

SOUTHEAST COMMUNITY COLLEGE
COURSE SYLLABUS
ADVANCED TECHNOLOGIES & SKILLED TRADES
Agriculture Management & Production Program
Revision Date: August 2023

I. CATALOG DESCRIPTION

Course Number:	AGRI 1152
Course Title:	Crop and Food Science Lab
Pre-Requisites:	None
Catalog Description:	This is a companion lab to Plant Science 1131. This lab will reinforce class content. The lab section will investigate plant structures and plant organs, plant growth and development, and plant identification.
Credit Hours:	1.0
Class Hours:	
Lab Hours:	45
Total Contact Hours:	Total Class + Lab total 45

II. Course Objectives: *Course will:*

- A. The course will demonstrate differences in seeds and factors that affect germination.
- B. The course will investigate the vegetative characteristics and growth habits of grasses and legumes.
- C. The course will demonstrate factors of pollination and fruit production.
- D. The course will develop the student's ability to identify common field and horticulture crops and weeds.
- E. The course will focus in experiments that will reinforce the plant growth process and factors that affect plants.

III. Student Learning Outcomes and General Educational Outcomes:

A. Student Learning Outcomes:

1. The student will be able to explain plant structures and organs.
2. The student will be able to describe how plants pollinate, grow, and develop and determine why plant growth is affected by the environment.
3. The student will be able to evaluate plant experiments that test: germination, growth, pollination, and fertilization.
4. The student will be able to identify common field and horticulture plants and weeds.

B. General Educational 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.

IV. Content/Topical Outline

Laboratory Exercises

- a. Seeds and Germination
- b. Vegetable Characteristics of Grasses and Legumes
- c. Flowers and Fruits
- d. Growth of Grasses and Legumes
- e. Growth Stages of Corn and Soybeans
- f. Effects of Biotic and Abiotic Factors on Plant Growth
- g. Plant Identification

V. Instructional Material

A. Required Text:

Introductory to Agronomy, Food, Crops and Environment 2nd Edition
Sheaffer & Moncada (Cengage) ISBN 13: 978-1-111-31233-6

Other Resources

Notebook, Calculator, Safety Glasses, Protective Clothing, Hand Protection

VI. Methods of Presentation/Instruction

- A. A combination of the following will be used in this class:
 - a. Lecture, demonstrations, laboratory investigations, research and experimentation. Field trips and guest speakers will be used to enhance the lab content.

VII. Methods of Evaluation

Methods of evaluation typically include a combination of the following:

- a. Participation
- b. Assignments
- c. Experiments
- d. Quizzes, test, and exams

SCC Standard Grading Scale Policies

A+ 95-100	C+ 75-79	F Below 60
A 90-94	C 70-74	
B+ 85-89	D+ 65-70	
B 80-874	D 60-69	

VIII.SPECIFIC COURSE REQUIREMENTS:

- A. Successful completion of all exams, projects, activities, and assignments.
- B. Professional behavior/expectations as per program policy.

IX. Course Policies

- A. Attendance:
All students are expected to be in attendance when TCA is in session. Please contact me before a known absence and make arrangements for missed work. For any un-scheduled absence please contact me via e-mail for missed work.
- B. Late work – No late work will be accepted. Plan ahead and do the best you can on all assignments. Make sure assignments are complete and do the best you can.
- C. Extra credit – Extra credit will not be given.
- D. Missed in-class assignments, graded class activities, or labs. I will send out class notes and lab activities to students that contact me for missed work. In class assignments missed due to absent are not eligible for make-up.
- E. Missed quizzes, exams/ presentations – Arrangements of a pre-scheduled absents, sickness, or emergency should be made prior to assignment due date/time by e-mail. All effort will be made to help the student make up missed work.
- F. Plagiarism – of any form is not acceptable.