TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

ECAMPUS

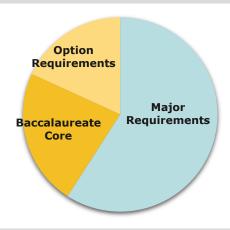
Chemeketa Community College

Natural Resources Major with Ecological Restoration Option

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations.

NR students completing this option will understand the complexities associated with restoration of terrestrial and aquatic ecosystems, and how restorative decisions involve significant interactions between ecological and social systems.

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>forestry.oregonstate.edu/undergraduate-</u> <u>programs/natural-resources/ecological-restoration</u>

Courses Required for Natural Resources Major

| NR Core Requirements Complete one course per category | Chemeketa Course | OSU Course | 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 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 | | AG 351 COMM 321 COMM 322 COMM 324 COMM 326 COMM 328 COMM 385 COMM 440 COMM 442 FES 430 | Available online at OSU Available online at OSU Available online at OSU |
| Forest as Classroom Effective Comm of Environmental Change Sci Critical thinking for NR Challenges Environmental Interpretation Science Writing Environmental Writing | | GEOG 453 NR 312 TRAL 493 WR 362 WR 462 | Available online at OSU Available online at OSU Available online at OSU |
| Biology I Introduction to Biology I Principles of Biology: Cells | BI 212 | BI 204 BI 221 | Available online at OSU |



| NR Core Requirements (continued) Complete one course per category | Chemeketa Course | OSU Course | Notes |
|---|------------------|--------------------|---------------------------|
| Biology II | | | |
| Introduction to Biology II | | BI 205 | Available online at OSU |
| Principles of Biology: Organisms | BI 211 | BI 222 | Available offinite at 350 |
| Biology III | | | |
| Introduction to Biology III | | BI 206 | Available online at OSU |
| Principles of Biology: Populations | BI 213 | BI 223 | Available offine at 050 |
| Chemistry | D1 213 | 51 223 | |
| General Chemistry I with Lab | CH 121 | CH 121 | Available online at OSU |
| General Chemistry (Majors) I with Lab | CH 122 | CH 231 & 261 | Available online at OSU |
| Climate Science | CITIZZ | C11 251 & 201 | Available offine at 656 |
| Climate Science | | ATS 201 | Available online at OSU |
| Global Change Biology | | FW 345 | Available offille at 030 |
| | | GEOG 323 | Available online at OSU |
| Climatology | | | |
| Intro to Climate Change | | SUS 103 | Available online at OSU |
| Soil Science | | CCC 20F | Available extins at OCU |
| Soil Science | COTI 205 | CSS 205 | Available online at OSU |
| Soil Science with Lab | SOIL 205 | SOIL 205 & 206 | |
| Soil Science with Forest Soils Lab | | SOIL 205 & FOR 206 | |
| Ecology | | | |
| Marine Ecology | | BI 351 | Available online at OSU |
| General Ecology | | BI 370 | Available online at OSU |
| Plant Ecology | | BOT 341 | Available online at OSU |
| Forest Ecology | | FES 341 | Available online at OSU |
| Mathematics | | | |
| Elementary Functions | MTH 112Z | MTH 112Z | 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 | | 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 | 3.771 2.132 | ST 351 | Available online at OSU |
| Animal ID | | 31 331 | Available offine at 050 |
| Terrestrial Vertebrate ID & Natural History | | FOR 210 | |
| Forest Entomology | | FES 412 | |
| | | FW 312 | Available online at OSU |
| Systematics of Birds | | | |
| Systematics of Fishes | | FW 316 | Available online at OSU |
| Systematics of Mammals | | FW 318 | Available online at OSU |
| Biology of Insects | | Z 365 | Available online at OCU |
| Herpetology | | Z 473 | Available online at OSU |
| Aquatic Entomology | | Z 477 | |
| Environ. Assessment & Planning | | CDOD/COT! /C::- | |
| 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 | The same at 350 |
| Planning for Sustainable Tourism | | TRAL 457 | |
| Scientific Methods for Analyzing NR Problems | | NR 325 | Available online at OSU |

