

# TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

ECAMPUS

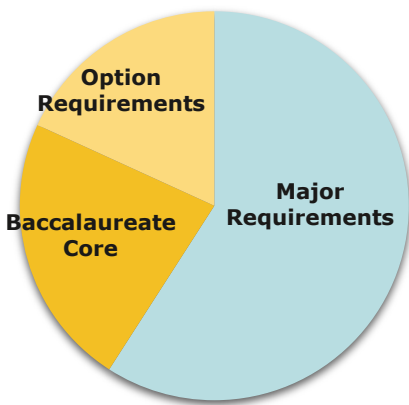
Tillamook Bay  
Community College

## Natural Resources Major with Landscape Analysis 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 to work with Geographic Information Science (GIS) technology

in a Natural Resource field such as wildfire ecology, land use planning, ecological restoration, etc. In addition, students will earn an undergraduate certificate in GIScience.

## 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/undergraduate-programs/natural-resources/landscape-analysis](http://More%20info%20forestry.oregonstate.edu/undergraduate-programs/natural-resources/landscape-analysis)

## Courses Required for Natural Resources Major

NR Core Requirements	TBCC Course	OSU Course	Notes
<i>Complete one course per category</i>			
Consensus and Natural Resources		FES 485	Available online at OSU
Managing Nat Res for the Future	NAT 201	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
<b>Advanced Communication</b>			
Intro to Communication Theory	COMM 215	COMM 321	
Small Group Problem Solving		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	
<b>Biology I</b>			
General Biology I with Lab	BI 101	BI 101	Available online at OSU
Introduction to Biology I		BI 204	Available online at OSU
Principles of Biology: Cells	BI 221	BI 221	

<b>NR Core Requirements</b> (continued) <i>Complete one course per category</i>	<b>TBCC Course</b>	<b>OSU Course</b>	<b>Notes</b>
<b>Biology II</b> General Biology II with Lab Introduction to Biology II Principles of Biology: Organisms	BI 102 BI 222	BI 102 BI 205 BI 222	Available online at OSU Available online at OSU
<b>Biology III</b> General Biology III with Lab Introduction to Biology III Principles of Biology: Populations	BI 103 BI 223	BI 103 BI 206 BI 223	Available online at OSU Available online at OSU
<b>Chemistry</b> General Chemistry I with Lab General Chemistry (Majors) I with Lab	CH 221	CH 121 CH 231 & 261	Available online at OSU Available online at OSU
<b>Climate Science</b> Climate Science Global Change Biology Climatology Intro to Climate Change		ATS 201 FW 345 GEOG 323 SUS 103	Available online at OSU Available online at OSU Available online at OSU
<b>Earth Science</b> The Solid Earth Physical Geology Earth Systems Science Environmental Geology Physical Geography	GS 106 G 201 G 202	GEO 101 GEO 201 GEO 202 GEO 221 GEOG 102	Available online at OSU Available online at OSU Available online at OSU
<b>Ecology</b> Marine Ecology General Ecology Plant Ecology Forest Ecology		BI 351 BI 370 BOT 341 FES 341	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Mathematics</b> Elementary Functions Calculus for Mgmt, Life, and Social Science Math for Mgmt, Life, and Social Science Differential Calculus	MTH 112	MTH 112 MTH 241 MTH 245 MTH 251	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Statistics</b> Principles of Statistics Intro to Statistical Methods	MTH 243	ST 201 ST 351	Available online at OSU Available online at OSU
<b>Animal ID</b> Terrestrial Vertebrate ID & Natural History Forest Entomology Systematics of Birds Systematics of Fishes Systematics of Mammals Biology of Insects Herpetology Aquatic Entomology		FOR 210 FES 412 FW 312 FW 316 FW 318 Z 365 Z 473 Z 477	Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Environ. Assessment &amp; Planning</b> Ecological Restoration Ecosystems Services Land Use Planning for Sust. Communities Land Use in the American West Planning Principles for Resilient Communities Sustainable Site Planning Scientific Methods for Analyzing NR Problems Wildland restoration and Ecology Habitat Analysis I Rangeland Management and Planning Sustainability Assessment Sustainable Communities Planning for Sustainable Recreation Planning for Sustainable Tourism		FES/FW 445 FW 462 GEOG 250 GEOG 450 GEOG 451 GEOG 452 NR 325 RNG 421 RNG 457 RNG 490 SUS 304 SUS 350 TRAL 456 TRAL 457	Available online at OSU Available online at OSU Available online at OSU Available online at OSU

