Name:_____

ID #_____

Oregon State University Cascades

2020-2021 Fish & Wildlife Natural Resources Checklist (NR3)

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 40 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 40 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)
- 124—maximum number of credits that will transfer from a community college
- 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-Cascades Bacc Core List http://osucascades.edu/osu-cascades-baccalaureate-core-course-guide			
Skills		Fulfilled	Grade
Lifetime Fitness (2)	HHS 231		
Lifetime Fitness II (1)	Physical Activity Course (PAC)		
Mathematics (4)	Fulfilled By Major	X	
Writing I (3)	WR 121		
Writing II (3)	WR 327 recommended fulfills Advanced Communications		
Speech (3)	Visit OSU-Cascades Bacc Core link above		
Perspectives		Fulfilled	Grade
Cultural Diversity (3-4)	Visit OSU-Cascades Bacc Core link above		
Literature & Arts	Visit OSU-Cascades Bacc Core link above		
Soc. Processes & Inst, (3)	Fulfilled By ECON 201	X	
Western Culture	Visit OSU-Cascades 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 GEO 309 (if selected for Ethics and Philosophy)	X	
Synthesis			
Contemporary Global Issues	FES 365 or SUS 350 in major (if selected)		
Science, Tech & Society	Fulfilled by Major	x	
Writing Intensive Course			
WIC	ENSC 479 recommended can be used in Specialization Option		

FISH AND WILDLIFE CONSERVATION- NATURAL RESOURCES MAJOR REQUIREMENTS 2020-2021 Curriculum (NR3)		
IMPORTANT: COURSES CAN'T DOUBLE COUNT IN THIS SECTION		
Interdisciplinary Foundations (10 credits) Required	Fulfilled	Grade
FES 485 (3) Consensus and Natural Resources		
NR 201 (3) Managing NR for the Future		
NR 455 (4) NR Decision Making (Capstone) (prereq senior standing + FES 485 & WIC course)		
Advanced Communication (3-4 credits) Choose One		
COMM 321 (3) Into to Comm Theory or COMM 324 (3) Communication in Organizations or COMM 326 (3) Intercultural Communication or COMM 328 (3) Non Verbal Communication or COMM 440 (3) Theories of Conflict and Conflict Mgmt or NR 312 (3) Critical Thinking for NR Challenges or WR 327 (3) Technical Writing		
Biophysical Science (28 Credits)	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 OR Soil Science (choose one)		
SOIL 205 & SOIL 206 lab (4) Soil Science		
Ecology (choose one)		
BI 370 (3) General Ecology *(prereq. BI 221-223 or BI 211-213)*		

FISH AND WILDLIFE CONSERVATION- NATURAL RESOURCES MAJOR REQUIREMENTS
2020-2021 Curriculum (NR3)

Mathematics and Statistics (8)	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 (23-31 credits)	**Fulfilled**	**Grade**
Animal ID (choose one)		
FW 312 (2) Systematics of Birds or FW 318 (2) Systematics of Mammals or Z 477 (4) Aquatic Entomology (prereq BI 200 series)		
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 (choose one)		
FES 341 Forest Ecology (3)		
Land & Water (choose one)		
RNG 355 (4) Desert Watershed Mgmt. or RNG 455 (4) Riparian Ecohydrology Mgmt. or SOIL 366 (4) Ecosystems of Wildland Soils (prereq SOIL 205/206)		
Range (choose one)		
FES 445 (4) Ecological Restoration (BI 370 + WIC course or instructor approval) or RNG 341 (3) Rangeland Ecology		
Vegetation ID (choose one)		
RNG 353 (4) Wildland Plant Identification		
Wildlife Management (choose one)		
FW 320 (4) Intro to Population Dynamics (prereq BI 370 or instructor approval)		
Social and Political Dimensions (15-20 Credits)	**Fulfilled**	**Grade**
Ethics and Philosophy		
GEO 309 (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 (3-4 credits)	**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 **40 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 BI 211-213) or FW 255 (3) Field Sampling of Fish and Wildlife			
Foundations of Conservation (12-14 credits) 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 (6-8 credits) CHOOSE TWO			
FES 445 (4) Ecological Restoration (BI 370 + WIC or instructor approval)			
RNG 341 (3) Rangeland Ecology & Mgmt.			
RNG 455 (4) Riparian Echohydrology & Mgmt			
SOIL 366 (3) Ecosystems of Wildland Soils (prereq Soil 205/206)			
NR Resource Policy (3 credits)			
FW 350 (3) Endangered Species, Soc. & Sustainability			
Electives- Select Two from below (6-7 Credits)			
*ENSC 479 (3) Environmental Case Studies (WIC)			
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			