#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

#### Major Offered At:

CORVALLIS ECAMPUS CASCADES

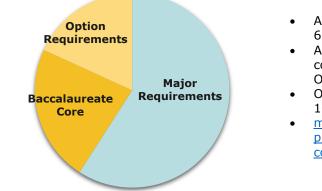
## Linn-Benton Community College

#### Natural Resources Major with Fish & Wildlife Conservation Option

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations. Completing this option prepares students for careers natural resource and wildlife conservation.

It emphasizes understanding the relationship between animal species and their habitat requirements and ability to apply that knowledge to the management of ecosystems as a means of conserving fish and wildlife.

# Your Bachelor's Degree (BS) in Natural Resources



- A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
  - A maximum of 135 credits earned at a community college may be applied toward a bachelor's degree at OSU.
- Only courses with letter prefixes and numbers above 100 are accepted.
- <u>more info at forestry.oregonstate.edu/undergraduate-</u> programs/natural-resources/fish-and-wildlifeconservation

# **Courses Required for Natural Resources Major**

<b>NR Core Requirements</b> Complete one course per category	LBCC Course	OSU Course	Notes
Consensus and Natural Resources		FES 485	Available online at OSU
Managing Nat Res for the Future		NR 201	Available online at OSU
Natural Resource Problems & Solutions		NR 202	Available online at OSU
Natural Resources Decision Making		NR 455	Available online at OSU
Advanced Communication:			
Communication in Global Agriculture		AG 351	Available online at OSU
Intro to Communication Theory		COMM 321	
Small Group Problem Solving		COMM 322	
Communication in Organizations		COMM 324	
Intercultural Communication		COMM 326	
Non-Verbal Communication		COMM 328	Available online at OSU
Communication and Culture in Cyberspace		COMM 385	Available online at OSU
Theories of Conflict and Conflict Management		COMM 440	
Bargaining and Negotiating Processes		COMM 442	
Forest as Classroom		FES 430	Available online at OSU
Effective Comm of Environmental Change Sci		GEOG 453	
Critical thinking for NR Challenges		NR 312	
Environmental Interpretation		TRAL 493	Available online at OSU
Science Writing		WR 362	Available online at OSU
Environmental Writing		WR 462	Available online at OSU
Biology I			
Introduction to Biology I		BI 204	Available online at OSU
Principles of Biology: Cells	BI 221	BI 221	
Biology II			
Introduction to Biology II		BI 205	Available online at OSU
Principles of Biology: Organisms	BI 222	BI 222	



