

SUSTAINABLE LANDSCAPE HORTICULTURE

Program Number 10-001-4 Associate Degree in Applied Science • Five Terms

Catalog No. Class Title

ABOUT THE PROGRAM

Sustainable Landscape Horticulture technicians can make a living in a wide variety of ways. The work of a horticulture technician is truly a "green" career. You may work in the disciplines of plant propagation and production for a greenhouse or tree nursery—nurturing plants to be used in landscaping, food production, or sold in retail garden centers. You may also work on landscape maintenance or landscape construction crews for landscape contractors, lawn care service companies, botanical gardens, municipal park departments, golf courses, civil engineering firms, and natural resource management agencies. Work duties are typically outdoors and very hands on. With time and experience, management and consulting opportunities within the field are possible.

PROGRAM OUTCOMES

- · Manage landscape grounds and horticultural operations sustainably.
- Minimize the stress on oneself and employee conflict to increase overall productivity.
- Implement stormwater conservation and management.
- Utilize the most up-to-date landscape and horticulture technologies.
- · Communicate within the horticulture industry.
- Propagate and grow horticulture plants.
- Justify the selection of the appropriate plant(s).
- Determine nutritional requirements of turf grasses, ornamentals, and edibles.
- · Analyze soil and its influence on plant life.
- Implement a landscape construction design plan.
- · Use carpentry and masonry hand and power tools.
- · Safely operate landscape equipment.
- Install irrigation equipment.
- Diagnose and treat pest problems on ornamental plants.
- Receive training for Wisconsin Pesticide Certification exam.
- Understand the role of design in high-quality landscape installation and maintenance.

ADMISSIONS STEPS

- Work with Admissions Specialist to:
- Submit application and \$30 fee.
- Complete an assessment for placement (Accuplacer or ACT).
- Submit official transcripts (high school and other colleges).
- Meet with program advisor/counselor to discuss program details.

APPROXIMATE COSTS

- \$132 per credit (resident)
- \$198 per credit (out-of-state resident)
- Other fees vary by program (books, supplies, materials, tools, uniforms, health-related exams, etc.) Visit gotoltc.edu/financial-aid/tuition-and-fees for details.

PLACEMENT SCORES

Accuplacer/ACT scores will be used to develop your educational plan. Contact your program advisor/counselor for details.

CAREER & EDUCATION ADVANCEMENT OPPORTUNITIES

LTC credits transfer to over 30 universities. For more information visit gotoltc.edu/future-students/transfer.

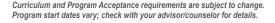
CONTACT

Chou Yang, Admissions Specialist 920.693.1851 • chou.yang@gotoltc.edu

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10001110 10001114 10001127 10001153 10001159 10001180 10001109 10801196	Term 1 Horticulture Introduction Computer Applications for Technicians Landscape Design Studio Introduction Botany and Soil Science Plants 1 Landscape Installation 1 Landscape Installation 2 Oral/Interpersonal Communications	3 1 1 3 2 2 2 3 17
10001128 10001130 10001158 10001170 10001172 10804123 10809198	Term 2 Computer Aided Design for Sustainability Greenhouse & Nursery Production Plants 2 Facilities Maintenance/Installation Landscape Maintenance Math with Business Applications Introduction to Psychology	2 3 2 1 3 3 3 17
10001174	Summer Term Horticulture Internship	2 2
10001129 10001140 10001141 10001143 10806112 10801197	Term 3 Site Inventory and Analysis Advanced Concepts in Horticulture Plant Communities of Wisconsin Stormwater Structures & Management Principles of Sustainability Technical Reporting	2 3 2 3 3 3 16
10001131 10001144 10001147 10001146 10809166 10809195	Term 4 Technology in Horticulture and Landscape Sustainable Horticulture Capstone Experience Advanced Greenhouse & Nursery Mgmt Sustainable Landscape Management Introduction to Ethics: Theory & Application Economics	3 3 2

TOTAL 68

Credit(s)







ADVANCED CONCEPTS IN HORTICULTURE...prepares the student to analyze and implement progressive methods and techniques at the forefront of the horticulture field, such as permaculture, hydroponics, aquaponics, aeroponics, vertical gardening, growing season extension, biodynamic farming, and agroforestry. PREREQUISITE: 10001153 Botany and Soil Science

