### VIT 51 Course Outline as of Fall 2004

# **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	<b>Course Hours Total</b>	
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:**

Course Completion or Concurrent Enrollment in VIT 1 ( or VIT 50 or AG 55) and Course Eligibility for ENGL 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: Course Completion or Concurrent Enrollment in VIT 1 ( or VIT 50 or AG 55) and Course Eligibility for ENGL 100 Limits on Enrollment:

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	Area Transfer Area	I.		Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	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 the student 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. Summarize the various types and applications for erosion control methods.

10. Outline 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. 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.

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

Writing 0 - 0% **Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

#### None

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

Multiple choice, True/false, Matching items, Completion, Short answer.

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

None

#### **Representative Textbooks and Materials:**

General Viticulture, 2nd edition. Winkler, A.J. UC Press, 1975. Instructor prepared materials. Problem solving 25 - 40%

Skill Demonstrations 0 - 0%

Exams				
60 - 75%				

