

## CUMBERLAND COUNTY COLLEGE

Course: AG 106 PLANT SCIENCE

Credit: 4

Prerequisites: RD 100, EN 060

### Description

Designed to familiarize the student with the factors that limit plant growth such as light, water, temperature, and nutrients. Students identify the horticultural relationships of plants to botanical anatomy and function.

### Learning Outcomes

Upon successful completion of this course, the student will be able to:

- Identify, name and describe the anatomical structure of plants.
- Explain the function of plant parts.
- Classify plants based on their form, life cycle, usage, and stem, leaf, and fruit characteristics
- List the growth factors associated with the above and below ground plant parts.
- Explain the difference between sexual and asexual plant reproduction.
- Discuss the role of genetics in plant improvement practices.

### Topical Outline

- Course orientation
- Plant cell structures and microscopy
- Plant tissues and microscopy
- Plant anatomy
- Plant physiology
- Growth and Development factors
- Plant genetics and improvement
- Reproductive growth and development
- Sexual and asexual plant propagation
- Plant regulators
- Chemistry and metabolism
- Photosynthesis and respiration
- Water relations
- Mineral nutrition

Text: McMahan, Margaret (2011). *Plant Science: growth, development, and utilization of cultivated plants* (5<sup>th</sup> ed.). Prentice Hall, Upper Saddle River, New Jersey.

Academic Integrity: Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of **F** for the semester at the discretion of the instructor.

Note: If you are having difficulty with work in this class tutoring is available through the Center for Academic & Student Success. If you think that you might have a learning disability, contact Project Assist at 856.691.8600 x 1282 for information on assistance that can be provided to eligible students.

### **Before Withdrawing From This Course**

If a student experiences adverse circumstances while enrolled in this course and considers withdrawing, s/he should see an advisor (division or advisement center) **BEFORE** withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.