TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At: CORVALLIS

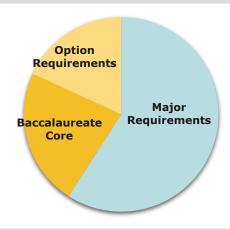
Tillamook Bay Community College

Natural Resources Major with Forest Ecosystems Option

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations. Students will understand the nature of forest ecosystems and the process by which they function.

Course work includes an understanding of the multiple resources and values associated with forest ecosystems and some of the techniques involved in managing them.

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 at forestry.oregonstate.edu/undergraduateprograms/natural-resources/forest-ecosystems

Courses Required for Natural Resources Major

NR Core Requirements Complete one course per category	TBCC Course	OSU Course	Notes
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
Advanced Communication Intro to Communication Theory Small Group Problem Solving Communication in Organizations Intercultural Communication Non-Verbal Communication Communication and Culture in Cyberspace Theories of Conflict and Conflict Management Bargaining and Negotiating Processes Forest as Classroom Effective Comm in Fish & Wildlife Sciences Critical thinking for NR Challenges Environmental Interpretation	COMM 215 COMM 140	COMM 321 COMM 322 COMM 324 COMM 326 COMM 328 COMM 385 COMM 440 COMM 442 FES 430 FW 489 NR 312 TRAL 493	Available online at OSU
Technical Writing Science Writing Environmental Writing Professional Writing	WR 227	WR 327 WR 362 WR 462 WR 466	Available online at OSU Available online at OSU
Biology I Introduction to Biology I Principles of Biology: Cells	BI 211	BI 204 BI 221	Available online at OSU



NR Core Requirements (continued)	TBCC Course	OSU Course	Notes
Complete one course per category Biology II			
Introduction to Biology II		BI 205	Available online at OSU
Principles of Biology: Organisms	BI 213	BI 222	Available offillie at 030
Biology III	DI 213	D1 222	
Introduction to Biology III		BI 206	Available online at OSU
Principles of Biology: Populations	BI 212	BI 223	Available offine at 050
Chemistry			
General Chemistry I with Lab		CH 121	Available online at OSU
General Chemistry (Majors) I with Lab	CH 221	CH 231 & 261	Available online at OSU
Climate Science			
Climate Science		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	0011 005	CSS 305	
Soil Science with Lab	SOIL 205	SOIL 205 & 206	
Soil Science with Forest Soils Lab	SOIL 205	SOIL 205 & FOR 206	
Ecology		DI 251	Aveilable entire et OCU
Marine Ecology		BI 351	Available online at OSU
General Ecology		BI 370 BOT 341	Available online at OSU Available online at OSU
Plant Ecology Mathematics		BO1 341	Available offille at USU
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	11111 241	MTH 245	Available online at OSU
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Statistics	11111 231	11111 231	7 (Valiable offinite at 050
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	A :1.11
Herpetology		Z 473	Available online at OSU
Aquatic Entomology		Z 477	
Environ. Assessment & Planning		EEC/EW 44E	Available online at OCU
Ecological Restoration		FES/FW 445 FW 462	Available online at OSU Available online at OSU
Ecosystems Services Land Use Planning for Sust. Communities		GEOG 250	Available online at OSU
Land Use in the American West		GEOG 250 GEOG 450	Available offille at 030
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 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 Tourism		TRAL 457	

NR Core Requirements (continued)	TBCC Course	OSU Course	Notes
Complete one course per category Fish & Marine Sciences			
Intro to Marine Biology		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	/aas.c cc at coc
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	FOR 240	FES 240	Available online at OSU
Forest Types of the Northwest		FES 342	Available online at OSU
Urban Forestry		FES/HORT 350	Available online at OSU
Ecological Restoration		FES/FW 445	Available online at OSU
Agroforestry		FES/NR 477	
Topics in Wildland Fire		FOR 346	Available online at OSU
Land & Water			
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		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	A silvid to self-result occur
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 SOIL 466	Available online at OSU
Soil Morphology and Classification Range		SOIL 466	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 351	Available online at OSU
Wildland Restoration and Ecology		RNG 332 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	FOR 241	FES 241	Available online at OSU
Landscape Plant Materials I: Decid & Conifers		HORT 226	Available online at OSU
Landscape Plant Materials II: Shrubs		HORT 228	Available online at OSU
Wildland Plant Identification		RNG 353	Available online at OSU
Wildlife Management	EW 254	EW 254	
Principles of Fish & Wildlife Conservation	FW 251	FW 251	Available online at OSU
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
Mammal Conservation and Management		FW 458	Available online at OSU
Wildlife Ecology	1	FW 481	Available online at OSU
Animal Behavior		Z 350	Available online at OSU

