

Organic Food Crop Production
Tentative Syllabus
Department of Tropical Plant and Soil Science
University of Hawaii
FALL 2008

Instructor: Dr. Ted Radovich
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Prerequisites: None

Required text: Reading materials provided by instructor.

Course Description and Objectives:

This lecture/laboratory is intended to provide a science- based overview of the ecological processes that are relied on in organic agricultural systems. Emphasis will be placed on management strategies for vegetable production. The general objectives of this course include:

1. Develop in students an understanding of certified organic agricultural systems, including the challenges associated with making them sustainable, and how they differ from other systems designed to improve agricultural sustainability.
2. Engage students in hands-on learning of strategies designed to maximize the efficacy of biological cycles within the farm and garden in order to optimize the economic, environmental and social sustainability of the food production system.
3. Facilitate the development of independent research, thought, and problem solving processes with regard to organic vegetable production.

Course Format (2 credit):

Monday: 12:30- 4:20. St. John 10 and Magoon Greenhouse Facility

Each lab period will generally be initiated by a brief introductory lecture. The remaining period will be devoted to the students acquiring hands-on experience in organic vegetable production and experimentation, field trips to better acquaint the students with commercial aspects of organic vegetable production, and discussion of student garden projects.

Student reports and presentations:

Each student will be responsible write a 5-10 page review of a topic of the student's choosing, subject to the instructor's approval.

The written portion of the report should follow the format below, unless otherwise cleared with the instructor:

Introduction- Clearly introduces the subject, its importance and what the student plans to assert.

Results and Discussion- Summarize the information available and discuss what it means to the student.

Conclusion- Clearly states the student's conclusion and its implications.

References- Consistently follows a conventional format and contains all the references cited in the paper and only those. They should be accurate and allow others to locate the reference. Students should cite at least 5 references and references should not be exclusively websites.

The student will also be responsible for a short (~ 5 min) oral presentation of their report to the class.

Grading:

Grading is based on a combination of quizzes (200 pts, 40%), lab journal and field trip reports (100 pts, 20%), a report and presentation (150, pts, 30%) and participation (50 pts, 10%).

- A \geq 90 %
- B \geq 80 % and < 90 %
- C \geq 70 % and < 80 %
- D \geq 60 % and < 70 %
- F < 60 %

All students are expected to attend all labs. More than five absences will result in loss of all class participation points (10% of course grade).

Tentative Schedule

<u>Meeting</u>	<u>Topic</u>
8/25	Lec:. Housekeeping; Organic Overview Lab: Transplanting
9/1	LABOR DAY
9/8	Organic Farm
9/15	Lec:. Soil health and fertility I Lab: Organic amendments and soil builders
9/22	Organic Farm
9/29	Lec: Soil health and fertility II Lab: Compost tea and soluble fertilizers- Pearl city urban garden center
10/6	Lecture: Pest control I Lab: Weed management strategies
10/13	Lec:. Pest control II Lab: Organic pesticides
10/20	Organic farm
10/27	Lec:. Marketing, Economic viability Lab: Cost of production
11/3	Organic farm
11/10	Lec: Environmental influence on crop quality Lab: sensory evaluation
11/17	Organic farm
11/24	Lec: Agricultural biotechnology Lab: Discussion
12/1	Organic Farm
12/8	Individual student presentations

12/19

Papers Due