

# TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

ECAMPUS

**Clackamas  
Community College**

## Natural Resources Major with Urban Forest Landscapes Option

Natural Resources students are passionate about the world around them. They collaborate to preserve and protect the natural world for future generations. Urban Forest Landscapes students will understand the complexities surrounding the culture and

management of urban forest ecosystems. This includes examination of economic, social, and environmental benefits and values of trees in urban areas, and the relationship between people and trees.

## 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/undergraduate-programs/natural-resources/urban-forest-landscapes](http://forestry.oregonstate.edu/undergraduate-programs/natural-resources/urban-forest-landscapes)

## 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  |
| <b>Advanced Communication:</b><br>Communication in Global Agriculture<br>Intro to Communication Theory<br>Small Group Problem Solving<br>Communication in Organizations<br>Intercultural Communication<br>Non-Verbal Communication<br>Communication and Culture in Cyberspace<br>Theories of Conflict and Conflict Management<br>Bargaining and Negotiating Processes<br>Forest as Classroom<br>Effective Comm of Environmental Change Sci<br>Critical thinking for NR Challenges<br>Environmental Interpretation<br>Science Writing<br>Environmental Writing |                  | AG 351<br>COMM 321<br>COMM 322<br>COMM 324<br>COMM 326<br>COMM 328<br>COMM 385<br>COMM 440<br>COMM 442<br>FES 430<br>GEOG 453<br>NR 312<br>TRAL 493<br>WR 362<br>WR 462 | Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU |
| <b>Biology I</b><br>Introduction to Biology I<br>Principles of Biology: Cells   | BI 211           | BI 204<br>BI 221  | Available online at OSU  |

| <b>NR Core Requirements</b> (continued)<br><i>Complete one course per category</i>   | <b>Clackamas Course</b>              | <b>OSU Course</b>  | <b>Notes</b>  |
|--|--------------------------------------|--|---|
| <b>Biology II</b><br>Introduction to Biology II<br>Principles of Biology: Organisms  | BI 213                               | BI 205<br>BI 222   | Available online at OSU   |
| <b>Biology III</b><br>Introduction to Biology III<br>Principles of Biology: Populations  | BI 212                               | BI 206<br>BI 223   | Available online at OSU   |
| <b>Chemistry</b><br>General Chemistry I with Lab<br>General Chemistry (Majors) I with Lab  | CH 221                               | CH 121<br>CH 231 & 261   | Available online at OSU<br>Available online at OSU  |
| <b>Climate Science</b><br>Climate Science<br>Global Change Biology<br>Climatology<br>Intro to Climate Change   |                                      | ATS 201<br>FW 345<br>GEOG 323<br>SUS 103   | Available online at OSU<br>Available online at OSU<br>Available online at OSU   |
| <b>Earth or Soil Science</b><br>Soil Science<br>The Solid Earth<br>Physical Geology<br>Earth Systems Science<br>Environmental Geology<br>Physical Geography<br>Soil Science with Lab<br>Soil Science with Forest Soils Lab   | G 101<br>G 201<br>G 202<br><br>G 102 | CSS 205<br>GEO 101<br>GEO 201<br>GEO 202<br>GEO 221<br>GEOG 102<br>SOIL 205 & 206<br>SOIL 205 & FOR 206  | Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU  |
| <b>Ecology</b><br>Marine Ecology<br>General Ecology<br>Plant Ecology<br>Forest Ecology   |                                      | BI 351<br>BI 370<br>BOT 341<br>FES 341   | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |
| <b>Mathematics</b><br>Elementary Functions<br>Calculus for Mgmt, Life, and Social Science<br>Math for Mgmt, Life, and Social Science<br>Differential Calculus  | MTH 112Z<br><br>MTH 251              | MTH 112Z<br>MTH 241<br>MTH 245<br>MTH 251  | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |
| <b>Statistics</b><br>Principles of Statistics<br>Intro to Statistical Methods  | STAT 243Z                            | ST 243Z<br>ST 351  | Available online at OSU<br>Available online at OSU  |
| <b>Animal ID</b><br>CCC Course: Bird ID and Taxonomy<br>Terrestrial Vertebrate ID & Natural History<br>Forest Entomology<br>Systematics of Birds<br>Systematics of Fishes<br>Systematics of Mammals<br>Biology of Insects<br>Herpetology<br>Aquatic Entomology   | BI 160                               | BI LDT<br>FOR 210<br>FES 412<br>FW 312<br>FW 316<br>FW 318<br>Z 365<br>Z 473<br>Z 477  | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU  |
| <b>Environ. Assessment &amp; Planning</b><br>Agriculture & Environmental Predicaments<br>Ecological Restoration<br>Ecosystems Services<br>Land Use Planning for Sust. Communities<br>Land Use in the American West<br>Planning Principles for Resilient Communities<br>Sustainable Site Planning<br>Wildland restoration and Ecology<br>Habitat Analysis I<br>Rangeland Management and Planning<br>Sustainability Assessment<br>Sustainable Communities<br>Planning for Sustainable Recreation<br>Planning for Sustainable Tourism<br>Scientific Methods for Analyzing NR Problems |                                      | CROP/SOIL/SUS 325<br>FES/FW 445<br>FW 462<br>GEOG 250<br>GEOG 450<br>GEOG 451<br>GEOG 452<br>RNG 421<br>RNG 457<br>RNG 490<br>SUS 304<br>SUS 350<br>TRAL 456<br>TRAL 457<br>NR 325 | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU |

