TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

ECAMPUS

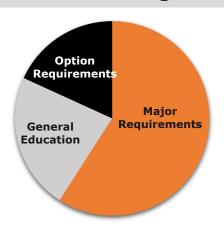
Central Oregon Community College

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.
- forestry.oregonstate.edu/undergraduateprograms/natural-resources/ecological-restoration

Courses Required for Natural Resources Major

NR Core Requirements Complete one course per category	COCC Course	OSU Course	Notes
Managing Nat Res for the Future		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 222	
Intercultural Communication		COMM 226	Available online at OSU
Communication in Organizations		COMM 324	
Non-Verbal Communication		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 Core Requirements Complete one course per category	COCC 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 221	BI 101 BI 204 BI 221Z	Available online at OSU Available online at OSU
Biology II Animal Bio: Genes, Behavior, and Evolution Introductory Biology II	BI 101	Z 102 BI 205	Available online at OSU Available online at OSU
Principles of Biology: Organisms Biology III Human Bio: Anatomy, Phys, and Disease Introductory Biology III Principles of Biology: Ecology & Evolution	BI 222 BI 102 BI 223	BI 222Z 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 COCC Course: Weather & Climate Climate Science Snow, Smoke and Storms: Climate in PNW Climatology Intro to Climate Change	GEOG 279 SUS 103	GEOG 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 Dynamic Planet	G 100 G 201 G 202	CSS 205 ENSC 210 GEO 101 GEO 201 GEO 202 GEO 308 GEO 322 GEOG 102	Available online at OSU
Soil Science & Lab Water Science	FOR 208	SOIL 205 & 206	
Watershed Processes Forest Watershed Management Environmental Hydrogeology Intro to Water Science and Policy Hydrology for Water Resource Mgmt Oceanography	GS 108	FE 430 FE 434 GEO 387 GEOG 340 GEOG 424 OC 201	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
Intro to Biological Oceanography Coastal Oceanography	00 100	OC 202 OC 332	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 Mathematics		BEE 270 BI 351 BI 370 BOT 341 ENSC 341 FES 341 FW 481 RNG 121	Available online at OSU
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 251	MTH 112Z MTH 241 MTH 245 MTH 251Z	Available online at OSU Available online at OSU Available online at OSU Available online at OSU

NR Core Requirements	COCC Course	OSU Course	Notes
Complete one course per category	COCC COUISE	O30 Course	Hotes
Statistics			
Elementary Statistics I	STAT 243Z	ST 243Z	Available online at OSU
Intro to Statistical Methods		ST 351	Available online at OSU
Animal Science			
COCC Course: Survey of NW Birds	FW 212	FW LDT	
COCC Course: Survey of NW Mammals	FW 218	FW LDT	
COCC Course: Animal Behavior	PSY 227	Z LDT	
Forest Entomology		FES 412	
Terrestrial Vertebrate ID and Nat History		FOR 210	Available online at OSU
Principles of Fish & Wildlife Conservation	FW 251	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			
COCC Course: General Botany	BI 202	BOT LDT	
Botany: A Human Concern		BOT 101	
Intro to Plant Biology		BOT 220	Available online at OSU
Plant Systematics		BOT 321	Available online at OSU
Forest Pathology		BOT/FOR 413	
Aquatic Botany		BOT 416	
Flora of the Pacific Northwest		BOT 425	
Mycology		BOT 461	Available online at OSU
Forest Biology	FOR 240A	FES 240	Available online at OSU
Dendrology	FOR 241A or 241B	FES 241	Available online at OSU
Landscape Plant Mat I: Decid & Coniferous		HORT 226	Available online at OSU
Landscape Plant Mat II: Shrubs		HORT 228	Available online at OSU
Wildland Plant Identification		RNG 353	Available online at OSU
Aquatic Ecosystems			
COCC Course: Marine Biology	BI 142	BI LDT	
Intro to Marine Biology		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	
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	1	GEOG 424	
Riparian Ecohydrology and Management		RNG 455	Available online at OSU

