#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

#### Major Offered At:

**CORVALLIS** ECAMPUS

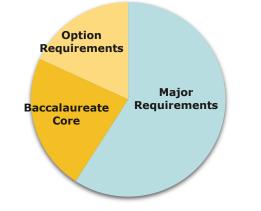
### Portland Community College

#### Natural Resources Major with Ecological Restoration Option

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations.

NR students completing this option will understand the complexities associated with restoration of terrestrial and aquatic ecosystems, and how restorative decisions involve significant interactions between ecological and social systems.

#### 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>forestry.oregonstate.edu/undergraduate-</u> programs/natural-resources/ecological-restoration

#### **Courses Required for Natural Resources Major**

NR Core Requirements	PCC Course	OSU Course	Notes
Complete one course per category	FCC Course	030 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			
Intro to Communication Theory		COMM 321	
Small Group Problem Solving	COMM 215	COMM 322	
Communication in Organizations		COMM 324	
Intercultural Communication	COMM 140	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 in Fish & Wildlife Sciences		FW 489	Available online at OSU
Critical thinking for NR Challenges		NR 312	
Environmental Interpretation		TRAL 493	Available online at OSU
Technical Writing	WR 227	WR 327	Available online at OSU
Science Writing		WR 362	Available online at OSU
Environmental Writing		WR 462	
Professional Writing		WR 466	
Biology I			
Introduction to Biology I		BI 204	Available online at OSU
Principles of Biology: Cells	BI 211	BI 221	



NR Core Requirements (continued)			
Complete one course per category	PCC Course	OSU Course	Notes
Biology II			
Introduction to Biology II		BI 205	Available online at OSU
Principles of Biology: Organisms	BI 213	BI 222	
Biology III	51213		
Introduction to Biology III		BI 206	Available online at OSU
Principles of Biology: Populations	BI 212	BI 223	Available offine at 030
Chemistry		BI 225	· · · · · · · · · · · · · · · · · · ·
General Chemistry I with Lab	CH 104	CH 121	Available online at OSU
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General Chemistry (Majors) I with Lab	CH 221	CH 231 & 261	Available online at OSU
Climate Science	0.404	170 001	
Climate Science	G 184	ATS 201	Available online at OSU
Global Change Biology		FW 345	
Climatology		GEOG 323	Available online at OSU
Intro to Climate Change		SUS 103	Available online at OSU
Soil Science			
Soil Science		CSS 205	Available online at OSU
Principles of Soil Science		CSS 305	
Soil Science with Lab	CSS 200	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			
Elementary Functions	MTH 112	MTH 112	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	Available online at OSU
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Statistics			
Principles of Statistics	MTH 243	ST 201	Available online at OSU
Intro to Statistical Methods		ST 351	Available online at OSU
Animal ID			
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			
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 450	
Sustainable Site Planning		GEOG 451	Available online at OSU
Scientific Methods for Analyzing NR Problems		NR 325	
Wildland restoration and Ecology		RNG 421	Available online at OSU
Habitat Analysis I		RNG 421 RNG 457	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 Recreation Planning for Sustainable Tourism			
FIGHTING TOT SUSTAILIADIE TOULISITI		TRAL 457	

