

BUTTE COLLEGE

COURSE OUTLINE

I. CATALOG DESCRIPTION

EH 41 - Wine Growing Practices - Fall

3 Unit(s)

Prerequisite(s): NONE

Recommended Prep: Reading Level IV; English Level III; Math Level II

Transfer Status: CSU

34 hours Lecture

51 hours Lab

This course will cover viticulture practices related to wine grapes for the fall and winter season including sugar and acid testing, harvesting, pruning, varietal selection and vineyard development. Emphasis will be placed on practical applications of viticulture.

II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Describe the harvest of grapes and the techniques for sampling.
- B. Describe the current approaches to weed control and recommend appropriate chemicals.
- C. Explain how climate, soils and vineyard practices affect vine growth and grape quality.
- D. List the different methods of erosion control.
- E. Describe the different types of support used for vines and explain why.
- F. Explain the different methods of pruning and why they are used on certain varieties.
- G. Identify fall disease symptoms
- H. Identify a fall fertilizing plan
- I. Estimate the size of the grape crop through field observation.
- J. Relate market timing and its relationship between the grower and the wine maker.

III. COURSE CONTENT

A. General Goals

1. This course will expose students to the vineyard and its operations during the most critical time of year – late summer and fall. It will involve them mentally and physically in decisions and actions which have important economic impacts to the business.

B. Unit Titles/Suggested Time Schedule

1. History and Evolution

- A. Overview of world-wide importance of grapes and grapevines
- B. Grapevine classification and *Vitis* species

2. Harvesting Grapes

- A. Vineyard sampling for sugar/acid ratios
- B. Techniques for maturity sampling
- C. Estimating crop size
- D. Care in harvesting
- E. Transportation of grapes
- F. Winery/grower relations

G. New harvest concepts

3. Grape Quality

A. Define

B. Use of different methods of thinning and crop control

C. Experiments being conducted

D. Water needs and soil types for grapes

4. Weed Control

A. Strip versus broadcast control

B. Age of vine

C. Action of chemical used

D. Currently recommended chemicals

E. Calibration of equipment

F. Non-chemical weed control

5. Erosion Control

A. Cover crop needs

B. Tillage equipment

C. Fertilization of cover crops

6. Support for Vines

A. Types of trellis systems

B. Purchase of trellising materials

7. Pruning

A. Equipment needed

B. Varieties for head pruning, cordon pruning and cane pruning

C. New pruning techniques

8. Other Fall Activities

A. Disease symptoms – examination and treatments

B. Fertilization plan – scheduling, types and methods

Lecture

Topics

1. History and Evolution

A. Overview of world-wide importance of grapes and grapevines

B. Grapevines classification and *Vitis* species

Hours

2.00

2. Harvesting Grapes	8.00
A. Vineyard sampling for sugar/acid ratios	
B. Techniques for maturity sampling	
C. Estimating crop size	
D. Care in harvesting	
E. Transportation of grapes	
F. Winery/grower relations	
G. New harvest concepts	
3. Grape Quality	8.00
A. Define	
B. Use of different methods of thinning and crop control	
C. Experiments being conducted	
D. Water needs and soil types for grapes	
4. Weed Control	6.00
A. Strip versus broadcast control	
B. Age of vine	
C. Action of chemical used	
D. Currently recommended chemicals	
E. Calibration of equipment	
F. Non-chemical weed control	
5. Erosion Control	2.00
A. Cover crop needs	
B. Tillage equipment	
C. Fertilization of cover crops	
6. Support for Vines	2.00
A. Types of trellis systems	
B. Purchase of trellising materials	
7. Pruning	4.00
A. Equipment needed	
B. Varieties for head pruning, cordon pruning and cane pruning	
C. New pruning techniques	
8. Other Fall Activities	2.00
A. Disease symptoms - examination and treatments	
B. Fertilization plan - scheduling, types and methods	
Total Hours	34.00

Lab

<u>Topics</u>	<u>Hours</u>
1. Harvesting Grapes	12.00

2.	Grape Quality	9.00
3.	Weed Control	9.00
4.	Erosion Control	3.00
5.	Support for Vines	3.00
6.	Pruning	12.00
7.	Other Fall Activities	3.00
	Total Hours	51.00

IV. METHODS OF INSTRUCTION

- A. Lecture
- B. Group Discussions
- C. Homework: Students are required to complete two hours of outside-of-class homework for each hour of lecture
- D. Assigned Reading
- E. Audio/Visual Presentations
- F. Student Presentations

V. METHODS OF EVALUATION

- A. Oral Presentation
- B. Written examinations, quizzes and homework assignments
- C. Hands on work in the vineyards, individually and in groups

VI. EXAMPLES OF ASSIGNMENTS

- A. Reading Assignments
- B. Writing Assignments
- C. Out-of-Class Assignments

VII. RECOMMENDED MATERIALS OF INSTRUCTION

Materials Other Than Textbooks:

- A. General Viticulture, Winkler, A.J., Kliewer, W.M., Lider, L.A., University of California Press, 1974, Second Edition
- B. References: Viticulture, Practices, Volume 2 Coombe & Dry, 1992. Grapevine Physiology, UCDANR, 1981. Sunlight into Wine, R. Smart and M. Robinson, 1991.

Created/Revised by: Jared Wilmarth

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