Catalog: 2026-2027 University of Wyoming Catalog Program: Wildlife and Fisheries Biology and Management, B.S.

Express Transfer Agreement (ETA) with Northwest College

Wildlife and Fisheries Biology and Management, B.S.

Provides a solid foundation in the theory and techniques involved in the management, conservation, and captive propagation of wildlife and fish populations. Includes both classroom and field experiences in a Rocky Mountain setting.

Additional Information

Wildlife and Fisheries Biology and Management is a professional degree designed to prepare students for state, federal, and other positions in resource management and conservation biology. The degree provides students with knowledge of the natural world, understanding of processes governing dynamics of wildlife and fish populations, as well as an appreciation of human-mediated effects on wildlife and fish populations. A student graduating with this degree will be familiar with the theory of resource management as well as with methods used to determine population status, habitat quality, and conservation. In Wyoming the abundance of wild animals and pristine habitats provide a unique natural laboratory for studying the responses of wildlife and fish populations to changing climates and habitats.

A student graduating with a degree in WFBM will have comprehensive knowledge of wildlife and fisheries biology and management, will have earned a degree that is compatible with the requirements for professional certification with the American Fisheries Society or the Wildlife Society, and will have a range of knowledge and skills that are valuable to potential employers.

University Studies Program

This degree requires that The University Studies Program 2015 requirements are met before graduation. Some of the courses required for this major fulfill USP requirements, but not all. Students should check their degree evaluations and consult with their assigned academic advisor to discuss their specific course plan.

Course Name	Credits	UW Course in Major	AA/AS/AB/ADN satisfies this USP
C 1-Communication 1 (COM1)	3		X
C 2-Communication 2 (COM2)	3		X
C 3-Communication 3 (COM3)	3	(Must be completed at UW)	
Q-Quantitative Reasoning (Q)	3		X
PN-Physical and Natural World (1) (PN)	3		X
PN-Physical and Natural World (2) (PN)	3		X
H-Human Culture (1) (H)	3		X
H-Human Culture (2) (H)	3		X
V-US & WY Constitution (V)	3		X
FYS or USP Elective-Any 3-credit hour of FYS or 3-credit hours of USP electives	3		X

Note: FYS courses have been paused. 3 hours from any additional USP designated courses is still required.

Foundation Courses. (MATH 1450 may substitute for MATH 1400 and MATH 1405)

Course Name	Credits	Northwest College	Sequence Notes
MATH 1400 - College Algebra Q	3	MATH 1400 - College Algebra	
MATH 1405 - Trigonometry Q	3	MATH 1405 - Precalculus Trigonometry	
MATH 2200 - Calculus I (may substitute MATH 2350) Q	4	MATH 2200 - Calculus I	
STAT 2050 - Fundamentals of Statistics Q OR STAT 2070 - Introductory Statistics for the Social Sciences Q OR LIFE 2100 - Intro Research and Analysis Q	4	STAT 2050 - Fundamentals of Statistics OR STAT 2070 - Intro to Statistics for Social Science Majors	
CHEM 1020 - General Chemistry I PN	4	CHEM 1020 - General Chemistry I	
CHEM 1030 - General Chemistry II PN	4	CHEM 1030 - General Chemistry II	
GEOL 1100 - Physical Geology PN OR PHYS 1110 - General Physics I PN OR SOIL 2010 - Introduction to Soil Science	4	GEOL 1100 - Physical Geology OR PHYS 1110 - General Physics I OR SOIL 2010 - Intro to Soil Science	
LIFE 1010 - General Biology PN	4	BIOL 1010 - General Biology I	
LIFE 2022 - Animal Biology	4		

Data Science course Choose ONE course from the following:

Course Name	Credits	Northwest College	Sequence Notes
COSC 1010 - Computational Thinking and Programming	3	COSC 1010 - Introduction to Computer Science	
COSC 1200 - Computer Information Systems	3	CMAP 1200 - Computer Information Systems	
GIST 1200 - Geospatial Foundations	3		
GIST 2140 - Survey of Remote Sensing Applications PN	3		
GIST 2190 - Introduction to Programming in Geospatial Information Science and Technology	3		
GIST 2200 - Spatial Data Visualization	3		
GIST 2310 - Intro to Geographic Information Systems	4	GIST 2310 - Introduction to Geographic Information Systems	

Course Name	Credits	
GIST 3140 - Introduction to Remote Sensing	3	UW Course
GIST 4211 - Advanced Remote Sensing	3	UW Course
ZOO 4530 - R Introduction for Wildlife Ecology	3	UW Course

Core Required Courses

Course Name	Credits	Northwest College	Sequence Notes
LIFE 3400 - General Ecology	3	BIOL 2400 - General Ecology *See Note 1*	
LIFE 3410 - Introduction to Field Ecology	2	BIOL 2410 - Field Ecology *See Note 1*	

