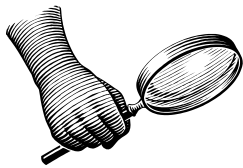


**CUYAMACA COLLEGE**  
**DEPARTMENT OF ORNAMENTAL HORTICULTURE**

**COURSE SYLLABUS - SPRING SEMESTER 2018**

**OH 275 – 1922**  
**DIAGNOSING HORTICULTURAL PROBLEMS (3.0 UNITS)**



**Class Instructor:** Tiffany Faulstich  
Tiffany.faulstich@gcccd.edu

**Office Hours:** by appt. only

**Class:** Tuesdays - Lecture 10:00am – 11:50am Lab 12:00pm – 2:50 p.m. Room M-105  
Lecture and Labs will combine for occasional offsite field trips

## OH 275 Course Description

- Provides methods for positive identification and understanding of symptoms for accurate diagnosis of plant problems in the landscape and nursery.
- Biotic and abiotic causal agents including cultural influences, nutrient deficiencies and toxicities, pest and disease problems, soil salinity, aeration, drainage and irrigation problems will be discussed.
- Control and correction of disorders will be determined through an understanding of the organism or function involved.

## Recommended Preparation

“C” grade or higher or “Pass” in OH 120, 130, 170 or equivalent

## Entrance Skills

It is highly recommended all 3 of the above courses be completed prior to or in conjunction with OH 275. Without the following skills, competencies and/or knowledge, students entering this course will be highly unlikely to succeed:

- 1) Identify and describe the function of the following: xylem, phloem, vascular cambium
- 2) Describe the tissues and their functions in the following plant organs: leaves, roots, stems, fruit
- 3) Describe soil textural classes, soil horizons and common soil series
- 4) Compare and contrast the effect on plants from high and low levels of pH, soluble salts and sodium in soils
- 5) Describe correction or adaptation to soil conditions including alkaline and acid soils, saline soils, sodic soils and calcareous soils
- 6) Compare and contrast life cycles of various orders of insects
- 7) Identify typical methods of insect pest damage and associate the type of insect for each damage type
- 8) Describe integrated pest management including strategies for control with cultural, biological and chemical control methods.
- 9) Identify 25 insect pests common to the landscape and nurseries of the Southwestern United States
- 10) Identify 15 common weed pests and list control options
- 11) Be able to identify common landscape plants and research their cultural needs

## OH 275 Student Learning Outcomes (SLO's)

Students will be able to:

- 1.) Apply diagnostic methods and practices for evaluating common landscape problems
- 2.) Identify common plant disorder correctives and causal agents
- 3.) Research and recommend corrective treatments for common landscape disorders
- 4.) Interpret reports and results from testing labs for treatment options

### **Method of Evaluation**

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, including essay exams, skills demonstration, assignments, quizzes, exams.

- Quizzes, activities, assignments and exams (including a final exam) which measure the student's ability to:
  - a) Apply methods for positive identification and understanding of symptoms for accurate diagnosis of plant problems in the landscape and nursery. (SLO # 1)
  - b) Identify and determine appropriate controls and corrections for biotic and abiotic causal agents including cultural influences, nutrient deficiencies and toxicities, pest and disease problems, soil salinity, aeration, drainage and irrigation problems. (SLO # 2)
  - c) Research and recommend corrective treatments for common landscape disorders (SLO #3)
  - d) Interpret reports and results from testing labs for treatment options (SLO #4)

### **Special Materials Required of Student**

None

### **Minimum Instructional Facilities**

- 1) Standard lecture classroom
- 2) Field Trips off campus and walks of campus areas for demonstrations and lab activities

### **Course Content**

- 1) Introduction
- 2) Abiotic Causal Agents
  - a. Water and soil salinity
  - b. Aeration and drainage
  - c. Nutrient deficiencies and toxicities
  - d. Irrigation and other cultural related problems
  - e. Climate related problems
  - f. Agricultural chemical application related problems
- 3) Biotic Causal Agents
  - a. Disease related problems
  - b. Insect related problems

### **Method of Instruction**

- 1) Lecture and demonstration
- 2) Laboratory, observations, data collection and discussion

## Texts and References

- 1) Required: *Abiotic Disorders of Landscape Plants – A Diagnostic Guide*. University of California Agriculture and Natural Resources, Publication 3420
- 2) Required: *Pests of Landscape Trees and Shrubs*. University of California Division of Agriculture and Natural Resources, 3<sup>rd</sup> edition.
- 3) *Plant Health Care for Woody Ornamentals: A Professionals Guide to Preventing and Managing Environmental Stresses and Pests*
- 4) Supplemental: None



<http://www.ipm.ucdavis.edu/PMG/menu.homegarden.html>

This site is closest to the class texts.

**Technology:** Appropriate class materials will be posted on **Canvas**. This is the College site that students access online. It will contain a variety of assignments, lecture notes, schedules, quizzes and email messages. No weekly handouts will be provided and students will be expected to bring their own downloaded copies to class.

