



Course Description

HOS1011 | Horticulture 2 | 3.00 credits

The student will learn the maintenance and management aspects of horticulture business (nursery facility or landscape maintenance and design) including irrigation systems, plant growing facilities, plant propagation equipment, and landscape maintenance equipment. Hands-on practice in programming of plant production crops and nursery design in our nursery. Prerequisite: HOS1010. A.S. degree only.

Course Competencies:

Competency 1: The student will demonstrate an understanding of a production facility by:

1. Researching various examples of growing facilities
2. Identifying the different structural methods growers use to modify the growing environment
3. Determining which type of irrigation system is correct for different growing facilities
4. Adjusting irrigation schedule depending on season and temperature
5. Identifying the necessary environmental requirements (moisture, temperature, light) for plant production in a large facility
6. Establishing an integrated pest management plan for a greenhouse or production facility

Competency 2: The student will become familiar with the marketing requirements and preparing plants for sale by:

1. Selecting the correct size of plant containers for rotation schedules
2. Creating a marketing design for a specific plant
3. Identifying correct shipping methods for plants

Competency 3: The student will understand how to maintain a nursery plant inventory by:

1. Counting and recording all plants of a particular species
2. Maintaining electronic records for plants growing in a nursery
3. Scheduling plant propagation and transplanting procedures to produce a specific product at a desired time
4. Maintaining accurate records of fertilization and watering schedules for various plants
5. Identify how to calculate the cost of plants and prepare a price for different size plants

Competency 4: The student will be able to determine how the plant environment affects overall growth by:

1. Describing the actions of different growth regulators
2. Applying growth regulators to achieve a desired result
3. Determining how fertilizers with a different analysis can yield differences in growth
4. Determining water requirements for different plants and applying water at proper rates
5. Analyzing the cost and effectiveness of various types of media components
6. Understanding how to adjust media pH

Learning Outcomes:

- Communicate effectively using listening, speaking, reading, and writing skills
- Use quantitative analytical skills to evaluate and process numerical data
- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Create strategies that can be used to fulfill personal, civic, and social responsibilities