<b>NR Core Requirements</b> (continued) Complete one course per category	LBCC Course	OSU Course	Notes
Biology III			
Introduction to Biology III		BI 206	Available online at OSU
Principles of Biology: Populations	BI 223	BI 223	
Chemistry	DI EES	51 225	
General Chemistry I with Lab	CH 121	CH 121	Available online at OSU
General Chemistry (Majors) I with Lab	CH 221	CH 231 & 261	Available online at OSU
Climate Science	011221	CH 251 & 201	Available offine at 050
Climate Science		ATC 201	Available online at OSU
		ATS 201 FW 345	Available online at 050
Global Change Biology			
Climatology		GEOG 323	Available online at OSU
Intro to Climate Change		SUS 103	Available online at OSU
Earth or Soil Science			
Soil Science		CSS 205	Available online at OSU
The Solid Earth	G 101	GEO 101	Available online at OSU
Physical Geology	G 201	GEO 201	
Earth Systems Science	G 202	GEO 202	
Environmental Geology		GEO 221	Available online at OSU
Physical Geography	G 102	GEOG 102	Available online at OSU
Soil Science with Lab	CSS 205	SOIL 205 & 206	
Soil Science with Forest Soils Lab		SOIL 205 & FOR 206	
Ecology			
Marine Ecology		BI 351	Available online at OSU
General Ecology		BI 370	Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
Forest Ecology		FES 341	Available online at OSU
Mathematics		123 541	Available online at 050
Elementary Functions	MTH 112Z	MTH 112Z	Available online at OSU
Calculus for Mgmt, Life, and Social Science	MTH 241	MTH 241	Available online at OSU
Math for Mgmt, Life, and Social Science	MTH 245	MTH 245	Available online at OSU
	MTH 245 MTH 251	_	
Differential Calculus Statistics	MIII 231	MTH 251	Available online at OSU
	CTAT 2427	CT 2427	Available enline at OCU
Principles of Statistics	STAT 243Z	ST 243Z	Available online at OSU
Intro to Statistical Methods		ST 351	Available online at OSU
Animal ID		505 010	
Terrestrial Vertebrate ID & Natural History		FOR 210	
Forest Entomology		FES 412	
Systematics of Birds		FW 312	Available online at OSU
Systematics of Fishes		FW 316	Available online at OSU
Systematics of Mammals		FW 318	Available online at OSU
Biology of Insects		Z 365	
Herpetology		Z 473	Available online at OSU
Aquatic Entomology		Z 477	
Environ. Assessment & Planning			
Agriculture & Environmental Predicaments		CROP/SOIL/SUS 325	
Ecological Restoration		FES/FW 445	Available online at OSU
Ecosystems Services		FW 462	Available online at OSU
Land Use Planning for Sust. Communities		GEOG 250	Available online at OSU
Land Use in the American West		GEOG 450	
Planning Principles for Resilient Communities		GEOG 451	Available online at OSU
Sustainable Site Planning	í	GEOG 451 GEOG 452	Available online at OSU
Wildland restoration and Ecology		RNG 421	Available online at OSU
5.		RNG 421 RNG 457	
Habitat Analysis I			Available online at OSU
Rangeland Management and Planning		RNG 490	Available online at OSU
Sustainability Assessment		SUS 304	Available online at OSU
Sustainable Communities		SUS 350	Available online at OSU
Planning for Sustainable Recreation		TRAL 456	
Planning for Sustainable Tourism		TRAL 457	
Scientific Methods for Analyzing NR Problem	s	NR 325	Available online at OSU

<b>NR Core Requirements</b> (continued) Complete one course per category	LBCC Course	OSU Course	Notes
Fish & Marine Sciences			
Intro to Marine Biology Biology of Marine Mammals Oceans in Peril Marine Ecology Intro to Population Dynamics Mgmt Principles of Pacific Salmon in the NW Coastal Ecology and Resource Management Fishery Biology Fish Ecology Wildlife Ecology Oceanography Coastal Oceanography	GS 108	BI 150 FW 302 BI 347 BI 351 FW 320 FW 323 FW 426 FW 454 FW 473 FW 481 OC 201 OC 332	Available online at OSU Available online at OSU
Forestry International Forestry Forest Biology Forest Ecology Forest Types of the Northwest Urban Forestry Wildland Fire Ecology Ecological Restoration Biodiversity Conservation in Managed Forests Agroforestry Topics in Wildland Fire Silviculture Principles Land & Water		FE/FOR 456 FES 240 FES 341 FES 342 FES/HORT 350 FES 440 FES/FW 445 FES/FW 452 FES/NR 477 FOR 346 FOR 441	Available online at OSU Available online at OSU
Watershed Processes Forest Watershed Management Integrated Watershed Management Freshwater Ecology and Conservation Wetlands and Riparian Ecology Minerals, Energy, Water and the Environment National Park Geology and Preservation Global Change and Earth Sciences Introduction to Water Science & Policy Water Resources Management in the U.S. International Water Resource Management Riparian Ecohydrology and Management Ecosystems of Wildland Soils Soil Systems and Plant Growth World Soil Resources Soil Morphology and Classification		FE 430 FE 434 FW 326 FW 456 FW 479 GEO 306 GEO 307 GEO 308 GEOG 340 GEOG 440 GEOG 441 RNG 455 SOIL 366 SOIL 388 SOIL 395 SOIL 466	Available online at OSU Available online at OSU
Range Wildland Fire Ecology Ecological Restoration Topics in Wildland Fire Rangeland Ecology and Management Range Ecology I – Grasslands Range Ecology II – Shrub Lands Wildland Restoration and Ecology Rangeland Analysis Rangeland-Animal Relations Rangeland Management and Planning		FES 440 FES/FW 445 FOR 346 RNG 341 RNG 351 RNG 352 RNG 421 RNG 441 RNG 442 RNG 490	Available online at OSU Available online at OSU
Vegetation ID Plant Systematics Agrostology Flora of the Pacific Northwest Mycology Dendrology Landscape Plant Materials I: Decid & Conifers Landscape Plant Materials II: Shrubs Wildland Plant Identification	HORT 226 HORT 228	BOT 321 BOT 414 BOT 425 BOT 461 FES 241 HORT 226 HORT 228 RNG 353	Available online at OSU Available online at OSU

