

HORTICULTURE TECHNOLOGY (HRTC)

QUICK FACTS: HRTC COURSES

- **Instructional School:** Science, Technology, and Math
- **Department:** Agricultural Sciences

HRTC 106 Annuals and Perennials

(3 Credits, Fall)

Collection, identification, cultural requirements, and landscape use of annuals, perennials, vines, and ornamental grasses. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 107 Landscape Management: Maintenance

(3 Credits, Fall)

Practical field experience in pruning, landscape maintenance, and small power equipment use. The use of Integrated Pest Management is emphasized with ISDA Laws and a Safety Certification exam is required. PRE/COREQ: Any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 108 Plant Propagation and Management

(3 Credits, Fall)

Propagation, growth, and analysis of nursery and greenhouse crops. Plant management in actual greenhouse, field, and nursery facilities. PRE/COREQ: Any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 110 Plant Science

(3 Credits, Fall)

Introduction to plant classification, anatomy, and basic plant growth processes. Emphasis on function of plant parts, reproductive structures and their application to the study of horticulture. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 140 Soils and Plant Nutrition

(3 Credits, Spring)

Examination of the physical, chemical, and biological properties of soils. Review of chemical properties of fertilizer components in soil solution. Study of the diagnosis and correction of plant deficiencies. PRE/COREQ: Any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 144 Horticulture Internship and Seminar

(3 Credits, Spring/Summer)

This course helps students prepare for internship employment requirements through creating cover letters and resumes, interview practice, and completion of college contracts for internships. Students will then find a supervised horticulture work experience in local horticultural businesses and obtain a minimum of 100 hours of work experience in their interest area under the supervision and guidelines of College faculty. PRE/COREQ: Any GEM 3 Math course and COMM 101 or ENGL 101. (1 lecture hours, 6 lab hours, 3 credits)

HRTC 152 Landscape Management: Irrigation

(3 Credits, Spring)

Designing, engineering, troubleshooting, and managing of commercial and residential irrigation systems. PREREQ: Any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 155 Urban Agriculture

(3 Credits, Spring)

Olericulture and pomology with an emphasis on fruit and vegetable production systems for the urban garden. Fieldwork experience in cultivation, pruning, propagation, and seeding practices suitable for small businesses or homeowners. PRE/COREQ: Any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 199 Horticulture Special Topics

(1-5 Credits, Varies)

This course is designed to permit the offering of special topics appropriate to a student's program. Regular or frequently recurring topics are not offered under this title. The course may be repeated as new topics are presented. (1 lecture hours, 0 lab hours, 1 credits)

HRTC 203 Landscape Plants

(3 Credits, Fall)

Collection, identification, cultural requirements, and landscape use of woody trees and shrubs. PREREQ: HRTC 106. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 204 Landscape Management: Installation

(3 Credits, Fall)

Hands-on opportunities for installing complete landscapes focusing on woody plants, hardscapes, irrigation systems, turf, and landscape equipment use. PREREQ: HRTC 107 and any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 208 Greenhouse and Nursery Management

(3 Credits, Spring)

Selecting, managing, and growing woody landscape plants, bare-root nursery stock, bedding plants, and tropical foliage plants for consumption and sales in actual greenhouse, field, and nursery facilities. Integrated Pest Management emphasized with ISDA certification exam required. PREREQ: HRTC 108. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 220 Interior and Floral Plant Design

(3 Credits, Varies)

Interior landscape design and installation principles, horticultural maintenance, identification, cultural requirements, and landscape container use of floral and foliage. Emphasis on sustainable design components and exploration of certification standards in health and energy efficiencies for interior plantscapes in public and private buildings. PREREQ: Any GEM 3 Math course. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 252 Landscape Management: QWEL

(3 Credits, Spring)

Students will learn water-wise landscape practices including plant selection, irrigation system design, and water management from a certified Qualified Water Efficient Landscaper (QWEL) trainer. Completion of the QWEL certification exam is required. The QWEL Training Program Meets EPA Watersense Criteria. PREREQ: HRTC 152. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 255 Integrated Pest Management

(3 Credits, Fall)

Identification, life cycles, and host symptom diagnosis; exploration of cultural, biological, and chemical controls for landscape and nursery environments. ISDA certification exams OH & OI required. PREREQ: HRTC 107. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 256 Landscape Design I

(3 Credits, Fall)

Culture and history of landscape architecture and its impact on modern landscape architecture. Principles and elements of design for the development of functional, aesthetically pleasing outdoor environments. PREREQ: Any GEM 3 Math course, and ENGL 101 or COMM 101. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 257 Landscape Design II

(3 Credits, Spring)

This course focuses on computer-aided design software applications for small scale design. Students will explore several aspects of landscape design including various landscape styles, spatial creation in the landscape, planting design, construction document synthesis, and navigating career opportunities in landscape design. PREREQ: HRTC 256. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 293 Horticulture Technology Internship

(1-3 Credits, Varies)

Internships allow students to apply learning to real-life career possibilities. Credits are earned through supervised fieldwork specifically related to a student's area of study. PREREQ: PERM/INST. (0 lecture hours, 3 lab hours, 1 credits)

HRTC 295 Horticulture Business Management Practicum

(3 Credits, Fall/Spring)

This course requires students to complete a horticulture production or project experience, demonstrating their ability to synthesize and apply their horticulture skill set within a horticulture business, project site, or community site. Required completion of TSA. PREREQ: HRTC 144 or HRTC 293. (1 lecture hours, 4 lab hours, 3 credits)

HRTC 296 Horticulture Technology Independent Study

(1-10 Credits, Varies)

This is a term long project. Each credit hour is equivalent to 45 hours of work on a project. Students should make arrangements with the instructor in their field of interest. Before enrolling for independent study, a student must obtain approval of the department chair and dean, acting on the recommendation of the instructor who will be supervising the independent study. An Independent Study Registration Form must be completed and turned into a One Stop Student Services location before a student may register for this course. PREREQ: PERM/INST and submission of a completed Independent Study Registration Form. (0 lecture hours, 0 lab hours, 1 credits)

Refer to [How to Read Course Descriptions](#) for an explanation of elements found in the course descriptions above.