| <b>NR Core Requirements</b> (continued)<br><i>Complete one course per category</i>  | <b>Clackamas Course</b>                           | <b>OSU Course</b>  | <b>Notes</b>   |
|---|---|--|--|
| <b>Fish &amp; Marine Sciences</b><br>Intro to Marine Biology<br>Biology of Marine Mammals<br>Oceans in Peril<br>Marine Ecology<br>Intro to Population Dynamics<br>Mgmt Principles of Pacific Salmon in the NW<br>Coastal Ecology and Resource Management<br>Fishery Biology<br>Fish Ecology<br>Wildlife Ecology<br>Oceanography<br>Coastal Oceanography   |   | BI 150<br>FW 302<br>BI 347<br>BI 351<br>FW 320<br>FW 323<br>FW 426<br>FW 454<br>FW 473<br>FW 481<br>OC 201<br>OC 332   | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |
| <b>Forestry</b><br>International Forestry<br>Forest Biology<br>Forest Ecology<br>Forest Types of the Northwest<br>Wildland Fire Ecology<br>Ecological Restoration<br>Biodiversity Conservation in Managed Forests<br>Agroforestry<br>Topics in Wildland Fire<br>Silviculture Principles   |   | FE/FOR 456<br>FES 240<br>FES 341<br>FES 342<br>FES 440<br>FES/FW 445<br>FES/FW 452<br>FES/NR 477<br>FOR 346<br>FOR 441   | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU   |
| <b>Land &amp; Water</b><br>Watershed Processes<br>Forest Watershed Management<br>Integrated Watershed Management<br>Freshwater Ecology and Conservation<br>Wetlands and Riparian Ecology<br>Minerals, Energy, Water and the Environment<br>National Park Geology and Preservation<br>Global Change and Earth Sciences<br>Introduction to Water Science & Policy<br>Water Resources Management in the U.S.<br>International Water Resource Management<br>Riparian Ecohydrology and Management<br>Ecosystems of Wildland Soils<br>Soil Systems and Plant Growth<br>World Soil Resources<br>Soil Morphology and Classification |   | FE 430<br>FE 434<br>FW 326<br>FW 456<br>FW 479<br>GEO 306<br>GEO 307<br>GEO 308<br>GEOG 340<br>GEOG 440<br>GEOG 441<br>RNG 455<br>SOIL 366<br>SOIL 388<br>SOIL 395<br>SOIL 466 | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU |
| <b>Range</b><br>Wildland Fire Ecology<br>Topics in Wildland Fire<br>Rangeland Ecology and Management<br>Range Ecology I – Grasslands<br>Range Ecology II – Shrub Lands<br>Wildland Restoration and Ecology<br>Rangeland Analysis<br>Rangeland-Animal Relations<br>Rangeland Management and Planning   |   | FES 440<br>FOR 346<br>RNG 341<br>RNG 351<br>RNG 352<br>RNG 421<br>RNG 441<br>RNG 442<br>RNG 490  | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |
| <b>Vegetation ID</b><br>Clackamas Course: Plant Identification/Winter<br>Plant Systematics<br>Agrostology<br>Flora of the Pacific Northwest<br>Mycology<br>Dendrology<br>Landscape Plant Materials I: Decid & Conifers<br>Landscape Plant Materials II: Shrubs<br>Wildland Plant Identification   | HOR 227<br><br><br><br><br><br>HOR 226<br>HOR 228 | BOT 321<br>BOT 414<br>BOT 425<br>BOT 461<br>FES 241<br>HORT 226<br>HORT 228<br>RNG 353   | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |

