

# HORTICULTURE (HORT)

**HORT 10195 SPECIAL TOPICS IN HORTICULTURE 1-3 Credit Hours**  
(Repeatable for credit) Analysis of significant and current issues in horticulture not covered in regular courses.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1-3 lecture

**Grade Mode:** Standard Letter

**HORT 16001 INTRODUCTION TO HORTICULTURE 1 Credit Hour**  
A survey of those opportunities available within the "green industry" both in education and as a career option. Guest speakers and field trips are part of the class.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 1 lecture

**Grade Mode:** Standard Letter

**HORT 16010 FLORAL DESIGN I 3 Credit Hours**

Introduction to the concepts and practices of floral design for use in commercial settings. Topics include floral design theory, history, techniques and the skills required in the commercial floral design industry. Lab experience covers construction of basic floral products.

**Prerequisite:** None.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 2 lab

**Grade Mode:** Standard Letter

**HORT 16011 FLORAL DESIGN II 3 Credit Hours**

Advanced training in a broad array of floral design applications including wedding design, contemporary European and Asian design, tropical flowers and outdoor compositions. Students will be provided hands-on laboratory activities to apply the principles of design.

**Prerequisite:** None.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 2 lab

**Grade Mode:** Standard Letter

**HORT 16020 PLANT MATERIALS I 3 Credit Hours**

Design, selection, culture, and maintenance of flowering plants and foliage including annuals, perennials, bulbs and tropical plants for indoor and outdoor use.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 16021 WHOLESALE FLORICULTURE 3 Credit Hours**

Commercial production, marketing, inventory management and post-harvest care associated with the floriculture industry.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 16022 GREENHOUSE STRATA 3 Credit Hours**

Introduction to growing containerized plants in greenhouses and nurseries. Emphasis will be on issues related to traditional and alternative substrates, root media, irrigation practices, and soil matter.

**Prerequisite:** None.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 26001 OCCUPATIONAL REGULATIONS AND SAFETY 2 Credit Hours**

Presentation of the basic standards, rules, safety regulations and laws pertaining to horticultural and related industries which will affect the work atmosphere. Lecture two hours weekly; offered only at the Geauga and Salem campuses.

**Corequisite:** BSCI 16001 and HORT 16001.

**Schedule Type:** Lecture

**Contact Hours:** 2 lecture

**Grade Mode:** Standard Letter

**HORT 26010 ARBORICULTURE 3 Credit Hours**

Basics of pruning and tree climbing techniques. Covers the equipment and safe use of equipment commonly found in the arboricultural industry. Lecture two hours weekly; lab three hours weekly; offered only at the Salem campuses.

**Prerequisite:** BSCI 16001 and HORT 16001.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 3 lab

**Grade Mode:** Standard Letter

**HORT 26011 COOPERATIVE WORK EXPERIENCE IN TREE CARE 3 Credit Hours**

(Repeatable for credit) Cooperative work program through which the skills necessary to perform professionally in this occupation will be acquired. This course offered only at the Salem Campus. Requires a minimum of 30 hours per week of work experience. Not more than 9 semester hours in this or a combination of other work experience classes will be allowed.

**Corequisite:** HORT 26010.

**Schedule Type:** Field Experience

**Contact Hours:** 3 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HORT 26012 URBAN FORESTRY 3 Credit Hours**

Urban forestry and the planning and managing of urban green-scapes. Appraisal and computerized GIS/GPS inventory of urban vegetation, urban land use planning and legal ordinances, maintenance and management of street and park trees. Outdoor field trips and guest lecturers.

**Prerequisite:** HORT 16001 and BSCI 16001.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 26016 IRRIGATION DESIGN AND MAINTENANCE 3 Credit Hours**

Principles of irrigation design, installation maintenance and drainage. Specific information about the selection of sprinkler heads, pipe, pumps, basic hydraulics, water conservation methods and automatic control systems shall be explored. Drawing of irrigation plans shall be required.