NR Core Requirements (continued) <i>Complete one course per category</i>	TBCC Course	OSU Course	Notes
<b>Fish &amp; Marine Sciences</b> 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 Marine Fisheries 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 465 FW 473 FW 481 OC 201 OC 332	Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Forestry</b> 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	FOR 240	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 Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Land &amp; Water</b> 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 Desert Water Shed 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 355 RNG 455 SOIL 366 SOIL 388 SOIL 395 SOIL 466	Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Range</b> 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 Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Vegetation ID</b> Plant Systematics Agrostology Flora of the Pacific Northwest Dendrology Landscape Plant Materials I: Decid & Conifers Landscape Plant Materials II: Shrubs Wildland Plant Identification	FOR 241	BOT 321 BOT 414 BOT 425 FES 241 HORT 226 HORT 228 RNG 353	Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU

<b>NR Core Requirements</b> (continued) <i>Complete one course per category</i>	<b>TBCC Course</b>	<b>OSU Course</b>	<b>Notes</b>
<b>Wildlife Management</b> Principles of Fish & Wildlife Conservation Introductory Population Dynamics Applied Community and Ecosystem Ecology Wildlife in Agricultural Ecosystems Avian Conservation and Management Biodiversity Conservation in Managed Forests Mammal Conservation and Management Wildlife Ecology Animal Behavior	FW 251	FW 251 FW 320 FW 321 FW 435 FW 451 FES/FW 452 FW 458 FW 481 Z 350	Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Ethics &amp; Philosophy</b> Ecosystems Science of the PNW Indians Anthropology, Health, and the Environment Ecological Anthropology Natural Resources and Community Values Anthropology of International Development Multicultural Perspectives in NR Transforming Environmental Conflicts Environmental Justice Environmental History of the United States Critical Thinking for NR Challenges Nature in Storytelling over the Centuries Environmental Ethics World View and Environmental Values Sustainability, Justice & Engagement		AG 301 ANTH 352 ANTH 477 ANTH 481 ANTH 482 FW 340 GEOG 241 GEOG 330 HST 481 NR 312 NR 380 PHL 440 PHL/REL 443 SUS 331	Available online at OSU Available online at OSU Available online at OSU Available online at OSU  Available online at OSU Available online at OSU Available online at OSU Available online at OSU  Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Natural Resource Policy</b> Environmental Law Rural Development Economics & Policy Public Lands Policy & Management Forest Policy Natural Resources Policy and Law Fish & Wildlife Law and Policy Introduction to Ocean Law U.S. Energy Policy Environmental Politics and Policy International Environmental Politics & Policy		AEC 432 AEC 454 FES 486 FOR 460 FOR 462 FW 415 FW 422 PS 473 PS 475 PS 477	Available online at OSU Available online at OSU Available online at OSU  Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Political Issues</b> Plagues, Pests, and Politics Natural Resource Policy and Law Endangered Spec, Society and Sustainability When Science Escapes the Lab The Politics of Climate Change Environmental Politics and Policy Science and Politics International Environmental Politics & Policy Wilderness Management		ENT/HORT 300 FOR 462 FW 350 NR 351 PS 455 PS 475 PS 476 PS 477 TRAL 352	Available online at OSU  Available online at OSU  Available online at OSU Available online at OSU Available online at OSU Available online at OSU Available online at OSU
<b>Economics</b> Intro to Environmental Economics & Policy Intro to Microeconomics	EC 201	AEC 250 ECON 201	Available online at OSU Available online at OSU