| NR Core Requirements (continued) | Chemeketa Course | OSU Course | Notes |
|---|------------------|--------------|-------------------------|
| Complete one course per category | Salementa Course | 200 000.00 | |
| Fish & Marine Sciences | | | |
| Intro to Marine Biology | BI 143 | 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 |
| | | FW 426 | Available online at OSU |
| Coastal Ecology and Resource Management | | FW 454 | Available online at OSU |
| Fishery Biology | | | |
| Fish Ecology | | FW 473 | Available online at OSU |
| Wildlife Ecology | | FW 481 | Available online at OSU |
| Oceanography | GS 143 | OC 201 | Available online at OSU |
| Coastal Oceanography | | OC 332 | |
| Forestry | | | |
| International Forestry | | FE/FOR 456 | |
| Forest Biology | | FES 240 | Available online at OSU |
| Forest Ecology | | FES 341 | Available online at OSU |
| Forest Types of the Northwest | | FES 342 | Available online at OSU |
| Urban Forestry | | FES/HORT 350 | Available online at OSU |
| Wildland Fire Ecology | | FES 440 | Available online at OSU |
| | | FES/FW 445 | Available online at OSU |
| Ecological Restoration | | - / | |
| Biodiversity Conservation in Managed Forests | | FES/FW 452 | Available online at OSU |
| Agroforestry | | FES/NR 477 | |
| Topics in Wildland Fire | | FOR 346 | Available online at OSU |
| Silviculture Principles | | FOR 441 | |
| 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 | |
| International Water Resource Management | | GEOG 441 | 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 | Available online at OSU |
| Soil Morphology and Classification | | SOIL 466 | Available online at OSU |
| Range | | | |
| Wildland Fire Ecology | | FES 440 | 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 |
| | | | Available online at OSU |
| Range Ecology II – Shrub Lands | | RNG 352 | |
| Wildland Restoration and Ecology | | 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 | |
| Mycology | | BOT 461 | Available online at OSU |
| Dendrology | | FES 241 | Available online at OSU |
| Landscape Plant Materials I: Decid & Conifers | HOR 226 | HORT 226 | Available online at OSU |
| | | | |
| Landscape Plant Materials II: Shrubs | HOR 228 | HORT 228 | Available online at OSU |
| Wildland Plant Identification | | RNG 353 | Available online at OSU |

| NR Core Requirements (continued) | | | |
|---|------------------|--------------|--|
| Complete one course per category | Chemeketa 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 | | | |
| 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 | Available offilite at 030 |
| Environmental Law | | AEC 432 | Available online at OSU |
| | | | |
| Public Lands Policy & Management | | FES 486 | Available online at OSU |
| Forest Policy | | FOR 460 | |
| 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 477 | Available online at OSU |
| Political Issues | | | |
| 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 | |
| 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 | | | THE BOOK OF THE BO |
| Intro to Environmental Economics & Policy | | AEC 250 | Available online at OSU |
| Intro to Microeconomics | ECON 201 | ECON 201 | Available online at OSU |
| THE O TO PHE OCCOHOLING | LCON 201 | LCON ZUI | Available offille at 050 |

