

HORT - HORTICULTURE

HORT Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/HORT/>)

Courses

HORT 100 Introduction to Horticulture credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/100/>)
Basic principles of plant growth and development as they apply to the production, marketing, and utilization of fruits, vegetables, and ornamental plants. Additional fees may apply. See Class Schedule. Credit is not given for both HORT 100 and HORT 106.

HORT 105 Vegetable Gardening credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/105/>)
The science and art of growing vegetables and the connection between gardening and food. Topics include nutrient and pest management, history, folklore, growing requirements, and quality characteristics of vegetables. Lecture and laboratory. Additional fees may apply. See Class Schedule.

HORT 106 The Sustainable Home Garden credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/106/>)
Create inviting and sustainable indoor and outdoor living spaces with plants, whether your landscape is several acres or a few containers on an urban balcony. This blended-format class meets 1 hour per week for lecture and discussion with additional instruction presented through independent learning activities including virtual field trips, on-line lectures, and instructional videos. Learn the fundamentals of environmentally sound resource use when designing with and maintaining flowering, fruit and vegetable plants, lawns, trees and shrubs around your home. Become a savvy horticultural consumer and develop a healthy lifestyle that supports positive physical and mental well-being by including greenspace activities in your daily life. Additional fees may apply. See Class Schedule. Credit is not given for both HORT 106 and HORT 100.

HORT 199 Special Topics credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/199/>)
Experimental course on a special topic in horticulture. Approved for Letter and S/U grading. May be repeated as topics vary.

HORT 205 Local Food Systems credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/205/>)
Prepares students to be leaders and facilitators in local food systems. The focus is on providing the knowledge and skills to initiate and manage community food gardens, school gardens and curricula, institutional buying programs, farmers markets, community supported agriculture, and urban farm networks. Requires participation in on-farm labs at the Sustainable Student Farm, as well as a group food system project and an experience with a local food organization. Prerequisite: An introductory course in HORT or CPSC or consent of instructor.

HORT 223 The Intelligent Behavior of Plants credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/223/>)
This course provides students with an introduction into the study of plant behavior, which focuses on how plants interact with and respond to the world around them. Topics include a basic overview of plant anatomy and physiology, a comparative examination of behavioral and communication mechanisms used by plants and animals, and an analysis of the controversial arguments regarding plant intelligence. This course satisfies the General Education Criteria for:
Advanced Composition
Nat Sci Tech - Life Sciences

HORT 240 Plant Propagation credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/240/>)
Examines theories and methods employed in propagation of plants, emphasizing anatomical, physiological, and ecological principles involved in sexual propagation (seeds) and asexual propagation (division, cuttings, budding, grafting, tissue culture, etc.) Additional fees may apply. See Class Schedule. Prerequisite: IB 103.

HORT 341 Greenhouse Mgmt and Production credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/341/>)
Focuses on how controlled environments can be managed to obtain optimal plant growth. Lectures cover greenhouse operations, management, and production, including: greenhouse design, location, glazing, heating, cooling, environmental control, irrigation systems, light control, root media, fertilization, watering, integrated pest management, and automation. The course also has a large laboratory component, in which students conduct experiments in the greenhouse. A required all-day field trip to nearby greenhouse operations rounds out the course experience. Additional fees may apply. See Class Schedule. Prerequisite: NRES 201 and HORT 100.

HORT 344 Planting for Biodiversity and Aesthetics credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/344/>)
As the demand for food increases, plants in ornamental landscapes will need to provide not only beauty but also species biodiversity critical for supporting sustainable food production. Course emphasizes species identification (predominantly herbaceous perennials), management, and planting design principles. Designing for multiple contexts, such as residential and community gardens, and large scale production sites, to provide multiple ecosystem services, especially supporting human aesthetic preferences, and habitat for pollinators. Additional fees may apply. See Class Schedule. Prerequisite: IB 103.

HORT 360 Vegetable Crop Production credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/360/>)
Instruction on the commercial production of vegetable crops. The first part of the class focuses on broad issues important to all crops including methods of vegetable production, basic soil and nutritional management, irrigation, and weed, insect, and disease management. Both organic and conventional production are discussed with a focus on sustainability. Basic farm and business management topics, including postharvest handling, food safety, crop and farm budgets, business structures, marketing, insurance, and regulations are also discussed. The second part of the class focuses on specific crops, emphasizing their origin, production, growth and development, insects, and diseases as well as harvesting and postharvest handling. Prerequisite: HORT 100 or equivalent.