ADVANCED GREENHOUSE AND NURSERY MANAGEMENT...provides the student with the skills and experiences to choose, obtain, determine costs/budgets, propagate, grow, maintain, and sell a variety of plants and supplies in a greenhouse and nursery context. Students will choose an additional greenhouse/nursery topic for advanced study and application. PREREQUISITE: 10001130 Greenhouse and Nursery Production

BOTANY AND SOIL SCIENCE... addresses the unique interactions of healthy plants & soils; examines the physical, chemical, organic & biological characteristics of soils and how they impact the structure & functions of plants. COREQUISITE: 10001110 Horticulture-Introduction

COMPUTER AIDED DESIGN FOR SUSTAINABILITY...will use computer and computer aided design software as tools for design communication; learners will be introduced to the fundamental components of CAD in landscape design. Property lines, topography, site planning, hardscapes, planting plans, and section view graphics will be covered. PREREQUISITES: 10001114 Computer Applications for Technicians and 10001127 Landscape Design Studio Intro

COMPUTER APPLICATIONS FOR TECHNICIANS... provides the learner with basics of the current Windows operating system, terminology, file management, Microsoft Word, Microsoft Excel, and horticulture engineering applications utilizing appropriate computer drafting software.

ECONOMICS...provides the participant with an overview of how a market-oriented economic system operates, and it surveys the factors which influence national economic policy. Basic concepts and analyses are illustrated by reference to a variety of contemporary problems and public policy issues. Concepts include scarcity, resources, alternative economic systems. growth, supply and demand, monetary and fiscal policy, inflation, unemployment and global economic issues. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

FACILITIES MAINTENANCE/INSTALLATION...prepares the learner to use hand tools and power tools in basic applications of carpentry, plumbing, and basic electricity. CONDITION: 310011 Horticulture Technician or 100014 Sustainable Landscape Horticulture program requirements met

GREENHOUSE AND NURSERY PRODUCTION... provides the student with the skills to analyze and implement efficient, cost-effective, and sustainable methods of horticultural production in a variety of structures as well as field scenarios. COREQUISITES: 10001153 Botany and Soil Science

HORTICULTURE INTERNSHIP...provides a broad variety of specific occupational experiences in the horticultural industry. Students work with faculty to develop an internship plan and identify, coordinate, and evaluate learning experiences appropriate to the field of study and major career focus of the student. PREREQUISITES: 10001130 Greenhouse & Nursery Production and COREQUISITES: 10001109 Landscape Installation 2, 10001172 Landscape Mtnc and CONDITION: 100014 Sustainable Landscape Horticulture program requirements met

HORTICULTURE INTRODUCTION...introduces the learner to the horticulture industry, plant culture, identification, propagation, and physiology. Course will also explore the horticulture industry in regard to fruits, vegetables, ornamentals, greenhouse systems, landscape techniques, home gardens, and turf.

INTRODUCTION TO PSYCHOLOGY...introduces students to a survey of the multiple aspects of human behavior. It involves a survey of the theoretical foundations of human functioning in such areas as learning, motivation, emotions, personality, deviance and pathology, physiological factors, and social influences. It directs the student to an insightful understanding of the complexities of human relationships in personal, social, and vocational settings. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

INTRODUCTION TO ETHICS: THEORY AND APPLICATION...provides a basic understanding of the theoretical foundations of ethical thought. Diverse ethical perspectives will be used to analyze and compare relevant issues. Students will critically evaluate individual, social and/or professional standards of behavior, and apply a systematic decision-making process to these situations. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

LANDSCAPE DESIGN STUDIO INTRODUCTION...prepares the learner to graphically describe objects without CAD Systems or landscape drawing aids. Fundamental components of design process; lettering, geographic construction, orthographic projection, isometric sketching, section views, auxiliary views and dimensioning are covered.

