Miami Dade College

Course Description

ORH2277 | Foliage Plant Production | 3.00 credits

Students will learn plant propagation techniques such as the taking of cuttings, divisions, and seeds, along with aseptic and meristem culture. Students will be required to look for insect diseases and other cultural problems associated with foliage production and learn how to combat these problems. Environmental factors affecting foliage plants such as water, humidity, light, and temperature

Course Competencies:

Competency 1: The student will demonstrate knowledge of foliage plants by:

1. Identifying the characteristics that define foliage plants from other categories of ornamental plants.
2. Identifying the general growing conditions for foliage plants.
3. Discussing the economic importance of foliage plants worldwide.
4. Propagating foliage plants from a variety of methods.

Competency 2: The student will recognize chemical molecules that define the mineral components of fertilizers and understand their fundamental chemical properties by:

1. Defining the characteristics of atoms, elements, molecules, and ions to determine how each type interacts with water and soil components.
2. Identifying the common polyatomic ions found in fertilizers.

Competency 3: The student will become familiar with plant molecule transport by:

1. Explaining the basics of particle movement by diffusion and water movement by osmosis.
2. Explaining how plant roots use the properties of diffusion and osmosis to uptake fertilizer components.
3. Discuss the environmental factors that affect the uptake of fertilizer components.
4. Identifying the various properties of plant media and container size that affect molecule transport.

Competency 4: The student will understand how greenhouse irrigation affects production by:

1. Defining the different types of surface and subsurface irrigation systems.
2. Identify the advantages and disadvantages of different irrigation systems, including mist systems.
3. Interpreting measurements for irrigation consistency and quality.
4. Determining water requirements and application rates for different plants.
5. Submitting water samples for analysis and interpreting the results.

Competency 5: The student will determine how the plant environment affects overall growth by:

1. Identifying how the plant environment affects the uptake of the different fertilizer components.
2. Understanding how fertilizer components react with different soils.

Learning Outcomes:

1. Critical Thinking
2. Environmental Responsibility
3. Information Literacy