<b>NR Core Requirements</b> (continued) <i>Complete one course per category</i>	LBCC Course	OSU Course	Notes
Wildlife Management			
Introductory Population Dynamics		FW 320	Available online at OSU
Applied Community and Ecosystem Ecology		FW 321	Available online at OSU
Wildlife in Agricultural Ecosystems		FW 435	Available online at OSU
Avian Conservation and Management		FW 451	Available online at OSU
Biodiversity Conservation in Managed Forests		FES/FW 452	Available online at OSU
Mammal Conservation and Management		FW 458	Available online at OSU
Wildlife Ecology		FW 481	Available online at OSU
Animal Behavior		Z 350	Available online at OSU
Ethics & Philosophy		2 330	
Ecosystems Science of the PNW Indians		AG 301	Available online at OSU
Anthropology, Health, and the Environment		ANTH 352	Available online at OSU
Ecological Anthropology		ANTH 477	Available online at OSU
Natural Resources and Community Values		ANTH 481	Available online at OSU
Anthropology of International Development		ANTH 481	
Authopology of International Development Aulticultural Perspectives in NR		FW 340	Available online at OSU
Fransforming Environmental Conflicts		GEOG 241	Available online at OSU
Environmental Justice	G 209	GEOG 330	Available online at OSU
Environmental History of the United States	G 209	HST 481	Available online at OSU
			Available offinite at 050
Critical Thinking for NR Challenges		NR 312	Ausilable enline at OCU
Nature in Storytelling over the Centuries		NR 380	Available online at OSU
Environmental Ethics		PHL 440	Available online at OSU
Norld View and Environmental Values		PHL/REL 443	Available online at OSU
Sustainability, Justice & Engagement		SUS 331	Available online at OSU
Natural Resource Policy		456 433	
Environmental Law		AEC 432	Available online at OSU
Public Lands Policy & Management		FES 486	Available online at OSU
orest Policy		FOR 460	
Forest Policy Analysis		FOR 461	
ish & Wildlife Law and Policy		FW 415	Available online at OSU
ntroduction to Ocean Law		FW 422	Available online at OSU
J.S. Energy Policy		PS 473	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
nternational Environmental Politics & Policy		PS 477	Available online at OSU
Political Issues			
Plagues, Pests, and Politics		ENT/HORT 300	Available online at OSU
Endangered Spec, Society and Sustainability		FW 350	Available online at OSU
When Science Escapes the Lab		NR 351	
The Politics of Climate Change		PS 455	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
Science and Politics		PS 476	Available online at OSU
International Environmental Politics & Policy		PS 477	Available online at OSU
Wilderness Management		TRAL 352	Available online at OSU
Economics			
Intro to Environmental Economics & Policy		AEC 250	Available online at OSU
Intro to Microeconomics	EC 201	ECON 201	Available online at OSU

