

**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:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**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

Writing  
20 - 40%

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

Experiment with calculations; lab exercises

Problem solving  
20 - 40%

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

None

Skill Demonstrations  
0 - 0%

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

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

Exams  
20 - 30%

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

Field trip participation; presentations

Other Category  
10 - 20%

### 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)

