COURSE NAME: Plant Propagation

COURSE ALPHA: AG 149

CREDIT HOURS: 03

CATALOG DESCRIPTION:

An introductory course in the principles and practices of plant propagation. Studies include seed and vegetative propagation of fruit, vegetable and ornamental crops. Methods of propagation include; seed, cutting, grafting, air layering, and division.

REQUIREMENTS COURSE SATIFIES:

AT WCC Certificate of Completion in Agriculture Requirements, Plant Biotechnology Certificate

AT UH MANOA Elective for CTAHR

PREREQUISITES None

RECOMMENDED BASIC SKILL LEVEL College level Reading

READING LEVEL OF TEXT(S) College

ACTIVITIES REQUIRED AT OTHER THAN REGULARLY SCHEDULED CLASS TIMES: None

INSTRUCTURE: David Ringuette

OFFICE: Uluwehi

OFFICE PHONE: 236- 9265
Student Learning Outcomes

OBJECTIVES OF THE COURSE:

1. The students will be able to describe the different processes involved in plant metabolism such as: photosynthesis, respiration, transpiration, and translocation.

2. The student will be able to recommend the best methods of propagation of selected plants such as: root, stem, and leaf cutting; layerage; divisions; grafting; budding; and by seeds.

3. The student will be able to identify the various parts of the Flower.

4. The students will be able to describe the process of pollination and fertilization, and the problems that are sometimes encountered.

5. The student will be able to recommend the use of a plant growth regulator in the propagation of selected plants.

6. The students will be able to explain the effect that certain environmental conditions have on plants growth and development. Some examples are: light, temperature, and humidity.
GRADING:

1. Grading will be based on the following:
   a. 2-3 exams worth 100 points each.
   b. Laboratory exercises worth 150 points. Propagation project. Propagate a plant of your choosing using methods covered in class. Present your results to the class.

2. Letter grades will be assigned as following:
   
   A 90-100%

   B 80-89%

   C 70-79%

   D 60-69%

   F Less than 60% or failure to complete the required forms when withdrawing from course.

   I Non-completion of any of the required class activities. See the college catalog for details.

   W Formal withdrawal from the course.

   Cr/Ncr Credit will be awarded to those who have accumulated a minimum of 70% of the Total points.

MODE OF INSTRUCTION:

Lectures, lab, field works and field trips

REQUIRED/RECOMMENDED TEXTS

Plant Propagation- American Horticulture Society
COURSE OUTLINE AG 149

WEEK

1  Plant metabolism
2  Structure/Function of plants
3  Fertilization/Pollination
4  Plant environmental conditions
5  Propagating medium
6  Growth Regulators
7  Fertilization
8  Review/Midterm
9  Seed propagation
10 Propagation by cutting
11 Propagation by layering
12 Propagation by grafting
13 Pruning
14 Turf grass
15 Potting and repotting
16 Hydroponics/Review

“FINAL EXAM”