LANDSCAPE INSTALLATION 1...investigates techniques used in landscape construction practices. These include the use of specific landscape tools, plan implementation methods, preliminary site survey methods, proper planting, equipment operations & installations of basic landscape features. CONDITION: 310011 Horticulture Technician or 100014 Sustainable Landscape Horticulture program requirements met

LANDSCAPE INSTALLATION 2...builds upon landscape construction methods learned in Introduction to Landscape Installation. Possible projects include mixed material patios, retaining walls, water features, sustainable landscape elements, rain gardens, roof gardens, wooden structures, etc. COREQUISITE: 10001180 Landscape Installation 1

LANDSCAPE MAINTENANCE...assists learner in identifying problems and cultural challenges in the landscape; pruning techniques, insect/disease problems, weed identification; soil fertility; resolving situations in the field. Course will include production, maintenance, and harvest of edible and ornamental plants. PREREQUISITES: 10001110 Horticulture Introduction and COREQUISITE: 10001153 Botany and Soil Science

MATH WITH BUSINESS APPS...covers real numbers, basic operations, linear equations, proportions with one variable, percents, simple interest, compound interest, annuity, apply math concepts to the purchasing/buying process, apply math concepts to the selling process, and basic statistics with business/consumer applications. PREREQUISITE: 10834109 Pre-Algebra or equivalent and COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

ORAL/INTERPERSONAL COMMUNICATION...provides students with the skills to develop speaking, verbal and nonverbal communication, and listening skills through individual speeches, group activities, and other projects. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

PLANT COMMUNITIES OF WISCONSIN...enables the student to experience the diversity of the native plant communities throughout the Lakeshore region of Wisconsin and beyond. This course will involve extensive plant and plant community identification and analysis in the field. PREREQUISITES: 10001158 Plants 2 and 10001159 Plants 1

PLANTS 1...prepares the learner to use flowers/foliage effectively in the landscape including annuals/perennials/roses. Care of each flower emphasizing selection and tips to best utilize each flower and ground-cover/vines is included. CONDITION: 310011 Horticulture Technician or 100014 Sustainable Landscape Horticulture program requirements met and 10001159 Plants 1

PLANTS 2...provides the learner with the physiology, culture, identification, and use of primarily temperate woody plant materials appropriate for landscapes in northeastern Wisconsin. CONDITION: 310011 Horticulture Technician or 100014 Sustainable Landscape Horticulture program requirements met

PRINCIPLES OF SUSTAINABILITY...prepares students to develop sustainable literacy, analyze interconnections among physical and biological sciences and environmental systems, summarize effects of sustainability on health and well-being, analyze connections among social, economic, and environmental systems, employ energy conservation strategies to reduce use of fossil fuels, investigate alternative energy options, evaluate options to current waste disposal/recycling in the U.S., and analyze approaches used by your community. COREQUISITE: 10838105 Intro Reading and Study Skills or equivalent

SITE INVENTORY AND ANALYSIS...guides the student through inventory and evaluation of physical, biological, and cultural site resources to determine their potential for enhancement of human activities and their sensitivities to use-impact. Emphasis on information sources, data gathering methods and analysis techniques with projects to develop proficiency. PREREQUISITES: 10001109 Landscape Installation 2 and 10001127 Landscape Design Studio Introduction

STORMWATER STRUCTURES AND MANAGEMENT...analyzes and implements stormwater retention, detention, and harvesting at various landscape scales from backyard to regional watersheds. Environmental regulation considerations, best management practices, and design approaches will be utilized in project installations. PREREQUISITES: 10001109 Landscape Installation 2 and COREQUISITE: 10001129 Site Inventory and Analysis

SUSTAINABLE HORTICULTURE CAPSTONE EXPERIENCE...undertakes independent study across the horticulture field, implements knowledge and skills, and analyzes progress and results. Proposal Scope must be approved by the instructor. PREREQUISITES: 10001140 Advanced Concepts in Horticulture and COREQUISITE: 10001147 Advanced Greenhouse and Nursery Management

SUSTAINABLE LANDSCAPE MANAGEMENT...implements management and supervisory strategies for "triple bottom line" sustainability (Environmental, Economic, and Social) landscape scale management operations. PREREQUISITE: 10001143 Stormwater Structures and Management

TECHNICAL REPORTING...provides students with the skills to prepare and present oral and written technical reports. Types of reports may include lab and field reports, proposals, technical letters and memos, technical research reports, and case studies. PREREQUISITE: 10831103 Intro to College Wrtg or equivalent and COREQUISITE: 10838105 Intro Rdg & Study Skills equivalent

TECHNOLOGY IN HORTICULTURE AND LANDSCAPE...utilizes various programs and technologies for landscape, nursery, greenhouse, small/urban farm, and grounds planning, design, reporting, and monitoring. PREREQUISITES: 10001140 Advanced Concepts in Horticulture and COREQUISITE: 10001147 Advanced Greenhouse and Nursery Management