

ENVIRONMENTAL SCIENCE AND RESOURCE MANAGEMENT MAJOR

BS IN FOREST RESOURCES

COURSE	CR	TITLE and notes	EXPECTED QTR OFFERED
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WRITING (8 CREDITS)

___ ENGL COMP *	(5)	Any Composition Course _____	A/W/Sp/S
___ HCDE 231	(3)	Technical Writing <i>prereq Composition</i>	A/W/Sp/S

VISUAL, LITERARY & PERFORMING ARTS/INDIVIDUAL & SOCIETIES (15 CREDITS)

___ COM 202 or 220 *	(5)	Communication Theory/Public Speaking	A/W/Sp/S
___ ANY VLPA *	(5)	Any UW VLPA Course _____	A/W/Sp/S
___ Economics *	(5)	ENVIR/ECON 235 or ECON 200 or ECON 201	varies

QUANTITATIVE & SYMBOLIC REASONING (20 CREDITS)

___ QSCI 291 ¹ *	(5)	Analysis for Biologists I <i>prereq Math 120 *</i>	A/W/S
___ QSCI 292 ¹ *	(5)	Analysis for Biologists II <i>prereq QSCI 291</i>	W/Sp/S
___ QSCI 381 ²	(5)	Intro to Probability/Statistics <i>prereq Math 120</i>	A/W/Sp/S
___ ESRM 250	(5)	Introduction to Geographic Info. Sys.	A/W/Sp

NATURAL WORLD (24-25 CREDITS)

___ BIOL 180 ³	(5)	General Biology I	A/W/SP/S
___ BIOL 200 ⁴	(5)	General Biology II <i>prereq BIOL 180, CHEM 152 or 220</i>	A/W/SP/S
___ CHEM 120 ⁵ *	(5)	Principles of Chemistry I	A/S
___ CHEM 220 ⁵ *	(5)	Principles of Chemistry II <i>prereq CHEM 120 or 142</i>	W
___ Earth Science *	(4-5)	Choose one: ESRM 210, ESS 210, ESS/OCEAN 230 (5 crs), ESS 201 or ATM S 211	varies

CORE COURSES (27 CREDITS) MAY BE TAKEN IN ANY ORDER

___ ESRM 200 *	(5)	Society and Sustainable Environments	SP (W)
___ ESRM 201 *	(5)	Sustainable Pacific NW Ecosystems	A
___ ESRM 300	(2)	Principles of Sustainability	W
___ ESRM 304	(5)	Environmental/Resource Assess. <i>Prereq QSCI 381</i>	A/SP
___ Capstone	(10 crs)	Choose one: ESRM 494 & 495 or ESRM 494 & 496 or ESRM 462-464	

UPPER-LEVEL RESTRICTED ELECTIVES FROM CFR, ESRM & PSE (35 CREDITS): (QSCI BY PETITION)

Available transcripted options: Landscape Ecology and Conservation, Wildlife Conservation, Sustainable Forest Management, Restoration Ecology and Environmental Horticulture. Students may opt to self-select 35 upper-level ESRM credits instead of an option.

400 level Courses (min. 15 credits) Cr. 300 or 400 level courses (max 20 crs) Cr.

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_____	_____	_____	_____
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_____	_____	_____	_____

FREE ELECTIVES (51+ TO TOTAL 180 CREDITS FOR DEGREE) Student Choice

¹Or MATH 124 & 125. ²Or STAT 311. ³Former BIOL 161 ok. ⁴Or BIOL 200 or former ESRM/BIOL 162 ok. ⁵Or CHEM 142 & 152.

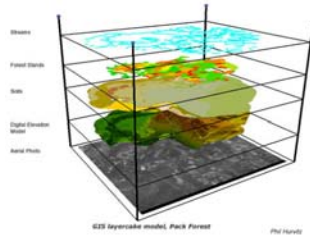
* Encouraged during the freshman and sophomore year.

ESRM MAJOR PROGRAM OPTIONS

~ a transcribed option for students following a specific path within the major (optional) ~

Landscape Ecology and Conservation

Landscape ecology is an integrated approach to studying the interaction of physical, biological, and social processes on ecological systems at a wide range of spatial scales. The Landscape Ecology and Conservation option focuses on applied aspects of landscape ecology that create, sustain, and alter landscapes to achieve biological diversity and integrity as well as social purposes. 36 credits total.



