

COMPETENCY ASSESSMENT

for

**Title of Majors: Landscape/Horticulture Technology
Landscape Emphasis (LE)
Plant Production Emphasis (LP)**

This document contains a list of courses, descriptions and associated competencies in the first year of the Ornamental Horticulture programs. Please assess each applicable competency by checking the box corresponding to the code letter, sign, date and return this form to:

Office of Admissions
Pennsylvania College of Technology
One College Avenue
Williamsport, PA 17701-5799

<u>Code Letter</u>	<u>Student's Skill Level</u>
H	Highly skilled; student is able to work independently
M	Moderately skilled; student requires minimum supervision
L	Limited skill; student requires supervision
N	Competency not covered in instruction or work experience

Student

Student ID Number

School

Date

HRT101

Introduction to Ornamental Horticulture

Overview of the diverse ornamental horticulture industry, including the worldwide scope and economic impact of the industry in today's marketplace. Emphasis on information access through the Internet, trade journals, trade organizations, the horticulture industry, guest speakers, and visitations to various horticultural businesses. Exploration includes products, services, and information used in the industry; production and marketing (wholesale and retail) of horticultural products and services; and traditional and nontraditional career paths within the industry. 1 Credit (1 Lecture - 0 Lab) Fall Only.

H M L N Competency

- a. Acquaint the student with various job opportunities and career paths in the horticultural and allied industries (The Green Industry)
- b. Identify important horticultural crops and production areas throughout Pennsylvania, the United States, and the world
- c. Illustrate the importance of various sources of up-to-date information on plant material, hard goods and educational materials available to the horticultural industry by using various sources such as; the Internet, library, trade journals, class notes and guest speaker presentations.
- d. Acquaint the student with the day to day operation of garden centers, nurseries, floral shops and greenhouse businesses through visitations and guest speakers.
- e. Describe the various types of ornamental horticultural and allied businesses.
- f. Summarize the important factors in establishing a horticultural operation.
- g. Summarize important horticulture industry information from presentations given by peer research presentations and industry related guest speakers.

HRT110 - Soils & Fertilizers

Study of soil texture, structure, organic matter and plant nutrients as related to the use of pH controllers and fertilizers. Includes synthetic soils and techniques used to control insects, disease and weed problems. Prerequisite(s): MTH005 or placement by exam. 3 Cr. (2-3).

H M L N Competency

- a. Demonstrate knowledge in the basic concepts of soil science and be able to apply these concepts to specific horticultural problems.
- b. Test soils for chemical and mineral content and make recommendations for various crops as to the following crop requirements: soil pH; soluble salts levels; macronutrient levels; Penn State Soil Testing system.
- c. Test soils for texture, porosity and density, and make recommendations to improve the solid structure for better plant growth.
- d. Prepare natural and soil-less media, according to cultural requirements of various plants.
- e. Appraise various types of natural, organic and man-made fertilizers and make recommendations as to their proper selection and application for quality plant growth.
- f. Appraise the various means of controlling soil pH and choose the proper materials for pH control and improve crop growth.
- g. Outline the benefits of various types of organic matter and non-organic amendments for improved solid structure, pH control, nutrient availability and plant growth.
- h. Discuss the non-soil environments and its impact in plant growth.

HRT 113 - Ornamental Plants

An introduction to the fields of study of horticulture. Outdoor identification of annuals, perennials, woody shrubs and trees, weeds and wildflowers. The use of these plant materials in the landscape industry will be stressed. 3 Cr. (2-3).

<u>H</u>	<u>M</u>	<u>L</u>	<u>N</u>	<u>Competency</u>
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|--------------------------|--------------------------|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | a. List and define the different areas of plant science. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | b. List and define the different areas of horticulture. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | c. Identify and discuss the use of annuals, perennials and woody plants used in the landscape garden center trade. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | d. Outline the requirements of the above plants for planting and regular maintenance. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | e. Discuss the effect that climate has on plants. Develop and understanding of weather and other environmental factors that may effect plant growth. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | f. Identify 50 annuals used in the landscape garden trade. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | g. Identify 50 perennials used in the landscape garden trade. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | h. Identify 50 woody plants used in the landscape garden trade. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | i. Identify 50 weeds, wildflowers and wetland plants that have an impact on the landscape garden trade. |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | j. List and define the basic principles of landscape design. |

