

# VWT 130 - General Viticulture Course Outline

**Approval Date: 11/14/2019 Effective Date:** 06/08/2020

**SECTION A** 

Unique ID Number CCC000602744

Discipline(s) Agricultural Business and Related Services

Agricultural Production

**Division** Career Education and Workforce Development

Subject Area Viticulture and Winery Technology

Subject Code VWT

Course Number 130

**Course Title** General Viticulture

TOP Code/SAM Code 0104.00\* - Viticulture, Enology, and Wine Business\* / D

- Possible Occupational

Rationale for adding this course to To offer a new modality for student learning.

Units 3

Cross List N/A

**Typical Course Weeks** 18

**Total Instructional Hours** 

**Contact Hours** 

Lecture 54.00

**Lab** 0.00

Activity 0.00

Work Experience 0.00

**Outside of Class Hours** 108.00

**Total Contact Hours** 54

**Total Student Hours** 162

Open Entry/Open Exit No

Maximum Enrollment 45

**Grading Option** Letter Grade or P/NP

**Distance Education Mode of** On-Campus

**Instruction** Hybrid

**Entirely Online** 

**SECTION B** 

**General Education Information:** 

**SECTION C** 

**Course Description** 

Repeatability May be repeated 0 times

**Catalog** Introduction to grape growing, including: history, varieties and rootstocks, **Description** anatomy and physiology, climate, soils, propagation, planting and vine training, cultural practices, common grapevine pests and diseases.

Schedule Description

#### **SECTION D**

Condition on Enrollment 1a. Prerequisite(s): *None* 1b. Corequisite(s): *None* 1c. Recommended: *None* 

1d. Limitation on Enrollment: None

#### **SECTION E**

### **Course Outline Information**

## 1. Student Learning Outcomes:

- A. Understand basic principles of viticulture science.
- B. Acquire and polish skills required in the workplace.
- 2. Course Objectives: Upon completion of this course, the student will be able to:
  - A. Demonstrate knowledge of the current and historical importance of grape production in California and throughout the world.
  - B. Select appropriate fruiting and rootstock cultivars for production goals and vineyard site.
  - C. Understand and use appropriate vineyard and vine morphology vocabulary and terminology.
  - D. Appraise the effects of climate and soil on the performance of grapevines in order to select appropriate operational practices.
  - E. Apply principles of soil management to increase and maintain soil health through the use of soil amendments, fertilization, cover crops and erosion control methods.
  - F. Demonstrate knowledge of the seasonal progression of grapevine growth and berry development and the effects of weather, climate and cultural practices on these processes.
  - G. Identify the parameters used to determine ripeness and harvest timing.
  - H. Identify critical grapevine pests and diseases for northern California and the most common pest control methods. Understand the impacts of the pests and their control methods.
  - I. Articulate the importance of vine water status and irrigation management to vine growth, productivity and overall health.
  - J. Demonstrate knowledge of organic, conventional, certified sustainable and biodynamic farming systems, including their attributes and differences.

K.

## 3. Course Content

- A. History and classification of grape vines
- B. Fruiting and rootstock cultivars
- C. Anatomy and physiology of the grapevine
- D. Basic plant science and the photosynthetic process
- E. Vinevard soils
- F. Mineral nutrition of the grapevine
- G. Water relations in soils and in the grapevine
- H. The seasonal process of grapevine phenology

- I. Grape berry development
- J. Propagation, planting and training methods
- K. Vineyard floor management
- L. Vineyard canopy management
- M. Pruning
- N. Harvest and post-harvest operations
- O. Organic, conventional, certified sustainable and biodynamic farming systems
- P. Diseases, insects and animal pests of the grapevine

Q.

#### 4. Methods of Instruction:

Activity:

Discussion:

Lecture:

**Observation and Demonstration:** 

**Visiting Lecturers:** 

Online Adaptation: Discussion, Lecture

**2. Methods of Evaluation:** Describe the general types of evaluations for this course and provide at least two, specific examples.

# Typical classroom assessment techniques

Class Participation --

Class Work --

Home Work --

Final Exam --

Mid Term --

Additional assessment information:

Two to three midterm examinations; quizzes; homework assignments; a final examination

Letter Grade or P/NP

- **3. Assignments:** State the general types of assignments for this course under the following categories and provide at least two specific examples for each section.
  - A. Reading Assignments
    - -Assigned readings from class handouts (example: "Environmental Factors Influencing Grapevine Diseases")
    - -Assigned readings from the textbook (example: section on anatomy and physiology from "General Viticulture", Winkler et al. textbook).
  - B. Writing Assignments
    - -Writing:

short paper (example: a short term paper in which the student explains the history, attributes and uses of a chosen grape variety or rootstock).

Problem Solving:

Examinations (example: midterm and final examinations in which the student selects alternate vineyard operations options).

C. Other Assignments

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#### 4. Required Materials

# A. EXAMPLES of typical college-level textbooks (for degree-applicable courses) or other print materials.

Book #1:

Author: Larry Bettiga et al

Title: Wine Grape Varieties in California

Publisher: University of California Agriculture and Natural Resources

Date of Publication: 2003 Edition: 1st

Book #2:

Author: McGourty, G.

Title: Organic Winegrowing Manual

Publisher: University of California Agriculture and Natural Resources

Date of Publication: 2011

Edition:

# B. Other required materials/supplies.