PLANT SCIENCE AND AGRICULTURAL TECHNOLOGY

Plant Science and Agricultural Technology with Specializations in:

- Horticulture
- Landscape

Associate in Science Degree (CIP# 1101060502)

This program is designed to prepare students for careers in the landscape and horticulture industries. Students may choose to specialize in two areas: landscape or horticulture. The Landscape Specialization provides for skills in landscape design, construction, and maintenance, which include instruction in constructing and landscaping parks, airports, communities, resorts, etc. Students are trained to supervise, manage, and design exterior and interior landscapes. The Horticulture Specialization is designed to prepare students for careers in both greenhouse and nursery operations and includes instruction in greenhouse foliage, flower and woody nursery production. Students are specially trained to operate and manage all types of plant productions, programs and facilities.

Students are strongly encouraged to consult a Career Program Advisor in the department office for assistance in determining the best education plan for their career goals.

Although scheduling may not always provide for the following progression of courses, students should use the foundation, intermediate and specialization course sequence as a guide in program planning.

All degree-seeking students must satisfy entry testing requirements and satisfactorily complete all mandatory courses in reading, student success, mathematics, English, and English for Academic Purposes in which the student is placed.

Alternative Ways to Earn Credit

You may be eligible to receive credit toward this degree if you have earned an approved industry certification or Career Pathways credit. For more information and requirements, go to valenciacollege.edu/asdegrees/transferagreements.cfm (http://valenciacollege.edu/asdegrees/transferagreements.cfm) to view the award of credit options. Eligible students should contact the related academic department and/or Career Program Advisor at Valencia for the award of credit.

Technical Certificates

The Plant Science and Agricultural A.S. degree also offers the following college credit certificate programs. These certificate programs can put you on the fast-track to reaching your career goals. They are designed to equip you with a specialized skill set for entry-level employment or to upgrade your skills for job advancement. Most can be completed in one year or less, and all of the courses in the certificate programs are embedded in the A.S. degree. Click on the Certificate tab at the top of the page for more information about the course requirements.

- Landscape & Horticulture Specialist (12 credits)
- Landscape & Horticulture Professional (18 credits)
- Landscape & Horticulture Technician (30 credits)

Start Right

Degree-seeking students enrolling at Valencia for the first time will have a limited range of courses from which to choose for their first 18 college-level credits. Within the first 18 college credit hours, you will be required to take ENC1101 (3 credits), and if applicable, SLS 1122 (3 credits) and a mathematics course appropriate to your selected major (3 credits). The remaining courses will be chosen from the General Education Core Courses in humanities (3 credits), science (3 credits), or social science (3 credits), and/or the introductory courses within the A.S. degree programs. For specific courses see the Foundation Courses on the “Program Requirements” tab. For course sequencing recommendations, see your Career Program Advisor or create an education plan by logging into Atlas, clicking on the LifeMap tab and clicking My Education Plan.

Potential Careers

- Nursery Supervisor/Manager
- Supervisor, Parks
- Production Superintendent
- Landscape & Groundskeeping Manager
- Landscape Gardener/Designer/Contractor
- Supervisor/Manager of Landscaping and Horticulture Services
- Landscape & Horticulture Specialist
- Landscape & Horticulture Professional

Salary & Earnings Information

For salary and wage information, visit: www.floridawages.com (http://www.floridawages.com).

Contacts

Future Students
Contact Enrollment Services at enrollment@valenciacollege.edu or call 407-582-1507.

Current Students
Javier Garces, Program Chair, West Campus: 407-582-1820
jgarces3@valenciacollege.edu

Beverly Johnson, Career Program Advisor, West Campus: 407-582-1890
bjohnson@valenciacollege.edu

Internship and Workforce Services

If you need assistance with job resources or in locating an internship, please visit: valenciacollege.edu/internship (http://valenciacollege.edu/internship).

Program Requirements

Foundation Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>ENC 1101</td>
<td>FRESHMAN COMPOSITION I **~</td>
<td>3</td>
</tr>
<tr>
<td>EVR 1001</td>
<td>Intro to Environ Science **~</td>
<td>3</td>
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<tr>
<td>or MAC 110 College Algebra</td>
<td></td>
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<tr>
<td>PLS 1010C</td>
<td>INTRODUCTION TO PLANT SCIENCE</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1510C</td>
<td>Ornamental Plant Materials I *</td>
<td>3</td>
</tr>
<tr>
<td>ORH 1511C</td>
<td>Ornamental Plant Materials II *</td>
<td>3</td>
</tr>
<tr>
<td>ENY 1002C</td>
<td>Principles Of Entomology *</td>
<td>3</td>
</tr>
<tr>
<td>BOT 2010C</td>
<td>Botany *</td>
<td>4</td>
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<tr>
<td>CHM 1025C</td>
<td>Intro To General Chemistry *</td>
<td>4</td>
</tr>
<tr>
<td>or CHM 104 GENERAL CHEMISTRY WITH QUALITATIVE ANALYSIS</td>
<td></td>
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</tbody>
</table>

Intermediate Courses
Horticulture Specialization
Designed for students wishing to specialize in nursery and greenhouse operations.

Program Outcomes
- Differentiate the mechanisms involved in plant physiology and growth.
- Categorize plants based on growth, morphological, and taxonomic characteristics.
- Design a pest management program.
- Demonstrate employability skills in the field of horticulture.
- Develop solutions for a wide variety of plant health issues.

Landscape and Horticulture Technology Degree Electives
These courses may be used for Landscape and Horticulture Technology Degree Electives credit if not a requirement of the Specialization.

