



# Sustainable Landscape Horticulture

Program No: 10-001-4

Associate Degree in Applied Science

Degree Completion Time: Four Terms

Degree completion time may vary based on student scheduling needs and class availability.

2013-2014

Catalog No.	Class Title	Credit(s)
<b>Term 1</b>		
10001110	Horticulture Introduction	3.00
10001122	Botany for Gardeners	1.00
10001158	Plants-Woody Ornamental	3.00
10001159	Flowers-Herbaceous	3.00
10462170	Facilities Maintenance/Installation	1.00
10001180	Landscape Installation-Introduction	2.00
10001114	Computer Applications for Technicians	1.00
10001127	Landscape Design Studio Introduction	1.00
10801196	Oral/Interpersonal Communications	3.00
	<b>Total</b>	<b>18.00</b>
<b>Term 2</b>		
10001109	Landscape Installation-Advanced	2.00
10001130	Greenhouse & Nursery Production	3.00
10001153	Plant and Soil Science	3.00
10001172	Landscape Maintenance	2.00
10001128	Landscape Computer Aided Design	2.00
10804107	College Mathematics	3.00
10809198	Intro to Psychology	3.00
	<b>Total</b>	<b>18.00</b>
<b>Term 3</b>		
10001174	Horticulture Internship	2.00
10001140	Advanced Concepts in Horticulture	2.00
10001141	Plant Communities of Wisconsin	2.00
10001129	Site Inventory and Analysis	2.00
10001142	Integrated Landscape Grounds Maintenance or 10001154 Turf Management	3.00
10801197	Technical Reporting	3.00
10806112	Principles of Sustainability	3.00
	<b>Total</b>	<b>17.00</b>
<b>Term 4</b>		
10001143	Stormwater Structures & Management	3.00
10001144	Sustainable Horticulture Capstone Experience	3.00
10001131	Technology in Horticulture and Landscape	2.00
10001145	Sustainable Horticulture Management OR 10001146 Sustainable Landscape Grounds Mgmt (3cr)	3.00
10809172	Introduction to Diversity Studies	3.00
10809166	Intro to Ethics, Theory & Application	3.00
	<b>Total</b>	<b>17.00</b>
	<b>Program Total</b>	<b>70.00</b>

**Note:** Classes run year-round; check with your program counselor for details.

Program start dates vary; check with your counselor for details.

Curriculum and program acceptance requirements are subject to change.

## About the Career

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.

## Careers

Many exciting career options await horticulture technician graduates. You may decide to enter the work world immediately, or you may choose to continue your education by completing your associate degree through an articulation agreement with a partner school. Entry-level positions available to you may include:

- Landscape Foreperson or Supervisor
- Grounds Manager
- Nursery and Greenhouse Supervisor
- Starting Your Own Business
- Nursery and Greenhouse Assistant
- Landscape Installer
- Landscape Maintenance Technician
- Gardening Services

## Admissions Steps

- Submit Application and \$30 Processing Fee
- Complete an Assessment for Placement (Accuplacer or ACT)
- Submit Official Transcripts (High School and Other Colleges)
- Meet with Program Advisor
- Complete Functional Ability Statement of Understanding Form

## Program Outcomes

You'll learn to:

- 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.

## 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.)

## Functional Abilities

Functional abilities are the basic duties that a student must be able to perform with or without reasonable accommodations. At the postsecondary level, students must meet these requirements, and they cannot be modified.

## Placement Scores

Accuplacer/ACT scores will be used to develop your educational plan. Please contact your program counselor/advisor at 920-693-1109.

## Grading Policy

All program courses in the Agriculture Division must be passed with a grade of “C” or better for program graduation.

## Transfer agreements are available with the following institutions:

Bellevue University  
Capella University  
Cardinal Stritch University  
Concordia University  
Excelsior College  
Franklin University

Herzing University  
Lakeland College  
Ottawa University  
Silver Lake College  
University of Phoenix  
Upper Iowa University

UW-Green Bay  
UW-Oshkosh  
UW-Stout

IMPORTANT: For more information on these agreements, visit [gotoltc.edu/transfer](http://gotoltc.edu/transfer).

### **10001109 Landscape Installation Advanced**

...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.  
**PREREQUISITE:** 10001180 *Landscape Installation Introduction*

### **10001110 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.

### **10001114 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.

### **10001122 Botany for Gardeners**

...provides the learner with a broad-based presentation of the importance and usefulness of botany and terminology as it relates to the practice of horticulture. Areas covered include plant growth, organization, adaptation, function, and reproduction.

### **10001127 Landscape Design Studio Introduction**

...teaches the learner to graphically describes 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.

