#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS EC

**ECAMPUS** CASCADES

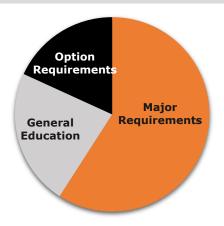
# Portland Community College

#### **Natural Resources Major with Policy & Management Option**

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

This option prepares students for careers in the broad arena of natural resource and environmental conservation, with an emphasis on the social and political aspects of resource issues.

#### 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.
- More info: forestry.oregonstate.edu/undergraduateprograms/natural-resources/policy-and-management

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

NR Major Requirements Complete one course per category	PCC Course	OSU Course	Notes
Managing Nat Res for the Future	ESR 204	NR 201	Available online at OSU
Natural Resource Problems & Solutions		NR 202	Available online at OSU
Consensus and Natural Resources		FES 485	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
Social Media Advocacy in Ag Sci & Nat Res		AG 445	Available online at OSU
Risk & Crisis Communication in Ag Sci & NR		AG 455	
Small Group Communication	COMM 215	COMM 222	
Intercultural Communication	COMM 140	COMM 226	Available online at OSU
Communication in Organizations		COMM 324	
Non-Verbal Communication	COMM 227	COMM 328	
Communication in Cyberspace		COMM 385	Available online at OSU
Theories of Conflict and Conflict Management		COMM 440	
Bargaining and Negotiating Processes		COMM 442	
Environmental Case Studies		ENSC 321	Available online at OSU
Forest as Classroom		FES 430	Available online at OSU
Maps, Media and Communication		GEOG 202	
Effective Comm of Environmental Change Sci		GEOG 453	
Critical thinking for NR Challenges		NR 312	
Environmental Interpretation		TRAL 493	Available online at OSU
Technical Writing	WR 227Z	WR 227Z	Available online at OSU
Advanced Writing & Argumentation		WR 323	Available online at OSU
Science Writing		WR 362	Available online at OSU
Writing for the Natural Sciences		WR 375	
Environmental Writing		WR 462	Available online at OSU



NR Major Requirements Complete one course per category	PCC Course	OSU Course	Notes
Writing Intensive Course Ag and Environmental Predicaments Environmental Case Studies Public Lands Policy and Management Forest Policy and Regulation Aquaculture		CROP/SOIL/SUS 325 ENSC 321 FES 486 FE/FOR 463 FW 497	Available online at OSU Available online at OSU
Climatology Research Methods Rangeland Management and Planning World Soil Resources Environmental Writing  Biology I		GEOG 323 PS 300 RNG 491 SOIL 395 WR 462	Available online at OSU
Env Bio: Ecology, Cons., Global Change Introductory Biology I Principles of Biology: Cells	BI 103 BI 221Z	BI 101 BI 204 BI 221Z	Available online at OSU Available online at OSU
<b>Biology II</b> Animal Bio: Genes, Behavior, and Evolution Introductory Biology II Principles of Biology: Organisms	BI 102 BI 222Z	Z 102 BI 205 BI 222Z	Available online at OSU Available online at OSU
<b>Biology III</b> Human Bio: Anatomy, Phys, and Disease Introductory Biology III Principles of Biology: Ecology & Evolution	BI 101 BI 223Z	BI 103 BI 206 BI 223Z	Available online at OSU Available online at OSU
Chemistry General Chemistry I with Lab General Chemistry (Majors) I with Lab	CH 221Z & 227Z	CH 121 CH 221Z & 227Z	Available online at OSU Available online at OSU
Climate Science PCC Course: Climate Change & Human Syst. Climate Science Snow, Smoke and Storms: Climate in PNW Climatology Intro to Climate Change	G 209 G 184	GEO LDT ATS 201 ATS 341 GEOG 323 SUS 103	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
Land Science Soil Science Environmental Earth Science Planet Earth Physical Geology Earth Systems Science Global Change and Earth Sciences Surface Processes	G 201 G 202 G 203	CSS 205 ENSC 210 GEO 101 GEO 201 GEO 202 GEO 308 GEO 322	Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
Dynamic Planet Soil Science & Lab Water Science		GEOG 102 SOIL 205 & 206	Available online at OSU
Watershed Processes Forest Watershed Management Environmental Hydrogeology Intro to Water Science and Policy		FE 430 FE 434 GEO 387 GEOG 340	Available online at OSU  Available online at OSU  Available online at OSU
Hydrology for Water Resource Mgmt Oceanography Intro to Biological Oceanography Coastal Oceanography	GS 108	GEOG 424 OC 201 OC 202 OC 332	Available online at OSU  Available online at OSU
Ecology Ecology for Engineers Marine Ecology General Ecology Plant Ecology Tropical Ecology and Conservation Forest Ecology Wildlife Ecology Intro to Wildland Ecology		BEE 270 BI 351 BI 370 BOT 341 ENSC 341 FES 341 FW 481 RNG 121	Available online at OSU
Mathematics Elementary Functions Calculus for Mgmt, Life, and Social Science Math for Mgmt, Life, and Social Science Differential Calculus	MTH 112Z MTH 241 MTH 245 MTH 251Z	MTH 112Z MTH 241 MTH 251Z	Available online at OSU Available online at OSU Available online at OSU Available online at OSU

