

Name: _____

ID # _____



2022-2023 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

Checklist only lists OSU-Cascades Courses

BACCALAUREATE CORE			
Link to OSU-Baccalaureate Core Courses https://catalog.oregonstate.edu/earning-degrees/bcc/			
Skills		Fulfilled	Grade
Lifetime Fitness (2)	HHS 231		
Lifetime Fitness II (1)	Physical Activity Course (PAC)		
Mathematics (4)	Fulfilled By Major	X	
Writing I (4)	WR 121		
Writing II (3)	Fulfilled by WR 327 (if selected for Advanced Communication)		
Speech (3)	Visit Bacc Core link above		
Perspectives		Fulfilled	Grade
Cultural Diversity (3-4)	Visit Bacc Core link above		
Literature & Arts	Visit Bacc Core link above		
Soc. Processes & Inst, (3)	Fulfilled By ECON 201	X	
Western Culture	Visit Bacc Core link above		
Physical Science	Fulfilled by Major	X	
Biological Science	Fulfilled by Major	X	
Additional Phys or Bio Science	Fulfilled by Major	X	
Difference, Power, & Discrim.	Fulfilled by GEOG 333 (if selected for Ethics and Philosophy)		
Synthesis			
Contemporary Global Issues	Fulfilled by FES 365 (Social Issues) or SUS 350 (Env. Asses. & Planning)		
Science, Tech & Society	Fulfilled by FES 485	X	
Writing Intensive Course			
WIC	ENSC 479 recommended can be used in Specialization Option		

FISH AND WILDLIFE CONSERVATION- NATURAL RESOURCES MAJOR REQUIREMENTS 2022-2023 Curriculum			
IMPORTANT: COURSES CAN'T DOUBLE COUNT IN THIS SECTION			
Interdisciplinary Foundations (13 credits) All REQUIRED		Fulfilled	Grade
FES 485 (3) Consensus and Natural Resources			
NR 201 (3) Managing NR for the Future			
NR 202 (3) Natural Resource Problems and Solutions IMPORTANT: THIS IS A REQUIRED CLASS ONLY FOR THOSE STUDENTS ADMITTED IN SUMMER 2021 OR LATER.			
NR 455 (4) NR Decision Making (Capstone) (prereq senior standing + FES 485 & WIC course)			
Advanced Communication: (choose one)			
COMM 321 (3); COMM 322 (3); COMM 324 (3); COMM 326; COMM 385 (3); COMM 440 (3); WR 327 (3)			
Biophysical Science		Fulfilled	Grade
Biology (Whole Sequence Required)			
BI 221 (4), BI 222 (4), BI 223 (4) (Co/Prereq CHEM 121 or CHEM 231/261)			
Chemistry (choose one)			
CHEM 121 or CHEM 231/261 (5) General Chemistry (Co/prepreq MTH 111 or Higher)			
Climate Change			
ATS 201 (4) Climate Science			
Earth Science <u>OR</u> Soil Science			
SOIL 205 & SOIL 206 lab (4) Soil Science			
Ecology			
BI 370 (3) General Ecology (prereq. BI 221-223)			

**FISH AND WILDLIFE CONSERVATION- NATURAL RESOURCES MAJOR REQUIREMENTS
2022-2023 Curriculum**

Mathematics and Statistics	Fulfilled	Grade
Mathematics (choose one)		
MTH 112 (4) Elementary Functions or MTH 241 (4) Calculus for Mgmt, Life & Social Sci or MTH 245 (4) Mathematics for Mgmt, Life & Social Sci or MTH 251 (4) Differential Calculus		
Statistics (choose one)		
ST 201 (4) Principles of Statistics or ST 351 (4) Intro. to Statistical Methods		
Resource Management	Fulfilled	Grade
Animal ID (choose one)		
FW 312 (3) Systematics of Birds or FW 318 (2) Systematics of Mammals or Z 477 (4) Aquatic Entomology (prereq BI 221-223)		
Environmental Assessment and Planning (choose one)		
SUS 304 (4) Sustainability Assessment or SUS 350 (4) Sustainable Communities		
Fisheries and Marine Science		
FW 323 (3) Mgmt. of Pacific Salmon		
Forestry		
FES 341 Forest Ecology (3) (BI 221-223)		
Land & Water		
RNG 455 (4) Riparian Echohydrology & Mgmt		
Range		
RNG 341 (3) Rangeland Ecology		
Vegetation ID		
RNG 353 (4) Wildland Plant Identification		
Wildlife Management		
FW 320 (4) Intro to Population Dynamics (prereq BI 370 or instructor approval)		
Social and Political Dimensions	Fulfilled	Grade
Ethics and Philosophy (choose one)		
GEOG 333 (3) Environmental Justice or ANTH 352 (3) Anthropology, Health, & Environment		
Natural Resource Policy		
GEOG 340 (3) Intro to Water Science		
Political Issues		
PS 475(4) Environmental Politics & Policy		
Economics		
ECON 201 (4) Intro to Microeconomics		
Social Issues (choose one)		
FES 365 (3) Issues In NR Conservation or SOC 480 (3) Environmental Sociology or SUS 420 (3) Social Dimensions of Sustainability or TRAL 353 (4) Nature, Eco and Adventure Tourism		
Spatial Analysis	Fulfilled	Grade
GEOG 360 (4) GISCIENCE I: GIS & Theory		

FISH AND WILDLIFE CONSERVATION SPECIALIZATION OPTION REQUIREMENTS

IMPORTANT COURSES USED FOR NR MAJOR REQUIREMENTS & OPTION CAN'T DOUBLE COUNT

Minimum of **37 credits** is required with at least 20 upper division credits.

Measurements (3-4 credits) choose one	Fulfilled	Grade
BI 375 (4) Field Methods in Ecological Restoration (prereq BI 221-223) or FW 255 (3) Field Sampling of Fish and Wildlife		
Foundations of Conservation: (13 Credits) All REQUIRED		
FES 342(3) Forest Types of the Northwest		
FES 440 (3) Wildland Fire Ecology		
FW 370 (4) Conservation Genetics (Prereq BI 221-223 or BI 211-213)		
FW 251 (3) Principles of Fish & Wildlife Conservation		
Fish and Wildlife Biology (9 credits)		
FW 311 (3) Ornithology (EOY)		
FW 317 (3) Mammalogy (EOY)		
FW 481(3) Wildlife Ecology (EOY) (Prereq BI 370 or instructor approval)		
Habitat Management (7 credits) Two Habitat Mgmt. Classes Required		
FES 445 (4) Ecological Restoration		
FW 326 (3) Integrated Watershed Management		
NR Resource Policy (3 credits)		
FW 350 (3) Endangered Species, Soc. & Sustainability		
Elective- Choose one (3 credit)		
*ENSC 479 (3) Environmental Case Studies (WIC) Highly recommended		
Z 349 (3) Biodiversity: Causes, Conseq., & Conservation		
Z 477 (4) Aquatic Entomology (4) (prereq BI 211-213 or BI 221-223)		

NOTE: Up to 6 Credits of appropriate internships, projects or study abroad may be used to fulfill credit requirements in this option as approved by petition