

Name:

ID # _____



2024-2025 Fish & Wildlife Natural Resources Checklist

Students who graduate with a BS degree in Natural Resources from Oregon State University will learn to integrate technical field or laboratory skills with analytical skills to solve critical natural resource problems. The curriculum is designed to help students acquire knowledge about a range of natural resource issues, work in interdisciplinary teams, and deal with social and political aspects of resource management.

Students will acquire knowledge in biophysical sciences, social sciences, math and statistics. They will learn holistic resource management approaches that emphasize the interconnectedness of humans and the environment. In addition, students will develop a toolbox of resource management skills such as communication, collaboration, analysis, assessment and planning. They will explore the conservation and management of key resources which include fish and wildlife, land and water resources, and a wide range of ecosystems from forests to rangelands. A disciplinary depth in a focused area is developed through a required specialization option. Students may choose from a number of pre-approved options, or create an individualized (student designed) specialization option.

A specialization “option” is a *required* part of the Natural Resources major that allows the students to develop depth and focus in a particular area of natural resource management. All specialization options are required to have a minimum of 37 credits with at least 20 upper division (300-400 level) courses included.

Natural Resources Requirements:

- OSU Graduation Requirements
- Baccalaureate Core
- Natural Resource Major Requirements
- Specialization Option: *minimum of 37 credits with at least 20 upper division (300-400 level) courses*
- The Natural Resources Specialization Option will have a minimum GPA requirement of 2.25.
- Only two courses used to complete the Natural Resources major requirements may be taken S/U

OSU Graduation Requirements:

Students pursuing a degree at OSU must meet the following requirements in addition to program and college requirements.

- 180—total number of credits required to graduate from OSU
- 60—number of upper division credits required (300-400 level courses)
- 45 of last 75 credits must be OSU credits
- Maintain a 2.0 or better university GPA

Baccalaureate Core

<https://catalog.oregonstate.edu/earning-degrees/bcc/>

- Find Bacc Core courses at OSU using the checkboxes in the OSU Class Search: <https://classes.oregonstate.edu/>
- Find Bacc Core courses at COCC using the list of course equivalencies: <https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-central-oregon-community-college>

Skills		Fulfilled
Lifetime Fitness (2)	HHS 231: Lifetime Fitness for Health	
Physical Activity Course (1)	PAC 1xx	
Mathematics (4)	Fulfilled by Major	
Writing I (4)	WR 121Z: English Composition	
Writing II (3)	Visit Bacc Core Link Above	
Speech (4)	Visit Bacc Core Link Above	
Perspectives: No more than two courses from any one subject area may be used to fulfill the Perspectives requirement.		
Cultural Diversity (3-4)	Visit Bacc Core Link Above	
Literature & Arts (3-4)	Visit Bacc Core Link Above	
Social Processes & Institutions (4)	Fulfilled by Major (Econ 201)	
Western Culture (3-4)	Visit Bacc Core Link Above	
Physical Science (4)	Fulfilled by Major	
Biological Science (4)	Fulfilled by Major	
Additional Physical or Bio Science (4)	Fulfilled by Major	
Difference Power and Discrimination (3)	GEOG 333 if selected for Ethics and Philosophy	
Synthesis: The two courses used to fulfill the Synthesis requirement may not be in the same department		
Contemporary Global Issues (3-4)	FES 365 (Social Issues) or SUS 350 (Env. Assessment and Planning) if selected	
Science, Tech, and Society (3)	Fulfilled by Major (FES 485)	
Writing Intensive Course	ENSC 321 (FW Option Elective)	

Natural Resources Major Requirements 2024-2025 Curriculum Important Courses Can't Double Count in this Section or in Option

Interdisciplinary Foundations- 13 credits (All courses required)	Term Offered (subject to change)	Prerequisites/Notes	Fulfilled
NR 201: Managing NR for the Future (3) – Intro class for major	Fall	Recommended first year	
NR 202: NR Problems and Solutions (3)	Winter		
FES 485: Consensus and NR (3); <i>Synthesis STS</i>	Spring		
NR 455: NR Decision Making (4) – Senior Capstone	Winter	ENSC 321 (WIC) + FES 485	

