

## MODULE DESCRIPTIONS

### **Module AGR1010: Agriculture: The Big Picture**

Students demonstrate knowledge of the diversity and significance of agriculture, and they identify career opportunities within the industry.

### **Module AGR1030: Production Basics**

Students demonstrate the basic steps involved in planting, growing and harvesting a plant commodity; or in raising, growing and finishing an animal commodity, and they identify related career opportunities.

### **Module AGR1060: Consumer Products & Services**

Students demonstrate the basic steps involved in processing (adding value to) an agriculture commodity and/or in providing related services, and they identify career opportunities in agriculture processing.

### **Module AGR1070: Basic Landscape/Turf Care**

Students demonstrate knowledge of the techniques used to perform basic landscape and turf care services, focusing attention on plant identification, equipment and supplies and basic maintenance tasks; and they identify related career opportunities.

### **Module AGR1080: Basic Floral Design**

Students demonstrate knowledge of the techniques used to construct basic floral designs and arrangements, focusing attention on plant and flower identification, care and handling of fresh cut flowers and foliage, and simple fresh/dried/artificial arrangements; and they identify related career opportunities.

### **Module AGR1090: Market Fundamentals**

Students explain the basic principles involved in marketing a plant or animal product or service, and they identify related career opportunities.

### **Module AGR1100: Agriculture Technology**

Students describe applications of science and technology within an agriculture or horticulture industry.

### **Module AGR1110: Resource Management**

Students describe the practices used to manage water, soil and land use; and they present the results of research on one or more related issues in agriculture.

### **Module AGR2020: Animal Husbandry/Welfare**

Students apply the principles of animal science and health technology in providing care for a domestic animal.

### **Module AGR2030: Field Crops 1 (Materials & Processes)**

Students apply knowledge of materials and processes in growing a field crop, focusing attention on plant anatomy and identification, growth requirements, physical structures and equipment and practical production tasks; and they identify related career opportunities. Potential areas of specialization include the production of cereals, forage, oil seeds, pulse crops, mushrooms, spices/herbs, vegetables, fruits, medicinal plants and exotic plants.

### **Module AGR2040: Livestock/Poultry 1 (Materials & Processes)**

Students apply knowledge of materials and processes in raising livestock, poultry or other animal commodities, focusing attention on anatomy and identification, rations and feeding, housing, animal handling and restraint, animal health and welfare, and care for the young; and they identify related career opportunities. Potential areas of specialization include the production of beef, dairy, poultry, swine, sheep, game, exotics and bees and/or the study of aquaculture.

### **Module AGR2050: Agrifoods 1 (Materials & Processes)**

Students demonstrate knowledge of materials and processes used in producing an agrifood product or in providing a related service, focusing attention on industry inputs, and processing technologies and practices; and they identify related career opportunities. Potential areas of investigation include dairy, beef, pork, poultry, cereals, oil seeds, sugar beets, wine, fruits/vegetables and honey.

**Module AGR2060: Landscape/Turf Management 1 (Maintenance Practices)**

Students demonstrate the techniques used to provide landscape and turf maintenance services, focusing attention on plant identification, equipment maintenance, effective landscape practices, cost analysis and pricing. Potential areas of specialization include home landscapes, golf courses, recreational fields and parks, institutional/industrial grounds and roadside landscapes.

**Module AGR2070: Equine 1 (Materials & Processes)**

Students demonstrate practical skills and approved practices in providing for the daily care of a horse, focusing attention on the origin and history of horses, anatomy and conformation, types and breeds, handling and feeding practices, and basic health care; and they identify related career opportunities.

**Module AGR2080: Floral Design 1 (Projects for All Occasions)**

Students demonstrate knowledge of the practices involved in providing floral design and interior plantscape services, focusing attention on plant and flower identification, elements and principles of design, floral projects for all occasions, interior plant care and marketing practices.

**Module AGR2090: Marketing 1 (Open Marketing Structures)**

Students apply knowledge of general marketing principles within the context of an agriculture or horticulture industry, focusing attention on materials and services offered to the consumer through open (free enterprise) marketing structures and marketing techniques; and they identify related career opportunities.

