

Syllabus

HRT 204 Plant Propagation and Nursery Management

General Information

Date

June 20th, 2018

Author

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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

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Grading Scheme

Letter

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

None

FLCC Values

Institutional Learning Outcomes Addressed by the Course

Critical Thinking Ethics/Values Oral Communication

Course Learning Outcomes

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

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- 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

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