Course Name	Credits	
LIFE 3050 - Genetics	4	UW Course
ZOO 2450 - Fish and Wildlife Management in the Anthropocene C2	4	UW Course
ZOO 4190 - Comparative Environmental Physiology	3	UW Course
ZOO 4400 - Population Ecology	3	UW Course
ZOO 4970 - Internship in Wildlife Management	1	UW Course
ZOO 4100 - Scientific Communication C3Credits: 2 AND ZOO 4101 - Scientific Communication Lab C3Credits: 1 OR ZOO 4200 - Applied Principles of Science Communication C3 OR approved USP C3 substitute	3	UW Course

Options
Complete Terrestrial OR Aquatic Option

Aquatic Option - REQUIRED COURSES
A minimum of 10 of the AQUATIC OPTION requirements listed below (ZOO 4330 and ZOO 4440 and ZOO 4430 and Restricted Electives) must be exclusive to the WFBM major.

Course Name	Credits	
ZOO 4330 - Ichthyology	3	UW Course
ZOO 4440 - Freshwater Ecology	3	UW Course
ZOO 4430 - Freshwater Ecology Lab	2	UW Course

RESTRICTED ELECTIVES - 15 Credits of Electives from the following list:

Course Name	Credits	Northwest College	Sequence Notes
CHEM 2230 - Quantitative Analysis	5	CHEM 2230 - Quantitative Analysis	
LIFE 2023 - Biology of Plants and Fungi	4	BIOL 2023 - Plant and Fungal Biology	

Course Name	Credits	
ZOO 3600 - Principles of Animal Behavior	3	UW Course

ZOO 4235 - Marine Biology	3	UW Course
ZOO 4300 - Wildlife Ecology and Management	5	UW Course
ZOO 4310 - Fisheries Management	3	UW Course
ZOO 4350 - Ornithology	3	UW Course
ZOO 4370 - Mammalogy	3	UW Course
ZOO 4380 - Herpetology	3	UW Course
ZOO 4415 - Behavioral Ecology	3	UW Course
ZOO 4420 - Conservation Biology	3	UW Course
ZOO 4540 - Invertebrate Zoology	3	UW Course
ZOO 4740 - Fish Culture and Nutrition	3	UW Course
AGEC 3750 - Natural Resource Planning and Economics	3	UW Course
SOC 3950 - Environmental Sociology	3	UW Course

BOT 0000:5999
ENR 0000:5999
REWM 0000:5999

Terrestrial Option - REQUIRED COURSES

A minimum of 10 of the TERRESTRIAL OPTION requirements listed below (BOT 4700 and ZOO 4300 and Restricted Electives) must be exclusive to the WFBM major.

Course Name	Credits	
BOT 4700 - Vegetation Ecology	4	UW Course
ZOO 4300 - Wildlife Ecology and Management	5	UW Course

RESTRICTED ELECTIVES - 14 Credits of Electives from the following list:

Course Name	Credits	Northwest College	Sequence Notes
CHEM 2230 - Quantitative Analysis	5	CHEM 2230 - Quantitative Analysis	
LIFE 2023 - Biology of Plants and Fungi	4	BIOL 2023 - Plant and Fungal Biology	

Course Name	Credits	
ZOO 3600 - Principles of Animal Behavior	3	UW Course
ZOO 4195 - Comparative Environmental Physiology Lab	2	UW Course
ZOO 4235 - Marine Biology	3	UW Course
ZOO 4310 - Fisheries Management	3	UW Course
ZOO 4330 - Ichthyology	3	UW Course
ZOO 4350 - Ornithology	3	UW Course
ZOO 4370 - Mammalogy	3	UW Course
ZOO 4380 - Herpetology	3	UW Course
ZOO 4415 - Behavioral Ecology	3	UW Course
ZOO 4420 - Conservation Biology	3	UW Course
ZOO 4430 - Freshwater Ecology Lab	2	UW Course
ZOO 4440 - Freshwater Ecology	3	UW Course
ZOO 4540 - Invertebrate Zoology	3	UW Course
ZOO 4740 - Fish Culture and Nutrition	3	UW Course
AGEC 3750 - Natural Resource Planning and Economics	3	UW Course
SOC 3950 - Environmental Sociology	3	UW Course

BOT 0000:5999
ENR 0000:5999
REWM 0000:5999

Notes:

Note 1: The following substitutions have been approved as substitutions: BIOL 2400 will satisfy LIFE 3400, BIOL 2410 will satisfy LIFE 3410. However, the substitution will not satisfy the upper-division residency requirement.

Concurrent majors are available through the Haub School. Students who are interested in learning more should contact the department upon enrolling at the University of Wyoming.

COURSE SUBSTITUTIONS: WyoTAGs reflect published equivalencies. UW academic departments occasionally arrange for course substitutions when indirect equivalencies exist. Please contact your UW Academic Advisor for details.

EFFECTIVE DATE: This document is in effect as of the 2026-2027 catalog year; it reflects the published UW curriculum as of that date. Any changes to the UW curriculum or the WYCC course equivalents will require this document to be updated. To request an updated document, faculty should contact transfer@uwyo.edu via email.