Adv. Communication – 3 Credits (Choose One)	Term Offered (subject to change)	Prerequisites	Fulfilled
COMM 321: Introduction to Communication Theory (3)	Fall		
COMM 322: Small-Group Problem Solving (3)	Winter		
COMM 440: Theories of Conflict & Conflict Mgmt. (3)	Spring		
COMM 328: Nonverbal Communication (3)	TBD		
COMM 385: Comm. & Culture in Cyberspace (3)	TBD		

Biophysical Sciences – 28 Credits			
Chemistry – 5 Credits (Choose One)	Term Offered (subject to change)	Prerequisites	Fulfilled
CH 121: General Chemistry (5)	Fall	Recommended MTH111Z	
CH 231/CH 261: General Chemistry (5)	Fall	MTH 111Z	
Biology – 12 credits (whole sequence required)	Term Offered (subject to change)	Prerequisites	Fulfilled
BI 221: Principles of Bio: Cells (4); <i>Bacc Core Bio Science</i>	Fall	Co/Prereq CH 121 or CH 231/261	
BI 222: Principles of Bio: Organisms (4); <i>Bacc Core Add. Sci.</i>	Winter	BI 221 + CH 121 or CH 231/261	
BI 223: Principles of Bio Populations (4)	Spring	BI 221 + CH 121 or CH 231/261	
Climate Science- 4 Credits	Term Offered (subject to change)	Prerequisites	Fulfilled
ATS 201: Climate Science (4); <i>Bacc Core Physical Science</i>	Spring		
Earth or Soil Science – 4 Credits	Term Offered (subject to change)		
GEO 221: Physical Geology (4); <i>Bacc core Physical Science</i>	Fall		
Ecology – 3 credits	Term Offered (subject to change)		
BI 370: General Ecology (3)	Winter	BI 221/BI 222/BI 223	

Mathematics and Statistics – 8 Credits			
Mathematics- 4 Credits (Choose One)	Term Offered (subject to change)	Prerequisites	Fulfilled
MTH 112Z: Elementary Functions (4); <i>Bacc Core MTH</i>	Winter, Spring	MTH 111Z or 60 score on ALEKS	
MTH 241: Calculus for Mgmt, Life & Social Sci (4); <i>Bacc Core MTH</i>	Spring	MTH 111Z or 60 score on ALEKS	
MTH 245: Math for Mgmt, Life and Social Sci (4); <i>Bacc Core MTH</i>	Spring	MTH 111Z or 60 score on ALEKS	
MTH 251: Differential Calculus (4); <i>Bacc Core MTH</i>	Fall, Winter	MTH 112Z or 75score on ALEKS	
Statistics – 4 Credits (Choose One)	Term Offered (subject to change)	Prerequisites	Fulfilled
ST 243Z: Principles of Statistics (4)	Fall, Winter		
ST 351: Intro. to Statistical Methods (4)	Fall		

Resource Management			
Animal ID- 2-4 Credits (Choose One)	Term Offered (subject to change)	Prerequisites	Fulfilled
<i>FW 312: Systematics of Birds (3)</i>	<i>Winter 2026 (Every other year)</i>		
<i>FW 318: Systematics of Mammals (3)</i>	<i>Winter 2025 (Every other year)</i>		
Z 477: Aquatic Entomology (4)	Fall	BI221/BI222/BI223	
Envir. Assessment and Planning – 4 Credits (Choose One)	Term Offered (subject to change)		
SUS 304: Sustainability Assessment (4)	Winter		
SUS 350: Sustainable Communities (4); <i>Synthesis: CGI</i>	Fall		
Fisheries & Marine Sciences – 3 Credits	Term Offered (subject to change)		
FW 323: Management of Pacific Salmon in NW (3)	Winter		
Forestry – 3 Credits	Term Offered (subject to change)		
FES 341: Forest Ecology	Fall		
Land and Water – 4 Credits	Term Offered (subject to change)		
RNG 455: Riparian Ecohydrology & Mgmt (4)	Fall	Recommended FW 326	
Range – 3 Credits	Term Offered (subject to change)		
RNG 341: Rangeland Ecology and Mgmt (3)	Winter		
Vegetation ID – 4 Credits	Term Offered (subject to change)		
RNG 353: Wildland Plant Identification (4)	Fall		
Wildlife Management – 4 Credits			
<i>FW 320: Intro Population Dynamics (4)</i>	<i>Spring 2026 (Every other year)</i>	<i>BI 370 or Instructor Approval</i>	

