HORT 1100 (AG 905)
Introduction to Horticulture
3 Credit Hours
Principles and practices in the development, production and use of horticultural crops. Includes classification, structure, growth and development, environmental influences on horticultural plants, and vocational opportunities in the horticultural industries. (2 lecture hours, 2 lab hours)
Course types: Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)

HORT 1101 (AG 904)
Soils and Fertilizers
3 Credit Hours
Nature and characteristics of soils including physical, chemical and biological properties, soil origins, classification, soilless media and proper soil management. Examines the interrelationship between soils and fertilizers and the selection and use of fertilizers to meet plant nutritional needs. (2 lecture hours, 2 lab hours)

HORT 1105
Floral Design I
3 Credit Hours
Principles and elements of floral design, with practice in creating basic floral designs and using proper techniques. Includes identification, care and handling of flowers. (2 lecture hours, 2 lab hours)

HORT 1109
OSHA 10-Hour Landscape Safety
1 Credit Hour
Occupational Safety and Health Administration (OSHA) Landscape training for entry level workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in workplaces in general industry and landscape. Includes information regarding workers' rights, employer responsibilities, and how to file a complaint. Students receive their 10 hour Card upon satisfactory completion of the course. (1 lecture hour)

HORT 1110
Applied Plant Taxonomy
3 Credit Hours
Classification of plant families with an emphasis on plant material used in the horticulture industry. (2 lecture hours, 2 lab hours)
Prerequisite: HORT 1100 or consent of instructor.

HORT 1111
Landscape Design I
3 Credit Hours
The process of residential landscape design, site analysis and practical solutions of typical landscape problems. Includes plant selection, graphic presentation and correct placement of materials in the residential landscape. (2 lecture hours, 2 lab hours)

HORT 1112
Landscape Maintenance
3 Credit Hours
Principles and practices for sustainable maintenance of various landscape features for residential and commercial sites. Includes best practices and strategies for snow and ice management. (2 lecture hours, 2 lab hours)

HORT 1113
Landscape Construction
3 Credit Hours
Principles and practices for sustainable construction and installation of various landscape features for residential and commercial sites. (2 lecture hours, 2 lab hours)

HORT 1114
Irrigation & Water Management
3 Credit Hours
Principles and practices of landscape irrigation involving the use of water from proper system design and installation through maintenance and management. (2 lecture hours, 2 lab hours)

HORT 1115
Floral Design II
3 Credit Hours
Continuation of the principles covered in Floral Design I. Introduces new styles and techniques and includes flower shop management. (2 lecture hours, 2 lab hours)
Prerequisite: HORT 1105 or equivalent or consent of instructor.

HORT 1116
Spanish for Horticulture
3 Credit Hours
Develops basic conversational skills to communicate effectively in the horticulture industry. Emphasizes the ability to speak, understand, read, and write Spanish for safe, effective, and productive workplace interactions in a cross-cultural context. Role-plays and simulations will be used to prepare students to successfully engage with Spanish speakers in the green industry. For the beginning student. Credit cannot be earned for both SPAN 1116 and HORT 1116. (3 lecture hours)

HORT 1120
Landscape Lighting
2 Credit Hours
Principles and practices for design and installation of low voltage landscape lighting for residential and commercial sites. (1 lecture hour, 2 lab hours)

HORT 1121
National Collegiate Landscape Competitions
2 Credit Hours
This course prepares students for an experience in the National Collegiate Landscape Competition (NCLC). Students will gain hands-on-experience in various aspects of the landscape industry and practice safety. Students will also have an opportunity to gain awareness and demonstrate knowledge in the many facets of the landscape industry. (1 lecture hour, 2 lab hours)
Prerequisite: Students who sign up for this class must also sign up to attend the National Collegiate Landscape Competition.