**Prerequisite:** HORT 16001 and BSCI 16001.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**HORT 26018 LANDSCAPE CONSTRUCTION 3 Credit Hours**

The basic skills and techniques involved in landscape contracting and construction, including building material data, site grading, contour mapping, deck construction, water features, lighting, landscape paving and retaining walls. Field trips and outside hands-on experience.

**Prerequisite:** HORT 16001 or advisor's approval.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 3 other

**Grade Mode:** Standard Letter

**HORT 26020 LANDSCAPE MANAGEMENT 3 Credit Hours**

A detailed discussion and practice of managing trees, shrubs and flowers within the landscape. Additional concepts such as the types of equipment used in the "green industry," marketing, writing specifications, bidding projects and personnel management.

**Prerequisite:** BSCI 16001 and HORT 16001.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** CTAG Horticulture

**HORT 26021 COOPERATIVE WORK EXPERIENCE IN LANDSCAPE MANAGEMENT 3 Credit Hours**

(Repeatable for credit) Cooperative work program through which the skills necessary to perform professionally in this occupation will be acquired. This course offered only at the Salem Campus. Requires a minimum of 30 hours per week of work experience. Not more than 9 semester hours in this or a combination of other work experience will be allowed.

**Corequisite:** HORT 26020.

**Schedule Type:** Field Experience

**Contact Hours:** 3 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HORT 26030 TURF GRASS MANAGEMENT 3 Credit Hours**

Basic principles of turf management. Covers turf equipment and the safe use of equipment commonly found in the turf industry. Lecture two hours weekly; lab three hours weekly; course offered only at the Salem campus.

**Prerequisite:** BSCI 16001 and HORT 16001.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 3 lab

**Grade Mode:** Standard Letter

**Attributes:** CTAG Horticulture

**HORT 26031 COOPERATIVE WORK EXPERIENCE IN TURF GRASS MANAGEMENT 3 Credit Hours**

(Repeatable for Credit) Cooperative work program through which the skills necessary to perform professionally in this occupation will be acquired. This course offered only at the Salem Campus. Requires a minimum of 30 hours per week of work experience. Not more than 9 semester hours in this or a combination of other work experience classes will be allowed.

**Corequisite:** HORT 26030.

**Schedule Type:** Field Experience

**Contact Hours:** 3 lecture

**Grade Mode:** Satisfactory/Unsatisfactory-IP

**HORT 26032 GOLF COURSE MANAGEMENT 3 Credit Hours**

The golf course environment as it relates to turf grass maintenance and pest/disease management. The construction and management of greens, tees, water and bunker management practices, turf aeration issues, topdressing and administrative concerns.

**Prerequisite:** HORT 16001 and HORT 26031 and BSCI 16001.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 26046 LANDSCAPE DESIGN I 3 Credit Hours**

An introduction to landscape appreciation and history, the landscape industry and elements of the landscape design process. Students will assess proper plant placement and uses, develop graphic communication skills and present a project. Field trips and project site work as required.

**Prerequisite:** HORT 16001 and BSCI 16001 and BSCI 26003.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 4 lab

**Grade Mode:** Standard Letter

**HORT 30195 SPECIAL TOPICS IN HORTICULTURE 3 Credit Hours**

(Repeatable for credit) Analysis of significant and current topics in horticulture not covered in regular classes.

**Prerequisite:** None.

**Schedule Type:** Laboratory, Lecture, Combined Lecture and Lab

**Contact Hours:** 2 lecture, 2 lab

**Grade Mode:** Standard Letter

**HORT 36014 PLANT PROPAGATION AND GREENHOUSE PRODUCTION 3 Credit Hours**

Asexual/vegetative propagation including anatomical and physical concepts. Techniques covered include cuttings, budding, grafting, layering, dividing and micropropagation. Plant propagation by seeding and plugs are promoted along with crop production. Students provide an annual production schedule. Lecture two hours weekly; lab three hours weekly.

