HRT 204 Plant Propagation and Nursery Management

General Information

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Department
Environmental Conservation and Horticulture

Course Prefix
HRT

Course Number
204

Course Title
Plant Propagation and Nursery Management

Course Information

Credit Hours
3

Lecture Contact Hours
3

Lab Contact Hours
0

Other Contact Hours
0

Catalog Description
This course will familiarize the student with methods of increasing plant numbers and producing a saleable product. Topics include: growth structures, media, plant culture, sexual and asexual reproduction, grafting, and nursery management. Practical greenhouse and field experience included.

Key Assessment
This course does not contain a Key Assessment for any programs

Prerequisites
None

Co-requisites
None
First Year Experience/Capstone Designation

This course DOES NOT satisfy the outcomes applicable for status as a FYE or Capstone.

SUNY General Education

This course is designated as satisfying a requirement in the following SUNY Gen Ed category

FLCC Values

Institutional Learning Outcomes Addressed by the Course

- Critical Thinking
- Ethics/Values
- Oral Communication

Course Learning Outcomes

1. Analyze and identify the requirements from propagation of any specific plant
2. Describe propagation using the terminology and techniques required
3. Demonstrate plant propagation skills for a variety of assigned plants
4. Name specific plants for propagation using Latin binomial naming
5. Discuss basic botany concepts relative to plant propagation

Outline of Topics Covered

1. Introduction to plant propagation
   a. Overview of techniques to be covered
   b. Opportunities in the industry
   c. Naturally occurring propagation in a forest succession
2. Greenhouse
   a. Structures
i. Types of structures
ii. Materials used to cover structures
iii. Heating / cooling controls & equipment
iv. Benches
v. Lighting

b. Routine clean up needs
c. Occasional intensive sanitation requirements

3. Biology of propagation
   a. Herbaceous
   b. Woody
   c. Other
d. Sexual
e. Asexual

4. Propagation
   a. Vegetative propagation
   b. Tissue culture & micropropagation
c. Seeds
      i. Seed collection
      ii. Seed development
      iii. Seed production & handling
d. Grafting
e. Budding
f. Layering
g. Specialized stems & roots

5. Nursery Management
   a. Container vs field growing
   b. Media considerations
c. Container issues
d. Production scheduling
e. Growth retardants
f. Pest controls