NR Core Requirements (continued)	TD00 0	0011.0	
Complete one course per category	TBCC Course	OSU Course	Notes
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	
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 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 350	Available online at OCH
Intro to Environmental Economics & Policy	EC 201	AEC 250	Available online at OSU Available online at OSU
Intro to Microeconomics Social Issues	EC 201	ECON 201	Available offillie at 050
0.0000000000000000000000000000000000000		BI 301	
Human Impacts on Ecosystems 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	Available offillie at 030
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	, tranable offinite at 050
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	. 51. 252	TRAL 351	anable offinite at 050
Wilderness Management		TRAL 351	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
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Requirement Complete one course per category unless otherwise noted	TBCC Course	OSU Course	Notes
Spatial Analysis Precision Agriculture GIS and Forest Engineering Applications Survey of Geographic Information Systems Foundations of Geospatial Science & GIS Geoscience I: GIS and Theory	GEO 265	CROP/HORT 414 FE 257 FW 303 GEOG 201 GEOG 360	Available online at OSU

Courses Required for Forest Ecosystems Option Requirement Complete one course per category unless **TBCC Course OSU Course** Notes otherwise noted Measurements Field Methods in Ecological Restoration BI 375 Field Methods in Plant Ecology **BOT 440** Available online at OSU FOR 321 Forest Mensuration FES 341 Available online at OSU Forest Ecology FES 412 Forest Entomology Wildland Fire Ecology Available online at OSU **FES 440** Biodiversity Conservation in Managed Forests FES/FW 452 Available online at OSU FOR 413 Forest Pathology Wildland Fire Science & Management FOR 436 Available online at OSU Silviculture Principles FOR 441 **Ecology Breath - choose two classes BOT 321** Plant Systematics **BOT 341** Plant Ecology Available online at OSU Flora of the Pacific Northwest **BOT 425** FE 434 Forest Watershed Management **Ecological Restoration** FES/FW 445 Available online at OSU Agroforestry FES/NR 477 Principles of Fish & Wildlife Conservation FW 251 FW 251 Available online at OSU FW 311 Available online at OSU Ornithology Ichthyology FW 315 Available online at OSU FW 317 Mammalogy Available online at OSU Introductory Population Dynamics FW 320 Available online at OSU Applied Community and Ecosystem Ecology FW 321 Available online at OSU FW 451 Available online at OSU Avian Conservation and Management FW 456 Freshwater Ecology and Conservation Available online at OSU Mammal Conservation and Management FW 458 Available online at OSU FW 473 Fish Ecology Wildlife Ecology FW 481 Available online at OSU Scientific Methods for Analyzing NR Problems NR 325 Available online at OSU Range Ecology I – Grasslands **RNG 351 RNG 352** Range Ecology II - Shrublands 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 Soil morphology and Classification **SOIL 466** Available online at OSU Biodiversity: Causes, Consequences, Conserv. Z 349 Available online at OSU Z 473 Available online at OSU Herpetology Technical Electives - choose one Forest Surveying FOR 222 FE 208 Available online at OSU Forest Photogrammetry & Remote Sensing FE 209 Harvesting Operations FE 370 Forestry Remote Sensing & Photogrammetry FE 444 **FES 447** Arboriculture Available online at OSU Available online at OSU Foundations of Geospatial Science & GIS GEOG 201 Geoscience I: GIS and Theory Available online at OSU **GEOG 360** Intro to Statistical Methods I ST 351 Available online at OSU

ST 352

Available online at OSU

Intro to Statistical Methods II

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: <u>admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-tillamook-bay-community-college</u>

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 PE 295 @ TBCC
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 visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

Tillamook Bay Community College	Megan Deane McKenna, Lead Faculty for Agriculture, Nat Resources, and Forestry Megan.deanemckenna@oregonstate.edu
OSU College of Forestry Prospective Student Advisor	Autumn VanderLinden 541-737-9135 Autumn.VanderLinden@oregonstate.edu