

Forestry course descriptions – University of Vermont

Please go to <http://www.uvm.edu/academics/catalogue2007-08/?category=FOR> for more information.

FOR 001 - Forest Conservation

Introduction to the ecology and management of American forests: forest distribution, ownership, and ecological factors, species interactions, multi-resource management goals, and silvicultural practices. Cannot be taken by junior- or senior-level RSENR students. Credits: 3.

FOR 021 - Dendrology

Classification, silvical characteristics, and identification features of native and introduced trees and shrubs. Credits: 4.

FOR 073 - Small Woodland Management

Concepts of forest ecology, resource inventory, cultural practices, and multiple use management for small woodland areas. Credits: 3.

FOR 081 - Forestry Seminar

Readings and discussions introducing current issues in forestry. Prerequisite: First or second year standing in Natural Resources. Credits: 1.

FOR 120 - Forest Ecology

Forest environment and its effects on the development and distribution of forest communities. Introduction to population dynamics, systems and analysis, diversity, stability, ecosystem disturbances, and succession. Prerequisite: Natural Resources 1, or another introductory biological science course. Not offered 2001-02. Credits: 3.

FOR 121 - Forest Ecology Laboratory

Application of ecological principles in the analysis of forest communities. Prerequisite: Natural Resources 25, a course in tree identification, and previous or concurrent enrollment in Natural Resources 103. Credits: 2.

FOR 122 - Forest Ecosystem Analysis

An integrated field course to investigate, through quantification and interpretation, the flora, fauna, and abiotic components (soils, physiography, water, and microclimate) of a selected forest ecosystem. Prerequisites: FOR 121, NR 140. Credits: 4.

FOR 126 - Forest Ecology Field Trip

Assessment of southeastern forest ecosystems including Smoky Mountain communities, and upland and bottomland forests of the Georgia Piedmont and South Carolina Coastal Plain. Field trip at end of spring semester. Prerequisites: A course in plant identification, a course in ecology, instructor's permission. Credits: 2.

FOR 132 - Forest Fire Behavior & Mgmt

Forest fire ecology, behavior, effects, weather relationships, danger rating, prevention, detection, management, prescribed fire, smoke management, wildland/urban interface, and multi-resource perspectives. Prerequisite: A course in plant ecology or concurrent enrollment. Knowledge of plant identification. Alternate years. Credits: 3.

FOR 133 - Forest Entomology

(Cross-listed with Plant and Soil Science 107.) Credits: 3.

FOR 146 - Remote Sensing of Natural Res

(Cross-listed with Natural Resources 146, Geography 185.) Identification, interpretation, measurement, and mapping of natural resources from aerial photographs and satellite imagery. Labs include air photo interpretation and digital image analysis. Prerequisites: Junior standing. Alternate years. Credits: 3.

FOR 152 - Forest Resources Values

History, methods, and current issues associated with the nonmarket and market values of forest-based resources, including aesthetics, wildlife, recreation, water, and timber. Prerequisites: Economics 12 or CDAE 61. (Same as Recreation Management 152). Credits: 3.

FOR 158 - Stewardship: Private Woodlands

Basic financial, legal and operational aspects for long-term ownership and stewardship of woodlands; appraisals, taxation, land trusts, conservation easements, estate planning; Vermont focus. Prerequisite: Course in economics. Credits: 3.

FOR 162 - Properties & Uses of Wood

Properties, uses, and identification of commercial woods of the U.S. Manufacture of major wood products. Prerequisite: A course in tree identification. Alternate years. Credits: 3.

FOR 163 - Timber Harvesting

Private forest emphasis; impacts of alternative techniques on cultural and natural resources; preharvest inventory, prescription, layout, contracts, bookkeeping; postharvest operations. Alternate years. Credits: 3.

FOR 182 - Advanced Forestry Seminar

In-depth examination of contemporary issues in forestry. Prerequisite: Junior or senior standing in Forestry. Credit arranged. Credits: 1.