<b>NR Core Requirements</b> (continued) Complete one course per category	LBCC Course	OSU Course	Notes
Social Issues			
Human Impacts on Ecosystems		BI 301	
Human Ecology		BI 348	
Issues in Natural Resource Conservation		FES 365	Available online at OSU
Global Crises in Resource Ecology		FW 325	Available online at OSU
Sustainability for the Common Good		GEOG 300	Available online at OSU
Climate Change, Water and Society		GEOG 240	
Transforming Environmental Conflicts		GEOG 241	
Resilience-Based Natural Resource Mgmt		GEOG 430	
Global Resource Development		GEOG 431	
When Science Escapes the Lab		NR 351	
Oceans, Coasts & People		OC 333	Available online at OSU
Social Dimensions of Sustainability		SOC 381	Available online at OSU
Rural Sociology		SOC 475	
Environmental Sociology		SOC 480	Available online at OSU
Society and Natural Resources		SOC 481	Available online at OSU
Social Dimensions of Sustainability		SUS 420	Available online at OSU
Recreation Resource Management		TRAL 251	Available online at OSU
Outdoor Recreation on Public Lands		TRAL 351	
Wilderness Management		TRAL 352	Available online at OSU
Nature, Eco, and Adventure Tourism		TRAL 353	
Communities, Natural Areas, and Tourism		TRAL 354	
Parks & Protected Areas		TRAL 357	Available online at OSU
Women and Natural Resources		WGSS 440	Available online at OSU
Spatial Analysis			
Precision Agriculture		CROP/HORT 414	Available online at OSU
GIS and Forest Engineering Applications	ENGR 242	FE 257	Available online at OSU
Survey of Geographic Information Systems		FW 303	Available online at OSU
Foundations of Geospatial Science & GIS		GEOG 201	Available online at OSU
Geoscience I: GIS and Theory		GEOG 360	Available online at OSU

# **Courses Required for Fish & Wildlife Conservation Option**

<b>Requirement</b> Complete one course per category unless otherwise noted.	LBCC Course	OSU Course	Notes
Measurements			
Field Methods in Ecological Restoration		BI 375	
Field Sampling of Fish & Wildlife		FW 255	Available online at OSU
Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU
Rangeland Analysis		RNG 441	Available online at OSU
Forest Types of the Northwest		FES 342	Available online at OSU
Introduction to Forestry		FOR 111	Available online at OSU
Wildland Fire Ecology		FES 440	Available online at OSU
Topics in Wildland Fire		FOR 346	Available online at OSU
Wildland Fire Science and Management		FOR 436	Available online at OSU
Biodiversity Conservation in Managed Forests		FES/FW 452	Available online at OSU
Conservation Genetics		FW 370	Available online at OSU
Principles of Fish & Wildlife Conservation	FW 251	FW 251	Available online at OSU
Fish & Wildlife Biology – complete 3			
Biology of Marine Mammals		FW 302	Available online at OSU
Ornithology		FW 311	Available online at OSU
Ichthyology		FW 315	Available online at OSU
Mammalogy		FW 317	Available online at OSU
Introductory Population Dynamics		FW 320	Available online at OSU
Applied Community and Ecosystem Ecology		FW 321	Available online at OSU
Ecology of Marine and Estuarine Birds		FW 331	
Fish Ecology		FW 473	Available online at OSU
Wildlife Ecology		FW 481	Available online at OSU
Environmental Physiology		Z 423	Available online at OSU
Herpetology		Z 473	

