

TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

Major Offered At:

CORVALLIS

**Mt. Hood
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/undergraduate-programs/natural-resources/forest-ecosystems](http://forestry.oregonstate.edu/undergraduate-programs/natural-resources/forest-ecosystems)

Courses Required for Natural Resources Major

| NR Core Requirements | MHCC 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 | F 111 or NR 101 | 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 Forest as Classroom Effective Comm of Environmental Change Sci Critical thinking for NR Challenges Environmental Interpretation Science Writing Environmental Writing | | AG 351 COMM 321 COMM 322 COMM 324 COMM 326 COMM 328 COMM 385 COMM 440 COMM 442 FES 430 GEOG 453 NR 312 TRAL 493 WR 362 WR 462 | Available online at OSU Available online at OSU 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) <i>Complete one course per category</i> | MHCC Course | OSU Course | Notes |
|---|--------------------------------|--|---|
| Biology II Introduction to Biology II Principles of Biology: Organisms | BI 212 | BI 205 BI 222 | Available online at OSU |
| Biology III Introduction to Biology III Principles of Biology: Populations | BI 213 | BI 206 BI 223 | Available online at OSU |
| Chemistry General Chemistry I with Lab General Chemistry (Majors) I with Lab | CH 221 | 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 |
| Soil Science Soil Science Soil Science with Lab Soil Science with Forest Soils Lab | NR 140 NR 140 | CSS 205 SOIL 205 & 206 SOIL 205 & FOR 206 | Available online at OSU |
| Ecology Marine Ecology General Ecology Plant Ecology | | BI 351 BI 370 BOT 341 | 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 112Z MTH 241 MTH 251 | MTH 112Z 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 | STAT 243Z | ST 243Z ST 351 | Available online at OSU Available online at OSU |
| Animal ID MHCC Course: Forest Insects & Disease Terrestrial Vertebrate ID & Natural History Forest Entomology Systematics of Birds Systematics of Fishes Systematics of Mammals Biology of Insects Herpetology Aquatic Entomology | NR 144 | FES 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 MHCC Course: Intro to Public Land Mgmt. Agriculture & Environmental Predicaments Ecological Restoration Ecosystems Services Land Use Planning for Sust. Communities Land Use in the American West Planning Principles for Resilient Communities Sustainable Site Planning Wildland restoration and Ecology Habitat Analysis I Rangeland Management and Planning Sustainability Assessment Sustainable Communities Planning for Sustainable Recreation Planning for Sustainable Tourism Scientific Methods for Analyzing NR Problems | PS 217 | PS LDT CROP/SOIL/SUS 325 FES/FW 445 FW 462 GEOG 250 GEOG 450 GEOG 451 GEOG 452 RNG 421 RNG 457 RNG 490 SUS 304 SUS 350 TRAL 456 TRAL 457 NR 325 | 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 Available online at OSU Available online at OSU Available online at OSU |

| NR Core Requirements (continued) <i>Complete one course per category</i> | MHCC Course | OSU Course | Notes |
|--|---|---|--|
| 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 Coastal Oceanography | | BI 150 FW 302 BI 347 BI 351 FW 320 FW 323 FW 426 FW 454 FW 473 FW 481 OC 201 OC 332 | 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 |
| Forestry MHCC Course: Timber Harvesting MHCC Course: Applied Silviculture I MHCC Course: Applied Silviculture II MHCC Course: Forest Fire Mgmt & Ecol International Forestry Forest Biology Forest Types of the Northwest Urban Forestry Ecological Restoration Agroforestry Topics in Wildland Fire | FT 238 NR 244 FT 246 FT 160 F 240 or NR 230 | FOR LDT FOR LDT FOR LDT FOR LDT FE/FOR 456 FES 240 FES 342 FES/HORT 350 FES/FW 445 FES/NR 477 FOR 346 | 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 |
| Land & Water MHCC Course: Forest Water Resources 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 | NR 242 | FOR LDT 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 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 |
| Range 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 | | 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 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 |
| Vegetation ID Plant Systematics Agrostology Flora of the Pacific Northwest Mycology Dendrology Landscape Plant Materials I: Decid & Conifers Landscape Plant Materials II: Shrubs Wildland Plant Identification | F 141 | BOT 321 BOT 414 BOT 425 BOT 461 FES 241 HORT 226 HORT 228 RNG 353 | 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> | MHCC 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 Mammal Conservation and Management Wildlife Ecology Animal Behavior | FW 251 | FW 251 FW 320 FW 321 FW 435 FW 451 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 |
| 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 Available online at OSU |
| Natural Resource Policy Environmental Law Public Lands Policy & Management Forest Policy Forest Policy Analysis Fish & Wildlife Law and Policy Introduction to Ocean Law U.S. Energy Policy Environmental Politics and Policy International Environmental Politics & Policy | | AEC 432 FES 486 FOR 460 FOR 461 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 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 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 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 |