NR Core Requirements (continued)	<b>DCC</b> Course	0011 000000	Netes
Complete one course per category	PCC Course	OSU Course	Notes
Fish & Marine Sciences			
Intro to Marine Biology	BI 142	BI 150	
Biology of Marine Mammals		FW 302	Available online at OSU
Oceans in Peril		BI 347	Available online at OSU
Marine Ecology		BI 351	Available online at OSU
Intro to Population Dynamics		FW 320	Available online at OSU
Mgmt Principles of Pacific Salmon in the NW		FW 323	Available online at OSU
Coastal Ecology and Resource Management		FW 426	Available online at OSU
Fishery Biology		FW 454	Available online at OSU
Marine Fisheries		FW 465	
Fish Ecology		FW 473	Available online at OSU
Wildlife Ecology		FW 481	Available online at OSU
Oceanography	GS 108	OC 201	Available online at OSU
Coastal Oceanography		OC 332	
Forestry			
International Forestry		FE/FOR 456	
Forest Biology	BI 141	FES 240	Available online at OSU
Forest Ecology		FES 341	Available online at OSU
Forest Types of the Northwest		FES 342	Available online at OSU
Urban Forestry		FES/HORT 350	Available online at OSU
Wildland Fire Ecology		FES 440	Available online at OSU
Ecological Restoration		FES/FW 445	Available online at OSU
Biodiversity Conservation in Managed Forests		FES/FW 452	Available online at OSU
Agroforestry		FES/NR 477	
Topics in Wildland Fire		FOR 346	Available online at OSU
Silviculture Principles		FOR 441	
Land & Water			
Fresh Water Biology	BI 143	BI LDT	
Watershed Processes		FE 430	Available online at OSU
Forest Watershed Management		FE 434	
Integrated Watershed Management		FW 326	Available online at OSU
Freshwater Ecology and Conservation		FW 456	Available online at OSU
Wetlands and Riparian Ecology		FW 479	Available online at OSU
Minerals, Energy, Water and the Environment		GEO 306	Available online at OSU
National Park Geology and Preservation	G 147	GEO 307	Available online at OSU
Global Change and Earth Sciences		GEO 308	Available online at OSU
Introduction to Water Science & Policy		GEOG 340	Available online at OSU
Water Resources Management in the U.S.		GEOG 440	
International Water Resource Management		GEOG 441	Available online at OSU
Desert Water Shed Management		RNG 355	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
World Soil Resources		SOIL 395	Available online at OSU
Soil Morphology and Classification		SOIL 466	Available online at OSU
Range			
Wildland Fire Ecology		FES 440	Available online at OSU
Ecological Restoration		FES/FW 445	Available online at OSU
Topics in Wildland Fire		FOR 346	Available online at OSU
Rangeland Ecology and Management		RNG 341	Available online at OSU
Range Ecology I – Grasslands		RNG 351	Available online at OSU
Range Ecology II – Shrub Lands		RNG 352	Available online at OSU
Wildland Restoration and Ecology		RNG 421	Available online at OSU
Rangeland Analysis		RNG 441	Available online at OSU
Rangeland-Animal Relations		RNG 442	Available online at OSU
Rangeland Management and Planning		RNG 490	Available online at OSU
Vegetation ID			
Plant Systematics		BOT 321	
Agrostology		BOT 414	
Flora of the Pacific Northwest		BOT 425	
Dendrology		FES 241	Available online at OSU
Landscape Plant Materials I: Decid & Conifers	HOR 226	HORT 226	Available online at OSU
Landscape Plant Materials II: Shrubs	HOR 228	HORT 228	Available online at OSU
Wildland Plant Identification	-	RNG 353	Available online at OSU
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<b>NR Core Requirements</b> (continued) Complete one course per category	PCC Course	OSU Course	Notes
Wildlife Management			
Principles of Fish & Wildlife Conservation	BI 145	FW 251	Available online at OSU
Introductory Population Dynamics	51115	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 455	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 Ecosystems Science of the PNW Indians		AC 201	Available online at OSU
Anthropology Health and the Environment		AG 301	
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 482	
Multicultural Perspectives in NR		FW 340	Available online at OSU
Transforming Environmental Conflicts		GEOG 241	Available online at OSU
Environmental Justice		GEOG 330	Available online at OSU
Environmental History of the United States		HST 481	Available online at OSU
Critical Thinking for NR Challenges		NR 312	
Nature in Storytelling over the Centuries		NR 380	Available online at OSU
Environmental Ethics		PHL 440	Available online at OSU
World View and Environmental Values		PHL/REL 443	Available online at OSU
Sustainability, Justice & Engagement		SUS 331	Available online at OSU
Natural Resource Policy			
Environmental Law		AEC 432	Available online at OSU
Rural Development Economics & Policy		AEC 454	Available online at OSU
Public Lands Policy & Management		FES 486	Available online at OSU
Forest Policy		FOR 460	
Natural Resources Policy and Law		FOR 462	
Fish & Wildlife Law and Policy		FW 415	Available online at OSU
Introduction to Ocean Law		FW 422	Available online at OSU
U.S. Energy Policy		PS 473	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
International Environmental Politics & Policy		PS 477	Available online at OSU
Political Issues			
Plagues, Pests, and Politics		ENT/HORT 300	Available online at OSU
Natural Resource Policy and Law		FOR 462	
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 475	Available online at OSU
International Environmental Politics & Policy		PS 470	Available online at OSU
Wilderness Management		TRAL 352	Available online at OSU
		IKAL 352	
Intro to Environmental Economics & Policy		AEC 250	Available online at OSU
Intro to Aicroeconomics	EC 201	ECON 201	Available online at OSU
	LC 201		Available Utilitie at USU

