F/FT - FORESTRY

F111 Introduction to Natural Resources
Credits 3
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W; and MTH020; each with a grade of "C" or better, or placement above stated course levels. Students are introduced to natural resources definitions, management and regulations, with an emphasis on forest ecosystems. Topics include an elementary approach to ecosystems structure, composition and function; fundamentals of forest, range, watershed, wetlands, recreation and wildlife management; and an overview of pertinent history and laws influencing natural resource policy and management.

F141 Tree and Shrub Identification
Credits 3
Registration Requirement: RD090 and WR090, or IECC201R and IECC201W; and MTH020; each with a grade of "C" or better, or placement above stated course levels. This course is devoted to the classification and field identification of important western trees and shrubs. Appropriate ranges, habitats and consumer use of these species are presented as well as a survey of other major forest types of North America. Outdoor field trips are an integral part of the course.
Additional Course Fee: $25.00

F200 Introduction to Forest Surveying
Credits 4
Registration Requirement: F111, F141, FT122, FT221, and MTH084 or higher or instructor consent. This course covers the fundamental concepts of plane surveying and resource surveys within the natural resources field. The use of mathematics in applying the correction to errors, calculation of angles and bearings and the adjustment of traverses is emphasized, along with field survey practice. Federal and State survey protocols may be covered.
Additional Course Fee: $25.00

F240 Natural Resources Ecology
Credits 4
Registration Requirement: F111 and FW251 and NR230; or instructor consent.
Natural Resources Ecology is an introductory course in ecology, with an emphasis on forest ecosystems. Students examine the relationships between biological and physical components of ecosystems and dynamic processes such as nutrient cycling, disturbance and succession. Students are expected to take an active role in class activities, including class discussions and group work. Indoor and outdoor laboratories focus on field techniques used to measure and characterize ecosystem components. This course is recommended for all natural resources technology majors and all students interested in ecology and natural resource conservation.
Additional Course Fee: $25.00
This course fulfills: Lab Science

FT122 Forest Measurements I
Credits 5
Registration Requirement: F111, F141, and MTH060; or instructor consent.
This course introduces the student to field measurement of forest resources. Topics include fundamentals of field sampling, use of topographic maps, estimation of land area and measurement of physical tree characteristics. Electronic data collection and analysis are integral.
Additional Course Fee: $25.00

FT221 Aerial Photo Interpretation, GPS and sUAS
Credits 4
Registration Requirement: F111, F141, and FT122. This course teaches the fundamentals of aerial photograph, the global positioning systems (GPS) and small unmanned aerial systems (sUAS, drones) needed for navigation, interpretation and data gathering in natural resources. Students learn to relate photo features to map and landscape features, and to find distance, direction and land area on photos. Photos are used with GPS for various field data applications. Additional GPS topics include satellite signals and paths, factors influencing position accuracy and computer post-processing. Students use GPS to construct computer-generated maps. sUAS Federal Aviation Administration (FAA) Part 107 licensing requirements are covered extensively.
Additional Course Fee: $25.00

FT222 Forest Measurements II
Credits 4
Registration Requirement: F141, FT122, FT221 and MTH084 or higher; or instructor consent. This course provides instruction and training in estimating volume and quality of standing timber. Sampling methods and their associated field techniques are covered, with an emphasis on producing reliable and accurate data. Data computation, statistical evaluation and the preparation of comprehensive timber cruise reports are required. Labs focus on field timber cruising using Atterbury's Super A.C.E. program.
Additional Course Fee: $25.00

FT228 Introduction to Geographic Information Systems
Credits 3
Registration Requirement: F111, F141, FT122, FT221, F240, and MTH084 or higher or instructor consent. This course covers the fundamentals of how to manage, manipulate and display spatially-referenced data for land-use planning and decision making. Students work with GIS software applications.
Additional Course Fee: $25.00

FT235 Outdoor Recreation
Credits 3
Registration Requirement: FT111 and F141 or instructor consent. This course explores the use and management of forested recreational settings. Topics include the influence of social and economic values on recreational use and planning, techniques for environmental interpretation and facilities and site maintenance.
Additional Course Fee: $25.00

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