

NR - NATURAL RESOURCES

NR140 Introduction to Forest Soils

Credits 3 Spring

Registration Requirement: F111, F141, and FT122; or instructor consent. This course introduces students to the physical and chemical properties of forest soils in the context of forest management. Topics include soil composition, texture, structure, water holding capacity and nutrient cycling. The roles of mycorrhizal fungi and soil organisms in organic matter decomposition and nutrient availability are examined. Key concepts are used to evaluate the effects of forest management activities on soil productivity.

Additional Course Fee: \$25.00

NR144 Forest Insects and Diseases

Credits 3 Spring

Registration Requirement: F111 or instructor consent. In this course, the major insects and diseases of Pacific Northwest forest trees are studied as they relate to forest health. Identification, biology, damage to trees and the role of insects and diseases in forest ecosystems are emphasized. Preventative and control measures are studied in the context of landowners' management objectives. A discussion of abiotic damage agents, including atmospheric pollutants, is also included.

Additional Course Fee: \$25.00

NR150 Career Development in Natural Resources

Credit 1 Fall/Winter

Registration Requirement: RD090 and WR090, or IECC201R and IECC201W; and MTH020; each with a grade of "C" or higher; or placement above stated course levels.

In this course, students investigate career options, job search strategies and application processes specific to the natural resources field, including discussion of private organizations and public agencies managing natural resources in the Pacific Northwest. Topics will include interviewing, resume development, job search strategies and methods and specific application processes for state and federal positions.

NR160 Wildland Fire

Credits 3 Fall

Registration Requirement: RD090 and WR090, or IECC201R and IECC201W; and MTH020; each with a grade of "C" or higher, or placement above stated course levels.

This course introduces the student to the role of fire in forested ecosystems. Areas addressed include wildland fire prevention, suppression and behavior; fuels management strategies and activities; basic fire ecology; and the use of prescribed fire as a management tool. Topics covered include the National Wildfire Coordinating Group (NWCG) S-190, Introduction to Wildland Fire Behavior and S-130, Firefighter Training.

Additional Course Fee: \$25.00

NR212 Current Issues/Forest Resources

Credit 1 Winter

Registration Requirement: F111, FW251, and F240; or instructor consent. This course investigates biological, social and political issues influencing forestry and natural resources management. Organizations and organizational structure are examined as they relate to land management philosophies and objectives.

NR230 Forest Botany

Credits 3 Spring

Registration Requirement: F111 and F141

This course introduces students to the identification and classification of forest plants. Topics include plant taxonomy, anatomy and physiological responses to environmental factors. Labs focus on field identification of plant families and indicator species.

Additional Course Fee: \$25.00

NR238 Timber Harvesting and Products

Credits 5 Spring

Registration Requirement: FT228 and NR244 or instructor consent. This course investigates the various techniques used to remove woody material from forest stands and to manufacture wood products. Instruction focuses on selecting proper harvesting methods and equipment to meet forest management objectives, and the relationship between the raw wood material and finished wood product. Topics include the operations of ground-based, cable and aerial logging methods; environmental assessment of resource impacts; timber sale and road layout; timber appraisal, wood properties and treatment; and methods of product manufacturing. Field trips to logging sites and mills are integral to the course.

Additional Course Fee: \$25.00

NR242 Watershed Processes

Credits 3 Winter

Registration Requirement: FT122, NR140, F200, and MTH084 (or higher); or instructor's consent.

This course examines the basic hydrological processes occurring in forested watersheds. Natural factors influencing water quality and yield, fish and wildlife habitat and soil and slope stability are covered. The effects of forest management activities on these processes are examined, with an emphasis on riparian areas.

Additional Course Fee: \$25.00

NR244 Applied Silviculture I: Reforestation

Credits 3 Winter

Registration Requirement: F141, FT122, NR140, and F240; or instructor consent.

In NR244 and NR246, students are instructed in the practices of forest ecosystem management. This course focuses on the principles and applications of reforestation and restoration of native plants. Topics include silvical characteristics of forest tree species, site preparation, seedling selection and planting, brush and animal damage control, natural regeneration and reforestation evaluation.

Additional Course Fee: \$25.00

NR246 Applied Silviculture II: Forest Stand Dynamics

Credits 3

Spring

Registration Requirement: F111, F141, FT122, FT222, FT228, and NR244; or instructor consent.

This course is a continuation of Silviculture I. In this course students study the growth and development of stands and methods of prescribing stand management techniques, particularly thinning, for a given forest type and landowner objective. It also includes evaluating the applicability of the major silvicultural systems of clearcutting, shelterwood and selection cutting for a given site and landscape.

Additional Course Fee: \$25.00

NR260 Field Projects

Credits 3

Spring

Registration Requirement: F111, FT122, FT221, F200, NR244, and FT228, or instructor consent.

This course provides the student an opportunity to synthesize the principles and field skills gained from previous coursework by planning, developing and carrying out a team capstone project of their own. Data are recorded in field journals and results are communicated both orally and in technically written reports.

Course fees are subject to change. Additional section fees (web, hybrid, etc.) may apply.