

Landscape and Horticultural Technology (LHT)

Courses

LHT-101. Introduction to Turf Management. 3 Credits.

LECT 30 hrs LAB 45 hrs

Intended to provide students with the skills needed to professionally manage turf facilities including golf courses, recreational and athletic fields. Topics include turf establishment and reseeding, turf management, turf maintenance, irrigation, control of turf pests and maintenance of turf areas. This course may be eligible for New Jersey Pesticide Recertification Credits in both core and selected categories. This course is offered as a traditional face-to-face course or as a hybrid online course. The face-to-face course also has an online supplement.

Additional Fees: Course fee applies.

LHT-108. Herbaceous Plant Materials. 3 Credits.

LECT 30 hrs LAB 45 hrs

Teaches field identification techniques for herbaceous plants including annuals, biennials and perennials. The installation, selection and uses of herbaceous plants in a landscape, maintenance of herbaceous plants, and the selection of tools and equipment in the maintenance of herbaceous landscape plants are also included. This course is offered as a face-to-face course with an online supplement and also as a hybrid course.

Additional Fees: Course fee applies.

LHT-110. Plant Science. 3 Credits.

LECT 30 hrs LAB 45 hrs

Plant Science includes studying the effects of the environment on plant growth and development, plant morphology and physiology, and plant classification. Students apply theory by propagating, maintaining and studying plants using the Landscape and Horticultural Technology program greenhouse facility. This course is offered as a traditional face-to-face course with an online supplement, as an online course or as a hybrid online course.

Additional Fees: Course fee applies.

LHT-111. Introduction to Horticulture. 4 Credits.

LECT 45 hrs LAB 45 hrs

Plant production, plant propagation, greenhouse management and marketing of bedding plants represent the major topics of study. Students apply classroom theory by producing both annual and perennial plants from seed, cuttings and division. Commercial production techniques are emphasized, including professional greenhouse management. This course is offered as a traditional face-to-face course or as a hybrid online course. The face-to-face course also has an online supplement.

Additional Fees: Course fee applies.

LHT-114. Landscape Plant Identification Management and Use. 3 Credits.

LECT 30 hrs LAB 45 hrs

This course focuses on field identification techniques applied to the study of woody plant material including trees, shrubs, groundcovers and vines. Both conifer and deciduous plants are covered. The landscape uses of plants and the factors which should be used to guide plant selection are also discussed. Over 100 species of woody plant material are studied including trees, shrubs, vines and groundcovers. The County College of Morris campus, local garden centers and arboreta of the Morris County Park Commission are all used for field study. This course is offered as a traditional face-to-face course, as an online course or as a hybrid online course. The face-to-face course also has an online supplement.

Additional Fees: Course fee applies.

LHT-115. Horticultural Computer Software Applications. 3 Credits.

LECT 30 hrs LAB 45 hrs

Improves technical literacy by familiarizing students with the most effective ways to use the computer as a tool for online research, landscape design, landscape imaging and digital presentation development. Computer-assisted drafting is a major focus, and students also are introduced to GPS and GIS technology applications in agriculture. Students are provided with the opportunity to achieve competence in the selection and use of horticultural computer software. This course includes an online supplement and also offers students the opportunity to lease or purchase landscape design software at a significant discount.

Additional Fees: Course fee applies.

LHT-116. Horticultural Soils. 4 Credits.

LECT 45 hrs LAB 45 hrs

The origin, composition and management of soils, including study of the physical and chemical properties with emphasis on ion exchange processes, soil classification, soil amendments and biological processes that occur in the soil. The lab provides students with the opportunity to learn how to analyze and evaluate soil productivity including nutrient and pH levels as well as texture and structure. The emphasis throughout the course is on the development of problem-solving abilities which can be applied to field work. Students are required to complete a semester project which requires that they analyze the suitability of soils in an assigned area. This course is offered as a face-to-face course. This course will prepare students for the New Jersey Fertilizer Applicator Examination.

Additional Fees: Course fee applies.

LHT-124. Grounds Maintenance and Development. 3 Credits.

LECT 30 hrs LAB 45 hrs

This course provides students with the skills needed to professionally manage exterior environments. Topics include turf and landscape plant management, irrigation, control of landscape pests, winter property management and maintenance of landscape construction features as well as the maintenance of grounds equipment. This course is offered as a face-to-face course with an online supplement and as a hybrid course.

Additional Fees: Course fee applies.

LHT-130. Arboriculture. 3 Credits.

LECT 30 hrs LAB 30 hrs

This course introduces students to the science and technology of tree care in urban and suburban environments. Topics included are the anatomy and physiology of trees, fertility, water relations, pest management, pruning, disease management, tree/utility line conflicts, preservation of older trees in the landscape and identification of hazardous trees.

Additional Fees: Course fee applies.

LHT-211. Landscape Design and Planning I. 3 Credits.

LECT 30 hrs LAB 45 hrs

Class instruction emphasizes the theory, principles and practices of design and planning, effective use of plant materials, artistic consideration of form and function, and basic drawing and drafting techniques. Students learn to apply the design process as a problem-solving technique to produce finished designs. The process of design is a major focus and students are also taught presentation techniques. Sustainable practices are infused throughout the course. This course is offered as a face-to-face course with an online supplement or as a hybrid online course. Student project work is posted online using a free online portfolio system.