FOR 185 - Undergrad Special Topics

Readings, investigations, and lectures in selected forest resource subjects. Prerequisite: Instructor's permission. Credit arranged. Credits: 0-6.

FOR 191 - Forestry Work Practicum

Supervised work experience in forest resource area. Prerequisite: Instructor's permission. Credit arranged. Credits: 1-9.

FOR 205 - Mineral Nutrition of Plants

(Cross-listed with Botany 205.) Credits: 3.

FOR 222 - Advanced Silviculture

Scientific basis and contemporary status of silviculture practices. Prerequisites: 223, permission. Alternate years, 2000-01. Credits: 3.

FOR 223 - Multi-Resource Silviculture

Theory and application of forest stand maintenance/manipulation for forest ecosystem sustainability. Topics: Silvics, regeneration, tree improvement, protection, stand structure/dynamics/tending, and multi-resource perspectives. Prerequisites: NR 25, 103, FOR 121 (FOR 122-Forestry majors). Credits: 4.

FOR 225 - Tree Structure & Function

Basic anatomy and physiology of trees and other woody plants, emphasizing their unique structural and physiological adaptations to the environment. Prerequisites: Permission. Credits: 3.

FOR 228 - Ecosystem Ecology

Examination of the structure and function of terrestrial ecosystems using a systems approach. Laboratory sessions involve modeling and data analysis. Prerequisites: Biology 1, 2, Chemistry 23, an intermediate ecology course, Natural Resources 140, Math. 19, Physics 11 or equivalent. Alternate years, 2002-03. Credits: 2.

FOR 231 - Integrated Forest Protection

Integration of concepts of forest protection using a holistic ecological approach to forest pest management. Detection, population dynamics, evaluation, prediction, and pest management considerations. Prerequisites: 133, 234 or instructor's permission. Alternate years, 2001-02. Credits: 3.

FOR 234 - Forest Pathology

An in-depth survey of diseases of forest and shade trees emphasizing identification, morphology, physiology, ecology, epidemiology, genetic relationships, integrated disease management, and multi-resource perspectives. Prerequisites: Biology 1 & 2, knowledge of plant identification and ecology. Credits: 4.

FOR 272 - Sustainable Mgmt Forest Ecosys

Principles of long-term planning and plan implementation in support of sustainable forestry; Adaptive management; biodiversity and ecosystem health; major management planning project. Prerequisites: FOR 122, NR 205, concurrent or prior enrollment in 223; or graduate standing. Credits: 4.

FOR 275 - Forest Watershed Management

Concepts of forest hydrology and forest watershed management; emphasis on natural processes and impacts of quantity, quality, and seasonal distribution of flow from watersheds. Prerequisite: Natural Resources 102, junior standing or permission. Credits: 3.

FOR 285 - Advanced Special Topics

Advanced special topics courses or seminars in forestry beyond the scope of existing formal courses. Prerequisites: Graduate or advanced undergraduate standing, instructor's permission. Credit as arranged. Credits: 0-6.

FOR 291 - Senior Research

Work on research problem under direction of a staff member. Findings submitted in written form as prescribed by department. Prerequisites: Senior standing, permission. Credits: 3.

FOR 292 - Senior Research

Work on research problem under direction of a staff member. Findings submitted in written form as prescribed by department. Prerequisites: Senior standing, permission. Credits: 3.

FOR 299 - Honors

Honors project dealing with the biology and/or management of forest ecosystems. Prerequisite: By application only; see program chair. Credits: 3-6.

FOR 382 - Seminar in Research Planning

(Cross-listed with Natural Resources 382.) Credits: 1.

FOR 385 - Selected Problems in Forestry

Advanced readings, or a special investigation dealing with a topic beyond the scope of existing formal courses. Prerequisites: Permission. Credits: 1-6.

FOR 391 - Master's Thesis Research. Credits: 1-6.**FOR 392 - Master's Project Research. Credits: 1-6.**