VIT 51 Course Outline as of Spring 2009

CATALOG INFORMATION

Dept and Nbr: VIT 51 Title: VITICULTURE: FALL PRACT
Full Title: Viticulture: Fall Practices
Last Reviewed: 9/13/2021

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00 Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade Only
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	AG 57A

Catalog Description:
Fall practices for wine grape production in the north coast region, including budding, grape maturity monitoring, harvesting, pruning, varietal selection and vineyard development.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: Fall practices for wine grape production including budding, harvesting, pruning, varietal selection and vineyard development. (Grade Only)
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:	Fall 1981	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon completion of this course, students will be able to:
1. Outline the key elements in the grape harvest process.
2. Estimate the size of the grape crop through field observation.
3. Outline vineyard management procedures during harvest.
4. Summarize criteria used to evaluate grape readiness for harvest.
5. Describe post-harvest cultural practices.
6. Assess sugar/acid ratios based on vineyard sampling.
7. Describe techniques for grape maturity sampling.
8. Identify disease symptoms common in the fall vineyard.
9. Compare and contrast the various types and applications for erosion control methods.
10. Evaluate the elements of a vineyard development plan.
11. Identify appropriate vineyard practices for each stage of the growth cycle.
12. Compare and contrast sustainable and organic agricultural practices in the vineyard.

Topics and Scope:

I. Harvesting Grapes
  A. Vineyard sampling for sugar/acid ratios
  B. Techniques for maturity sampling
  C. Estimating crop size
    1. Cluster counts
    2. Cluster weights
    3. Pounds (lbs)/vine
    4. Tons/acre
  D. Vineyard management during harvest
    1. Irrigation
    2. Bunch rot control
    3. Insect control

4. Crop load adjustments
E. Traditional harvest criteria
1. Briggs (sugar)
2. pH
3. Total acid (T.A.)
F. New harvest & quality concepts
1. Baume
2. Color intensity
3. Ripe flavors
4. Clones
a. cluster size and weight
b. berry size and weight
c. different maturity times
5. Hand vs. machine harvest
6. Daytime vs. nighttime harvest
7. Contaminants
G. Transporting grapes

II. Post-harvest Cultural Practices
A. Post-harvest irrigation
B. Post-harvest fertilization
C. Early pre-pruning

III. Grapevine Diseases and Fall Symptoms
A. Fungal
B. Bacterial
C. Virus and virus-like diseases
D. Nematodes

IV. Winery and Grower Relations
A. Marketing your grapes
B. Grape sale contracts
C. Cultural operations under contract
D. Evaluating the wines made from your grapes

V. Erosion Control and Vineyard Winterization
A. Cover crops
1. Types of cover crops
2. Criteria for selection
3. Fertilization of cover crops
B. Drainage systems
C. Silt ponds and silt fences
D. Fish friendly practices
E. Erosion control and drainage system repair and maintenance

VI. Vineyard Development
A. Criteria
1. Location, site selection and accessibility
2. Climate
3. Water availability and quality
4. Soil testing
B. Permits
C. Vineyard abandonment
D. Field preparation
1. Soil amendments
2. Ripping and disking
E. Establishing the Vineyard

1. Varietals and clone selection
2. Selection and utilization of commercial rootstocks
3. Spacing
4. Trellis systems and materials
5. Irrigation system selection
6. Vineyard layout

VII. Pruning
- A. Pruning principles
- B. Types of pruning
  1. Head pruning
  2. Cordon Pruning
  3. Cane Pruning
- C. New Pruning techniques
  1. Modified pruning
  2. Growth advantage points
  3. Pre-pruning
  4. Late pruning
- D. Pruning mature vines
- E. Wine quality concepts at pruning
- F. Pruning and training young vines
  1. During dormancy
  2. After bud break

Assignment:

1. Reading, 15 - 20 pages per week.
2. Lab activities such as:
   a. Collect cluster samples, test sugar and pH.
   b. Analyze and compare clusters size and weights, berry size and weight.
   c. Disease identification.
   d. Interpretation of soil and petiole tests.
   e. Pruning.
3. Lab reports, 2-3 pages per activity.
4. Four quizzes; midterm; 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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.	Writing 0 - 0%

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

Lab reports	Problem solving 25 - 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.

Multiple choice, True/false, Matching items, Completion, Short answer.	Exams 60 - 75%

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

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Wine Grape Varieities in California, University of California, Publication #3419, 2003.