**VIT 114 Course Outline as of Spring 2024**

# 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 | Course Hours Total | |
|---|---|---|---|---|---|---|
| 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

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|---|---|
| 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:

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|---|---|---|---|
| **AS Degree:** | **Area** | Effective: | Inactive: |
| **CSU GE:** | **Transfer Area** | Effective: | Inactive: |
| **IGETC:** | **Transfer Area** | Effective: | Inactive: |

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| **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.

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| Homework assignments | Writing<br>60 - 80% |

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

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| None | Problem solving<br>0 - 0% |

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

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| None | Skill Demonstrations<br>0 - 0% |

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

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| Final exam | Exams<br>20 - 40% |

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

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| None | Other Category<br>0 - 0% |

**Representative Textbooks and Materials:**
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)