

**SUSAG 112 Course Outline as of Fall 2005****CATALOG INFORMATION**

Dept and Nbr: SUSAG 112 Title: ORGANIC CROP PRODUCTION  
 Full Title: Organic Crop Production  
 Last Reviewed: 2/14/2005

Units	Course Hours per Week		Nbr of Weeks	Course Hours Total		
Maximum	2.00	Lecture Scheduled	4.00	9	Lecture Scheduled	36.00
Minimum	2.00	Lab Scheduled	2.00	8	Lab Scheduled	18.00
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	54.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 72.00

Total Student Learning Hours: 126.00

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: AG 297.55S

**Catalog Description:**

Planting procedures, cultural requirements, harvesting techniques and marketing practices involved in the production of organic vegetable, fruit and grain crops in small commercial operations. Includes hands-on management of Shone Farm's Food Pyramid Garden.

**Prerequisites/Corequisites:****Recommended Preparation:**

Course Completion or Concurrent Enrollment in SUSAG 110 ( or AG 121)

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Planting procedures, cultural requirements, harvesting techniques and marketing practices involved in the production of organic vegetable, fruit and grain crops in small commercial operations. Includes hands-on management of Shone Farm's Food Pyramid Garden. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Course Completion or Concurrent Enrollment in SUSAG 110 ( or AG 121)

Limits on Enrollment:

Transfer Credit:

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

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

**AS Degree:**      **Area**      Effective:      Inactive:

**CSU GE:**      **Transfer Area**      Effective:      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. Select appropriate crops for Sonoma County.
2. Evaluate various potting mixes for seed starting.
3. Compare and contrast the benefits of on-farm transplant production and purchase of commercially produced transplants.
4. Determine appropriate plant spacing and planting arrangements for optimal crop production.
5. Prepare a raised garden bed.
6. Collect and analyze representative soil samples.
7. Amend soil with organic fertilizers to meet crop nutrient needs and pH preferences.
8. Determine optimal harvest time for a given crop.
9. Discuss effective storage requirements to eliminate crop deterioration.
10. Evaluate marketing channels appropriate to Sonoma County.
11. Determine crop density based on square footage of space available.
12. Identify pest pressures and apply appropriate pest management treatments.

### **Topics and Scope:**

- I. Orientation to the Food Pyramid Garden (FPG)
  - A. Background
  - B. History of site
  - C. Purpose
  - D. Long-term vision
  - E. Overview of Food Pyramid Garden components
    1. grains
    2. vegetables

3. fruit
  4. protein
  5. dairy
  6. sugars and oils
- II. Farm Management/Planning
- A. Financial planning
    1. budget
    2. income/expense
    3. record keeping
  - B. Community relations/outreach
- III. Soil Fertility Management
- A. Soil testing and analysis
    1. soil pH
    2. soil nutrients
    3. percentage organic matter
  - B. Organic soil amendments
  - C. Cover crop planting
  - D. Crop rotation
- IV. Cultural Practices
- A. Tillage
  - B. Integrated Pest Management (IPM)
    1. pest pressures
    2. pest management treatments
  - C. Irrigation
  - D. Fertilization
    1. calculating material to meet crop nutrient needs
    2. application methods
  - E. Cover crop incorporation
- V. Planting
- A. Appropriate crops
  - B. Seeds
    1. ordering the appropriate seeds
    2. proper storage
  - C. Transplants
  - D. Care of seedlings/transplants
- VI. Planting Plans
- A. Field layout
    1. spacing
    2. companion planting
    3. yield calculations
  - B. Planting intervals for continuous harvest

**Assignment:**

Assignments may include:

1. Prepare potting mix based on crop and soil needs.
2. Develop an advertising tool for the FPG.
3. Prepare a detailed plot plan for planting various sections of the FPG.
4. Prepare a plot for planting.
5. Assigned reading, 15 - 20 pages per week.

## 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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing  
0 - 0%

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

Prepare potting mix; plot plan; advert. strategy.

Problem solving  
80 - 90%

**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.

None

Exams  
0 - 0%

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

Attendance and participation.

Other Category  
10 - 20%

## Representative Textbooks and Materials:

Sustainable Vegetable Production from Start-up to Market. Vernon P. Grubinger. Natural Resource, Agriculture, and Engineering Service (NRAES), 1999.

Sustainable Horticulture Today and Tomorrow. Poincelot, Raymond. Prentice Hall, 2004.

Web based materials.