Requirement			
Complete one course per category unless	LBCC Course	OSU Course	Notes
otherwise noted.			
Habitat Management – complete 2			
Ecological Restoration		FES/FW 445	Available online at OSU
Integrated Watershed Management		FW 326	Available online at OSU
Coastal Ecology and Resource Management		FW 426	Available online at OSU
Estuarine Ecology		FW/OC 434	Available online at OSU
Wildlife in Agricultural Ecosystems		FW 435	Available online at OSU
Freshwater Ecology and Conservation		FW 456	Available online at OSU
Wetlands and Riparian Ecology		FW 479	Available online at OSU
Rangeland Ecology and Management		RNG 341	Available online at OSU
Riparian Ecohydrology and Management		RNG 455	Available online at OSU
Ecosystems of Wildland Soils		SOIL 366	Available online at OSU
Soil Systems and Plant Growth		SOIL 388	Available online at OSU
Soil Morphology and Classification		SOIL 366	Available online at OSU
		3012 400	Available offine at 030
Natural Resource Policy		FES 486	Available online at OSU
Public Landas Policy and Management			
Endangered Species, Soc and Sustainability		FW 350	Available online at OSU
Fisheries and Wildlife Law and Policy		FW 415	Available online at OSU
Human Dimensions in Fish & Wildlife Mgmt		FW 439	Available online at OSU
Electives – complete 1		DI 247	
Oceans in Peril		BI 347	Available online at OSU
Intro to Plant Pathology		BOT 220	Available online at OSU
Plant Systematics		BOT 321	Available online at OSU
Fungi in Society		BOT 324	Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
Mycology		BOT 461	Available online at OSU
Aquatic Biological Invasions		FW 421	Available online at OSU
Environmental Case Studies		ENSC 321	Available online at OSU
Human Dimensions in Fish & Wildlife Mgmt		FW 439	Available online at OSU
Mgmt Principles of Pacific Salmon in NW		FW 323	Available online at OSU
Environmental Contaminants in F&W		FW 366	Available online at OSU
Environmental Physiology of Fishes		FW 371	
Natural History of Whales and Whaling		FW 419	Available online at OSU
Principles of Wildlife Disease		FW 427	Available online at OSU
Avian Conservation and Management		FW 451	Available online at OSU
Fishery Biology		FW 454	Available online at OSU
Ecosystems Services		FW 462	Available online at OSU
Antarctic Science and Conservation		FW 467	Available online at OSU
Phys and Behavior of Marine Megafauna		FW 469	Available online at OSU
Early Life History Fishes		FW 474	
Wildlife Behavior		FW 475	Available online at OSU
Fish Physiology		FW 476	Available online at OSU
Aquaculture		FW 497	Available online at OSU
Aquaculture Laboratory		FW 498	
Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU
Oceans, Coasts, and People		OC 333	Available online at OSU
Biological Oceanography		OC 340	
Habitat Analysis I		RNG 457	
Biodiv: Causes, Consequences, Conservation		Z 349	Available online at OSU
			Available online at OSU Available online at OSU
Animal Behavior		Z 350	
Biology of Insects		Z 365	Available online at OSU
Aquatic Entomology		Z 477	

# General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of LBCC courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-</u> equivalencies-linn-benton-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MTH 112Z or higher WR 121Z. Required to transfer. Can be completed as part of major: see advisor Choose one course from Bacc Core link above PE 231 @ LBCC
PERSPECTIVE COURSES	Biological Science Physical Science Additional Biological or Physical Science Cultural Diversity Literature and the Arts Social Processes and Institutions Western Culture	Completed as part of major: Biology I Completed as part of major: Chemistry Completed as part of major: Biology II Choose one course from Bacc Core link above Choose one course from Bacc Core link above Completed as part of major: EC 201 Choose one course from Bacc Core link above
DPD COURSE	Difference, Power, & Discrimination	Can be completed as part of major: see advisor
SYNTHESIS COURSES	Contemporary Global Issues Science, Technology, & Society	Upper division course, take through OSU Upper division course, take through OSU

### **Advising Contacts**

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. **See your community college advisor first and use this Transfer Guide to help you plan.** It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See <u>visitosu.oregonstate.edu/visit-campus</u> to schedule your personalized visit.

Linn-Benton Community College	linnbenton.edu/current-students/student-support/advising-center/
OSU College of Forestry	541-737-1594
Student Services Office	forestrystudentservices@oregonstate.edu