### **10001128 Landscape Computer Aided Design**

...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*

### **10001129 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-Advanced* and 10001127 *Landscape Design Studio Introduction*

### **10001130 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 *Plant and Soil Science*

### **10001131 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:** 10001130 *Greenhouse and Nursery Production* or 10001142 *Integrated Landscape Grounds Maintenance*

### **10001140 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 *Plant and Soil Science*

### **10001141 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-Woody Ornamental* and 10001159 *Flowers-Herbaceous*

### **10001142 Integrated Landscape Grounds Maintenance**

...provides the student with the tools to examine and implement multifaceted landscape scale maintenance by applying Integrated Pest Management to turfgrasses, ornamentals, and trees, as they relate to site amenities and facilities.  
**PREREQUISITES:** 10001172 *Landscape Maintenance* and 10001154 *Turf Management*

### **10001143 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-Advanced* and 10001129 *Site Inventory and Analysis*

### **10001144 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:** 10001130 *Greenhouse and Nursery Production* or 10001142 *Integrated Landscape Grounds Maintenance*

### **10001145 Sustainable Horticulture Management**

...prepares the student to manage and supervise horticultural operations such as a garden center, greenhouse, nursery, and small farm production.  
**PREREQUISITE:** 10001130 *Greenhouse and Nursery Production*

### **10001153 Plant 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*

### **10001154 Turf Management**

...will identify various turf grasses and will examine natural low-maintenance turf, residential lawns and high intensity applications (i.e. golf courses, athletic fields).  
**PREREQUISITE:** 10001110 *Horticulture Introduction*

### **10001158 Plants-Woody Ornamentals**

...provides the learner with the physiology, culture, identification, and use of primarily temperate woody plant materials appropriate for landscapes in northeastern Wisconsin.

### **10001159 Flowers-Herbaceous**

...prepares the learner to use flowers/foilage 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.

### **10001172 Landscape Maintenance**

...assists learner in identifying problems and cultural challenges in the landscape; pruning techniques, insect/disease problems, weed identification; soil fertility; resolve situations in the field.  
**PREREQUISITES:** 10001110 *Horticulture Introduction*, 10001122 *Botany for Gardeners* and **COREQUISITE:** 10001153 *Plant and Soil Science*

### **10001174 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.  
**COREQUISITE:** 10001130 *Greenhouse & Nursery Production* and **CONDITION:** 100014 *Sustainable Landscape Horticulture program requirements met*

### **10001180 Landscape Installation Introduction**

...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.

### **10462170 Facilities Maintenance/Installation**

...prepares the learner to use hand and power tools. Introduces basic applications in such areas as carpentry, plumbing, basic electricity, small engines, and concrete.

### **10801196 Oral/Interpersonal Comm**

...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 **CONDITION:** Reading accuplacer minimum score of 74 or equivalent

### **10801197 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. Designed as an advanced communication course for students who have completed at least the prerequisite introductory writing course.  
**PREREQUISITE:** 10831103 *Intro to College Wrtg* or **CONDITION:** Written Comm Prepared Learner (Accuplacer Wrtg min score of 86 or Equivalent) and **COREQUISITE:** 10838105 *Intro Rdg & Study Skills* or **CONDITION:** Reading Accuplacer min score of 74 or equivalent

### **10804107 College Mathematics**

...is designed to review and develop fundamental concepts of mathematics pertinent to the areas of: 1) arithmetic and algebra; 2) geometry and trigonometry; and 3) probability and statistics. Special emphasis is placed on problem solving, critical thinking and logical reasoning, making connections, and using calculators.  
**PREREQUISITE:** Accuplacer Math minimum score of 79 or Equivalent or 10834109 *Pre-Algebra* and **COREQUISITE:** 10838105 *Intro Reading and Study Skills* or **CONDITION:** Reading accuplacer minimum score of 74 or equivalent

### **10806112 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 *Accuplacer Reading score of 74 or equivalent*

### **10809166 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 *Accuplacer Reading score of 74 or equivalent*

### **10809172 Introduction to Diversity Studies**

...is a course that draws from several disciplines to reaffirm the basic American values of justice and equality by teaching a basic vocabulary, a history of immigration and conquest, principles of transcultural communication, legal liability and value of aesthetic production to increase the probability of respectful encounters among people. In addition to an analysis of majority/minority relations in a multicultural context, the topics of ageism, sexism, gender differences, sexual orientation, the disabled and the American Disability Act (ADA) are explored. Ethnic relations are studied in global and comparative perspectives.  
**COREQUISITE:** 10838105 *Intro Reading and Study Skills* or *Accuplacer Reading score of 74 or equivalent*

### **10809198 Intro 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 *Accuplacer Reading score of 74 or equivalent*