| <b>NR Core Requirements</b> (continued)<br><i>Complete one course per category</i>   | <b>Clackamas Course</b> | <b>OSU Course</b>  | <b>Notes</b>   |
|--|-------------------------|--|--|
| <b>Wildlife Management</b><br>Principles of Fish & Wildlife Conservation<br>Introductory Population Dynamics<br>Applied Community and Ecosystem Ecology<br>Wildlife in Agricultural Ecosystems<br>Avian Conservation and Management<br>Biodiversity Conservation in Managed Forests<br>Mammal Conservation and Management<br>Wildlife Ecology<br>Animal Behavior   |                         | FW 251<br>FW 320<br>FW 321<br>FW 435<br>FW 451<br>FES/FW 452<br>FW 458<br>FW 481<br>Z 350  | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |
| <b>Ethics &amp; Philosophy</b><br>Ecosystems Science of the PNW Indians<br>Anthropology, Health, and the Environment<br>Ecological Anthropology<br>Natural Resources and Community Values<br>Anthropology of International Development<br>Multicultural Perspectives in NR<br>Transforming Environmental Conflicts<br>Environmental Justice<br>Environmental History of the United States<br>Critical Thinking for NR Challenges<br>Nature in Storytelling over the Centuries<br>Environmental Ethics<br>World View and Environmental Values<br>Sustainability, Justice & Engagement |                         | AG 301<br>ANTH 352<br>ANTH 477<br>ANTH 481<br>ANTH 482<br>FW 340<br>GEOG 241<br>GEOG 330<br>HST 481<br>NR 312<br>NR 380<br>PHL 440<br>PHL/REL 443<br>SUS 331 | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU |
| <b>Natural Resource Policy</b><br>Environmental Law<br>Public Lands Policy & Management<br>Forest Policy<br>Forest Policy Analysis<br>Fish & Wildlife Law and Policy<br>Introduction to Ocean Law<br>U.S. Energy Policy<br>Environmental Politics and Policy<br>International Environmental Politics & Policy  |                         | AEC 432<br>FES 486<br>FOR 460<br>FOR 461<br>FW 415<br>FW 422<br>PS 473<br>PS 475<br>PS 477   | Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU   |
| <b>Political Issues</b><br>Plagues, Pests, and Politics<br>Endangered Spec, Society and Sustainability<br>When Science Escapes the Lab<br>The Politics of Climate Change<br>Environmental Politics and Policy<br>Science and Politics<br>International Environmental Politics & Policy<br>Wilderness Management  |                         | ENT/HORT 300<br>FW 350<br>NR 351<br>PS 455<br>PS 475<br>PS 476<br>PS 477<br>TRAL 352   | Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |
| <b>Economics</b><br>Intro to Environmental Economics & Policy<br>Intro to Microeconomics   | EC 201                  | AEC 250<br>ECON 201  | Available online at OSU<br>Available online at OSU   |

| <b>NR Core Requirements</b> (continued)<br><i>Complete one course per category</i>   | <b>Clackamas Course</b> | <b>OSU Course</b>  | <b>Notes</b>   |
|--|-------------------------|--|--|
| <b>Social Issues</b><br>Human Impacts on Ecosystems<br>Human Ecology<br>Issues in Natural Resource Conservation<br>Global Crises in Resource Ecology<br>Sustainability for the Common Good<br>Climate Change, Water and Society<br>Transforming Environmental Conflicts<br>Resilience-Based Natural Resource Mgmt<br>Global Resource Development<br>When Science Escapes the Lab<br>Oceans, Coasts & People<br>Social Dimensions of Sustainability<br>Rural Sociology<br>Environmental Sociology<br>Society and Natural Resources<br>Social Dimensions of Sustainability<br>Recreation Resource Management<br>Outdoor Recreation on Public Lands<br>Wilderness Management<br>Nature, Eco, and Adventure Tourism<br>Communities, Natural Areas, and Tourism<br>Parks & Protected Areas<br>Women and Natural Resources |                         | BI 301<br>BI 348<br>FES 365<br>FW 325<br>GEOG 300<br>GEOG 240<br>GEOG 241<br>GEOG 430<br>GEOG 431<br>NR 351<br>OC 333<br>SOC 381<br>SOC 475<br>SOC 480<br>SOC 481<br>SUS 420<br>TRAL 251<br>TRAL 351<br>TRAL 352<br>TRAL 353<br>TRAL 354<br>TRAL 357<br>WGSS 440 | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU<br><br>Available online at OSU<br>Available online at OSU |
| <b>Spatial Analysis</b><br>Clackamas Course: Geographic Info Systems<br>Precision Agriculture<br>GIS and Forest Engineering Applications<br>Survey of Geographic Information Systems<br>Foundations of Geospatial Science & GIS<br>Geoscience I: GIS and Theory  | GIS 201                 | CROP/HORT 414<br>FE 257<br>FW 303<br>GEOG 201<br>GEOG 360  | Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU<br>Available online at OSU  |