NR Major Requirements	PCC Course	OSU Course	Notes
Complete one course per category		333 334.33	110100
Statistics			
Elementary Statistics I	STAT 243Z	ST 243Z	Available online at OSU
Intro to Statistical Methods		ST 351	Available online at OSU
Animal Science			
PCC Course: Bird ID & Ecology	BI 164	BI LDT	
Forest Entomology		FES 412	
Terrestrial Vertebrate ID and Nat History		FOR 210	Available online at OSU
Principles of Fish & Wildlife Conservation	BI 145	FW 251	Available online at OSU
Bio and Conservation of Marine Mammals		FW 302	Available online at OSU
Ornithology		FW 311	Available online at OSU
Systematics of Birds		FW 312	Available online at OSU
Ichthyology		FW 315	Available online at OSU
Systematics of Fishes		FW 316	Available online at OSU
Mammalogy		FW 317	Available online at OSU
Systematics of Mammals		FW 318	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	Available online at OSU
Herpetofauna Conservation and Management		FW 448	Available online at OSU
Avian Conservation and Management		FW 451	Available online at OSU
Fishery Biology		FW 454	Available online at OSU
Mammal Conservation and Management		FW 458	Available online at OSU
Marine Conservation Biology		FW 464	Available online at OSU
Wildlife Ecology		FW 481	Available online at OSU
Animal Behavior		Z 350	Available online at OSU
Biology of Insects		Z 365	Available online at OSU
Herpetology		Z 473	Available online at OSU
Aquatic Entomology		Z 477	
Plant Science	DI 202	DOT LOT	
PCC Course: General Botany	BI 202	BOT LDT	
Botany: A Human Concern		BOT 101	Assettable autime at OCH
Intro to Plant Biology		BOT 220	Available online at OSU
Plant Systematics		BOT 321	Available online at OSU
Forest Pathology Aquatic Botany		BOT/FOR 413 BOT 416	
Flora of the Pacific Northwest		BOT 425	
Mycology		BOT 461	Available online at OSU
Forest Biology	BI 141	FES 240	Available online at OSU
Dendrology	B1 141	FES 241	Available online at OSU
Landscape Plant Mat I: Decid & Coniferous	HOR 226	HORT 226	Available online at OSU
Landscape Plant Mat II: Shrubs	HOR 228	HORT 228	Available online at OSU
Wildland Plant Identification	TION 220	RNG 353	Available online at OSU
Aquatic Ecosystems		100 333	Available offilite at 030
PCC Course: Marine Biology	BI 142	BI LDT	
PCC Course: Freshwater Biology	BI 143	BI LDT	
Intro to Marine Biology	DI 143	BI 150	
Oceans in Peril		BI 347	
Marine Ecology		BI 351	Available online at OSU
Mgmt Principles of Pacific Salmon in NW		FW 323	Available online at OSU
Integrated Watershed Management		FW 326	Available online at OSU
Coastal Ecology and Resource Management		FW 426	The state of the s
Estuarine Ecology		FW/OC 434	
Freshwater Ecology and Conservation		FW 456	Available online at OSU
Fish Ecology		FW 473	Available online at OSU
Wetlands and Riparian Ecology		FW 479	Available online at OSU
Hydrology for Water Resource Management		GEOG 424	7.1.4.1.4.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Riparian Ecohydrology and Management	1	RNG 455	Available online at OSU

