

**SUSAG 130 Course Outline as of Fall 2004****CATALOG INFORMATION**

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

Full Title: Sustainable Gardens and Landscapes

Last Reviewed: 4/19/2004

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
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:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**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.
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Writing 20 - 40%
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**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.