**Module AGR2100: Protected Structures**

Students identify essential components of a controlled growing/living environment and demonstrate the techniques used to manage the growing/living environment within a protected enclosure.

**Module AGR2120: Soils Management 1 (Soil Properties/Classification)**

Students examine soil formation and classification, conduct tests to determine the physical and chemical properties of soils, and they explain the impact of soil properties on productivity.

**Module AGR2130: Integrated Pest Management**

Students apply knowledge of biological, cultural and chemical pest-control measures within the context of an agriculture, horticulture or forest industry.

**Module AGR2140: Nursery/Greenhouse Crops 1 (Materials & Processes)**

Students apply knowledge of materials and processes in growing a nursery or greenhouse crop, focusing attention on plant anatomy and identification, growth requirements, physical structures and equipment, and practical production tasks; and they identify related career opportunities.

**Module AGR3010: Issues in Agriculture**

Students analyze a range of issues relevant to agriculture and food production, and they develop strategies for dealing with agriculture issues within a global context.

**Module AGR3030: Field Crops 2 (Management Techniques)**

Students demonstrate the techniques used to produce a field crop, focusing attention on industry trends, enterprise selection, genetics and reproduction, and production skills. Potential areas of specialization include the production of cereals, forage, oil seeds, pulse crops, mushrooms, spices/herbs, vegetables, fruits, medicinal plants and exotic plants.

**Module AGR3040: Livestock/Poultry 2 (Management Techniques)**

Students demonstrate the techniques used to manage production of livestock, poultry or other animal commodities, focusing attention on industry trends and opportunities, genetics and reproduction, rations and feeding, housing, animal handling and restraint, animal health and welfare, breeding operations and care for the young. Potential areas of specialization include the production of beef, dairy, poultry, swine, sheep, game, exotics and bees and/or the study of aquaculture.

**Module AGR3050: Agrifoods 2 (Standards & Regulation)**

Students demonstrate knowledge of the techniques used to manage the development of an agrifood product or related service, focusing attention on government regulation and control, economic principles, product quality and safety, environmental impact and industry trends. Potential areas of investigation include dairy, beef, pork, poultry, cereals, oil seeds, sugar beets, wine, fruits/vegetables and honey.

**Module AGR3060: Landscape/Turf Management 2 (Installation & Repair)**

Students demonstrate the techniques used to provide landscape and turf management services, focusing attention on plant identification, effective maintenance practices, diagnosis and correction of problems, installation of specialty items, cost analysis and seasonal estimates. Potential areas of specialization include home landscapes, golf courses, recreational fields and parks, institutional/industrial grounds and roadside landscapes.

**Module AGR3070: Equine 2 (Management Techniques)**

Students demonstrate practical skills and approved practices in providing for the daily care of a horse, focusing attention on the use of physical facilities, procedures for stall cleaning and bedding a horse, guidelines for turnout and shelter, reproductive fundamentals and techniques, and basic horsemanship.

**Module AGR3080: Floral Design 2 (Creative Design & Display)**

Students demonstrate knowledge of the practices involved in providing creative floral design services, focusing attention on plant and flower identification, more advanced design techniques, floral services for special occasions and promotional displays of floral services offered.

**Module AGR3090: Marketing 2 (Closed Marketing Structures)**

Students explain specialized applications of marketing within closed (supply managed) marketing structures, focusing attention on regulatory agencies/policies that influence the supply of a commodity, product or service.

**Module AGR3100: Biotechnology**

Students present the results of research on applications of biotechnology in agriculture and food production.

**Module AGR3110: Water Management**

Students explain principles of water management and establish appropriate water management practices for an agriculture or horticulture enterprise.

**Module AGR3120: Soils Management 2 (Soil Testing & Amending)**

Students demonstrate knowledge of appropriate soil testing and amending techniques, and they interpret soil survey maps and reports.

**Module AGR3130: Sustainable Agriculture Systems**

Students examine the impact of a range of agriculture practices on the environment, and they propose strategies for ensuring the sustainable use of natural resources.

**Module AGR3140: Nursery/Greenhouse Crops 2 (Management Techniques)**

Students demonstrate techniques used to produce a nursery or greenhouse crop, focusing attention on enterprise selection, plant identification, genetics and reproduction, production skills and venture analysis.