NR Major Requirements	PCC Course	OSU Course	Notes
Complete one course per category	rec course	030 Course	Notes
Terrestrial Ecosystems			
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 445	Available online at OSU
Biodiversity Conservation in Managed Forests		FES 452	Available online at OSU
Intro to Forestry		FOR 111	Available online at OSU
Topics in Wildland Fire		FOR 346	Available online at OSU
Silviculture Principles		FOR 441	Available online at OSU
Intro to Wildland Ecology		RNG 121	Available online at OSU
Rangeland Ecology and Management		RNG 341	Available online at OSU
Ecology of Grassland Ecosystems		RNG 351	Available online at OSU
Ecology of Shrubland Ecosystems		RNG 352	
Rangeland Restoration and Ecology		RNG 421	Available online at OSU
Vegetation Monitoring and Analysis		RNG 441	Available online at OSU
Rangeland-Animal Relations		RNG 442	
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	
Environ. Assessment & Planning			
PCC Course: Intro to Env Systems	ESR 200	ENSC LDT	
PCC Course: Applied Env Studies, Problems	ESR 202	ENSC LDT	
Agriculture & Environmental Predicaments		CROP/SOIL/SUS 325	
Ecological Restoration		FES 445	Available online at OSU
Urban Forestry Plannin, Policy, and Mgmt		FES/HORT 455	Available online at OSU
Ecosystems Services		FW 462	Available online at OSU
Land Use Planning for Sust. Communities		GEOG 250	Available online at OSU
Planning Principles for Resilient Communities		GEOG 451	Available online at OSU
Sustainable Site Planning		GEOG 452	Available online at OSU
Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU
Wildland restoration and Ecology		RNG 421	Available online at OSU
Habitat Analysis I		RNG 457	Available online at OSU
Rangeland Management and Planning		RNG 491	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	Available online at OSU
Planning for Sustainable Tourism		TRAL 457	Available online at OSU
Evaluating Sus through Life Cycle Analysis		WSE 385	Available online at OSU
Difference/Power/Oppression Advanced			
Indigenous Agriculture and Subsistence		AG 311	Available online at OSU
Anthro of Difference, Power, and Oppression		ANTH 411	
Environmental Justice		ENSC/GEOG 333	Available online at OSU
Power and Justice in US Nat Res Management		FW 340	Available online at OSU
Sustainability, Justice, and Engagement		SUS 331	Available online at OSU
Economics			
Intro to Environmental Economics & Policy		AEC 250	Available online at OSU
Intro to Microeconomics	EC 201Z	ECON 201Z	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 170	GEOG 201	Available online at OSU
Geoscience I: GIS and Theory	GEO 265	GEOG 360	Available online at OSU

NR Major Requirements	PCC Course	OSU Course	Notes
Complete one course per category  Social & Ethical Issues			
	G 147	GEO LDT	
PCC Course: Geography of National Parks PCC Course: Intro to Environmental Ethics	PHL 206	PHL LDT	
	PHL 200	AEC 253	Available online at OSU
Environmental Law, Politics & Policy			
Indigenous Ecosystem Science		AG 201 ANTH 352	Available online at OSU  Available online at OSU
Anthropology, Health, and Environment			
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	Available online at OSU
Human Impacts on Ecosystems		BOT 301	Accellate audiona at OCH
Issues in Natural Resource Conservation		FES 365	Available online at OSU
Food From the Sea		FW 324	Available online at OSU
Global Crises in Resource Ecology		FW 325	Available online at OSU
Minerals, Energy, Water, and Environment		GEO 306	Available online at OSU
National Park Geology and Preservation		GEO 307	Available online at OSU
Climate Justice		GEOG 100	Available online at OSU
Human-Environment Geog in Anthropocene		GEOG 203	Available online at OSU
Human Dimensions of Climate Change		GEOG 240	Available online at OSU
Transforming Environmental Conflicts		GEOG 241	Available online at OSU
Urban Aqua Networks: Ancient to Modern		GEOG 242	
Sustainability for the Common Good		GEOG 300	Available online at OSU
Resilience-Based Natural Resource Mgmt		GEOG 430	Available online at OSU
Environmental History of the U.S.		HST 481	Available online at OSU
Humans and the Ocean		MAST 201	Available online at OSU
Society, Culture and the Marine Environment		MAST 300	
Critical Thinking for NR Challenges		NR 312	
Nature in Literature Over the Centuries		NR 380	Available online at OSU
Oceans, Coasts & People		OC 203	Available online at OSU
Environmental Ethics		PHL 440	
World Views and Environmental Values		PHL/REL 443	
Native American Philosophies		PHL/REL 448	Available online at OSU
Energy, Climate, and Society		PPOL 441/SOC 482	Available online at OSU
Intro to Environment and Society		SOC 280	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	Available online at OSU
Nature, Eco, and Adventure Tourism		TRAL 353	Available online at OSU
Communities, Natural Areas, and Tourism		TRAL 354	Available online at OSU
Parks & Protected Areas		TRAL 357	Available online at OSU
Women and Natural Resources		WGSS 440	Available online at OSU

