

Natural Resources

Natural Resources Degrees and Certificates

- Natural Resources
- Pathway Natural Resources - DTA

Natural Resources Classes

ENVS 170: Introduction to Stream Ecology

Introductory course covering integrative principles of rivers and streams including biological, chemical, ecological, and physical processes. Students will gain an appreciation of streams as constantly evolving ecosystems as well as skills to scientifically analyze data related to river and stream management. Conservation, restoration, policy, and environmental-justice issues are also covered.

Credits 5

Weekly Contact Hours 6

Meets Degree Requirements For

Natural Science with Lab

ENVS 230: Intro to Fisheries Science and Management

An overview of fisheries science and management. Topics explored include careers available in fish management and propagation, identification of important northwest fishes, and an introduction to the lesser known and more interesting aspects of fish biology and behavior. Field trips will incorporate standard sampling and survey techniques.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For

General Elective

ENVS 231: Introduction to Forest Resources

Focuses on the identification and inventory of forest natural resources including water, timber, flora, fauna and soils. Also includes study on how the interrelationships of these resources play in landscape ecosystems.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For

General Elective

NATR 102: Maps and Navigation

Learn to navigate and read topographic maps, along with learning to use a hand compass, staff compass and aerial photography. Students will learn differential leveling, pacing, traversing, survey mapping, General Land Office survey methods, legal descriptions, bearing/azimuth survey and topographic interpretation-profiling. Transect survey plotting and sampling will be introduced.

Credits 3

Weekly Contact Hours 4

Meets Degree Requirements For

Restricted Elective

NATR 108: Exploring Natural Resources

A panoramic view of ecosystems, current topics, primary organizations and professions in modern natural resources management. Lectures, discussions and extensive field activities survey this diverse industry. Use career assessment and planning tools, such as educational portfolio development, to create a strategy for your professional future.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
Restricted Elective

NATR 112: Mathematical Applications for Natural Resources

Students will learn how to apply knowledge of basic algebra, trigonometry, and geometry to field applications in natural resources including land measurement, area determination, estimation, rounding, and calibration/unit conversion.

Credits 2

Weekly Contact Hours 2

Meets Degree Requirements For
Restricted Elective

Prerequisites

MATH 99 with a grade of "C" (2.0) or better, MATH100, or appropriate placement score.

NATR 125: Introduction to Geographical Information Systems

Introduces Geographical Information Science (GIS) concepts, technology and tools. Topics will include the input, management, manipulation, analysis and display of spatial data. ArcGIS software will be used to visualize real-world issues, discover patterns and communicate spatial information.

Credits 3

Weekly Contact Hours 3

Meets Degree Requirements For
Restricted Elective

NATR 158: Employment Seminar

Seminar to prepare students for cooperative work experience in natural resources. Explore personal goals for career and related options available such as technician, seasonal, internship, or volunteer opportunities. Students will also develop a basic resume and explore interviewing techniques.

Credits 2

Weekly Contact Hours 2

Meets Degree Requirements For
Restricted Elective

NATR 160: Introduction to Forest Health and Ecology

Exploration of the symbiotic relationship of forest health and forest ecology. The macro and micro ecosystem of the forest habitat will be explored to show the total inter-dependency of both systems.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For

Restricted Elective

NATR 196: Cooperative Work Experience

Intended to provide authentic experiences in the world of work by applying knowledge and skills learned in the classroom to a working environment.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For
Restricted Elective

NATR 210: Natural Resource Portfolio

Completion of a professional portfolio that demonstrates development as a natural resource professional. The portfolio contains applicable coursework examples, educational experiences, and professional products including a resume, personal statement.

Credits 2

Weekly Contact Hours 2

Meets Degree Requirements For
Restricted Elective

Prerequisites

Completion of one year's course work in the natural resource program.

NATR 220: Introduction to Wildland Fire Ecology and Restoration

An overview of wildfire with an emphasis on local natural environments. Wildfire is presented in a historical and ecological context, and as a physical force and agent for ecological change. Covers land management, social policy issues, restoration, and habitat resiliency.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For
Restricted Elective

NATR 235: Society & Natural Resources

From personal to global levels, this course uses a systems approach to examine interaction of social, economic and ecological factors in natural resources management. Identify and explore the consequences of diverse natural resource philosophies and paradigms, and develop skills to direct, mitigate or change human impacts on natural systems.

Credits 5

Weekly Contact Hours 5

Meets Degree Requirements For
Restricted Elective

Prerequisites

[ENGL& 101](#)

NATR 240: Maps, Navigation, and Aerial Photos

Learn to read and use topographic maps, compasses, and aerial photography. Learn differential leveling, pacing, traversing, survey mapping, General Land Office survey methods, legal descriptions, bearing/azimuth survey and topographic interpretation-profiling. Introduction to transect survey plotting and sampling. Students will be trained in and perform transect surveys to determine resource health.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For

Restricted Elective

NATR 241: Intro to Watershed Science and Management

Watershed science and management are inherently multidisciplinary and involve a broad array of physical, biological and social sciences. A range of water resource management strategies are examined including structural/nonstructural, regulatory/non-regulatory and prevention/restoration approaches. Case studies and field trips will look at freshwater management issues at the local to national level.

Credits 4

Weekly Contact Hours 4

Meets Degree Requirements For

Restricted Elective

NATR 242: Survey of Wildlife Populations

Identification of northwest wildlife and associated populations. Identification and habitat improvement through population surveys, forage/browse utilization, population dynamics and carrying capacities. Students will learn wildlife survey procedures and survey the associated conditions of required habitat for both large and small birds/mammals.

Credits 4

Weekly Contact Hours 4

Meets Degree Requirements For

Restricted Elective

NATR 260: Forest Mensuration

Covers a variety of forest measurement practices, measuring equipment, product measurement, timber cruising, inventory sampling, growth, site-index, and introduction to GPS 3-P and drone sampling.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For

Restricted Elective

NATR 260: Introduction to Forest Mensuration

Covers a variety of forest measurement practices, measuring equipment, product measurement, timber cruising, inventory sampling, growth, site-index, and introduction to GPS 3-P and drone sampling.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For

Restricted Elective

NATR 270: Silviculture

This course provides a detailed introduction to different silvicultural systems and practices, with an emphasis on the underlying ecological basis of silviculture and systems in the United States, particularly the forest health of the Pacific Northwest.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For
Restricted Elective

NATR 270: Silviculture

This course provides a detailed introduction to different silvicultural systems and practices, with an emphasis on the underlying ecological basis of silviculture and systems in the United States, particularly the forest health of the Pacific Northwest.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For
Restricted Elective

NATR 280: Forest Harvest Systems

Exploration of a variety of harvest techniques for forest product removal. Cost/benefit analysis, logging plans, wood and other forest products, road layout and construction, best management practices, timber appraisal and contracts.

Credits 5

Weekly Contact Hours 7

Meets Degree Requirements For
Restricted Elective

Prerequisites

NATR 112

NATR 296: Cooperative Work Experience

Intended to provide authentic experiences in the world of work by applying knowledge and skills learned in the classroom to a working environment.

Credits 1-5

Weekly Contact Hours 25

Meets Degree Requirements For
Restricted Elective