HORT 361 Small Fruit Production credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/361/>)
Technological application of biological principles to the culture of strawberry, grape, blueberry, raspberry, blackberry, currant, gooseberry, and miscellaneous small fruits. Prerequisite: HORT 100 or IB 103.

HORT 362 Tree Fruit Production credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/362/>)
Examines biological principles and cultural practices involved in the growth and production of apple, pear, peach, cherry, plum, apricot, almond, and miscellaneous citrus and nut crops. Offered every fall semester. Prerequisite: HORT 100 or IB 103.

HORT 363 Postharvest Handling Hort Crop credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/363/>)

Provides theoretical and practical experience in the principles and practices of postharvest handling of cut flowers, ornamentals, fruits, and vegetables, emphasizing factors that impact quality, shelf-life, and safety. Requires two field trips, one to a local produce warehouse and the other to local supermarkets. Offered every fall semester. Prerequisite: HORT 100, CHEM 102, CHEM 103, IB 103.

HORT 393 (<https://courses.illinois.edu/schedule/terms/HORT/393/>) **Horticulture Internship MACS 346, RST 346** credit: 1 to 5 Hours.

Supervised experience in a field directly pertaining to a subject matter in horticulture. Approved for S/U grading only. May be repeated in separate terms. Independent Study courses are limited to 12 hours total applying to a degree in ACES. For registration in this course students should contact the Department Undergraduate Program Coordinator. Prerequisite: Sophomore standing, cumulative GPA of 2.0 or above at the time the internship is arranged, and consent of instructor.

HORT 395 Undergrad Research or Thesis credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/395/>)

Independent research, special problems, thesis, development and/or design work under the supervision of an appropriate member of the faculty. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Cumulative GPA of 2.5 or above at the time the activity is arranged and consent of instructor.

HORT 396 Ug Honors Research or Thesis credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/396/>)

Individual research, special problems, thesis, development and/or design work under the direction of the Honors advisor. May be repeated. Independent Study courses are limited to 12 hours total applying to a degree in ACES. Prerequisite: Junior standing, admission to the ACES Honors Program, and consent of instructor.

HORT 421 Horticultural Physiology credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/421/>)

Horticultural crop growth is examined in relation to plant structure, environment, and cultural practices. Emphasizes environmental control of whole plant growth as influenced by the supply of the raw materials required for growth: water, carbon dioxide, radiant energy, including the influence of temperature and photoperiod on plant growth and development. The shoot and root interactions with the environment are characterized relative to cultural practices. 4 undergraduate hours. 4 graduate hours. Prerequisite: HORT 100 or IB 103 and junior standing.

HORT 430 Children and Nature credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/430/>)

Study of research theory and evidence suggesting the importance of children's contact with natural environments including, designed urban greenspaces, managed sustainable landscapes, and wilderness, for healthy child development, ecological literacy, and pro-environmental behavior as adults. Discussion of research implications and applications for redesigning our communities' outdoor spaces, societal values, public policies and education systems to foster children's access to, and bonding with, nature. Same as LA 430. 2 undergraduate hours. 2 graduate hours.

HORT 435 Urban Food Production credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/435/>)

Explore opportunities and challenges for maximizing the productivity and sustainability of urban food production systems, considering agricultural, environmental, energy, social, and economic issues. Students will examine the science and practice of urban agriculture through scientific and popular literature, case studies, online discussion, and service-learning opportunities. Production systems covered will include both outdoor (e.g., vacant lot urban farms) and controlled environment (e.g., hydroponics and aquaponics) agriculture. 3 undergraduate hours. 3 graduate hours. Prerequisite: HORT 100 or CPSC 112 or equivalent introductory course in plant science.

HORT 442 Plant Nutrition credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/442/>)

Mechanisms and factors affecting the absorption, transport, distribution, and functions of the essential elements required by higher plants. 4 undergraduate hours. 4 graduate hours. Offered in alternate years. Prerequisite: NRES 201 and IB 420.

HORT 447 Horticultural Plant Breeding credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/447/>)

Methodology, objectives, and constraints of breeding for improved cultivars of flowers, woody ornamentals, turfgrasses, fruits, and vegetables. Emphasis on breeding objectives unique to horticultural commodities such as color, appearance, flavor, shelf-life, nutritional value, and other characteristics that determine product quality. 3 undergraduate hours. 3 graduate hours. Offered in alternate years. Prerequisite: CPSC 352.

HORT 499 Advanced Special Topics credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/HORT/499/>)

Advanced experimental course on a special topic in horticulture. 1 to 4 undergraduate hours. 1 to 4 graduate hours. Approved for Letter and S/U grading. May be repeated if topics vary.