Social and Political Dimensions			
Ethics and Philosophy – 3 credits (Choose One)	Term Offered (subject to change)	Prerequisites/Notes	Fulfilled
GEOG 333: Environmental Justice (3); <i>Bacc Core DPD</i>	Spring		
ANTH 352: Anthropology, Health, and Environment (3)	Spring		
Natural Resource Policy – 3 Credits	Term Offered (subject to change)		
GEOG 340: Intro. to Water Science (3); <i>Bacc Core STS</i>	Fall	GEOG 340 approved at Cascades for NR Policy	
Political Issues – 4 Credits	Term Offered (subject to change)		
PS 475: Environmental Politics and Policy	Spring		
Economics – 4 Credits	Term Offered (subject to change)		
Econ 201: Intro to Microeconomics (4)	Fall, Winter		
Social Issues – 3-4 Credits (Choose One)	Term Offered (subject to change)		
FES 365: Issues in NR Conservation (3); <i>Synthesis CGI</i>	Winter		
SOC 480: Environmental Sociology (4)	Fall		
SUS 420: Social Dimensions of Sustainability (3)	Winter		
TRAL 353: Nature, Eco and Adventure Tourism (3)	Fall		

Spatial Analysis – 4 Credits	Term Offered (subject to change)	Prerequisites	Fulfilled
GEOG 360: Geoscience I: GIS	Winter		

Checklist only lists OSU-Cascades Courses

Italics = Every Other Year class

Fish and Wildlife Conservation Specialization Option Requirements

IMPORTANT: Courses cannot double count in both NR major requirements and option requirements

A minimum of 37 credits is required; at least 20 upper division credits.

Measurements – 3-4 Credits (Choose One)	Term Offered (subject to change)	Prerequisites	Fulfilled
FW 255: Field Sampling of Fish and Wildlife (3)	Spring		
BI 375: Field Methods in Ecological Restoration (4)	Summer	BI221, BI222, B223 + Instructor approval	
Foundations of Conservation – 13 Credits (All courses required)			
FES 342: Forest Type of the Northwest (3)	Fall		
FES 440: Wildland Fire Ecology (3)	Spring		
FW 370: Conservation Genetics (4)	Winter	BI 221, BI 222, BI 223	
FW 251: Principles of Fish & Wildlife Conservation (3)	Fall		
Fish and Wildlife Biology – 9 Credits (All courses required)	Term Offered (subject to change)		
<i>FW 311: Ornithology (3)</i>	<i>Spring 2025 (Every other year)</i>		
<i>FW 317: Mammalogy (3)</i>	<i>Spring 2026 (Every other year)</i>		
<i>FW 481: Wildlife Ecology (3)</i>	<i>Spring 2025 (Every other year)</i>	BI 370 or Instructor Approval	
Habitat Management – 7 Credits (All courses required)	Term offered (subject to change)		
FES 445: Ecological Restoration (4)	Spring		
FW 326: Integrated Watershed Management (3)	Spring		
Natural Resource Policy – 3 Credits	Term Offered (subject to change)		
FW 350: Endangered Species, Society and Sustainability (3)	Winter		
Elective – 3 Credits	Term Offered (subject to change)		
ENSC 321: Environmental Case Studies (3); <i>WIC class</i>	Winter		