#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

#### Major Offered At:

CORVALLIS

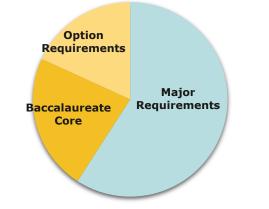
#### Clackamas Community College

#### Natural Resources Major with Integrated Conservation Analysis Option

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations. Learn to recognize, understand, analyze, and evaluate complex NR problems.

Students will contribute to finding solutions to critical issues by developing depth of knowledge in a disciplinary focus and working on cross-disciplinary teams. Learn about communicating findings effectively to diverse audiences.

### 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.
- <u>More info forestry.oregonstate.edu/undergraduate-</u> programs/natural-resources/integrated-conservationanalysis

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

NR Core Requirements	Clackamas Course	OSU Course	Notes
Complete one course per category	Clackanias course	050 200132	notes
Consensus and Natural Resources		FES 485	Available online at OSU
Managing Nat Res for the Future		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 BI 101		BI 101	Available online at OSU
Introduction to Biology I		BI 204	Available online at OSU
Principles of Biology: Cells	BI 211	BI 221	



<b>NR Core Requirements</b> (continued) <i>Complete one course per category</i>	Clackamas Course	OSU Course	Notes
Biology II			
General Biology II with Lab	BI 102	BI 102	Available online at OSU
Introduction to Biology II		BI 205	Available online at OSU
Principles of Biology: Organisms	BI 213	BI 222	
Biology III	51215		
General Biology III with Lab	BI 103	BI 103	Available online at OSU
Introduction to Biology III	DI 105	BI 206	Available online at OSU
	DI 212	BI 223	Available offinite at 050
Principles of Biology: Populations	BI 212	DI 223	
Chemistry		CU 121	Austikele enline et OCU
General Chemistry I with Lab	CH 221	CH 121	Available online at OSU
General Chemistry (Majors) I with Lab		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
Earth or Soil Science			
Soil Science		CSS 205	Available online at OSU
The Solid Earth	G 101	GEO 101	Available online at OSU
Physical Geology	G 201	GEO 201	
Earth Systems Science	G 202	GEO 202	
Environmental Geology		GEO 221	Available online at OSU
Physical Geography	G 102	GEOG 102	Available online at OSU
Soil Science with Lab		SOIL 205 & 206	
Soil Science with Forest Soils Lab		SOIL 205 & FOR 206	
Ecology		5012 205 01 01 200	
Marine Ecology		BI 351	Available online at OSU
General Ecology		BI 370	Available online at OSU
Plant Ecology		BOT 341	Available online at OSU
		FES 341	
Forest Ecology		FES 341	Available online at OSU
Mathematics	MTU 1107	MTU 1107	Ausilable enline at OCU
Elementary Functions	MTH 112Z	MTH 112Z	Available online at OSU
Calculus for Mgmt, Life, and Social Science		MTH 241	Available online at OSU
Math for Mgmt, Life, and Social Science		MTH 245	Available online at OSU
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Statistics			
Principles of Statistics	STAT 243Z	ST 243Z	Available online at OSU
Intro to Statistical Methods		ST 351	Available online at OSU
Animal ID			
CCC Course: Bird ID and Taxonomy	BI 160	BI LDT	
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	
Herpetology		Z 473	Available online at OSU
Aquatic Entomology		Z 473 Z 477	
Environ. Assessment & Planning		2 4//	
Agriculture & Environmental Predicaments		CROP/SOIL/SUS 325	
Ecological Restoration		FES/FW 445	Available online at OSU
Ecosystems Services		FW 462	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	
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
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	
Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU
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NR Core Requirements (continued)	Clackamas Course	OSU Course	Notes
Complete one course per category 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		BI 150 FW 302 BI 347 BI 351 FW 320 FW 323 FW 426 FW 454 FW 454 FW 473 FW 481 OC 201	Available online at OSU Available online at OSU
Coastal Oceanography		OC 332	
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/FW 452 FES/NR 477 FOR 346 FOR 441	Available online at OSU Available online at OSU
Land & Water			
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		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         Vegetation ID		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
CCC course: Plant Identification/winter Plant Systematics Agrostology Flora of the Pacific Northwest Mycology Dendrology Landscape Plant Materials I: Decid & Conifers Landscape Plant Materials II: Shrubs Wildland Plant Identification	HOR 227 HOR 226 HOR 228	HORT LDT BOT 321 BOT 414 BOT 425 BOT 461 FES 241 HORT 226 HORT 228 RNG 353	Available online at OSU Available online at OSU

<b>NR Core Requirements</b> (continued) Complete one course per category	Clackamas Course	OSU Course	Notes
Wildlife Management			
Principles of Fish & Wildlife Conservation		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
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		2 3 3 3 3	
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	Available online at 050
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
		HST 481	Available online at OSU
Environmental History of the United States Critical Thinking for NR Challenges		NR 312	Available offine at 050
Nature in Storytelling over the Centuries		_	Available enline at OCU
Environmental Ethics		NR 380 PHL 440	Available online at OSU 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	
Environmental Law		AEC 432	Available online at OSU
Public Lands Policy & Management		FES 486	Available online at OSU
Forest Policy		FOR 460	Available offinite at 050
Forest Policy Analysis		FOR 460	
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 Environmental Politics and Policy		PS 473 PS 475	Available online at OSU
International Environmental Policics & Policy		PS 475 PS 477	Available online at OSU Available online at OSU
Political Issues		PS 477	
		ENT/HORT 200	Available online at OSU
Plagues, Pests, and Politics Endangered Spec, Society and Sustainability		ENT/HORT 300 FW 350	Available online at OSU
When Science Escapes the Lab			Available offine at USU
		NR 351	Available enline at CCU
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		1.50.050	
Intro to Environmental Economics & Policy		AEC 250	Available online at OSU
Intro to Microeconomics	EC 201	ECON 201	Available online at OSU

<b>NR Core Requirements</b> (continued) Complete one course per category	Clackamas 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	Available offine at 050
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		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		FE 257	Available online at OSU
Survey of Geographic Information Systems		FW 303	Available online at OSU
Foundations of Geospatial Science & GIS GIS 201		GEOG 201	Available online at OSU
Geoscience I: GIS and Theory		GEOG 360	Available online at OSU

# **Courses Required for Integrated Conservation Analysis Option**

<b>Requirement</b> Complete one course per category	Clackamas Course	OSU Course	Notes
Scientific Methods for Analyzing NR Problems		NR 325	
Critical Thinking for NR Challenges		NR 312	
When Science Escapes the Lab		NR 351	
Resource Economics			
Natural Resources Economics & Policy		AEC 351	Available online at OSU
Intro to Coastal & Marine Resource Econ		AEC 353	Available online at OSU
Environmental Economics & Policy		AEC/ECON 352	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	
Disciplinary Focus – 22credits minimum			
Select an area of focus from Policy, Social			
Science/Human Dimensions, or an Ecological			
Discipline. Students are required to submit a			
plan for these courses, and it must be			
approved by NR Program Director.			

# 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 Clackamas courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-</u> equivalencies-clackamas-community-college

<u>equivalencies-clacka</u>	<u>mas-community-college</u>	
SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of major: MTH 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 @ Clackamas
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.

Clackamas Community College Advising	clackamas.edu/academics/academic-support/academic-advising-and-education-
clackallas commanity concyc Advising	planning
OSU College of Forestry	541-737-1594
Student Services Office	forestrystudentservices@oregonstate.edu