NR Core Requirements	COCC Course	OSU Course	Notes
Complete one course per category	Cocc course	OSO Course	Notes
Terrestrial Ecosystems			
Forest Biology	FOR 240A	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	E00 444	FES 452	Available online at OSU
Intro to Forestry	FOR 111	FOR 111	Available online at OSU
Topics in Wildland Fire	FOR 110 & 210	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 RNG 351	Available online at OSU Available online at OSU
Ecology of Grassland Ecosystems		RNG 351	Available offille at 050
Ecology of Shrubland Ecosystems Rangeland Restoration and Ecology		RNG 332	Available online at OSU
Vegetation Monitoring and Analysis		RNG 421	Available online at OSU
		RNG 441	Available offliffe at 030
Rangeland-Animal Relations 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 300	Available online at OSU
Soil Morphology and Classification		SOIL 466	Available offliffe at 030
Environ. Assessment & Planning		3012 400	
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
Nat Resource Politics & Policy (choose 2)			
Environmental Law		AEC 432	Available online at OSU
Contemporary Native Issues		ANTH 472	Available online at OSU
Plagues, Pests, and Politics		ENT 300/HORT 330	Available online at OSU
Native American Law: Tribes, Treaties & US		ES 444	Available online at OSU
Forest Policy & Regulation		FE/FOR 463	
Public Lands Policy & Management		FES 486	Available online at OSU
Forest Policy & Regulation		FOR 461	
Endangered Species, Soc, and Sustainability		FW 350	Available online at OSU
Fish & Wildlife Law and Policy		FW 415	Available online at OSU
Introduction to Ocean Law		FW 422	
Conflict, Cooperation, and Control of Water		GEOG 440	A . 11.11. 11
The World's Water		GEOG 441	Available online at OSU
Public Policy Problems		PPOL/PS 371	Available online at OSU
Policy and Law of US Coastal Governance		PPOL 446	Available online at OSU
Integrated Policy: Food, Energy, Water, Clim		PPOL 447	Available online at OSU
Marine Policy in the United States		PPOL 448	Available online at OSU
The Politics of Climate Change		PS 455	Aveilable enlice et OCU
U.S. Energy Policy		PS 473	Available online at OSU
Environmental Politics and Policy	<u> </u>	PS 475	Available online at OSU

ND Core Degricements			
NR Core Requirements	COCC Course	OSU Course	Notes
Complete one course per category Economics			
		AEC 250	Available online at OSU
Intro to Environmental Economics & Policy	EC 201		Available online at OSU
Intro to Microeconomics Social & Ethical Issues	EC 201	ECON 201Z	Available offille at 050
COCC Course: Hunting & Society	FW 257	FW LDT	
	FW 237	AEC 253	Available online at OSU
Environmental Law, Politics & Policy Indigenous Ecosystem Science		AG 201	Available online at OSU
Anthropology, Health, and 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	Available online at OSU
Human Impacts on Ecosystems		BOT 301	Available offilite at 030
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 300	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	/ (valiable of line at 656
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	FOR 251	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
Spatial Analysis			
Precision Agriculture		CROP/HORT 414	Available online at OSU
GIS and Forest Engineering Applications	GEOG 265	FE 257	Available online at OSU
Survey of Geographic Information Systems		FW 303	Available online at OSU
Foundations of Geospatial Science & GIS	GEOG 101	GEOG 201	Available online at OSU
Geoscience I: GIS and Theory	GEOG 266	GEOG 360	Available online at OSU

