SUSAG 116 Course Outline as of Spring 2005

CATALOG INFORMATION

Dept and Nbr: SUSAG 116 Title: ORGANIC APPLE PRODUCTION Full Title: Organic Apple Production Last Reviewed: 9/13/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	4.50	4	Lecture Scheduled	18.00
Minimum	1.00	Lab Scheduled	3.00	4	Lab Scheduled	12.00
		Contact DHR	0		Contact DHR	0
		Contact Total	7.50		Contact Total	30.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 36.00

Total Student Learning Hours: 66.00

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:	

Catalog Description:

This course emphasizes organic apple production practices and is intended for current or potential apple producers. Emphasizes available and effective methods in commercial or small-scale organic contexts.

Prerequisites/Corequisites:

Recommended Preparation: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:

Description: This course emphasizes organic apple production practices and is intended for current or potential apple producers. Emphasizes available and effective methods in commercial or small-scale organic contexts. (Grade or P/NP) Prerequisites/Corequisites: Recommended: Eligibility for ENGL 100 or ESL 100 Limits on Enrollment:

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, the student will be able to:

- 1. Comply with state and federal regulations pertaining to the production of organic apples.
- 2. Establish an orchard so as to ensure optimal production.
- 3. Select appropriate apple varieties and rootstocks for planting.
- 4. Manage the orchard floor to control weed competition and provide appropriate access.
- 5. List common diseases of apples and describe the symptoms and control methods.
- 6. List the common physiological disorders of apples and describe the symptoms and control methods.
- 7. Monitor an orchard for pests and utilize appropriate pest management control approaches.
- 8. Manage harvest and post-harvest operations.
- 9. Prune and train apple trees for optimal production.
- 10. Install and manage an irrigation system.
- 11. Discuss marketing considerations for organically grown apples.

Topics and Scope:

- I. Overview of the Organic Apple Industry
- A. Trends in organic production and markets
- B. Supply and price response
- C. Regulation of California organic apple production methods, including certification
- II. Orchard Management
- A. Orchard culture
 - 1. Site selection
 - 2. Land preparation

- 3. Planting
- 4. Rootstock selection
- 5. Variety selection
- 6. Tree nutrition and fertilization
- 7. Fruit thinning
- 8. Pruning
- 9. Irrigation timing
- B. Orchard floor management
 - 1. Weed control
 - 2. Cover crop selection and management
 - C. Irrigation system
 - 1. Installation
 - 2. Management
 - D. Equipment requirements
- III. Disease and Pest Management
 - A. Apple diseases
 - 1. Major apple diseases
 - a. apple scab
 - b. fire blight
 - 2. Minor apples diseases
 - a. powdery mildew
 - b. phytophthora root and crown rot
 - c. oat root fungus
 - d. dematophora root rot
 - e. sappy bark
 - f. southern blight
 - g. European canker
 - h. post-harvest rots
 - i. viruses
 - B. Physiological disorders
 - 1. Major: bitter pit
 - 2. Minor
 - a. water core
 - b. apple measles
 - C. Insect and mite management
 - 1. Major
 - a. codling moth
 - b. aphids
 - 2. Minor
 - a. mites
 - b. tentiform leafminer
 - c. leafrollers
 - D. Vertebrate pest management
 - 1. Deer
 - 2. Gophers
 - 3. Rabbits
 - 4. Birds
- IV. Harvest and Post-harvest Operations
- A. Pre-harvest factors
- B. Harvesting and packing
- C. Apple storage
- D. Sanitation during processing of organic apples

V. Marketing Considerations

- A. Quality
- B. Demand
- C. Marketing channels
- D. Promotion
- VI. Economic Performance
- A. Yield
- B. Labor management
- C. Estimated costs and expected returns for organic apples

Assignment:

Assignments may include:

1. Develop a farm plan, including irrigation issues, fertilization, equipment needs, and marketing strategy (3-5 pages).

2. Lab: activities assigned according to the season in Shone Farm apple orchard e.g., pruning, monitoring for orchard pests, weed control methods for orchard floor.

3. Assigned reading totaling approximately 60 - 100 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.

Farm plan.

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

None

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

Lab activities.

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

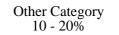
None

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

Participation/attendance

Representative Textbooks and Materials:

	Writing 30 - 50%	
Г	Problem solving	7
	0 - 0%	
	Skill Demonstrations 30 - 50%	
	Exams 0 - 0%	
		-



Organic Apple Production Manual. University of California Agriculture and Natural Resources Publication 3403. Regents of the University of California, 2000. www.ipm.ucdavis.edu Instructor prepared materials.