All Required: ESRM 350 Wildlife Biology, ESRM 425 Ecosystem Management, ESRM 427 Integrated Mgmt of Forest Landscapes, ESRM 430 Hi-Res Remote Sensing, ESRM 441 Landscape Ecology, ESRM 465 Economics of Conservation, ESRM 470 Natural Resource Policy and Planning, and Q SCI 482 Stat Inference in Applied Research I.

Sustainable Forest Management



Students acquire the knowledge and skills to measure and assess natural resources in order to understand the ecology of forest systems; manage for environmental services; treat forest fuels; achieve sustainable harvest; market and sell forest products; and understand how social, economic, and ecologic forces impact the management of forests and their resources. 35 credits minimum.

All Required: ESRM 323 Silviculture, ESRM 368 Natural Resource Measurements, ESRM 430 Hi-Res Remote Sensing, ESRM 461 Forest Mgmt and Economics, and ESRM 470 Natural Resource Policy/Planning.

Choose one of the following: ESRM 328 Forest/Fish, ESRM 350 Wildlife Biology and Conservation, ESRM 409 Soil Ecology, ESRM 410 Forest Soils and Site Productivity, ESRM 414 Forest Soil Fertility and Chemistry, ESRM 425 Ecosystem Management, ESRM 426 Wildland Hydrology, or ESRM 428 Principles of Silviculture/Applications.

Choose one of the following: ESRM 315 Old Growth/Forest Mgmt, ESRM 381 Mgmt of Wildland Recreation and Amenities, ESRM 420 Wildland Fire Mgmt, ESRM 425 Ecosystem Management, ESRM 435 Forest Entomology, ESRM 444 Forest Ecosystem Protection, ESRM 468 Forest Operations, or ESRM 490 (section by approval).

Choose one of the following: ESRM 320 Marketing and Management, ESRM 321 Finance and Accounting, ESRM 400 Natural Resource Conflict Mgmt, ESRM 403 Forest and Economic Development, ESRM 427 Integrated Mgmt/Forest Landscapes, or ESRM 465 Economics of Conservation.



Restoration Ecology and Environmental Horticulture

Restoration Ecology and Environmental Horticulture students learn and apply fundamental concepts of biology, plant science, and ecology. This disciplinary knowledge, supporting coursework, and experience allow students to become accomplished in the productions of plant material, the practice of sustainable landscaping, repairing damaged ecosystems, and contributing to other large interdisciplinary projects. 36 credits minimum.

All Required: ESRM 331 Landscape Plant Recognition, ESRM 362 Intro to Restoration Ecology, ESRM 473 Ecosystem-based Restoration Ecology or ESRM 479 Restoration Design, ESRM 478 Plant Eco-physiology, and ESRM 480 Landscape Plant Science/Sustainable Mgmt.



At least two from: ESRM 411 Plant Propagation, ESRM 412 Native Plant Production, ESRM 444 Forest Ecosystem Protection, or ESRM 451 Urban Plant Protection.

Wildlife Conservation

Wildlife conservation is the science and art of managing animals populations and their related resources. This option offers coursework in wildlife ecology, quantitative science, and the social and political aspects of wildlife conservation issues. Students can expect hands-on field experiences including: how to identify, capture, and handle animals, and how to assess, map, and plan wildlife habitats. Instruction on writing technical reports and scientific papers, as well as presentation of findings and implementation of wildlife conservation plans will be expected. 35 credits total.

All Required: ESRM 350 Wildlife Biology and Conservation, ESRM 351 Wildlife Research Techniques, ESRM 441 Landscape Ecology, ESRM 450 Wildlife Ecology and Conservation, ESRM 455 Wildlife Seminar (take twice), ESRM 458 Mgmt of Endangered/Threatened Species, and Q SCI 482 Stat Inference in Applied Research I.

Admission

ESRM is an open major and can be declared by current students and UW applicants at any time

Prospective UW students

www.admit.washington.edu

Program/study options

Research, internships, honors, study abroad, scholarships, and graduate study for qualified applicants

Career/job information

www.cfr.washington.edu/Acad/careers.htm

<http://mailman.u.washington.edu/mailman/listinfo/cfrjoblist>

UNIVERSITY of WASHINGTON

School of Forest Resources

Office of Student and Academic Services
Anderson Hall Rooms 116/130
cfradv@u.washington.edu ~ 206-543-3077
www.cfr.washington.edu