VIT 113 Course Outline as of Fall 2009

CATALOG INFORMATION

Dept and Nbr: VIT 113 Title: ORGANIC VITICULTURE
Full Title: Organic 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	0.50	8	Lab Scheduled	8.75
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50 Total Student Learning Hours: 87.50

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 organic wine grape production, investigating both theory and practical applications. Regional growing conditions will be emphasized. Topics include: assessment of a site's feasibility for organic production; appropriate choice of planting materials; soil fertility; biodiversity; ecologically sound pest and disease management; cost comparisons of organic production versus other methods.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: Examination of commercial organic wine grape production, investigating both theory and practical applications. Regional growing conditions will be emphasized. Topics include: assessment of a site's feasibility for organic production; appropriate choice of planting materials; soil fertility; biodiversity; ecologically sound pest and disease management; cost

comparisons of organic production versus other methods. (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

Outcomes and Objectives:
Upon completion of the course the student will be able to:
1. Accurately define and discuss organic winegrape production in terms of purpose, principles and applied techniques.
2. Correctly identify primary criteria for a successful organic wine grape vineyard operation.
3. Analyze strengths and weaknesses of organically based wine grape production in terms of yield, pest and disease management, soil fertility and economic viability.
4. Analyze and discuss the economic outlook for organic winegrape production in Sonoma County.
5. State and discuss key criteria in choosing a site that is suitable for organic winegrape production.
6. Define and discuss soil fertility in terms of grape vine growth, production and fruit quality.
7. Distinguish the role of macronutrients and micronutrients in soil fertility.
8. Distinguish the role of compost and organic soil amendments in soil fertility
8. Define and discuss the role of beneficial microorganisms in soil fertility.
9. Compare and contrast various kinds of fertility programs utilized in an organic system plan.
10. Define the components of a healthy soil and discuss methods to achieve it.
11. Define and discuss the roles and value of biodiversity both above ground, and in the vineyard soil.
12. Discuss vine nutrient requirements, and describe the mechanism of how grapevines absorb these nutrients.
13. Assess the needs and timing of compost applications for wine grapes.
14. Define and discuss the role of mulching, and list and analyze various kinds of mulch.
15 Define and discuss the role and benefits of using various cover crops.
16. Discuss different methods of cover crop establishment, maintenance and sustainability.

17. List and analyze several organic weed control methods.
18. Define, discuss and analyze the role of soil applied organic fertilizers and foliar applied organic fertilizers.
19. Define and discuss organic pest control management.
20. Define and discuss organic disease control management.
21 Define and discuss the principles of Integrated Pest Management.
22. Discuss the steps required to increase beneficial insect populations..
23. Discuss the long-term economic outlook of organically produced winegrapes and wines.

Topics and Scope:

1. Introduction to Organic Viticulture
   a. History of organic viticulture regionally and worldwide
   b. Focus of organic agriculture, their similarities and differences
   c. History of organic agriculture
   d. Ecological farming systems theory
   e. Conventional farming systems
   f. Organic farming systems
   g. Comparative cost analysis
2 Vineyard Organic Farming Systems
   a. Locally appropriate production
   b. Enhanced biodiversity
   c. Improved soil fertility
   d. Organic pest and disease management
3. Organic Soil Amendments
   a. Humus and the process of humification
   b. Complex organic compounds
   c. Natural humification versus composting
   d. Hot, cold, and warm composting
   e. Application methods, rates and timing
5. Economics of Organic Grape Production
   a. Installation and maintenance costs
   b. Yield and pricing
   c. Organic certification process
   d. Working with your certifying agency
6. Selecting Material for Planting
   a. Assessing soil problems and choosing tolerant rootstocks
   b. Assessing above ground pest and disease problems and choosing tolerant cultivars
   c. Matching the soil and climate to appropriate trellis, spacing and row orientation
7. Sustainability - Organic cultural practices
   a. Mulching
   b. Cover crops
   c. Organic fertilization
   d. Irrigation
   e Weed control
   f. Fruit quality improvement
8. Organic Pest and Disease Control
   a. Biological controls
   b. Mechanical controls
   c. Biological controls
   c. Plant extract based fungicides
   f. Beneficial insects

9. Economics and Careers in Organic Wine grape Production
   a. Current economic conditions for organic production
   b. California developments
   c. Sonoma County
   d. Career outlook
   e. Marketing and sales
10. Organic Certification
   a. State versus federal law
   b. Certification versus compliance
   c. Various certifying agencies
   d. Registering in Sonoma County for Organic certification

Assignment:

1. Specific reading assignments from texts and handouts, 15-20 pages per week, 150 total.
2. Research projects on production related topics (1 to 2, 3 to 5 pages each).
3. Internet study assignments (approximately 2 hours per week).
4. On-site Vineyard evaluation sheets (5 to 8).
5. Exams: 1-2 quizzes; final examination including short essays).

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, Term papers, Semester project	Writing 40 - 60%

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

Homework problems, Field work	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, 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:
The Grape Grower: A Guide to Organic Viticulture, Lon Rombough, Chelsea Green Publishing Company, 2002.
Instructor prepared materials