Portland State University

Environmental Science & Management Department

Forest Ecology and Management Certificate

The department is currently not accepting applications to this certificate

Forest management requires a consideration of the ecological, social, and policy context of Oregon's forests, including urban forests. This certificate is designed to provide the academic background required for understanding and managing forests beyond traditional industrial forestry needs. Students who complete the certificate will be prepared to take active roles in and contribute to management of Oregon's forests.

This is a rigorous certificate that will require eight 400-level courses. The courses are split between forest ecology, watershed functioning, management, and policy areas. Although any student could earn the certificate, they will have to have had many pre-requisites (or equivalent preparation) in Environmental Science & Management or Geography.

Certificate requirements

Electives (Choose 4)

BI 471	Plant Ecology	4
<u>BP 476</u>	Population Ecology	5
ESM 427	Watershed Biogeochemistry	4
ESM 435	Natural Resource Policy and Management	4
ESM 445	Old-growth Forest Ecology	4
ESM 465	Investigating Ecological and Social Issues in Urban Parks and	4
	Natural Areas	
<u>GEOG 413</u>	Biogeography of Pacific Northwest	4
<u>GEOG 415</u>	Soils and Land Use	4
<u>GEOG 448</u>	The Urban Forest	4
	Total Credit Hours:	16

Core Courses

ESM 407	Forest Ecology and Management Seminar
	ESM/GEOG/G 407: School of the Environment Speaker
	Series will fulfill this requirement.

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ESM 418/GEOG 418 Landscape Ecology		4
ESM 425	Watershed Hydrology	4
ESM 444	Forest Ecology	4
	Total Credit Hours:	13

Students must take required courses for a differentiated grade and earn a C-or better for it to count toward the certificate (except that a P is acceptable for the <u>ESM 407</u> only).

TOTAL CREDIT HOURS: 29