<b>NR Core Requirements</b> (continued) Complete one course per category	PCC 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	
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		FE 257	Available online at OSU
Survey of Geographic Information Systems		FW 303	Available online at OSU
Foundations of Geospatial Science & GIS	GEO 264	GEOG 201	Available online at OSU
Geoscience I: GIS and Theory	GEO 265	GEOG 360	Available online at OSU

# **Courses Required for Ecological Restoration Option**

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<b>Requirement</b> Complete one course per category unless otherwise noted	PCC Course	OSU Course	Notes
Measurements			
Field Methods in Ecological Restoration Field Methods in Plant Ecology Scientific Methods for Analyzing NR Problems		BI 375 BOT 440 NR 325 RNG 441	Available online at OSU Available online at OSU
Rangeland Analysis Resource Economics		KNG 441	Available offinite at 050
Natural Resources Economics Natural Resources Economics & Policy Environmental Economics & Policy Intro to Coastal & Marine Resource Econ Rural Development Economics & Policy Forest Resource Economics I Economics & Policy of Wildland Fire Plant Systematics		AEC 351 AEC/ECON 352 AEC 353 AEC 454 FOR 329 FOR 431 BOT 321	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
General Chemistry II with Lab General Chemistry II with Lab (for majors)	CH 105 CH 222	CH 122 CH 232 & 262	Available online at OSU Available online at OSU
Ecological Restoration		FES/FW 445 FW 479	Available online at OSU Available online at OSU
Wetlands and Riparian Ecology		_	
Riparian Ecohydrology and Management Land Use in the American West Planning Prin & Pract for Resilient Community		RNG 455 GEOG 450 GEOG 451	Available online at OSU
Sustainable Site Planning		GOEG 452	Available online at OSU
Ecosystems of Wildland Soils Soil System and Plant Growth Soil Morphology and Classification		SOIL 366 SOIL 388 SOIL 466	Available online at OSU Available online at OSU Available online at OSU
Social & Ethical Considerations Urban Forestry Econ and Policy of Forest Wildland Fire Critical Thinking for NR Challenges Environmental Ethics World Views and Environmental Values Environmental Sociology Society and Natural Resources Sustainability, Justice, and Engagement		FES/HORT 350 FOR 431 NR 312 PHL 440 PHL/REL 443 SOC 480 SOC 481 SUS 331	Available online at OSU Available online at OSU
Ecological & NR Electives – 2 classes		505 551	
Marine Ecology Environmental Physiology of plants Wildland Fire Ecology Wildland Fire Science & Management		BI 351 BOT 488 FES 440 FOR 436	Available online at OSU Available online at OSU Available online at OSU
Biodiversity Cons in Managed Forests Silviculture Principles Introductory Population Dynamics Coastal Ecology and Resource Management		FES/FW 452 FOR 441 FW 320 FW 426	Available online at OSU Available online at OSU Available online at OSU
Avian Conservation and Management Fishery Biology Freshwater Ecology and Conservation		FW 451 FW 454 FW 456	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
Mammal Conservation and Management Fish Ecology Wildlife Ecology		FW 458 FW 473 FW 481	Available online at OSU Available online at OSU Available online at OSU
Rangeland Ecology and Management Wildland Restoration and Ecology Soil Landscape Analysis Biodiversity: Causes, Consequences, Conserv		RNG 341 RNG 421 SOIL 468 Z 349	Available online at OSU Available online at OSU Available online at OSU
Environmental Physiology		Z 423	Available online at OSU

## 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 PCC courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-</u> equivalencies-portland-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MTH 112 or higher WR 121. Required to transfer. Can be completed as part of major: see advisor Choose one course from Bacc Core link above HE 295 and PE 295 @ PCC
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.

Portland Community College	pcc.edu/advising/
OSU College of Forestry Prospective Student Advisor	Autumn VanderLinden 541-737-9135 Autumn.VanderLinden@oregonstate.edu