

TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

ECAMPUS

**Clackamas
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	Clackamas 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		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 Writing Technical Writing Science Writing Environmental Writing Professional Writing	WR 227	COMM 321 COMM 322 COMM 324 COMM 326 COMM 328 COMM 385 COMM 440 COMM 442 FES 430 FW 489 NR 312 TRAL 493 WR 327 WR 362 WR 462 WR 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
Biology I General Biology I with Lab Introduction to Biology I Principles of Biology: Cells	BI 101 BI 211	BI 101 BI 204 BI 221	Available online at OSU

NR Core Requirements (continued) <i>Complete one course per category</i>	Clackamas Course	OSU Course	Notes
Biology II General Biology II with Lab Introduction to Biology II Principles of Biology: Organisms	BI 102 BI 213	BI 102 BI 205 BI 222	Available online at OSU Available online at OSU
Biology III General Biology III with Lab Introduction to Biology III Principles of Biology: Populations	BI 103 BI 212	BI 103 BI 206 BI 223	Available online at OSU Available online at OSU
Chemistry General Chemistry I with Lab General Chemistry (Majors) I with Lab	CH 2221	CH 121 CH 231 & 261	Available online at OSU Available online at OSU
Climate Science 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
Earth Science The Solid Earth Physical Geology Earth Systems Science Environmental Geology Physical Geography	G 101 G 201 G 202 G 102	GEO 101 GEO 201 GEO 202 GEO 221 GEOG 102	Available online at OSU Available online at OSU Available online at OSU
Ecology 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
Mathematics 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
Statistics Principles of Statistics Intro to Statistical Methods	MTH 243	ST 201 ST 351	Available online at OSU Available online at OSU
Animal ID CCC Course: Bird ID and Taxonomy Terrestrial Vertebrate ID & Natural History Forest Entomology Systematics of Birds Systematics of Fishes Systematics of Mammals Biology of Insects Herpetology Aquatic Entomology	BI 160	BI LDT 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
Environ. Assessment & Planning 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 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

NR Core Requirements (continued) <i>Complete one course per category</i>	Clackamas Course	OSU Course	Notes
Wildlife Management 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 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
Ethics & Philosophy 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
Natural Resource Policy 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 Available online at OSU
Political Issues 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
Economics Intro to Environmental Economics & Policy Intro to Microeconomics	EC 201	AEC 250 ECON 201	Available online at OSU Available online at OSU

NR Core Requirements (continued) <i>Complete one course per category</i>	Clackamas Course	OSU Course	Notes
Social Issues 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		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
Spatial Analysis Precision Agriculture GIS and Forest Engineering Applications Survey of Geographic Information Systems		CROP/HORT 414 FE 257 FW 303	Available online at OSU Available online at OSU Available online at OSU

Courses Required for Landscape Analysis Option

Requirement <i>Complete one course per category unless otherwise noted</i>	Clackamas Course	OSU Course	Notes
Measurements Forest Surveying	ENGR 226 substitutes	FE 208	Available online at OSU
Foundations of Geospatial Science & GIS	GIS 201	GEOG 201	Available online at OSU
Geoscience I: GIS Systems & Theory		GEOG 360	Available online at OSU
GIS & Forest Engineering Applications		FE 257	Available online at OSU
Civil Engr: Geospatial Info & GIS		CE 202	
Geo-visualization: Cartography		GEOG 370	Available online at OSU
Forestry Remote Sensing & Photogrammetry		FE 444	
Remote Sensing I: Principles & Applications		GEOG 380	Available online at OSU
GIS Electives – 11-14 credits 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
Natural Resource Electives – 11-14 cr. <i>Courses related to GI Science and Natural Resources</i>			

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: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-clackamas-community-college

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 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-planning
OSU College of Forestry Prospective Student Advisor	Autumn VanderLinden 541-737-9135 Autumn.VanderLinden@oregonstate.edu