



Sustainable Forest Management Option

in the Environmental Science and Terrestrial Resource Management major

<http://www.sefs.uw.edu/academicprograms/undergrad/esrm/SMFoption.pdf>

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.

Required Option Courses (minimum 35 credits)

ESRM 323 (5) Silviculture
ESRM 331 (3) Landscape Plant Recognition
ESRM 368 (4) Natural Resource Measurements
ESRM 430 (5) Hi-Res Remote Sensing
ESRM 461 (5) Forest Management and Economics
ESRM 470 (5) Natural Resource Policy and Planning

Choose one from each topic area:

Forest Ecology and Biology:

ESRM 350 (5) Wildlife Biology and Conservation
ESRM 409 (5) Soil Ecology
ESRM 410 (5) Forest Soils and Site Productivity
ESRM 414 (3) Forest Soil Fertility and Chemistry
*ESRM 426 (4) Wildland Hydrology

Forest Resource Management:

ESRM 315 (5) Old Growth and Forest Management
ESRM 381 (3) Management of Wildland Recreation and Amenities
ESRM 420 (5) Wildland Fire Management
ESRM 425 (5) Ecosystem Management
ESRM 428 (5) Principles of Silviculture/Applications
ESRM 435 (3) Forest Entomology
*ESRM 468 (5) Forest Operations

Forest Resource Policy, Economics, and Admin.:

ESRM 320 (5) Marketing and Human Resources
ESRM 321 (5) Finance and Accounting
*ESRM 400 (3) Natural Resource Conflict Mgmt
ESRM 403 (4) Forest and Economic Development
ESRM 465 (3) Economics of Conservation

*Strongly Recommended

Recommended Capstone Experience

To fulfill the 10 credit major capstone requirement, students are strongly encouraged to select the Proposal (ESRM 494), then either the Senior Thesis (ESRM 496) or Senior Project (ESRM 495). The award-winning UW-REN Restoration Ecology Capstone (ESRM 462-464) is also available. Capstone projects can be designed to provide experience in developing a forest management plan to meet forestland parcel objectives. Requirements include a project proposal, data collection or project implementation, analysis of data/project, final written report of findings/project, and an oral presentation.

Career Opportunities and Graduate Study

Career possibilities include positions responsible for forest stand examination, stream sampling, amphibian and/or bird surveys as they relate to Habitat Conservation Plans, silviculture prescription writing, riparian management zone (stream buffer) layout, timber "cruising," timber sale layout, and harvest setting layout.

Completion of the option, with appropriate selection of restricted and/or free electives, allows students to apply for the Society of American Foresters Candidate Certified Forester (CCF) title. An SAF committee reviews each applicant's educational record to determine eligibility.

Students may choose to apply to the Master of Forest Resources (MFR) degree, accredited by the Society of American Foresters, following their ESRM undergraduate major. The MFR is a non-thesis professional master's degree that can be completed in just one additional year if the Sustainable Forest Management option is completed. This advanced degree can provide additional experience for those desiring more in-depth knowledge of the field and for those inclined toward leadership roles in their careers.

SEFS Faculty: Eric Turnblom (lead), Greg Ettl, Jerry Franklin, Rob Harrison, L. Monika Moskal, Dorothy Paun, Clare Ryan, and Sandor Toth