VIT 55 Course Outline as of Fall 2022

CATALOG INFORMATION

Dept and Nbr: VIT 55 Title: BASIC WINE VITICULTURE
Full Title: Basic Wine Grape Viticulture
Last Reviewed: 9/13/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00 Total Student Learning Hours: 157.50

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:
An introduction to viticulture including history and development of the wine industry, grape growing, distribution, processes and factors affecting wine quality. Also covers biology, anatomy, propagation, cultivated varieties, rootstocks, climate, vineyard practices, and common diseases and pests. Provides basic information required to establish a wine grape vineyard in Sonoma County.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: An introduction to viticulture including history and development of the wine industry, grape growing, distribution, processes and factors affecting wine quality. Also covers biology, anatomy, propagation, cultivated varieties, rootstocks, climate, vineyard practices, and common diseases and pests. Provides basic information required to establish a wine grape

vineyard in Sonoma County. (Grade or P/NP)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;
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:	Transferable	Effective:	Summer 2007	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. Explain yearly growth cycle of grapevines and correlate vineyard operations appropriate at each phenological stage.

2. Identify common vineyard pest and disease problems, explain their life cycles, and recommend timely and sustainable vineyard practices for disease and pest control.
3. Describe various grapevine cultivars, rootstocks, trellis types and canopy management strategies that are utilized for high quality wine grape production.
4. Describe the steps for determining feasibility for planting (or replanting) a vineyard.

Objectives:
At the conclusion of this course, the student should be able to:
1. Summarize the history and development of the wine industry.
2. Evaluate the economic importance of grapes both historically and currently.
3. Analyze the vineyard yearly growth cycle and relate it to timing of vineyard practices.
4. Identify and describe grapevine structures and functions.
5. Describe and contrast development of a new vineyard vs. farming an established vineyard.
6. Explain how climate, soils and vineyard practices affect vine growth and grape and wine quality.
7. Identify, compare and contrast the different cultivars and rootstocks.
8. Summarize the unique characteristics of the world's major grape growing areas.
9. Identify and describe the important vineyard disease and pests and recommend integrated pest management control strategies.

Topics and Scope:

I. History and Evolution
   A. Overview of world-wide importance of grapes and grapevines
   B. History and development of the wine industry
   C. Grapevine classification and Vitis species
   D. Origin of Vitis vinifera and its spread throughout the world
II. Geographical Distribution of Grape Growing
   A. European and American varieties
   B. Growing regions in California
   C. Growing regions world-wide
III. Vitis Species and Cultivars
   A. Wine grape, table grape and raisin cultivars
   B. Rootstocks
   C. Clones
   D. Vitis species
IV. Climate and Soils
   A. Heat summation and climatic regions
   B. Vineyard soils and terroir
V. Vine Structure and Function
   A. Vocabulary
   B. Shoot system and vine canopy
   C. Root system and permanent wood
   D. Vine physiology
VI. Vineyard Yearly Growth Cycle
   A. Budburst
   B. Grand period of growth
   C. Bloom and berry set
   D. Veraison and ripening
   E. Harvest
   F. Post-harvest
   G. Dormancy
   H. Processes and factors affecting wine quality
VII. Vine Propagation
VIII. Vineyard Development
   A. Site selection
   B. Natural resources, habitat and environmental concerns
   C. Vineyard design - trellises and irrigation systems
   D. Installation and planting
IX. Farming and Established Vineyard
   A. Vineyard practices during the cycle of vine growth
   B. Canopy management
   C. Vine mineral nutrition management
   D. Sustainable agricultural practices
   E. Methods to improve grape quality
X. Grapevine Diseases and Pests
   A. Identification and monitoring
   B. Control and integrated pest management
XI. Economic Impacts of the Wine Grape Industry

Assignment:

1. Weekly reading (20-30 pages)

2. One research report on one of the following: worldwide distribution of grapes, grape production and consumption from a historical perspective, history of the development of the wine industry,
or the importance of grapes historically and currently (5-7 pages)
3. Ten homework assignments including: graphic summary of yearly growth cycle and timing of vineyard practices, the different cultivars and rootstocks, the important vineyard diseases and pests with recommendations for management practices
4. Two midterms and 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.

Research report, homework assignments	Writing 40 - 40%

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%

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

Midterm and Final Exam	Exams 60 - 60%

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

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Grapes: Crop Production Science in Horticulture. 2nd ed. G.L Creasy, Glen and Creasy, Leroy. CABI. 2018.
Terroir and Other Myths of Winegrowing. Matthews, Mark. University of California Press. 2016 (classic)