# **Courses Required for Policy & Management Option**

Requirement	PCC Course	OSU Course	Notes
Complete one course per category unless otherwise noted	PCC Course	OSO Course	Notes
Measurements			
Research Methods in Social Science		FES 422	Available online at OSU
Research Methods		PS 300	Available online at OSU
Human Dimen. of NR Mgmt (choose 2)		10.004	A . 11 . 11
Indigenous Ecosystem Science		AG 201	Available online at OSU
Ecological Anthropology		ANTH 477	Available online at OSU
Human Dimensions of Climate Change		GEOG 240	Available online at OSU
Land Use Planning for Sustainable Community		GEOG 250	Available online at OSU
Sustainability for the Common Good		GEOG 300 GEOG 350	Available online at OSU  Available online at OSU
Geography of Natural Hazards Resilience-Based Nat Resource Management		GEOG 330	Available online at OSU
Plan Principles and Pract for Resilient Comm		GEOG 450	Available offille at 050
Sustainable Site Planning		GEOG 451	Available online at OSU
Critical Thinking for NR Challenges		NR 312	Available offille at 030
Intro to Sociology	SOC 204Z	SOC 204	Available online at OSU
Environmental Sociology	330 2072	SOC 480	Available online at OSU
Society and Natural Resources		SOC 480	Available online at OSU
Sustainability, Justice, and Engagement		SUS 331	Available online at OSU
Sustainable Communities		SUS 350	Available online at OSU
Politics & Policy of NR (12-13 credits)		303 333	Available offinite at 555
Intro to Climate Change Econ & Policy		AEC 122	Available online at OSU
Environmental Law, Policy, and Economics		AEC 253	Available online at OSU
Natural Resource Economics & Policy		AEC 351	Available online at OSU
Environmental Econ & Policy		AEC/ECON 352	Available online at OSU
Intro to Coastal and Marine Resource Econ		AEC 353	Available online at OSU
Environmental Law		AEC 432	Available online at OSU
Contemporary Native Issues		ANTH 472	Available online at OSU
Native American Law: Tribes & Treaties in US		ES 444	Available online at OSU
Issues in Natural Resource Conservation		FES 365	Available online at OSU
Public Lands Policy and Management		FES 486	Available online at OSU
Econ and Policy of Forest Wildland Fire		FOR 431	Available online at OSU
Forest Policy Analysis		FOR 461	
Forest Policy & Regulation		FOR 463	
Endangered Species, Soc. and Sustainability		FW 350	Available online at OSU
Fisheries and Wildlife Law and Policy		FW 415	Available online at OSU
Intro to Ocean Law		FW 422	Available online at OSU
Intro to Public Policy		PPOL 201	Available online at OSU
Public Policy Problems		PPOL/PS 371	Available online at OSU
Policy & Law of US Coastal Governance		PPOL 446	Available online at OSU
Policy: Food, Energy, Water, Climate		PPOL 447	Available online at OSU
Marine Policy in the United States Intro to US Gov't & Politics	PS 201	PPOL 448 PS 201	Available online at OSU  Available online at OSU
	P3 201		
The Politics of Climate Change Global Food Politics and Policy		PS 455 PS 470	Available online at OSU Available online at OSU
U.S. Energy Policy		PS 470	Available online at OSU
Environmental Politics and Policy		PS 475	Available online at OSU
Int'l Environmental Politics and Policy		PS 477	Available online at OSU
Renewable Energy Policy		PS 478	Available online at OSU
Resource Economics			
Natural Resources Economics & Policy		AEC 351	Available online at OSU
Environmental Economics & Policy		AEC/ECON 352	Available online at OSU
Intro to Coastal & Marine Resource Econ		AEC 353	Available online at OSU
Econ of Traditional and Renewable Energy		ECON 466	Available online at OSU
Forest Resource Economics I		FOR 329	
Economics & Policy of Wildland Fire		FOR 431	Available online at OSU
Economics of Recreation & Tourism		TRAL 432	

