#### SUSAG 120 Course Outline as of Fall 2024

### **CATALOG INFORMATION**

Dept and Nbr: SUSAG 120 Title: ORG GRDNING & FOOD PROD

Full Title: Organic Gardening and Food Production

Last Reviewed: 2/8/2021

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	2.00	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	2.00	Lab Scheduled	1.50	4	Lab Scheduled	26.25
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50 Total Student Learning Hours: 105.00

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:**

Exploration of organic gardening practices with an emphasis on designing and maintaining gardens. Application of techniques for local and seasonally appropriate production of edible crops including vegetables, fruits, flowers, and herbs. Class focuses on small scale production practices that are applicable for home gardens, as well as urban and community garden settings, including: permaculture design, soil building, watering, biodiversity and hand tools.

#### **Prerequisites/Corequisites:**

### **Recommended Preparation:**

Eligibility for ENGL 100 OR EMLS 100 (formerly ESL 100) or appropriate placement based on AB705 verbiage

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: Exploration of organic gardening practices with an emphasis on designing and maintaining gardens. Application of techniques for local and seasonally appropriate production of edible crops including vegetables, fruits, flowers, and herbs. Class focuses on small scale

production practices that are applicable for home gardens, as well as urban and community garden settings, including: permaculture design, soil building, watering, biodiversity and hand tools. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 OR EMLS 100 (formerly ESL 100) or appropriate placement based on AB705 verbiage

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**

## **Student Learning Outcomes:**

At the conclusion of this course, the student should be able to:

- 1. Design a diversified home garden suitable to a local microclimate.
- 2. Describe and implement techniques for locally appropriate production of edible crops, including vegetables, fruits, flowers, and herbs.
- 3. Discuss sustainable management practices for local organic gardens.

#### **Objectives:**

At the conclusion of this course, the student should be able to:

- 1. Discuss the application of permaculture design principles to home gardens.
- 2. Describe and implement methods for preparing garden beds.
- 3. Describe and implement techniques for starting plants from seed and transplanting seedlings.
- 4. Develop a soil building management plan.
- 5. Develop a garden planting plan.
- 6. List and discuss major vegetables, fruits, flower, and herbs produced for the home garden.
- 7. Determine the microclimate associated with a particular garden location.
- 8. Outline simple steps every gardener can take to increase beneficial insect populations.
- 9. Describe the appropriate use of various hand tools in the garden.

## **Topics and Scope:**

- I. Garden Design for Food Production
  - A. Permaculture design

- 1. Permaculture principles
- 2. Characteristics of permaculture gardens
- B. Garden design
  - 1. Site evaluation
  - 2. Design process

# II. Crops

- A. Vegetables
- B. Fruits
- C. Medicinal and culinary herbs
- D. Edible and cut flowers
- III. Sustainable Soil Management
  - A. Soil fertility
  - B. Assessing soil fertility
  - C. Building soil fertility
    - 1. Raised beds
    - 2. Soil amendments
    - 3. Soil organisms
    - 4. Cover crops

## IV. Garden Ecology

- A. Biodiveristy in gardens
- B. Animals in gardens
- C. Edible forest gardens
- D. Urban and community gardens

## V. Growing Techniques

- A. Planning components
  - 1. Seed selection and sources
  - 2. Water source
  - 3. General Climate / microclimates
  - 4. Growing Seasons
  - 5. Frost Dates
  - 6. Timing and Scheduling
  - 7. Bed rotations
  - 8. Gardening tools and equipment
- B. Protected growing
  - 1. Greenhouse, cold frames and other season extenders
  - 2. Tunnels and trellises

## VI. Production Principles

- A. Garden bed Preparation
  - 1. Cultivation
  - 2. Tillage
  - 3. Bed preparation
- B. Planting Techniques
  - 1. Seed germination
  - 2. Direct sowing
  - 3. Transplanting
- C. Cultural management
  - 1. Irrigation
  - 2. Mulching
  - 3. Thinning
  - 4. Weeding
  - 5. Integrated Pest Management
- VII. Harvest Principles

- A. Harvest timing
- B. Harvest techniques
- C. Postharvest techniques and handling

Concepts presented in lecture are applied and practiced in lab.

# **Assignment:**

Lecture-related assignments:

- 1. Weekly reading from texts and handouts (10-20 pages)
- 2. Discussions
- 3. Written problem solving assignments such as soil building plan (3-4)
- 4. Home garden design project
- 5. Quizzes (4 17) and final exam

Lab-related assignments:

1. Weekly lab quizzes

#### 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.

Discussions, written problem solving assignments

Writing 40 - 50%

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

Written problem solving assignments, garden design project

Problem solving 20 - 30%

**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.

Final, lab and lecture quizzes

Exams 20 - 30%

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

None

Other Category 0 - 0%

# **Representative Textbooks and Materials:**

Gaia's Garden: A Home-Scale Guide to Permaculture. 2nd ed. Chelsea Green Publishing. 2009 (classic)

Golden Gate Gardening. Pierce, Pam. Sasquatch Books. 2010 (classic)
Western Garden Book of Edibles. Sunset Publishing. 2010 (classic)
"For the Gardener" – Article Series. Center for Agroecology and Sustainable Food Systems.
University of California Santa Cruz. Current edition
Instructor prepared materials