#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

#### Major Offered At:

CORVALLIS

**ECAMPUS** 

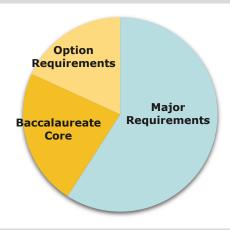
# Treasure Valley Community College

## **Natural Resources Major with NR Education 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 as natural resource educators. Students may choose to focus on teaching in informal settings like interpretive centers, aquariums, museums, or parks or a career in formal education in a K-12 classroom.

## 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: <u>forestry.oregonstate.edu/undergraduate-</u> programs/natural-resources/natural-resource-education

# **Courses Required for Natural Resources Major**

NR Core Requirements	TVCC Course	OSU Course	Notes
Complete one course per category	TVCC Course	030 Course	Notes
Consensus and Natural Resources		FES 485	Available online at OSU
Managing Nat Res for the Future	NATR 111	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			
General Biology I with Lab	BIOL 101	BI 101	Available online at OSU
Introduction to Biology I		BI 204	Available online at OSU
Principles of Biology: Cells	BIOL 211	BI 221	



NR Core Requirements (continued) Complete one course per category	TVCC Course	OSU Course	Notes
Biology II			
General Biology II with Lab	BIOL 102	BI 102	Available online at OSU
Introduction to Biology II	BIOL 213	BI 205 BI 222	Available online at OSU
Principles of Biology: Organisms  Biology III	BIOL 213	DI ZZZ	
General Biology III with Lab	BIOL 103	BI 103	Available online at OSU
Introduction to Biology III	5101 103	BI 206	Available online at OSU
Principles of Biology: Populations	BIOL 212	BI 223	
Chemistry			
General Chemistry I with Lab	CHEM 121	CH 121	Available online at OSU
General Chemistry (Majors) I with Lab	CHEM 221	CH 231 & 261	Available online at OSU
Climate Science Climate Science		ATS 201	Available online at OSU
Global Change Biology		FW 345	Available offille at 030
Climatology		GEOG 323	Available online at OSU
Intro to Climate Change		SUS 103	Available online at OSU
Earth or Soil Science			
TVCC Course: Physical Geography	GEOG 101	GEOG LDT	
Soil Science		CSS 205	Available online at OSU
The Solid Earth	GEOL 202	GEO 101	Available enline at OCU
Physical Geology Earth Systems Science	GEOL 202 GEOL 201	GEO 201 GEO 202	Available online at OSU
Environmental Geology	GLOL 201	GEO 202	
Physical Geography		GEOG 102	Available online at OSU
Soil Science with Lab	CSS 205	SOIL 205 & 206	Available online at OSU
Soil Science with Forest Soils Lab		SOIL 205 & FOR 206	
Ecology			
TVCC Course: Intro NR Ecology	NATR 221	DI 251	Aveilable enline at OCL
Marine Ecology General Ecology		BI 351 BI 370	Available online at OSU  Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
Forest Ecology		FES 341	Available online at OSU
Mathematics			
Elementary Functions	MATH 112Z	MTH 112Z	Available online at OSU
Calculus for Mgmt, Life, and Social Science	MATH 241	MTH 241	Available online at OSU
Math for Mgmt, Life, and Social Science	MATH 251	MTH 245	Available online at OSU
Differential Calculus Statistics	MATH 251	MTH 251	Available online at OSU
Principles of Statistics	STAT 243Z	ST 243Z	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 Systematics of Mammals		FW 316 FW 318	Available online at OSU  Available online at OSU
Biology of Insects		Z 365	Available offillite at 030
Herpetology		Z 473	Available online at OSU
Aquatic Entomology		Z 477	
Environ. Assessment & Planning		CDOD/COTI /CUC COT	
Agriculture & Environmental Predicaments		CROP/SOIL/SUS 325	Available enline at OCU
Ecological Restoration Ecosystems Services		FES/FW 445 FW 462	Available online at OSU  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		GEOG 452	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 490	Available online at OSU  Available online at OSU
Sustainability Assessment Sustainable Communities		SUS 304 SUS 350	Available online at OSU  Available online at OSU
Planning for Sustainable Recreation		TRAL 456	Available offiline at 030
Planning for Sustainable Tourism		TRAL 457	
Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU

NR Core Requirements (continued) Complete one course per category	TVCC 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	GSCI 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
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		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
Land & Water  TVCC Course: Intro to Watershed Mgmt. 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	NATR 218	NR LDT 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	NATR 241	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
Vegetation ID TVCC Course: Applied Botany Plant Systematics Agrostology Flora of the Pacific Northwest Mycology Dendrology Landscape Plant Materials I: Decid & Conifers Landscape Plant Materials II: Shrubs Wildland Plant Identification	NATR 103	BOT 321 BOT 414 BOT 425 BOT 461 FES 241 HORT 226 HORT 228 RNG 353	Available online at OSU

NR Core Requirements (continued)	TVCC Course	OSU Course	Notes
Complete one course per category	Tree course	000 000.50	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			
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 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	Available offine at 050
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		303 331	7.vanabie omine de 050
Environmental Law		AEC 432	Available online at OSU
Public Lands Policy & Management		FES 486	Available online at OSU
Forest Policy		FOR 460	Available offliffe at 050
Forest Policy Analysis		FOR 461	
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 475	Available online at OSU
Political Issues		PS 477	Available offliffe at USU
		ENT/LIODE 200	Available enline at OCII
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	Associable entire at OCU
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	ECON 201	ECON 201	Available online at OSU

NR Core Requirements (continued) Complete one course per category	TVCC 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	NATR 251	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	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 201	Available online at OSU
Geoscience I: GIS and Theory		GEOG 360	Available online at OSU

# **Courses Required for Natural Resource Education Option**

Requirement			
Complete one course per category unless	TVCC Course	OSU Course	Notes
otherwise noted			
Measurements			
Forest as Classroom		FES 430	Available online at OSU
Introduction to Forestry	FOR 111	FOR 111	Available online at OSU
Forest Types of the Northwest		FES 342	Available online at OSU
Principles of Fish & Wildlife Conservation	NATR 252	FW 251	Available online at OSU
Environmental Interpretation		TRAL 493	Available online at OSU
Purp, Struct, and Function of Ed in Democracy		ED 216	Available online at OSU
Civil Rights and Multlicult. Issues in Education		ED 219	Available online at OSU
Learning Across the Lifespan		ED 253	Available online at OSU
Technology for Educators		ED 496	Available online at OSU
Inquiry in Science and Science Education		SED 413	Available online at OSU
Electives – choose at least 12 credits			
Purp, Struct, and Function of Ed in Democracy		ED 216	Available online at OSU
Civil Rights and Multlicult. Issues in Education		ED 219	Available online at OSU
Field Practicum		ED 309	Available online at OSU
Educational Psychology, Learning and Develop		ED 411	Available online at OSU
Learning Styles and Needs in Adolescence		ED 412	Available online at OSU
Projects		SED 406	Available online at OSU
Tech Found for Teaching Math & Science		SED 412	Available online at OSU
Comm. Ocean Science to Informal Audiences		SED 435	Available online at OSU
Intro to Marine Biology		BI 150 BI 301	
Human Impacts on Ecosystems Oceans in Peril		BI 347	Available online at OSU
Human Ecology		BI 348	Available offille at 030
Biodiv. Conservation in Managed Forests		FES/FW 452	Available online at OSU
Biology and Conservation of Marine Mammals		FW 302	Available online at OSU
Food From the Sea		FW 324	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
Mammal Conservation and Management		FW 458	Available online at OSU
Marine Conservation Biology		FW 464	
Earth Systems Science		GEO 202	
Evolution of Planet Earth	GEOL 201	GEO 203	
National Park Geology and Preservation		GEO 307	Available online at OSU
Nature in Storytelling Over the Centuries		NR 380	Available online at OSU
Rangeland Ecology and Management	NATR 241	RNG 341	Available online at OSU
Wildland Restoration and Ecology		RNG 421	Available online at OSU
Riparian Ecohydrology and Management		RNG 455	Available online at OSU
Recreation Resource Management		TRAL 251	Available online at OSU
Outdoor Recreation on Public Lands	NATR 251	TRAL 351	
Wilderness Management		TRAL 352	Available online at OSU
Parks & Protected Areas Management		TRAL 357	Available online at OSU
Biodiv: Causes, Consequences, Conservation		Z 349	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 TVCC courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-</u>

equivalencies-treasure-valley-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MATH 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 HPE 295 @ TVCC
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: ECON 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 <a href="visitosu.oregonstate.edu/visit-campus">visitosu.oregonstate.edu/visit-campus</a> to schedule your personalized visit.

Treasure Valley Community College	Marcus Nichols, Natural Resources Faculty 541-881-5968 mnichols@tycc.cc
OSU College of Forestry	541-737-1594
Student Services Office	forestrystudentservices@oregonstate.edu