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

I. CATALOG DESCRIPTION

Course Number: HORT 1131
Course Title Plant Science
Prerequisite(s): None

Catalog Description: Principles and practices of production and maintenance of turf and horticultural plants.

Credit Hours: 3.0
Class Hours: 45
Total Contact Hours: Total of Class + Lab Hours 45

II. COURSE OBJECTIVES: *Course will:*

A. The course will demonstrate basic botanical nomenclature used in the horticulture industry.
B. The course will examine plant anatomy, with specific detail placed on important plant structures.
C. Students will study the five physiological processes in plant growth.
D. The course will demonstrate the various lifecycles of plants.
E. Students will examine the various stages of growth in a plants lifecycle.
F. The course will examine the various plant growth hormones and how they affect plant growth.
G. The course will demonstrate how the five elements of climate will affect plant growth.
H. Course will discuss various natural factors modifying climate and how they affect plant growth.
I. Students will study the many plant-growing zones of North America.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES:

1. Students will be able to use basic botanical nomenclature to classify and identify basic plant categories.
2. Students will be able to identify important plant structures and explain their important to plant function.
3. Students will be able to describe the five physiological processes of plant growth and how they affect plant growth.
4. Students will be able to demonstrate knowledge of the various plant lifecycles.
5. Students will be able to describe and identify plants in their various stages of plant growth.
6. Students will be able to explain the function of various plant hormones and their effects on the plant.
7. The students will be able to explain how each of the five elements on climates affect plant growth.
8. Students will be able to identify environments with modified climates and be able to explain how to manage those plants in those environments.

9. Students will be able to explain the many plant-growing zones in North America, and be able to choose plants for the specified zones.

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) Synthesize information to arrive at reasoned solutions to problems.

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

a. Understanding Horticulture Production
b. Horticulture Plants in Relation to the Environment
c. Botany Horticulture Plants
d. Seeding Rates
e. Horticulture Crop Production

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):

B. Other Resources:

Calculator, Notebook, Safety Glasses, Protective Clothing, Pliers or Vice Grips, Hand Protection, Three Ring Notebook, Spiral Bound Notebook

VI. METHODS OF PRESENTATION/INSTRUCTION

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

a. Methods will include, but not limited to:
Lecture, laboratory assignment and tasks, power point and video presentations, research and writing assignments, field trips, and guest lectures and speakers.

b. Lab Activities

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:
B. Quizzes, tests, and exams
C. Skills project and exam
D. Daily Evaluation
E. 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. Utilize proper safety eyewear at all times in lab