Course Prefix and Number: HRT 127  
Credits: 3

Course Title: Horticultural Botany

Course Description: Studies taxonomy, anatomy, morphology, physiology, and genetics of plants as applied to identification, propagation, and culture. Prerequisites: None. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

General Course Purpose:

Course Prerequisites and Co-requisites: None

Course Objectives: Upon completing the course, the student will be able to:
a. Relate the metabolic plant cell to the functions of a plant;
b. Relate the anatomy of a plant to the function of a plant;
c. Relate the processes of photosynthesis, respiration, digestion, assimilation, and differentiation to the functions of the whole plant;
d. Relate the processes of plant growth and development to the overall plant growth; and
e. Relate the hormonal balance of plant growth to the growth regulations of horticultural plants.

Major Topics to Be Included:
a. Introduction, classification, plant body
b. Metabolic plant cell, cell cycle
c. Chemistry and physiology
d. Primary growth, secondary growth
e. Roots and leaves/mid-term test
f. Photosynthesis
g. Respiration
h. Transpirations, conduction, absorption, mineral nutrition
i. Flower and plant life cycles
j. Plant growth and development

Effective Date of Course Content Summary: February 12, 2009