Courses Required for Forest Ecosystems Option

| <i>Complete one course per category unless otherwise noted</i> | MHCC Course | OSU Course | Notes |
|--|--------------------|------------------------------|-------------------------|
| Measurements Field Methods in Ecological Restoration Field Methods in Plant Ecology Forest Mensuration | | BI 375 BOT 440 FOR 321 | Available online at OSU |
| Forest Ecology | | FES 341 | Available online at OSU |
| Forest Entomology | | FES 412 | |
| Wildland Fire Ecology | | FES 440 | Available online at OSU |
| Biodiversity Conservation in Managed Forests | | FES/FW 452 | Available online at OSU |
| Forest Pathology | | FOR 413 | |
| Wildland Fire Science & Management | | FOR 436 | Available online at OSU |
| Silviculture Principles | | FOR 441 | |
| Ecology Breath – choose two classes | | | |
| Plant Systematics | | BOT 321 | Available online at OSU |
| Plant Ecology | | BOT 341 | Available online at OSU |
| Flora of the Pacific Northwest | | BOT 425 | |
| Forest Watershed Management | | FE 434 | |
| Ecological Restoration | | FES/FW 445 | Available online at OSU |
| Agroforestry | | FES/NR 477 | |
| Principles of Fish & Wildlife Conservation | | FW 251 | Available online at OSU |
| Ornithology | | FW 311 | Available online at OSU |
| Ichthyology | | FW 315 | Available online at OSU |
| Mammalogy | | FW 317 | Available online at OSU |
| Introductory Population Dynamics | | FW 320 | Available online at OSU |
| Applied Community and Ecosystem Ecology | | FW 321 | Available online at OSU |
| Avian Conservation and Management | | FW 451 | Available online at OSU |
| Freshwater Ecology and Conservation | | FW 456 | Available online at OSU |
| Mammal Conservation and Management | | FW 458 | Available online at OSU |
| Fish Ecology | | FW 473 | |
| 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 | Available online at OSU |
| Range Ecology II – Shrublands | | RNG 352 | 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 |
| Herpetology | | Z 473 | Available online at OSU |
| Technical Electives | | | |
| Forest Surveying | F 200 | FE 208 | Available online at OSU |
| Forest Photogrammetry & Remote Sensing | FT 221 | FE 209 | |
| GIS & Forest Engineering Applications | | FE 257 | Available online at OSU |
| Harvesting Operations | | FE 370 | |
| Forestry Remote Sensing & Photogrammetry | | FE 444 | |
| Arboriculture | | FES 447 | 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 |
| Intro to Statistical Methods I | | ST 351 | Available online at OSU |
| Intro to Statistical Methods II | | ST 352 | 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 MHCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-mount-hood-community-college

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|----------------------------|--|---|
| 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 @ MHCC |
| 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.

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| Mt. Hood Community College | Jason Pinkerton, Biology/Natural Resources Instructor 503-791-5941 Jason.pinkerton@mhcc.edu |
| OSU College of Forestry Student Services Office | 541-737-1594 forestrystudentservices@oregonstate.edu |