HORT 1125
Water Use/Conservation in the Landscape
1 Credit Hour
Residential and commercial water management as it relates to understanding the intersection of the Plant-Soil-Water continuum. Includes best practices and strategies for sustainability. (1 lecture hour)

HORT 1130
Horticulture Business
3 Credit Hours
Principles and practices of operating a horticultural business and operational procedures for dealing with the perishable and seasonal nature of horticulture. Includes trends, skills and career opportunities in the various disciplines within horticulture. (3 lecture hours)
Horticulture (HORT)

HORT 1131
Landscaping for Wildlife
1 Credit Hour
A study of landscape environments that offer food, water, and shelter/nesting cover to local wildlife to help species compete in our changing environment. The role of native plants in sustaining wildlife will be emphasized. (1 lecture hour)

HORT 1135
Introduction to Green Roofs
1 Credit Hour
The basics of green roof design, construction, and maintenance. Includes benefits of green roofs and a review of the products, plants, and growing media used in green roof applications. (1 lecture hour)

HORT 1140
Landscape Graphics
2 Credit Hours
Drawing plans, section-elevations and perspectives for landscape design. Includes the use of pencils and markers for lettering, drafting and color renderings. (2 lecture hours)

HORT 1141
Sustainable Landscape Design
1 Credit Hour
Sustainable landscape design and construction practices that minimize loss of natural resources. The economic benefits of sustainable practices will also be discussed. (1 lecture hour)

HORT 1142
Landscaping for Pollinators
1 Credit Hour
Biology and ecology of Midwest pollinators. Landscape design and implementation for attracting pollinators including site selection, plant selection, and maintenance requirements. (1 lecture hour)

HORT 1145
Perennial Plant Communities I
2 Credit Hours
Introduction to selecting perennial plants that grow well together and have similar maintenance requirements to create diverse, compatible, functional and beautiful gardens. Perennial plants are combined based on cost, maintenance and aesthetic appeal. (2 lecture hours)

HORT 1148
Introduction to Horticultural Therapy
3 Credit Hours
Examines the practice of horticultural therapy (HT) as an effective and increasingly utilized treatment modality for sustaining or improving health. Explores the people-plant relationship, a horticultural therapist's techniques and methods, evidence-based research, and therapeutic gardens. The course will also highlight the numerous populations served by horticultural therapists and explore the multitude of benefits these populations receive from plant-rich, nature-immersive treatments. (3 lecture hours)

HORT 1150
Power Equipment Electrical Systems
3 Credit Hours
Basic electrical theory, circuit construction, and digital multimeter use. Service information and wiring diagrams used in power equipment diagnosis. Power equipment starting and charging systems. Small engine ignition systems. Electrical wiring repair techniques. Diagnosis of power equipment electrical systems. (2 lecture hours, 2 lab hours)

HORT 1151
2-Cycle Small Engine Repair/Maintenance
2 Credit Hours
Principles of 2-cycle engine-powered devices used in the landscape industry. Includes 2-cycle engine function, use of technical literature, safe disassemble, repair and troubleshooting techniques. (1 lecture hour, 2 lab hours)

HORT 1152
4-Cycle Small Engine Repair/Maintenance
3 Credit Hours
Principles of 4-cycle small engine repair, maintenance, troubleshooting, failure analysis and problem solving skills to repair and rebuild small engines used in landscape, industrial, and agricultural applications. (2 lecture hours, 2 lab hours)

HORT 1153
Portable Power Generator Repair and Maintenance
2 Credit Hours
Introduces portable power generator operation, basic electrical concepts, safety procedures, brushless and brush type generators, circuit analysis, troubleshooting using related testing procedures and equipment to repair generators. (1 lecture hour, 2 lab hours)

HORT 1154
Compact Diesel Engines
3 Credit Hours
Explores the design, operation, proper maintenance, repair, and troubleshooting of compact diesel engines found in the horticulture and agriculture industries. (2 lecture hours, 2 lab hours)

HORT 1155
Power Equipment Drivelines/Hydraulics/Hydrostatics
3 Credit Hours
Foundation of driveline, hydraulic, and hydrostatic principles and system operation including how to troubleshoot and repair equipment found in the horticulture and agriculture industries. (2 lecture hours, 2 lab hours)

HORT 1185
Arboriculture
3 Credit Hours
Care and maintenance of trees and shrubs in the urban landscape. Includes Plant Health Care (PHC), environmental factors affecting plants, and proper and safe use of tools. (2 lecture hours, 2 lab hours)

HORT 1420
Cannabis and Industrial Hemp Production
4 Credit Hours
Explores the fundamentals of cannabis biology and production. Emphasis on anatomy and physiology of the cannabis plant, hemp and marijuana cultivation, production, and processing methods. Various uses for and products of hemp and marijuana in the cannabis industry will be explored. (4 lecture hours)

