#### TRANSFER GUIDE FOR OREGON STATE UNIVERSITY

**Major Offered At:** 

CORVALLIS

**ECAMPUS** 

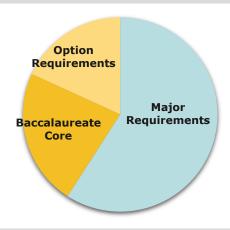
## Mt. Hood Community College

#### **Natural Resources Major with Wildland Fire Ecology 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 will help students understand the nature of fire in wildland ecosystems. It includes an understanding of the dynamics of fire behavior and post-fire response.

### 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/undergraduateprograms/natural-resources/wildland-fire-ecology

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

NR Core Requirements Complete one course per category	MHCC Course	OSU Course	Notes
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		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  Available online at OSU
Effective Comm of Environmental Change Sci Critical thinking for NR Challenges Environmental Interpretation Science Writing Environmental Writing  Biology I Introduction to Biology I		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
Principles of Biology: Cells	BI 211	BI 221	Available offilifie de 050



NR Core Requirements (continued) Complete one course per category	MHCC Course	OSU Course	Notes
Biology II			
Introduction to Biology II		BI 205	Available online at OSU
Principles of Biology: Organisms	BI 212	BI 222	
Biology III			
Introduction to Biology III		BI 206	Available online at OSU
Principles of Biology: Populations	BI 213	BI 223	
Chemistry			
General Chemistry I with Lab		CH 121	Available online at OSU
General Chemistry (Majors) I with Lab	CH 221	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		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		GEOG 102	Available online at OSU
Soil Science with Lab	NR 140	SOIL 205 & 206	
Soil Science with Forest Soils Lab	NR 140	SOIL 205 & FOR 206	
Ecology			
General Ecology		BI 370	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		ST 351	Available online at OSU
Animal ID			
MHCC Course: Forest Insects & Disease	NR 144	FES 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 477	
Environ. Assessment & Planning	DC 217	DC LDT	
MHCC Course: Intro to Public Land Mgmt.	PS 217	PS LDT	
Agriculture & Environmental Predicaments		CROP/SOIL/SUS 325	Available enline at OCH
Ecological Restoration		FES/FW 445	Available online at OSU
Ecosystems Services		FW 462	Available online at OSU
Land Use Planning for Sust. Communities		GEOG 450	Available online at OSU
Land Use in the American West		GEOG 450	Available online at OCL
Planning Principles for Resilient Communities		GEOG 451 GEOG 452	Available online at OSU  Available online at OSU
Sustainable Site Planning Wildland restoration and Ecology		RNG 421	Available online at OSU  Available online at OSU
Wildland restoration and Ecology			Available online at OSU  Available online at OSU
Habitat Analysis I		RNG 457	
Rangeland Management and Planning		RNG 490	Available online at OSU
Sustainability Assessment		SUS 304	Available online at OSU
Sustainable Communities  Planning for Sustainable Regrestion		SUS 350	Available online at OSU
Planning for Sustainable Recreation		TRAL 456 TRAL 457	
Planning for Sustainable Tourism Scientific Methods for Analyzing NR Problems		NR 325	Available online at OSU
Scientific Methods for Analyzing NK Problems		INK JZJ	Available utilitle at USU

NR Core Requirements (continued) Complete one course per category	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
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 Ecology Forest Types of the Northwest Urban Forestry Ecological Restoration Biodiversity Conservation in Managed Forests Agroforestry Topics in Wildland Fire Silviculture Principles	FT 238 FT 244 FT 246 FT 160 F 240 or NR 230	FE/FOR 456 FES 240 FES 341 FES 342 FES/HORT 350 FES/FW 445 FES/FW 452 FES/NR 477 FOR 346 FOR 441	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
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
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

NR Core Requirements (continued) Complete one course per category	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 Biodiversity Conservation in Managed Forests Mammal Conservation and Management Wildlife Ecology Animal Behavior	FW 251	FW 251 FW 320 FW 321 FW 435 FW 451 FES/FW 452 FW 458 FW 481 Z 350	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
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 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		AEC 432 FES 486 FOR 460 FOR 461 FW 415 FW 422 PS 473 PS 475 PS 477 ENT/HORT 300 FW 350 NR 351 PS 455 PS 475	Available online at OSU
Science and Politics International Environmental Politics & Policy Wilderness Management  Economics Intro to Environmental Economics & Policy Intro to Microeconomics	EC 201	PS 476 PS 477 TRAL 352 AEC 250 ECON 201	Available online at OSU Available online at OSU Available online at OSU  Available online at OSU Available online at OSU

NR Core Requirements (continued) Complete one course per category	MHCC 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	FT 235	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	FT 228	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 Wildland Fire Ecology Option**

Requirement	MUCC Courses	OSU Course	Notes
Complete one course per category unless otherwise noted	MHCC Course	OSO Course	Notes
Measurements			
Field Methods in Plant Ecology		BOT 440	Available online at OSU
Field Sampling of Fish & Wildlife		FW 255	Available online at OSU
Geoscience I: GIS & Theory		GEOG 360	Available online at OSU
Wildland Fire Ecology		FES 440	Available online at OSU
Ecological Restoration		FES/FW 445	Available online at OSU
Wildland Restoration and Ecology		RNG 421	Available online at OSU
Economics and Policy of Forest Wildland Fire		FOR 431	Available online at OSU
Wildland Fire Science and Management		FOR 436	Available online at OSU
Ecological & NR Elect: Choose 20-21 cr:			
Plant Ecology		BOT 341	Available online at OSU
Forest Pathology		BOT/FOR 413	
Agrostology		BOT 414	
Flora of the Pacific Northwest		BOT 425	
Weed Management		CROP 440	Available online at OSU
Forest Surveying	F 200	FE 208	Available online at OSU
Forest Watershed Management		FE 434	
Forest Ecology		FES 341	Available online at OSU
Forest Types of the Northwest		FES 342	Available online at OSU
Forest Entomology		FES 412	
Biodiversity Conservation in Managed Forests		FES/FW 452	Available online at OSU
Topics in Wildland Fire		FOR 346	Available online at OSU
Economics and Policy of Forest Wildland Fire		FOR 431	Available online at OSU
Silviculture Principles		FOR 441	
Applied Community and Ecosystem Ecology		FW 321	Available online at OSU
Avian Conservation & 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
Wetlands and Riparian Ecology		FW 479 FW 481	Available online at OSU  Available online at OSU
Wildlife Ecology Scientific Methods for Applyzing NR Problems		NR 325	Available online at OSU  Available online at OSU
Scientific Methods for Analyzing NR Problems		SOIL 366	Available online at OSU
Ecosystems of Wildland Soils Soil Systems and Plant Growth		SOIL 388	Available online at OSU
Soil Morphology and Classification		SOIL 366	Available online at OSU
Juli Murphulugy and Classification		301L 400	Available utilitie at USU

#### 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: <u>admissions.oregonstate.edu/baccalaureate-core-course-</u>

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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 <u>visitosu.oregonstate.edu/visit-campus</u> to schedule your personalized visit.

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