**Assignments:** Note Taking; Reading; Material and Data Collection; Lab/Project assignments / demonstrations; Site visits on and off campus; On-line research

**\* Make up:** This is not always possible but may be available in some cases. Contact the instructor regarding any makeup opportunities. Some items cannot be made up! Missed assignments, tests and deadlines are subject to a 20% penalty.

**Tools and Equipment:** To be reviewed in class when we cover field kit details. Students desiring to purchase their own equipment should contact the instructor for equipment advice and source recommendations. Closed toe foot wear is recommended for field site visits. ~ Tools and equipment must be used in a safe manner at all times.

### **Methods of Evaluation:**

~ Topical worksheets will be posted on Canvas and will relate directly to the lecture topic. These are for the students to use to study.

~ There will be 4 quizzes / 8 field assignments (diagnostic worksheet packs) throughout the semester. These will relate to the lectures, labs and field trips. Point values for each will vary.

~ On the 9th class there will be a midterm exam consisting of 100 questions and a scenario based assignment that is due on that day.

~ Students will develop and deliver to the class a presentation that will be a maximum of 10 minutes in length. Presentation subjects will be assigned by instructor but will relate to class subject matter, abiotic or biotic. Format will be based on the field data sheet. Samples and visual materials may be used. There will be 2-3 presentations per day.  
 ~ On the 17th class there will be a final exam consisting of 100 questions and a scenario based assignment that is due on that day.

**Grading Policy:** Attendance and participation are important.

**\*\* Reminder:** Ultimate grade is based on percentage of total points earned. Actual point total for class may vary. **\* NOTE-** Any area missed by student will have its total possible points subtracted from the final point total. Do **Not** miss any sections.

Grades:      A = ( 100 % - 90 % )  
                   B = ( 89 % - 80 % )  
                   C = ( 80 % - 70 % )  
                   D = ( 69 % - 50 % )  
                   F = ( 49 % - 0 )

**Actual task point total may vary so the above percentages will apply to final grade earned. Grades awarded are based on total points earned.**

You cannot learn and develop skills if you are not present to participate. Do Not miss classes or labs. Please be on time. If late please do not disrupt class in progress!

<b>Lab Assignments: Completed diagnostic worksheet packs (9 @ 50 pts)</b>	=	<b>450 pts</b>
<b>Quizzes (4 @ 50 pts)- TBA</b>	=	<b>200 pts</b>
<b>Presentation during Lab</b>	=	<b>50 pts</b>
<b>Thank you letter to County Ag Dept.</b>	=	<b>25 pts</b>
<b>Midterm Exam - test given on <u>class #9</u></b> This will cover subject matter and content from classes 1-8	=	<b>100 pts</b>
<b>Midterm Scenario Based Assignment</b>	=	<b>100 pts</b>
<b>Final Exam - test given on <u>class # 17</u></b>	=	<b>100 pts</b>
<b>Final Exam Scenario Based Assignment</b> This will cover subject matter and content from the entire class. Emphasis will be on the material from classes 9-16	=	<b>100 pts</b>
<b>TOTAL CLASS POINTS POSSIBLE</b>	=	<b>1125 pts</b>

**Policy**- Student is required to follow the regulations in the official Catalog & Class Schedule.

**Policy**: "Instructor reserves the right to adjust course content, assignments and testing instruments."

**Policy**: "Student is responsible for all information and assignments missed due to late adds, tardiness, and absences."

**Policy**: "Student may audio tape record lectures. Student may not use the tapes for any purpose other than those of the class. Student must erase or destroy tapes at the end of the semester. Instructor may change or update information on tapes at any time."

**Policy**: "Student is responsible for working in a safe manner, using appropriate safety aids and informing instructor of unsafe conditions."

**Policy**- Only registered students should attend the Classes and Labs. **No children** are permitted in class or during off site activities. Friends, family, and pets are a distraction to class activities and a safety liability for the college.

**Policy**- Students will not be allowed to audit a class under any circumstances.

**Policy** - Cell Phones and other electronic communication devices shall be turned off or on silent during class lectures and discussions.

**Instructor policy- NO TEXTING or emailing!** Please avoid class disruptions! Only calls of absolute necessity will be allowed. Advise instructor of pending need to accept emergency calls. Those calls must be handled outside, not in the class room. Use of electronic devices, i.e. laptops, Ipads, etc, for note taking should not be disruptive.

**Policy**: "Instructor reserves the right to photograph / reproduce all work produced for this class."

**Policy**: "It is the student's responsibility to formally drop themselves from a class."

**Policy** . Students who miss two consecutive classes will be dropped from roster.

**Policy**: "If you have a disability, or feel you may have a disability, you should contact the disabled students programs & services (DSPS) in office or by phone. Students requesting accommodations should contact the DSPS office." This office will then advise instructor on responses to situations or circumstances.