Prerequisite: HORT 1100 or concurrent enrollment in HORT 1100.
HORT 1800

Special Project
1-3 Credit Hours
Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.). (1 to 6 lab hours)

HORT 1820

Selected Topics
3 Credit Hours
Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (3 lecture hours)

HORT 1821

Selected Topics
3 Credit Hours
Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours, 2 lab hours)

HORT 1824

Selected Topics
2 Credit Hours
Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lecture hours)

HORT 1826

Selected Topics
1 Credit Hour
Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (2 lab hours)

HORT 1827

Selected Topics
1 Credit Hour
Introductory exploration and analysis of selected topics with a specific theme indicated by course title listed in college class schedule. This course may be taken four times for credit as long as different topics are selected. (1 lecture hour)

HORT 1840

Independent Study
1-4 Credit Hours
Exploration and analysis of topics within the discipline to meet individual student-defined course description, goals, objectives, topical outline and methods of evaluation in coordination with and approved by the instructor. This course may be taken four times for credit as long as different topics are selected. (1 to 4 lecture hours)

Prerequisite: Consent of instructor is required.

HORT 2211

Computer-Aided Drafting for Landscape
3 Credit Hours
Introduction to computer-aided design and drafting utilizing landscape-specific DynaSCAPE software. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1111 or equivalent or consent of instructor.

HORT 2212

Advanced Computer-Aided Drafting For Landscape
2 Credit Hours
Advanced Computer-Aided Design (CAD) and drafting utilizing landscape-specific DynaSCAPE software. Includes producing quotes from CAD designs and producing designs in color. (1 lecture hour, 2 lab hours)

Prerequisite: HORT 2211 or equivalent or consent of instructor.

HORT 2213

3D Landscape Design
3 Credit Hours
Visual interpretation and presentation of landscape design concepts using 3D Design Software. Create 3D models and presentation materials for multiple phases of landscape design projects. (2 lecture hours, 2 lab hours)

HORT 2214

Advanced 3D Landscape Design
2 Credit Hours
Advanced visual interpretation and presentation of landscape design concepts using 3D Design Software. (1 lecture hour, 2 lab hours)

Prerequisite: HORT 2213 or equivalent or consent of instructor.

HORT 2221

Plant Propagation
3 Credit Hours
Principles and practices of sexual and asexual propagation of plants used in the horticulture industry. Includes work with seeds, cuttings, grafting, micropropagation, special structures and layering. (2 lecture hours, 2 lab hours)

HORT 2222

Introduction to Plant Breeding
3 Credit Hours
Introduction to the principles, practices, and techniques of plant breeding. Examines modes of plant reproduction, breeding objectives, genetics, predictions, and selection. Course includes alternative techniques, practical considerations, and current developments in plant breeding. (3 lecture hours)

Prerequisite: HORT 1100 or equivalent or consent of instructor.

HORT 2225

Specialty Floral Design
3 Credit Hours
Advanced floral design skills using principles, elements and techniques to create party, wedding and sympathy presentations. (2 lecture hours, 2 lab hours)

Prerequisite: HORT 1115 or equivalent or consent of instructor.
HORT 2226
**Advanced Specialty Floral Design**
1 Credit Hour
Advanced floral design skills using principles, elements and techniques to create floral armatures, floral jewelry, wedding bouquets, prom corsages and boutonnieres, and advanced sympathy work. (2 lab hours)
**Prerequisite:** HORT 2225 or equivalent or consent of instructor.

HORT 2231
**Turf Science and Management**
3 Credit Hours
Principles and methods of selecting, establishing and maintaining turf for residential lawns, parks, sports fields and golf courses. Includes cultural practices such as fertilization, irrigation and cultivation, as construction and renovation techniques. Also covers weed, insect and disease identification and control. (2 lecture hours, 2 lab hours)

HORT 2235
**Landscape Estimating and Bidding**
3 Credit Hours
Fundamentals of creating landscape project estimates and bids to present to a client including reading landscape plans, take-off's, plant pricing, labor rates, measuring equipment, contingency, overhead costs and math calculations. (3 lecture hours)

HORT 2241
**Landscape Plants I**
3 Credit Hours
Identification of woody ornamental trees, shrubs, vines and groundcovers common to northern Illinois with an emphasis on deciduous plants. Includes adaptability, cultural requirements and placement in the landscape. (2 lecture hours, 2 lab hours)
**Prerequisite:** HORT 1100 or consent of instructor.