Courses Required for Ecological Restoration Option

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Requirement Complete one course per category unless otherwise noted	COCC Course	OSU Course	Notes
Measurements			
Field Methods in Ecological Restoration		BI 375	
Field Methods in Plant Ecology		BOT 440	Available online at OSU
Precision Agriculture		CROP/HORT 414	Available online at OSU
GIS & Forest Engineering Applications	GEOG 265	FE 257	Available online at OSU
Forest Surveying	FOR 230B	FE 208	Available online at OSU
Foundations of Geospatial Science and GIS	GEOG 101	GEOG 201	Available online at OSU
Geoscience I: GIS & Theory	GEOG 266	GEOG 360	Available online at OSU
Scientific Methods for Analyzing NR Problems	GLOG 200	NR 325	Available online at OSU
		RNG 441	Available online at OSU
Rangeland Analysis Resource Economics		KNG 441	Available offille at 030
Natural Resources Economics & Policy		AEC 351	Available online at OSU
			Available online at OSU
Environmental Economics & Policy		AEC/ECON 352	
Intro to Coastal & Marine Resource Econ		AEC 353	Available online at OSU
Forest Resource Economics I		FOR 329	
Economics & Policy of Wildland Fire		FOR 431	Available online at OSU
General Ecology		BI 370	Available online at OSU
Plant Systematics		BOT 321	Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
General Chemistry II with Lab		CH 122	Available online at OSU
General Chemistry II with Lab (for majors)	CH 222Z & 228Z	CH 222Z & 228Z	Available online at OSU
Ecological Restoration		FES/FW 445	Available online at OSU
Wetlands and Riparian Ecology		FW 479	Available online at OSU
Riparian Ecohydrology and Management		RNG 455	Available online at OSU
Land Use Planning for Sus Communities		GEOG 250	Available online at OSU
Planning Prin & Pract for Resilient Community		GEOG 451	Available online at OSU
Sustainable Site Planning		GOEG 452	Available online at OSU
Ecosystems of Wildland Soils		SOIL 366	Available online at OSU
Soil System and Plant Growth		SOIL 388	Available online at OSU
Soil Morphology and Classification		SOIL 466	Available online at OSU
Social & Ethical Considerations		301L 400	Available offille at 030
Urban Forestry		EEC/HODT 2E0	Available online at OSU
•		FES/HORT 350	
Econ and Policy of Forest Wildland Fire		FOR 431	Available online at OSU
Critical Thinking for NR Challenges		NR 312	
Environmental Ethics		PHL 440	A
World Views and Environmental Values		PHL/REL 443	Available online at OSU
Environmental Sociology		SOC 480	Available online at OSU
Society and Natural Resources		SOC 481	Available online at OSU
Ecological & NR Elective		DT 254	A
Marine Ecology		BI 351	Available online at OSU
Intro to Plant Biology		BOT 220	Available online at OSU
Environmental Physiology of plants		BOT 488	
Tropical Ecology and Conservation		ENSC 341	
Wildland Fire Ecology		FES 440	Available online at OSU
Wildland Fire Science & Management		FOR 436	Available online at OSU
Biodiversity Cons in Managed Forests		FES 452	Available online at OSU
Intro to Forestry	FOR 111	FOR 111	Available online at OSU
Silviculture Principles		FOR 441	
Introductory Population Dynamics		FW 320	Available online at OSU
Coastal Ecology and Resource Management		FW 426	Available online at OSU
Avian Conservation and Management		FW 451	Available online at OSU
Fishery Biology		FW 454	Available online at OSU
Freshwater Ecology and Conservation		FW 456	Available online at OSU
Mammal Conservation and Management		FW 458	Available online at OSU
Fish Ecology		FW 473	Available online at OSU
Wildlife Ecology		FW 481	Available online at OSU
Rangeland Ecology and Management		RNG 341	Available online at OSU
Wildland Restoration and Ecology		RNG 421	Available online at OSU
Vegetation Monitoring & Analysis		RNG 441	Available online at OSU
Soil Landscape Analysis		SOIL 468	anabie onnine at obo
Biodiversity: Causes, Consequences, Conserv		Z 349	Available online at OSU
Environmental Physiology		Z 423	Available online at OSU
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General Education Courses (called Core Ed)

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

	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
Communication, Media & Society		
CORE	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 visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

Central Oregon Community College	Diane Pritchard 541-318-3772 dpritchard2@cocc.edu	
OSU College of Forestry	541-737-1594	
Student Services Office	forestrystudentservices@oregonstate.edu	