#### SUSAG 130 Course Outline as of Fall 2004

### **CATALOG INFORMATION**

Dept and Nbr: SUSAG 130 Title: SUS GDNS & LANDSCP

Full Title: Sustainable Gardens and Landscapes

Last Reviewed: 4/19/2004

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	1.00	Lecture Scheduled	3.00	6	Lecture Scheduled	18.00
Minimum	1.00	Lab Scheduled	0	2	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	18.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 36.00 Total Student Learning Hours: 54.00

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 297.62

#### **Catalog Description:**

An integrated approach to designing a functional landscape/garden system that promotes sustainable practices. Emphasis on enhancing the garden ecosystem while keeping costs, maintenance and impact on natural resources to a minimum.

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

### **Recommended Preparation:**

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

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

Description: An integrated approach to designing a functional landscape/garden system that promotes sustainable practices. Enhance the garden ecosystem while keeping costs, maintenance and impact on natural resources to a minimum. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended:

Limits on Enrollment:

**Transfer Credit:** 

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

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

**AS Degree:** Effective: Area Inactive: **CSU GE: Transfer Area** Effective: Inactive:

**Transfer Area IGETC:** 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 successful completion of this course, the student will be able to:

- 1. Compare and contrast the features of a typical garden with those of an ecologically designed garden.
- 2. Determine microclimates at a given site and adapt plant choices appropriately.
- 3. Identify important California native and Mediterranean plants suitable for the local landscape.
- 4. Describe techniques for microclimate modification.
- 5. Identify edible plants requiring lowest inputs of labor and materials.
- 6. Summarize principles of soil health and fertility and explain how they relate to plant health.
- 7. Discuss principles of water conservation for the landscape.
- 8. Compare and contrast a variety of irrigation products.
- 9. Describe IPM (integrated pest management) assessment strategies.
- 10. Evaluate pest damage and select appropriate treatment.
- 11. Describe proper pruning techniques for overall tree health.
- 12. Evaluate landscape elements for multi-functionality.

# **Topics and Scope:**

- I. Introduction to the Ecological Garden
- A. Gardens that work with nature
- B. Permaculture principles
- C. Ecological vs. traditional gardens II. Microclimates
- A. How to determine microclimates on a site
- B. Selecting appropriate plants for a microclimate 1. Plant identification

  - 2. Plant selection and use

- C. Techniques for microclimate modification
- III. Plants Appropriate to Local Landscape
- A. California natives
- B. Mediterranean
- C. Edibles
  - 1. Edible landscaping
  - 2. Identifying attractive and productive plants
  - 3. Techniques for proper growth, maintenance, and harvest
- D. Evaluating plants for specific sites and needs
- IV. Soils and Fertility
- A. Principles of soil health
- B. Fertility
- C. Relationship between soil fertility and plant health
- V. Water Conservation
- A. Principles of water conservation for the landscape
- B. Irrigation products
- C. Low water use plants
- D. Techniques to conserve soil moisture
- VI. Integrated Pest Management
- A. Assessment strategies
  - 1. Determine quantity and kind of damage
  - 2. Evaluate least toxic control methods
  - 3. Appropriate treatments
- B. Establishing a habitat for beneficials
- VII. Pruning and Tree Care
- A. Basic pruning techniques
- B. Tree care
- VII. Multi-functional Garden Design
- A. Rationale for multi-functional gardening
- B. Elements of the multi-functional garden

### **Assignment:**

Representative assignments:

- 1. Reading, 15 25 pages per week.
- 2. Explore neighborhood/community to observe sustainable and non-sustainable landscape practices. Record observation notes for 2-3 sites in a 5-page paper (may include other recorded information, such as sketches or photos).
- 3. Develop a schematic drawing for a sustainable, multi-functional landscape, with 1-2 pages of explanatory text.

#### 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.

Observation paper.

Writing 20 - 40%

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

Schematic drawing and text.

Problem solving 20 - 40%

**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 20 - 40%

# **Representative Textbooks and Materials:**

Kourik, Robert. DESIGNING AND MAINTAINING YOUR EDIBLE LANDSCAPE NATURALLY.

Metamorphic Press, 1986.

Hemenway, Toby. GAIA'S GARDEN: A GUIDE TO HOME-SCALE PERMACULTURE. Chelsea

Green Pub Co., 2001.