HORT 2242
**Landscape Plants II**
3 Credit Hours
Identification of woody ornamental trees, shrubs, vines and groundcovers common to northern Illinois with an emphasis on narrow and broad-leaved evergreens. Includes adaptability, cultural requirements and placement in the landscape. (2 lecture hours, 2 lab hours)
**Prerequisite:** HORT 1100 or consent of instructor.

HORT 2243
**Ornamental Grasses**
2 Credit Hours
Identification and use of ornamental grasses in the landscape. Includes propagation, production and designing with native and non-native grasses. (2 lecture hours)

HORT 2244
**Herbaceous Perennials**
3 Credit Hours
Identification, selection, design and maintenance of herbaceous perennials in the landscape. (2 lecture hours, 2 lab hours)
**Prerequisite:** HORT 1100 or consent of instructor.

HORT 2245
**Perennial Plant Communities II**
1 Credit Hour
Design, installation and evaluation of perennial plant community gardens. Plant selections are based on time, cost and sustainability. (1 lecture hour)
**Prerequisite:** HORT 1145 or equivalent.

HORT 2246
**Perennial Plant Communities Stewardship**
1 Credit Hour
Maintenance and evaluation of perennial plant community gardens. Emphasizes the arts and methods of becoming a skilled gardener. (2 lab hours)
**Prerequisite:** HORT 1145 and HORT 2245 or equivalents, or consent of instructor.

HORT 2251
**Plant Pathology**
3 Credit Hours
Detection, identification, and treatment of common plant diseases. Includes analysis of symptoms, selection of chemicals, preventive measures, and selection of disease resistant ornamental plants. (2 lecture hours, 2 lab hours)

HORT 2253
**Greenhouse Operations and Procedures**
3 Credit Hours
Principles and practices of operating a commercial greenhouse. Includes types of greenhouse structures, greenhouse components, plant nutrition, greenhouse pests, crop scheduling, and business management principles for the greenhouse industry. (2 lecture hours, 2 lab hours)

HORT 2255
**Greenhouse Crop Production**
3 Credit Hours
Principles and practices utilized in growing and maintaining greenhouse crops such as bench and pot mums, poinsettias, lilies, bulbs, azaleas, hydrangeas, foliage and miscellaneous pot crops. Includes hands-on experience with these crops. (2 lecture hours, 2 lab hours)

HORT 2256
**Interior Plant Identification & Design**
2 Credit Hours
Identification, selection, cultural requirements, maintenance and propagation techniques of interior plants. Includes an introduction to professional interior landscaping, plant care and design techniques. (1 lecture hour, 2 lab hours)

HORT 2257
**Bedding Plant Production**
3 Credit Hours
Principles and practices of bedding plant and plug production. Includes culture and identification of annual plant material such as petunias, marigolds, impatiens, begonias, geraniums and miscellaneous bedding plant varieties. Hands-on experience with these crops is provided. (2 lecture hours, 2 lab hours)

HORT 2261
**Entomology for Horticulture**
3 Credit Hours
Detection, identification and management of local species of insects that damage plants. Includes selection and use of pesticides for insect control. (2 lecture hours, 2 lab hours)

HORT 2271
**Landscape Design II**
3 Credit Hours
The design process with emphasis on problem solving and hardscape materials. Includes graphics, estimating, sales, and construction processes as they relate to design, installation and costs. (2 lecture hours, 2 lab hours)
**Prerequisite:** HORT 1111 and HORT 2241.
HORT 2300  
*Introduction to Sustainable Urban Agriculture*
3 Credit Hours
Principles of sustainable agriculture for urban production. Includes the ethical, practical and scientific aspects of agricultural sustainability addressing economic, social and environmental impacts of food and urban farming. (2 lecture hours, 2 lab hours)

HORT 2301  
*Principles of Agroecology*
3 Credit Hours
Introduces ecological approaches to urban agriculture examining the interactions of crops with the environment and soil culminating in a whole systems perspective. (3 lecture hours)

**Prerequisite:** HORT 1100 or equivalent.

HORT 2303  
*Urban Agriculture Issues*
2 Credit Hours
Explores urban agricultural issues at the local, national, and global level focusing on growing food in urban areas. Includes the current state of urban agriculture, as both a social movement and as an aid in the implementation of urban environment sustainability. (2 lecture hours)