Prerequisites: LHT-114 or permission of department chair

Additional Fees: Course fee applies.

LHT-212. Landscape Design and Planning II. 3 Credits.

LECT 30 hrs LAB 45 hrs

A continuation of Landscape Design and Planning I. Class instruction focuses on problem-solving for difficult sites, including designing for slopes, sustainability, landscape lighting design, cultural influences on design and specialty garden design. Cost estimation, presentation skills and GPS applications are also covered. This course is offered as a face-to-face course with an online supplement or as a hybrid online course.

Prerequisites: LHT-211 or permission of department chair

Additional Fees: Course fee applies.

LHT-215. Plant Pest Management. 4 Credits.

LECT 45 hrs LAB 45 hrs

Teaches insects, diseases and weeds that are recognized as pests of ornamental plant materials and turf areas. The nature, structure and function of insect body parts, and the growth, habits, injurious effects and life cycles of pest organisms are studied in detail. Pesticides, regulations governing pesticide use and methods of selection and application are discussed with an emphasis on safety. Integrated Pest Management (IPM) techniques are stressed and students apply an understanding of IPM techniques to both greenhouse and landscape management. This course is offered as a face-to-face course, and will prepare students for the New Jersey Pesticide Applicator Examination in core and selected categories.

Prerequisites: LHT-110 or LHT-111 or permission of department chair.

Additional Fees: Course fee applies.

LHT-226. Internship Work Experience - LHT (45-100 Hours). 1 Credit.

COOP 45 hrs

This introductory course provides LHT Majors with career-oriented work experience in a paid work environment prior to career employment. The course requires a detailed description of the proposed internship, workplace attendance, frequent communication with the faculty advisor, and a written final report describing the students' work experience. The course satisfies one credit of a three-credit paid internship requirement of the LHT degree core curriculum. Students work a range of 45 to 100 hours.

Prerequisites: Permission of department chair.

LHT-227. Internship Work Experience -LHT (90-200 Hours). 2 Credits.

COOP 90 hrs

This intermediate course provides an internship experience in a paid environment for Landscape and Horticultural Technology majors. Students work a range of 90 - 200 hours. Course completion requires a detailed description of the proposed internship, workplace attendance, frequent communication with the faculty advisor, a written final report, and a closing interview describing the students' work experience.

Prerequisites: Permission of department chair.

LHT-228. Internship Work Experience - LHT (135-300 Hours). 3 Credits.

COOP 135 hrs

This comprehensive course provides selected students enrolled in the LHT major with job-oriented training and practical work experience in a paid or unpaid work environment prior to career employment. The course requires a detailed description of the proposed internship, workplace attendance, regular communication with the faculty advisor, an oral presentation, a written final report, and a closing interview describing the students' work experience. Students work a minimum of 135 hours. Students desiring to participate in this experience should make their interest known to the department chairperson by the end of their second semester.

Prerequisites: Permission of department chair.

LHT-231. Landscape Construction and Equipment. 3 Credits.

LECT 30 hrs LAB 45 hrs

Course emphasizes state-of-the-art landscape construction and installation techniques, surveying techniques and the safe operation and maintenance of landscaping equipment. Utilizing the well-equipped Landscape and Horticultural Technology facility, this course provides the student with extensive hands-on instruction in hardscape installation and also focuses on teaching students the value of professional certification programs. This course is offered as a face-to-face course with an online supplement and as a hybrid online course.

Additional Fees: Course fee applies.

LHT-234. Landscape and Turf Installation. 3 Credits.

LECT 30 hrs LAB 45 hrs

This course is intended to provide students with the skills and knowledge needed to succeed as landscape and turf installers and managers. Skills developed include surveying, understanding grading and drainage, and installation techniques for both landscape plants and turf. This course may be eligible for New Jersey Pesticide Recertification credits in both core and selected categories. This course is offered as a face-to-face course with online enhancements and as a hybrid online course.

Prerequisites: LHT-101 or LHT-110 or LHT- 111 or LHT-124 or permission of department chair.

Additional Fees: Course fee applies.

LHT-235. Irrigation Systems. 4 Credits.

LECT 45 hrs LAB 45 hrs

This course is intended to provide the student with a general understanding of the components, use and function of irrigation systems. By completion of this course, the students are able to operate, maintain and repair irrigation systems. This course is offered as a face-to-face course with an online supplement or as a hybrid course.

Additional Fees: Course fee applies.

LHT-291. Special Topics in Agriculture I. 3 Credits.

LECT 45 hrs

This course is an independent study course which involves students in an individualized course of study designed to fit each student's program of study and career goals. There is an online supplement for this course.

Prerequisites: Permission of department chair

Additional Fees: Course fee applies.

LHT-292. Special Topics in Agriculture II. 3 Credits.

LECT 45 hrs

This course is the second independent study course of a two semester sequence which involves students in an individualized course of study designed to fit each student's program of study and career goals. There is an online supplement for this course.

Prerequisites: Permission of department chair

Additional Fees: Course fee applies.