#### 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

Units		Course Hours per Wee	k Ni	or of Weeks	<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:**

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. 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.

Writing 40 - 60%

**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).