

SOUTHEAST COMMUNITY COLLEGE
COURSE SYLLABUS
ADVANCED TECHNOLOGIES & SKILLED TRADES
Horticulture & Turfgrass Management Program
Revision Date: August 2020

I. CATALOG DESCRIPTION

Course Number: HORT 1136
Course Title Plant Propagation
Prerequisite(s): None

Catalog Description: Introductory study of plant propagation and reproduction. Areas of focus include vegetative reproduction, cross pollination, and grafting procedures.

Credit Hours: 2.0
Class Hours: 23
Lab Hours: 23
Total Contact Hours: Total of Class + Lab Hours 46

II. COURSE OBJECTIVES: *Course will:*

1. Describe how plant propagation has evolved during human history.
2. Describe plant naming or taxonomy and relate its importance to plant propagation.
3. Describe the relationship between flower parts and seed development.
4. Describe and demonstrate different factors affecting sexual reproduction as it pertains to plant propagation.
5. Describe and demonstrate principles of a sexual reproduction as it pertains to plant propagation.
6. Describe and demonstrate the different types of a sexual reproduction.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES: *Student will be able to:*

1. Develop an understanding of plant taxonomy and its use in the plant propagation industry.
2. Understand the basic genetics involved in plant propagation.
3. Understand the different methods of sexual and asexual plant reproduction.
4. Understand the different propagation structures, media, fertilizers, sanitation and containers used in plant propagation.
5. Understand the basic grafting procedures.
6. Successfully propagate woody or non woody plant species using 5 of the 8 methods discussed in class.

B. GENERAL EDUCATION LEARNING OUTCOMES

GELO #3: Critical Thinking & Problem Solving

Critical thinkers have the ability to evaluate a problem or assumption and determine an appropriate course of action. They use reason and evidence to make judgments and decisions. Critical thinking and problem-solving skills rank highly among employer expectations.

Outcomes:

- 1) Collect, identify, interpret and analyze data.
- 2) Synthesize information to arrive at reasoned solutions to problems.
- 3) Evaluate ideas presented in writing, medial, speech, or artistic presentations.
- 4) Evaluate the validity of arguments, alternatives, data, outcomes, and/or impacts of actions.
- 5) Acquire and integrate knowledge and construct relationships across disciplines.

IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)

- A. Sexual and Asexual Reproduction and Propagation
- B. Seed Propagation
- C. Cutting Propagation
- D. Separation and Division
- E. Layering
- F. Grafting and Budding
- G. Plant Tissue Culture
- H. Propagation of Specialized Stems and Roots

V. INSTRUCTIONAL MATERIALS

A. **Required Text(s):** *Plant Propagation Principles and Practices*, 8th Edition; H.T. Hartman.

ISBN: 978-0-13-501449-3

B. **Other Resources:**

Class notes, handouts, and other information.

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

a. Methods will include, but are not limited to:

- Lectures
- Slide and Video Presentations
- Research and Writing Assignments
- Field Trips
- Guest speakers

b. Laboratory or Field Assignments

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:

- B. Quizzes, tests, and exams
- C. Lab assignments
- D. Class participation

SCC STANDARD GRADING SCALE POLICY:

A+ 95-100	C+ 75-79
A 90-94	C 70-74
B+ 85-89	D+ 65-69
B 80-84	D 60-64
	F Below 60

VIII. SPECIFIC COURSE REQUIREMENTS:

- a. Successful completion of all exams, projects, and assignments.
- b. Participation in class and class activities; including field trips
- c. Laboratory participation and completion of activities.
- d. Achieve passing grade of 60% or higher, based on SCC grading scale.