HORT 2304  
*Hydroponic and Aquaponic Production Systems*
3 Credit Hours
Introduction to concepts and practices of growing crops in hydroponic and aquaponic systems. (2 lecture hours, 2 lab hours)

HORT 2305  
*Local Foods*
2 Credit Hours
Explore the local food system, the importance of locally grown foods and the future impact of urban agriculture. (2 lecture hours)

HORT 2306  
*Introduction to Beekeeping*
2 Credit Hours
Principles and practices to start bee hives in your backyard. Includes topics on bee biology, hive management, queen bee purchasing, honey extraction, and bees in an urban setting. (2 lecture hours)

HORT 2308  
*Introduction to Composting*
1 Credit Hour
Introduces the cultural requirements, advantages, and benefits of composting systems. (2 lab hours)

HORT 2309  
*Fruit and Berry Production*
3 Credit Hours
Principles and practices of cultivating fruit and berry crops commercially. Includes fruit tree selection, planting and care for small-scale orchards or home gardens, pruning and training methods, and details on pest management. (2 lecture hours, 2 lab hours)

HORT 2310  
*Permaculture Design Certification*
4 Credit Hours
Foundations of permaculture design including ethics, principles, strategies, and techniques that can be employed for creating sustainable urban agriculture systems and projects. After completing this course, students earn the globally recognized Permaculture Design certificate aligned with the Permaculture Institute of North America core curriculum. (3 lecture hours, 2 lab hours)

HORT 2311  
*Cool Season Vegetable and Herb Production*
2 Credit Hours
Explores origin, crop requirements, harvesting, and management strategies for sustainable urban production of cool season vegetables and herbs. (1 lecture hour, 2 lab hours)

HORT 2312  
*Warm Season Vegetable and Herb Production*
2 Credit Hours
Explores origin, crop requirements, harvesting, and management strategies for sustainable urban production of warm season vegetables and herbs. (1 lecture hour, 2 lab hours)

HORT 2313  
*Mushroom Production*
2 Credit Hours
Explores methods of growing edible mushrooms including culture, maintenance, substrate preparation, composting, spawn generation techniques, inoculation methods, harvesting, and pest and disease management. (2 lecture hours)

HORT 2800  
*Special Project*
1-3 Credit Hours
Special project courses cover topics not otherwise covered by general education courses and other courses in the Catalog for the discipline. These courses require direct experience and focused reflection in an in-depth study of a specific discipline topic and/or the critical analysis of contemporary issues in the discipline. They are targeted to self-selected students with an interest in the subject matter and involve active participation. The course delivery incorporates an experiential component of no less than 30 percent but not to exceed 70 percent. This experiential component may include field studies, interdisciplinary learning, and/or the practical application of discipline-related concepts, theories, principles and methods with a specific focus. All courses require an orientation session to deliver academic and experiential information (syllabus, academic requirements, field preparation, logistics, etc.) This course may be taken four times for credit. (1 to 6 lab hours)

**Prerequisite:** At least one course in the discipline or consent of instructor.

HORT 2860  
*Internship (Career & Technical Ed)*
1-4 Credit Hours
Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits. (5 to 20 lab hours)

**Prerequisite:** Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.

**Course types:** Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)
HORT 2863  
*Internship (Career & Technical Ed)*  
3 Credit Hours  
Course requires participation in Career and Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 225 clock hours for three semester credit hours.  
*(15 lab hours)*  
**Prerequisite:** Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.  
**Course types:** Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)  

HORT 2865 (HORT-PE1)  
*Internship Advanced (Career & Tech Ed)*  
1-4 Credit Hours  
Continuation of Internship (Career and Technical Education). Course requires participation in Career & Technical Education work experience with onsite supervision. Internship learning objectives are developed by student and faculty member, with approval of employer, to provide appropriate work-based learning experiences. Credit is earned by working a minimum of 75 clock hours per semester credit hour, up to a maximum of four credits.  
*(5 to 20 lab hours)*  
**Prerequisite:** Consent of instructor and 2.0 cumulative grade point average; 12 semester credits earned in a related field of study; students work with Career Services staff to obtain approval of the internship by the Dean from the academic discipline where the student is planning to earn credit.  
**Course types:** Contemporary Life Skills (A.A., A.S., A.A.S., A.G.S.)