HORT 171 Course Outline as of Fall 2012

CATALOG INFORMATION

Dept and Nbr: HORT 171 Title: IPM IN HORTICULTURE Full Title: Integrated Pest Management in the Horticulture Industry Last Reviewed: 12/14/2015

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	1.50	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50

Total Student Learning Hours: 78.75

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	AG 297.39

Catalog Description:

The IPM (Integrated Pest Management) concept and its application in various horticultural settings for those who work, or intend to work, in the landscape, interiorscape, nursery or turf fields of horticulture. Reviews categories and characteristics of plant pests and diseases, prevention practices, and plant tolerance levels.

Prerequisites/Corequisites:

Recommended Preparation: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:

Description: The IPM (Integrated Pest Management) concept and its application in various horticultural settings for those who work, or intend to work, in the landscape, interiorscape, nursery or turf fields of horticulture. Reviews categories and characteristics of plant pests and diseases, prevention practices, and plant tolerance levels. (Grade or P/NP) Prerequisites/Corequisites:

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: CSU GE:	Area Transfer Area	Effective: Effective:	Inactive: Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer	Effective:	Inactive:	
UC Transfer:	Effective:	Inactive:	

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:

Upon completion of this course, students will be able to:

1. Describe common methods of pest control: physical/mechanical; cultural; biological; and chemical.

- 2. Distinguish between abiotic problems and pest problems.
- 3. Describe the proper procedure by which to examine plants.
- 4. Describe the proper plant monitoring techniques.
- 5. Outline common pest prevention practices for a production nursery.
- 6. Outline common pest prevention practices for a growing landscape.
- 7. Diagnose common pest problems.

Topics and Scope:

- I. Concept of "plant pests and problems" in the horticulture industry
- II. IPM concept
 - A. Prevention
 - B. Monitoring
 - C. Thresholds
 - D. Management
 - 1. physical/mechanical
 - 2. cultural
 - 3. biological
 - 4. chemical
 - 5. abiotic

III. Crop/plant profiles involving application of IPM strategies

- A. Landscape trees
- B. Landscape shrubs
- C. Nursery (container) shrubs

D. Greenhouse foliage plants

IV. Field application

- A. Landscape sites
- B. Container nurseries
- C. Greenhouse operation
- D. Turf maintenance

Assignment:

- 1. 6 field trips with written assignment for each
- 2. Media porosity experiment with calculations
- 3. Insect/disease/weed research and paper and presentation
- 4. 5 quizzes and 2 exams
- 5. 4-6 hands-on lab exercises
- 6. Weekly reading 5-20 pages

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Field trip write-ups; research paper

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Experiment with calculations; lab exercises

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Exams: All forms of formal testing, other than skill performance exams.

Quizzes and exams: multiple choice, true/false, matching items, completion

Other: Includes any assessment tools that do not logically fit into the above categories.

Field trip participation; presentations

Representative Textbooks and Materials:

Pests of Landscape Trees and Shrubs, an IPM Guide. University of Calif., 2011. IPM Guide for Floriculture and Nursery. University of Calif., 2002.(classic) Olkowski, William. Common Sense Pest Control. Taunton Press, 1991. (classic)

Writing 20 - 40%

Problem solving 20 - 40%

Skill Demonstrations 0 - 0%

> Exams 20 - 30%

Other Category 10 - 20%