Requirement			
Complete one course per category unless otherwise noted	PCC Course	OSU Course	Notes
Conservation & Mgmt of NR (12 credits)			
Managing Organizations		BA 251	Available online at OSU
Field Methods in Plant Ecology		BOT 440	Available online at OSU
Environmental Case Studies		ENSC 321	Available online at OSU
Wildland Fire Ecology		FES 440	Available online at OSU
Urban Forest Planning, Policy, and Mgmt		FES/HORT 455	Available online at OSU
Ecological Restoration		FES 445	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
Silviculture Principles		FOR 441	Available online at OSU
Survey of Geographic Information Systems		FW 303	Available online at OSU
Applied Community and Ecosystem Ecology		FW 321	Available online at OSU
Mgmt Principles of Pacific Salmon in NW		FW 323	Available online at OSU
Global Crises in Resource Ecology		FW 325	Available online at OSU
Integrated Watershed Management		FW 326	Available online at OSU
Herpetofauna Conservation & Management		FW 448	Available online at OSU
Avian Conservation & Management		FW 451	Available online at OSU
Mammal Conservation & Management		FW 458	Available online at OSU
Wetlands and Riparian Ecology		FW 479	Available online at OSU
Foundations of Geospatial Science and GIS	GEO 170	GEOG 201	Available online at OSU
Intro to Water Science and Policy		GEOG 340	Available online at OSU
Hydrology for Water Resource Mgmt		GEOG 424	
Water Resources Management in the US		GEOG 440	
Int'l Water Resource Management		GEOG 441	Available online at OSU
Intro to Non-Profit Management		NMC 311	Available online at OSU
Riparian Ecohydrology and Management		RNG 455	Available online at OSU
Rangeland Management and Planning		RNG 491	Available online at OSU
Parks and Protected Areas Management		TRAL 357	Available online at OSU

### **General Education Courses** (called Core Education)

- Complete one course in each category.
- Full listing of PCC courses that fulfill Core Ed requirements: <u>admissions.oregonstate.edu/course-articulations-portland-community-college</u>

	Writing Foundations	WR 121Z required
	Arts & Humanities: General	
	Arts & Humanities: Global	
FOUNDATIONAL	Quantitative Literacy & Analysis	Fulfilled by major: MTH 112Z, MTH 241, or STAT 243Z
CORE	Communication, Media & Society	
CORL	Social Science	Fulfilled by major: EC 201Z
	Scientific Inquiry & Analysis	Fulfilled by major: Biology
	Scientific Inquiry & Analysis	Fulfilled by major: Chemistry
	Difference, Power, Oppression Foundations	
	Transitions	
	Beyond OSU I: Prepare	Fulfilled by major: NR 201
	Beyond OSU II: Engage	Fulfilled by major: NR 455
SIGNATURE CORE	Difference, Power, Oppression Advanced	Fulfilled by major: AG 311, ENSC/GEOG 333, SUS 331
SIGNATURE CORE	Seeking Solutions	Cannot be fulfilled by a major requirement
	Writing Elevation	
	Writing Intensive Course	Fulfilled by major: SUS 325, ENSC 321, FES 486,
		FOR 463, or WR 462

### **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 <a href="visitosu.oregonstate.edu/visit-campus">visitosu.oregonstate.edu/visit-campus</a> to schedule your personalized visit.

Portland Community College	General Academic Advising 971-722-8888 Option 1 or <a href="mailto:advising@pcc.edu">advising@pcc.edu</a>	
OSU College of Forestry Student Services	Forestry Student Services 541-737-1594 or forestrystudentservices@oregonstate.edu	