**Prerequisite:** HORT 16001 and BSCI 16001.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 3 lab

**Grade Mode:** Standard Letter

**HORT 36018 LANDSCAPE CONSTRUCTION II 3 Credit Hours**

Advanced landscape construction techniques involved in landscape contracting with an emphasis on the overall layout and planning of a landscape project. Students master and research product documentation, layout plans, written specifications and detailed construction drawings as they pertain to built landscape environments. Specific field site work with real world applications. Lecture two hours weekly; lab 3 hours weekly.

**Prerequisite:** HORT 26018; and junior or senior standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 3 lab

**Grade Mode:** Standard Letter

**HORT 36025 PROFESSIONAL PRACTICE IN HORTICULTURE (WIC) 3 Credit Hours**

Investigation into owning and operating a green industry company including customer relations, wholesale and retail marketing, project bidding, potential profit and loss margins, communication requirements, and overall services to public and private clientele.

**Prerequisite:** HORT 26001 and HORT 26016 and HORT 26018.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**Attributes:** Writing Intensive Course

**HORT 36034 SPORTS TURF MANAGEMENT 3 Credit Hours**

Identification of grass plant species; culture and morphology; turf ecology with practical information on turf establishment and cultural practices. Covers issues of design, renovation, and maintenance of sports grounds and facilities. Class requires 20 hours service learning component.

**Prerequisite:** HORT 26030; and junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 36046 LANDSCAPE DESIGN II 3 Credit Hours**

Advanced landscape design looking at overall landscape planning, including site and planting design, site amenities, irrigation design and client needs. Special attention to communication formats such as color rendering and graphics, as well as to overall presentation. Some design modeling and graphic sketching are included.

**Prerequisite:** HORT 26012 or HORT 26032 or HORT 26046; and junior or senior standing.

**Schedule Type:** Combined Lecture and Lab

**Contact Hours:** 2 lecture, 3 lab

**Grade Mode:** Standard Letter

**HORT 36092 INTERNSHIP IN HORTICULTURE (ELR) 1-4 Credit Hours**

(Repeatable for credit) Internship experience in an advanced field of study within the horticulture/green industry, building on the student's understanding of science-based fundamentals. Internship requires a minimum of 210 working hours with an approved public organization or private green industry firm, and 2 hours per week consultation on independent research as approved and supervised by the academic program director. Work includes supporting documentation and written reports as deemed appropriate give the subject studied.

**Prerequisite:** Special approval.

**Schedule Type:** Practical Experience

**Contact Hours:** 3-12 other

**Grade Mode:** Standard Letter

**Attributes:** Experiential Learning Requirement

**HORT 41096 INDIVIDUAL INVESTIGATION IN HORTICULTURE 1-3 Credit Hours**

(Repeatable for credit) Research under the direction of a horticulture faculty/program director mentor. Investigation of specific horticulture topics that build upon previous concentration areas of study.

**Prerequisite:** Junior or senior standing.

**Schedule Type:** Individual Investigation

**Contact Hours:** 1-3 other

**Grade Mode:** Standard Letter-IP

**HORT 46014 GARDEN CENTER AND NURSERY PRODUCTION MANAGEMENT 3 Credit Hours**

Survey of plant production of container, bare-root, balled-in-burlap plant materials in a nursery setting. Exploration of physiological principles involved, including planting, maturity dates for harvest, shipping, garden center activities and wholesale and retail marketing of stock.

**Prerequisite:** BSCI 26002 and BMRT 11000; and junior or senior standing.

**Schedule Type:** Lecture

**Contact Hours:** 3 lecture

**Grade Mode:** Standard Letter

**HORT 46092 PRACTICUM IN HORTICULTURE (ELR) 3 Credit Hours**

(Repeatable for credit) An in-depth individual project, combining field experiences with original research within a green industry niche. Area of interest supports the student's educational goals given their intended concentration of past class work.

**Prerequisite:** HORT 36092; and junior or senior standing.

**Schedule Type:** Practical Experience

**Contact Hours:** 16 other

**Grade Mode:** Standard Letter-IP

**Attributes:** Experiential Learning Requirement