#### VIT 114 Course Outline as of Fall 2022

# **CATALOG INFORMATION**

Dept and Nbr: VIT 114 Title: SUSTAINABLE VITICULTURE

Full Title: Sustainable Viticulture

Last Reviewed: 9/13/2021

Units		Course Hours per Week		Nbr 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	6	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 wine grape production and certification requirements. 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 wine grape production and certification requirements. 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:**

At the conclusion of this course, the student should 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 wine grape vineyard operation.
- 3. Discuss sustainably based wine grape production in terms of quality, yield, pest and disease management, soil fertility, economic viability and social equity.
- 4. Discuss the economic outlook for sustainable wine grape production in Sonoma County.
- 5. State and discuss key criteria for site suitability for sustainable wine grape production.
- 6. Define and discuss soil fertility in terms of sustainable wine grape production
- 7. Define and discuss the role of beneficial microorganisms in soil fertility for sustainability.
- 8. Define and discuss the value of biodiversity in above the ground and below ground milieus.
- 9. Define and discuss the benefits of using various cover crops for sustainability.
- 10. Define and discuss various sustainable methods of weed control, pest management, disease management, and use of animals in farming systems
- 11. Contrast and compare Integrated Pest Management with sustainable pest and disease control methods.
- 12. Define and discuss social equity for vineyard personnel and in the community.
- 13. Contrast and compare short-term vs. long-term sustainable farming strategies.

# **Topics and Scope:**

- I. Introduction to Sustainable Viticulture
  - A. History of sustainable viticulture regionally and world-wide
  - B. Principles of agroecology
  - C. Conventional farming systems
- II. Vineyard Sustainable Farming Systems
  - A. Enhancing biodiversity
  - B. Improving soil fertility
  - C. Cover crops
  - D. Irrigation and water conservation of natural resources
  - E. Preservation and conservation of resource
  - F. Biological control of pests and diseases
  - G. Worker safety and equity
  - H. Supporting the community
  - I. Integration of animals for vineyard practices
  - J. Humane treatment of farm animals
  - K. Hedgerows
- III. Economics of Sustainable Vineyard Production
  - A. New planting vs. transitioning existing vineyard into becoming sustainable
  - B. Process of becoming and maintaining certification
  - C. Continuous improvement of all practices to maintain certification
  - D. Third party certification agencies

### **Assignment:**

- 1. Weekly reading (20 50 pages)
- 2. Weekly homework assignments (3 5 pages)
- 3. One final exam

#### 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.

Homework assignments

Writing 60 - 80%

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

None

Problem solving 0 - 0%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations 0 - 0%

performance exams.

Final exam

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

None

Other Category
0 - 0%

## **Representative Textbooks and Materials:**

**Exams:** All forms of formal testing, other than skill

California Code of Sustainable Winegrowing Workbook. 4th ed. California Sustainable Winegrowing Alliance, Wine Institute, and California Association of Winegrape Growers. 2020.

Agroecology: The Ecology of Sustainable Food Systems. 3rd ed. Gliessman, Stephen. CRC Press. 2014 (classic)