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

Courses Required for Ecological Restoration Option

| Requirement Complete one course per category unless | Chemeketa Course | OSU Course | Notes |
|---|------------------|-----------------------|--|
| otherwise noted | Chemeketa Course | OSO Course | Notes |
| Measurements | | | |
| Field Methods in Ecological Restoration | | BI 375 | |
| Field Methods in Plant Ecology | | BOT 440 | Available online at OSU |
| Scientific Methods for Analyzing NR Problems | | NR 325 | , wandsie omme de ooo |
| Rangeland Analysis | | RNG 441 | Available online at OSU |
| Resource Economics | | | 7.1.4.1.4.5.5 0.1.1.1.5 4.0 0.0 |
| Natural Resources Economics & Policy | | AEC 351 | Available online at OSU |
| Environmental Economics & Policy | | AEC/ECON 352 | Available online at OSU |
| Intro to Coastal & Marine Resource Econ | | AEC 353 | Available online at OSU |
| Rural Development Economics & Policy | | AEC 454 | |
| Forest Resource Economics I | | FOR 329 | |
| Economics & Policy of Wildland Fire | | FOR 431 | Available online at OSU |
| Plant Systematics | | BOT 321 | |
| Plant Ecology | | BOT 341 | Available online at OSU |
| General Chemistry II with Lab | CH 122 | CH 122 | Available online at OSU |
| General Chemistry II with Lab (for majors) | CH 222 | CH 232 & 262 | Available online at OSU |
| Ecological Restoration | | FES/FW 445 | Available online at OSU |
| Wetlands and Riparian Ecology | | FW 479 | Available online at OSU |
| Riparian Ecohydrology and Management | | RNG 455 | Available online at OSU |
| Land Use in the American West | | GEOG 450 | |
| Planning Prin & Pract for Resilient Community | | GEOG 451 | |
| Sustainable Site Planning | | GOEG 452 | Available online at OSU |
| Ecosystems of Wildland Soils | | SOIL 366 | Available online at OSU |
| Soil System and Plant Growth | | SOIL 388 | Available online at OSU |
| Soil Morphology and Classification | | SOIL 466 | Available online at OSU |
| Social & Ethical Considerations | | | |
| Urban Forestry | | FES/HORT 350 | Available online at OSU |
| Econ and Policy of Forest Wildland Fire | | FOR 431 | Available online at OSU |
| Critical Thinking for NR Challenges | | NR 312 | |
| Environmental Ethics | | PHL 440 | |
| World Views and Environmental Values | | PHL/REL 443 | Available online at OSU |
| Environmental Sociology | | SOC 480 | Available online at OSU |
| Society and Natural Resources | | SOC 481 | Available online at OSU |
| Sustainability, Justice, and Engagement | | SUS 331 | Available online at OSU |
| Ecological & NR Electives – choose two | | D7 054 | |
| Marine Ecology | | BI 351 | Available online at OSU |
| Environmental Physiology of plants | | BOT 488 | Aveilable and a strong to |
| Wildland Fire Ecology | | FES 440 | Available online at OSU |
| Wildland Fire Science & Management Biodiversity Cons in Managed Forests | | FOR 436 FES/FW 452 | Available online at OSU Available online at OSU |
| | | | Available online at USU |
| Silviculture Principles | | FOR 441 FW 320 | Available online at OCL |
| Introductory Population Dynamics | | FW 320 FW 426 | Available online at OSU Available online at OSU |
| Coastal Ecology and Resource Management | | FW 426 FW 451 | Available online at OSU |
| Avian Conservation and Management Fishery Biology | | FW 451 | Available online at OSU |
| Freshwater Ecology and Conservation | | FW 454 | Available online at OSU |
| Mammal Conservation and Management | | FW 458 | Available online at OSU |
| Fish Ecology | | FW 473 | Available online at OSU |
| Wildlife Ecology | | FW 473 | Available online at OSU |
| Rangeland Ecology and Management | | RNG 341 | Available online at OSU |
| Wildland Restoration and Ecology | | RNG 421 | Available online at OSU |
| Soil Landscape Analysis | | SOIL 468 | Available offille at 050 |
| | | 1 201L TUU | |
| Biodiversity: Causes, Consequences, Conserv | | 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 Chemeketa courses that fulfill Bacc Core requirements: <u>admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-chemeketa-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: WR 227Z Choose one course from Bacc Core link above HPE 295 @ Chemeketa |
|------------------------|--|---|
| 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 <u>visitosu.oregonstate.edu/visit-campus</u> to schedule your personalized visit.

| Chemeketa Community College | Joleen Schilling, Horticulture Faculty 503-399-5150 Joleen.schilling@chemeketa.edu |
|-----------------------------|--|
| OSU College of Forestry | 541-737-1594 |
| Student Services Office | forestrystudentservices@oregonstate.edu |