ORH 2251C Nursery Operation and Mgmt  
ORH 2260C Greenhouse Operations and Mgmt  
PLS 2220C Plant Propagation  

Total Credit Hours 14

Landscape Specialization
Designed for students wishing to specialize in landscape design, construction, and maintenance.

Program Outcomes
- Differentiate the mechanisms involved in plant physiology and growth.
- Categorize plants based on growth, morphological, and taxonomic characteristics.
- Design a landscape or interiorscape project.
- Demonstrate employability skills in the field of horticulture.
- Schedule a landscape or interiorscape maintenance program.

Landscape and Horticulture Specialist

Notes:
Specialized program courses are offered on the West Campus.

Specialized courses may not be offered every session or on every campus.

Associate in Science (A.S.) Degree students who wish to pursue a Bachelor’s Degree have the opportunity to transfer into a related bachelor’s degree (2 +2) that is offered at any state college in Florida. Students who want to continue their education should discuss the career path with their Career Program Advisor, as well as contact their State College of choice for acceptance of this degree.
• Demonstrate employability skills in the landscape field.

**PLS 1010C**  INTRODUCTION TO PLANT SCIENCE  3
**ORH 1510C**  Ornamental Plant Materials I  *  3
**ORH 1511C**  Ornamental Plant Materials II  *  3
**LDE 1000C**  Landscape Design and Implement  *  3

Total Credit Hours  12

* This course has a prerequisite; check description in Valencia catalog.

Notes:
All certificate courses are offered on the West Campus. Specialized courses may not be offered every session or on every campus.

**Landscape and Horticulture Professional**

**Technical Certificate**
This program is designed to prepare students for immediate employment in the landscape and horticulture industries as landscape gardeners, park workers, gardener specialists and landscape or horticulture professionals. Students focus on the maintenance of landscape plants, including nutrition, fertilization and pest control.

Program Outcomes
• Differentiate the mechanisms involved in plant physiology and growth.
• Categorize plants based on growth, morphological, and taxonomic characteristics.
• Design a landscape project.
• Install landscape plants.
• Schedule a fertilization program.

**PLS 1010C**  INTRODUCTION TO PLANT SCIENCE  3
**ORH 1510C**  Ornamental Plant Materials I  *  3
**ORH 1511C**  Ornamental Plant Materials II  *  3
**LDE 1000C**  Landscape Design and Implement  *  3
**SWS 2102C**  Soils and Fertilizers  *  3

or **AOM 2012C**  Types and Systems of Agri Oper

Specialization (See below)  15

Total Credit Hours  30

* This course has a prerequisite; check description in Valencia catalog.

**Horticulture Specialization**
Program Outcomes
• Differentiate the mechanisms involved in plant physiology and growth.
• Categorize plants based on growth, morphological, and taxonomic characteristics.
• Design a landscape or interiorscape project.
• Install landscape plants.
• Manage a plant nursery.

**ORH 2251C**  Nursery Operation and Mgmt  3

**Landscape and Horticulture Technology Certificate**
Elective(s)  12

Total Credit Hours  15

**Landscape Specialization**
Program Outcomes
• Differentiate the mechanisms involved in plant physiology and growth.
• Categorize plants based on growth, morphological, and taxonomic characteristics.
• Design a landscape or interiorscape project.
• Install landscape plants.
• Design a pest management program.

**ORH 1234C**  Ornamental Plant Maintenance  *  4
**PLP 2001C**  Plant Pathology  *  4

or **IPM 2011C**  Diagnostic Techniques for Plan

**ORH 2840C**  Landscape Construction  *  4
Landscape and Horticulture Technology Certificate

**Elective(s)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
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<td>AOM 2012C</td>
<td>Types and Systems of Agri Oper</td>
<td>3</td>
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<tr>
<td>BOT 2010C</td>
<td>Botany</td>
<td>4</td>
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<tr>
<td>BOT 2501C</td>
<td>Plant Physiology</td>
<td>4</td>
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<tr>
<td>CGS 2100C</td>
<td>COMPUTER FUNDAMENTALS AND APPLICATIONS</td>
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<tr>
<td>CHM 1025C</td>
<td>Intro To General Chemistry</td>
<td>4</td>
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<td>Selected Topics Horti/Lndscap</td>
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<td>HOS 2941</td>
<td>Intern Explor in Landscape/Hor</td>
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<td>HOS 2942</td>
<td>Intern in Landscape/Horticult</td>
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<tr>
<td>IPM 1301C</td>
<td>SURVEY OF PEST CONTROL</td>
<td>3</td>
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<tr>
<td>IPM 2011C</td>
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<td>ORH 1234C</td>
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<tr>
<td>ORH 1873C</td>
<td>Interiorscapng-Desgn and Maint</td>
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<td>ORH 2220C</td>
<td>Turf Grass Culture</td>
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<td>ORH 2260C</td>
<td>Greenhouse Operations and Mgmt</td>
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<td>ORH 2281C</td>
<td>Introduction to Orchidology</td>
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<td>ORH 2840C</td>
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<tr>
<td>OST 1755C</td>
<td>MICROSOFT WORD-INTRODUCTION</td>
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<tr>
<td>PLP 2001C</td>
<td>Plant Pathology</td>
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<td>PLS 2220C</td>
<td>Plant Propagation</td>
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<td>SWS 2102C</td>
<td>Soils and Fertilizers</td>
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* This course has a prerequisite; check description in Valencia catalog.

**Note**

All certificate courses are offered on the West Campus.

Specialized courses may not be offered every session or on every campus.

This certificate program is eligible for Financial Aid.