

**VIT 114 Course Outline as of Fall 2015****CATALOG INFORMATION**

Dept and Nbr: VIT 114                      Title: SUSTAINABLE VITICULTURE  
 Full Title: Sustainable Viticulture  
 Last Reviewed: 9/13/2021

<b>Units</b>	<b>Course Hours per Week</b>		<b>Nbr of Weeks</b>		<b>Course Hours Total</b>	
Maximum	1.50	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	1.50	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50

Total Student Learning Hours: 78.75

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:**

Examination of commercial sustainable winegrape production, investigating both theory and practical applications. Regional growing conditions will be emphasized. Topics include: vineyard practices that promote environmental protection and resource conservation, economic viability and continuity, and social equity.

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

Eligibility for ENGL 100 or ESL 100

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

Description: Examination of commercial sustainable winegrape production, investigating both theory and practical applications. Regional growing conditions will be emphasized. Topics include: vineyard practices that promote environmental protection and resource conservation, economic viability and continuity, and social equity. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

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**

**Student Learning Outcomes:**

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

1. Prepare an in-depth feasibility study that examines the benefits and costs of implementing a vineyard plan that transitions from conventional to sustainable practices.
2. Identify and describe various sustainable farming practices that will improve fruit quality, provide efficacious disease and pest control, are economically sound and provide for social equitability.
3. Research current third party agencies that are able to certify sustainability for a vineyard.

**Objectives:**

Upon completion of the course, students will be able to:

1. Define and discuss sustainable winegrape production in terms of purpose, principles and applied techniques.
2. Identify primary criteria for successful sustainable winegrape vineyard operation.
3. Analyze strengths and weaknesses of sustainably based winegrape production in terms of quality, yield, pest and disease management, soil fertility, economic viability and social equity.
4. Analyze and discuss the economic outlook for sustainable winegrape production in Sonoma County.
5. State and discuss key criteria in choosing a site that is suitable for sustainable winegrape production.
6. Define and discuss soil fertility in terms of sustainable winegrape production
7. Define and discuss the role of beneficial microorganisms in soil fertility for sustainability.
8. Compare and contrast various kinds of soil fertility programs suitable for sustainable farming.
9. Define and discuss the value of biodiversity in above the ground and below ground milieus.
10. Define and discuss the benefits of using various cover crops for sustainability.
11. Define and discuss various methods of sustainable weed control, sustainable pest management, sustainable disease management, and use of animals in farming systems.

12. Contrast and compare Integrated Pest Management with sustainable pest and disease control methods.
13. Define and discuss social equitability within the vineyard and in the community.
14. Contrast and compare short-term vs. long-term sustainable farming strategies.

### **Topics and Scope:**

1. Introduction to Sustainable Viticulture
  - a. History of sustainable viticulture regionally and world-wide
  - b. History and focus of sustainable agriculture
  - c. Ecological farming systems
  - d. Conventional farming systems
  - e. Comparative cost analysis
2. Vineyard Sustainable Farming Systems
  - a. Enhancing biodiversity
  - b. Improving soil fertility
  - c. Cover crops
  - d. Irrigation and water conservation
  - e. Preservation and conservation of resource
  - f. Biological control of pests and diseases
  - g. Worker safety and equitability
  - h. Supporting the community
  - i. Integration of animals for vineyard practices
  - j. Humane treatment of farm animals
  - k. Hedgerows
3. Economics of Sustainable Vineyard Production
  - a. New planting vs. transitioning existing vineyard into becoming sustainable
  - b. Costs of all Vineyard Sustainable Farming Systems components (see number 2 above)
  - c. Process of becoming certified sustainable
  - d. Third party certification agencies
  - e. Continuous improvement

### **Assignment:**

1. Reading assignments from texts, peer-reviewed journals, trade journals (10-20 pages/week).
2. Homework: online research and study assignments (approximately 2 hours/week).
3. On-site vineyard observations, evaluations and recommendations for improvement (4 written total).
4. Exams: 1-2 quizzes, final exam including short essays.
5. Term project.

### **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.

Written homework, evaluations and recommendations. Term project.
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Writing 40 - 60%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

On-site vineyard observations, evaluations of efficacy of vineyard practices.

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.

Quizzes and final exam; Short Essay Exams, Multiple Choice, True/False, Completion

Exams  
20 - 40%

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

None

Other Category  
0 - 0%

**Representative Textbooks and Materials:**

California Code of Sustainable Winegrowing, 3rd Edition, 2013.

California Sustainable Winegrowing Alliance, Wine Institute and California Association of Winegrape Growers, 2012.

The Conservation to Sustainable Agriculture: Principles, Processes, and Practices: 1st Edition, Stephan R. Gliessman (editor), 2009 (classic).