<b>NR Core Requirements</b> (continued) <i>Complete one course per category</i>	<b>TBCC Course</b>	<b>OSU Course</b>	<b>Notes</b>
<b>Social Issues</b> Human Impacts on Ecosystems Human Ecology Issues in Natural Resource Conservation Global Crises in Resource Ecology Sustainability for the Common Good Climate Change, Water and Society Transforming Environmental Conflicts Resilience-Based Natural Resource Mgmt Global Resource Development When Science Escapes the Lab Oceans, Coasts & People Social Dimensions of Sustainability Rural Sociology Environmental Sociology Society and Natural Resources Social Dimensions of Sustainability Recreation Resource Management Outdoor Recreation on Public Lands Wilderness Management Nature, Eco, and Adventure Tourism Communities, Natural Areas, and Tourism Parks & Protected Areas Women and Natural Resources	FOR 251	BI 301 BI 348 FES 365 FW 325 GEOG 300 GEOG 240 GEOG 241 GEOG 430 GEOG 431 NR 351 OC 333 SOC 381 SOC 475 SOC 480 SOC 481 SUS 420 TRAL 251 TRAL 351 TRAL 352 TRAL 353 TRAL 354 TRAL 357 WGSS 440	Available online at OSU Available online at OSU Available online at OSU  Available online at OSU Available online at OSU  Available online at OSU Available online at OSU Available online at OSU Available online at OSU  Available online at OSU  Available online at OSU
<b>Spatial Analysis</b> Waived for Landscape Analysis students			

## Courses Required for Landscape Analysis Option

<b>Requirement</b> <i>Complete one course per category unless otherwise noted</i>	<b>TBCC Course</b>	<b>OSU Course</b>	<b>Notes</b>
<b>Measurements</b> Forest Surveying	FOR 222	FE 208	Available online at OSU
Foundations of Geospatial Science & GIS		GEOG 201	Available online at OSU
Civil Engr: Geospatial Info & GIS GIS & Forest Engineering Applications Geoscience I: GIS Systems & Theory	GEO 265	CE 202 FE 257 GEOG 360	Available online at OSU
Geo-visualization: Cartography		GEOG 370	Available online at OSU
Forestry Remote Sensing & Photogrammetry Remote Sensing I: Principles & Applications		FE 444 GEOG 380	Available online at OSU
<b>GIS Electives – choose two courses</b> GIS in Water Resources Precision Agriculture Internship Forest Photogrammetry & Remote Sensing Forest Route Surveying Unmanned Aircraft Systems Remote Sensing Forestry Remote Sensing & Photogrammetry Survey of Geographic Information Systems GIScience II: Analysis & Applications Geovisualization: Web Mapping Plan Prin and Pract for Resilient Communities GIScience III: Programming for Geo. Analysis GIScience IV: Spatial Modeling Geospatial Perspectives Geo-visualization: Geo-visual Analytics Remote Sensing II: Digital Image Processing Soil Landscape Analysis		CE 413 CROP/HORT 414 NR 410 FE 209 FE 310 FE 423 FE 444 FW 303 GEOG 361 GEOG 371 GEOG 451 GEOG 462 GEOG 463 GEOG 464 GEOG 472 GEOG 481 SOIL 468	Available online at OSU Available online at OSU  Available online at OSU Available online at OSU  Available online at OSU Available online at OSU  Available online at OSU
<b>NR Electives – 11-14 credits</b> Courses related to GIScience and NR			

## 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 TBCC courses that fulfill Bacc Core requirements: [admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-tillamook-bay-community-college](https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-tillamook-bay-community-college)

<b>SKILLS COURSES</b>	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 PE 295 @ TBCC
<b>PERSPECTIVE COURSES</b>	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
<b>DPD COURSE</b>	Difference, Power, & Discrimination	Can be completed as part of major: see advisor
<b>SYNTHESIS COURSES</b>	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 [visitosu.oregonstate.edu/visit-campus](https://visitosu.oregonstate.edu/visit-campus) to schedule your personalized visit.

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<b>OSU College of Forestry Prospective Student Advisor</b>	Autumn VanderLinden 541-737-9135 <a href="mailto:Autumn.VanderLinden@oregonstate.edu">Autumn.VanderLinden@oregonstate.edu</a>