## Courses Required for Urban Forest Landscapes Option

| <b>Requirement</b><br><i>Complete one course per category</i>                      | <b>Clackamas Course</b> | <b>OSU Course</b>                        | <b>Notes</b>                                       |
|--|-------------------------|--|--|
| <b>Measurements</b><br>Field Methods in Plant Ecology<br>GeogScience I: GIS Theory |                         | BOT 440<br>GEOG 360                      | Available online at OSU<br>Available online at OSU |
| Plant Ecology<br>Plant Pathology<br>Forest Entomology<br>Forest Pathology          |                         | BOT 341<br>BOT 451<br>FES 412<br>FOR 413 | Available online at OSU<br>Available online at OSU |
| Urban Forestry   |                         | FES/HORT 350                             | Available online at OSU                            |
| Ecological Restoration   |                         | FES/FW 445                               | Available online at OSU                            |
| Arboriculture  |                         | FES/HORT 447                             | Available online at OSU                            |
| Urban Forest Planning, Policy & Management   |                         | FES/HORT 455                             | Available online at OSU                            |
| Urban Ecology  |                         | FW 418                                   | Available online at OSU                            |
| Ecosystem Services   |                         | FW 462                                   | Available online at OSU                            |
| Sustainable Landscapes: Maintenance, Conservation, Restoration                     |                         | HORT 315                                 | Available online at OSU                            |
| Natural Resources and Community Values   |                         | ANTH 481                                 | Available online at OSU                            |
| Society and Natural Resources  |                         | SOC 481                                  | Available online at OSU                            |
| Environmental Law  |                         | AEC 432                                  | Available online at OSU                            |
| Forest Policy Analysis   |                         | FOR 461                                  |  |
| Environmental Politics and Policy  |                         | PS 475                                   | Available online at OSU                            |
| Plan. Prin. & Pract. For Resilient Communities                                     |                         | GEOG 451                                 | Available online at OSU                            |
| Sustainable Site Planning  |                         | GEOG 452                                 | 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 Clackamas courses that fulfill Bacc Core requirements: [admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-clackamas-community-college](https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-clackamas-community-college)

|                            |  |   |
|----------------------------|--|---|
| <b>SKILLS COURSES</b>      | Math<br>Writing I<br>Writing II<br>Speech (Writing III)<br>Fitness   | Completed as part of major: MTH 112Z or higher WR 121Z. Required to transfer.<br>Can be completed as part of major: see advisor<br>Choose one course from Bacc Core link above<br>HPE 295 @ Clackamas   |
| <b>PERSPECTIVE COURSES</b> | Biological Science<br>Physical Science<br>Additional Biological or Physical Science<br>Cultural Diversity<br>Literature and the Arts<br>Social Processes and Institutions<br>Western Culture | Completed as part of major: Biology I<br>Completed as part of major: Chemistry<br>Completed as part of major: Biology II<br>Choose one course from Bacc Core link above<br>Choose one course from Bacc Core link above<br>Completed as part of major: EC 201<br>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<br>Science, Technology, & Society   | Upper division course, take through OSU<br>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>Clackamas Community College Advising</b>            | <a href="https://clackamas.edu/academics/academic-support/academic-advising-and-education-planning">clackamas.edu/academics/academic-support/academic-advising-and-education-planning</a> |
| <b>OSU College of Forestry Student Services Office</b> | 541-737-1594<br><a href="mailto:forestrystudentservices@oregonstate.edu">forestrystudentservices@oregonstate.edu</a>  |