



## COURSE OUTLINE

<b>Course Number</b> OHT 232	<b>Course Title</b> Nursery Management I	<b>Credits</b> 3
<b>Hours:</b> Lecture/Lab/Other 2/2/0	<b>Co- or Pre-requisite</b> OHT 102 or Permission of the Program Coordinator	<b>Implementation Semester &amp; Year</b> Spring 2022

**Catalog description:** A general study of nursery crop production, greenhouse, and nursery operations and mechanics. Topics covered include container and field planting and transplanting, trees and shrubs, fertilization, pest control, irrigation, pruning, plant propagation, inventory controls, day to day business operations, and managing employees. A field study of local businesses and lab exercises will be used to reinforce lecture material.

**General Education Category:** Not GenEd      **Course Coordinator:**  
Professor Amy Ricco  
[riccoa@mccc.edu](mailto:riccoa@mccc.edu) 609-570-3372

**Required texts & Other materials:**

AmericanHort Resources: ANLA Standards and Southern Nursery Association Best Management Practices

**Course Student Learning Outcomes (SLO):**

***Upon successful completion of this course, the student will be able to:***

1. Demonstrate proper cultural techniques used for both field and container grown plants. [Supports ILG #2, 3 and 11 ; PLO #1, 2, 3 and 5 ]
2. Identify the different types of nursery and nursery related businesses. [Supports ILG # 1 ]
3. Analyze several different types of businesses to compare and contrast styles in production and business management. [Supports ILG #1 ]
4. Identify the challenges facing the nursery industry along with the innovations on the horizon. [Supports ILG #9 ]
5. Explain how the role of a nursery manager changes as the type and size of the nursery changes. [Supports ILG #11 ]
6. Demonstrate proper propagation and production techniques. [Supports ILG #10 and 11 ; PLO #1, 2, 3, 4 and 5 ]
7. Explain how to use the ANLA Standards during nursery production. [Supports ILG # 10 and 11]
8. Explain the production process of nursery stock from propagation to being in the hands of the ultimate consumer. [Supports ILG #4 and 11 ; PLO # 1, 2, 3, 4 and 5]

## **Course-specific Institutional Learning Goals (ILG):**

**Institutional Learning Goal 1. Written and Oral Communication in English.** Students will communicate effectively in both speech and writing.

**Institutional Learning Goal 2. Mathematics.** Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.

**Institutional Learning Goal 3. Science.** Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.

**Institutional Learning Goal 4. Technology.** Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.

**Institutional Learning Goal 9. Ethical Reasoning and Action.** Students will understand ethical frameworks, issues, and situations.

**Institutional Learning Goal 10. Information Literacy:** Students will recognize when information is needed and have the knowledge and skills to locate, evaluate, and effectively use information for college level work.

**Institutional Learning Goal 11. Critical Thinking:** Students will use critical thinking skills understand, analyze, or apply information or solve problems.

## **Program Learning Outcomes for Ornamental Horticulture AAS Program (PLO):**

1. Identify, propagate, and care for at least 300 different woody and herbaceous plant specimens;
2. Implement a soils management plan using modern irrigation and nutrient control techniques;
3. Properly apply common pesticides and fertilizers to achieve optimum growing conditions for plants and crops;
4. Produce and manage common greenhouse crops;
5. Practice integrated pest management.

## **Units of study in detail – Unit Student Learning Outcomes:**

### **Unit I Overview of the Nursery Industry in the United States; Importance of Nursery Industry to New Jersey; Introduction to the Different Types of Nurseries; Innovations and Challenges within the Industry; Relevant Professional Organizations [Supports SLO # 2, 3, and 4]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Understand the role of the nursery industry in New Jersey and in the United States.
- Recognize how the nursery industry has changed over the years and what the new innovations are on the horizon.
- Identify the major types of nurseries.
- Identify relevant professional organizations and join an organization.
- Recognize the challenges facing the nursery industry and what the impact of those challenges are.

### **Unit II Role of a Nursery Manager [Supports SLO # 5]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Identify the possible employee organizational structures within a nursery business.
- Recognize the role of a nursery manager within a nursery organization.
- Analyze how the role of a nursery manager changes based on the size and the scope of the nursery.

### **Unit III Propagation of Nursery Stock; Growing Media and Components [Supports SLO# 6 and 8 ]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Identify where and how plants are propagated and produced in the United States.
- Demonstrate the common techniques used in plant propagation.
- Utilize the various soil media components, sanitation techniques and rooting hormones used during the propagation process.

### **Unit IV Field Grown Nursery Stock; Care and Maintenance of Nursery Stock [Supports SLO # 1, 7 and 8]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Identify the types of plants are commonly field grown.
- Draw a layout for field production.
- Demonstrate techniques used during the production of field grown nursery stock.
- Explain how to use the ANLA Standards for field grown nursery stock.
- Demonstrate how field grown nursery stock is harvested.

### **Unit V Container Grown Nursery Stock; Care and Maintenance of Nursery Stock [Supports SLO # 1, 7 and 8]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Identify the types of plants are commonly produced in containers.
- Identify different types of containers used in production.
- Demonstrate techniques used during the production of container grown nursery stock.
- Explain how to use the ANLA Standards for container grown nursery stock.

### **Unit VI Wholesale Marketing and Branding, Shipping, and Inventory [Supports SLO # 8]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Identify the different methods of shipping used for nursery stock.
- Analyze the different techniques used during the inventory of nursery stock.
- Recognize various marketing strategies used in the marketing of nursery stock.

### **Unit VII Greenhouses, Re-Wholesalers, and Garden Centers [Supports SLO # 2]**

#### **Learning Objectives**

##### ***The student will be able to:***

- Explain the role that greenhouses, garden centers and re-wholesalers play in the nursery industry.
- Understand the difference between a re-wholesaler and a garden center.

## **Evaluation of student learning:**

### **Grading:**

Grades will be based on the following point system.

Midterm Exam	100
Final Exam	100
Nursery Project	100
Attendance & Participation	140
Weekly Homework	<u>140</u>
Total	580

### **Explanation of Point System:**

**Exams** – There will be a midterm and a final exam. Both exams will be given in person during lecture.

**Attendance and Participation** - Your attendance and participation for the course will be evaluated at the end of the semester. Criteria for the evaluation includes punctuality, quality of participation, and task completion. Each week is worth 10 points.

**Nursery Project** - You are required to write a comprehensive summary report about the various nursery businesses we visited over the course of the semester. Before the first field trip, you work as a class to develop a list of questions to ask of each nursery visited. The summary, due at the end of the semester, will need to include the questions asked, the answers given, and how the nurseries compared to one another. Projects will be discussed during the last class in a round table forum.

**Weekly Homework** – Each week you will have a homework assignment related to what we are discussing in class. The homework assignments will be assigned and collected through BlackBoard.