF BEHAVIOR	
PSY 126	COMPARATIVE PSYCHOLOGY	
PSY 127	BEHAVIOR GENETICS	
PSY 128	HORMONES AND BEHAVIOR	

Biological Mechanisms:	3-5
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BIO 018 & 018L	INTRODUCTION TO ANATOMY AND PHYSIOLOGY and ANATOMY AND PHYSIOLOGY LAB	
BIO 101	COMPARATIVE ANATOMY OF VERTEBRATES	
BIO 103 & 103L	MICROBIOLOGY and MICROBIOLOGY LAB	
BIO 105	INTRODUCTION TO GENETICS	
NSCI 001	INTRODUCTION TO NEUROSCIENCE	

Organismal Biology, Ecology, and Evolution:	3-4
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BIO 098	INTRODUCTION TO PRIMATOLOGY	
BIO 101	COMPARATIVE ANATOMY OF VERTEBRATES	
BIO 112L	AVIAN WINTER ECOLOGY	
BIO 113 & 113L	VERTEBRATE BIOLOGY and VERTEBRATE BIOLOGY LAB	
BIO 114 & 114L	EVOLUTION and EVOLUTION LAB	
BIO 119 & 119L	HERPETOLOGY and HERPETOLOGY LAB	
BIO 122 & 122L	MAMMALOLOGY and MAMMALOLOGY LAB	
BIO 130 & 130L	ORNITHOLOGY and ORNITHOLOGY LAB	

Practical Courses

BIO/ENSS 159/ PSY 192	ZOO/GREAT APE INTERNSHIP	6
BIO/ENSS 197/ PSY 192	UNDERGRADUATE RESEARCH	2

Total Hours	57-62
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In addition to programmatic requirements, students are responsible for satisfying all requirements of the Drake Curriculum (<https://catalog.drake.edu/archive/2024-2025/undergraduate/academic-information/drake-curriculum/>), including Areas of Inquiry (AOI)

Student must also satisfy university graduation requirements (<https://catalog.drake.edu/archive/2024-2025/undergraduate/academic-information/graduation-requirements/>) for all undergraduate students..