

(I) Introduction to Natural Resources

Prerequisite: None. This course serves as the introductory level course for the Natural Resources Career Pathway. Students will explore the study of natural resources and begin to develop skills and knowledge required for employment in occupations related to forestry, wildlife and natural resources management, and conservation.

(II) Introduction to Animal Systems

Students develop competencies in each of the major areas of the Animal Systems career pathway including animal nutrition, reproduction, breeding, care, and management. Students learn agricultural mechanics applicable to animal systems. As with all agriculture courses, students will be exposed to principles of leadership and opportunities within student organizations along with Supervised Agricultural Experience opportunities.

(III) Agricultural Production Technology

This course emphasizes one or more areas of plant science, animal science, soil science, agricultural business management, and agricultural mechanization, based upon the student's employment objective. Local school divisions should select one of the following livestock enterprises: beef cattle, dairy cattle, swine, horses, or sheep. The competencies for the selected livestock enterprise are considered essential for the course. Supervised occupational experience programs and leadership training are important parts of the course. When only single periods are provided, greater emphasis is placed on individualized instruction and supervised occupational experience programs.

(IV) Agricultural Production Management

Course includes instruction in agricultural mechanics, with emphasis placed on the application of mechanical skills to farm power and machinery, soil and water management, supervised farming programs, and leadership training.

Forestry Management

This course will offer students instruction in the management of the forest as a resource and as a business. Students will develop knowledge in areas like tree physiology, forest ecology, silviculture, and the management and marketing of forest products. Strong emphasis is placed on developing career skills for the forestry industry as well.

Advanced Forestry Management

This course is designed to strengthen students' knowledge in forest ecology, map interpretation, best management practices, and the marketing of forest products. Students will also investigate strategies to protect and preserve forestland including pest and disease identification and management as well as advantages and disadvantages of prescribed burning and forest fires.

Horticulture Sciences I

In this course, students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment and advancement in areas such as floriculture, landscape design, greenhouse operation, nursery plant production, and turf management. They receive instruction in using soil and other plant-growing media and in identifying, propagating, and growing horticultural plants in the greenhouse and land laboratory. Instruction is provided in safety practices and leadership development.

Horticulture II Greenhouse Plant Production

Students enrolled in this course learn the operating procedures for a greenhouse. Units of instruction include developing plant production facilities, science application in plant production, and identification of plants. Business management and marketing skills are emphasized to prepare students for careers in the greenhouse plant production and management industry. Leadership development is offered through participation in FFA.

Horticulture III Landscaping

In this course, students develop the necessary knowledge, skills, habits, and attitudes for entry-level employment and advancement in areas such as landscape design, landscape construction, and landscape maintenance. They receive instruction in sketching and drawing, analyzing a landscape site, designing for function and aesthetics, identifying and selecting landscape plants, purchasing and installing plants, and maintaining the landscape by watering, fertilizing, mulching, pruning, and controlling pests.

Agricultural/ Horticulture Co-op Grade: 11 - 12 Only