Las Positas College
3000 Campus Hill Drive
Livermore, CA 94551-7650
(925) 424-1000
(925) 443-0742 (Fax)

Course Outline for HORT 53

INTEGRATED PEST MANAGEMENT

Effective: Fall 2015

I. CATALOG DESCRIPTION:
HORT 53 — INTEGRATED PEST MANAGEMENT — 3.00 units

Concepts of plant pathology, entomology, and weed science are studied in order to identify symptoms, diagnose problems, and determine methods of controlling plant diseases, insects, and weed pests. Methods and techniques of integrated pest management, chemical and non-chemical control related to garden, landscape, and other horticulture crops and plants are studied. Disease and pest control materials are assessed with emphasis on safe handling and application, and environmental protection. Focus is on preparation for State Qualified Applicators

2.50 Units Lecture 0.50 Units Lab

Grading Methods:
Letter or P/NP

Discipline:

	MIN
Lecture Hours:	45.00
Lab Hours:	27.00
Total Hours:	72.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

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

A. Create an Integrated Pest Management Program for a typcial landscape application
B. Catagorize common plant disorders and be able to classify them as biotic or abiotic in origin
C. Describe the corrective measures to be taken in the treatment of weeds, insect and animal pests, and plant dieseases
D. Identify beneficial insects and choose pest control techniques that enhance their value
E. Select safe and legal pesticide application techniques

V. CONTENT:
A. Concepts of integrated pest management
B. Recognize the difference between biotic and abiotic plant disorders
C. Weed pest and weed control
D. Insect, and animal pest control
E. Plant diseases and disease control
F. Beneficial insects and their value
G. The safe and legal handling of pesticides

VI. METHODS OF INSTRUCTION:
A. **Lab** - hands-on application of identification and control materials
B. **Lecture** - implementation and management of IPM programs
C. **Research** - identification and management of specific pests
D. **Observation and Demonstration** - landscape pest populations on campus

VII. TYPICAL ASSIGNMENTS:
A. Assigned reading from required texts & on-line sources
B. Laboratory & field assignments concentrating on identification of pest populations and damage caused by pests
C. Collection of weed & pest specimens
D. Written research papers on specific speicies of pests common to California landscapes

VIII. EVALUATION:
A. **Methods**

1. Exams/Tests
2. Quizzes
3. Papers

4. Class Participation
5. Lab Activities

B. **Frequency**

1. Two written exams (mid-term and final)
2. Quizzes (between 6 and 12)
3. One or more term homework paper
4. Daily attendance and active participation will be observed and noted

IX. TYPICAL TEXTS:

1. Flint, Mary Louise. *IPM in Practice.* 2nd ed., University of California ANR Publications, 2012.
2. Mathews, G.. *Pesticide Application Methods.* 4th ed., Wiley Publications, 2014.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

A. Appropriate sturdy footwear, and personal protective equipment, such as ear plugs, gloves, and safety glasses must be worn during certain lab activities, such as motorized equipment operation and chemical applications.
B. Access to internet is required, in order to utilize online resource material and blackboard.