Reedley College | AgNR Department
Smith | Plant Science 3

Plant Science 3: General Viticulture
Course Information

Catalog Description
The purpose of this course is to introduce general viticulture operations. Principles and practices include vine physiology and structure, climatic requirements, varieties, soils, training, pruning, nutrition, irrigation, and pest management.

Units and Hours
3 units; 2 hours lecture - MW 11:00 a.m. to 11:50 a.m.
3 hours lab' W 2:00 p.m. to 4:50 p.m.
Final: May 19, 2010 – 11:00-12:50 p.m.

Textbook
Viticulture. Volume 2, Practices. Edited by Coombe, B.G., and Dry, P.R. Winetitles. Underdale. 1992.

Assignments and Grading
Three major tests will be given that correlate to the assigned readings and course lecture notes. Quizzes will be given weekly on the discussed subject matter.

		Point Distribution
Lecture:	Quizzes	200
	2 Midterms	300
	Final Exam	200
Laboratory:	Participation	300
		1000

90% = A 80% = B 70% = C 60% = D Less = F

Important Dates:

Last Day to Drop Class with Refund:	January 22, 2010
Last Day to Drop w/o Transcript Record:	January 29, 2010
Last Day to Change CR/NR:	February 16, 2010
Last Day to Drop w/o Letter Grade Assigned:	March 12, 2010

COURSE OUTCOMES:

Upon completion of this course, students will be able to:

A. Explain the physiological processes occurring within vineyards and the management and cultural operations that affect these processes.

B. Develop and demonstrate skill and competencies in pruning, fertilization, pesticide application, systems calibration, and irrigation scheduling and systems evaluation.

C. Perform economic analyses of vineyard projects, operations, and profit and loss scenarios.

D. Identify optimum trellis and training systems for vineyard varieties and special conditions.

E. Analyze vine soil and tissue laboratory results and recommend efficient and economical solutions.

COURSE OBJECTIVES:

In the process of completing this course, students will:

A. Understand the general structure and physiology of the grapevine.

B. Identify key growth stages and the operations that are stage sensitive.

C. Demonstrate skills in the area of cultural operations for the maintenance of a vineyard.

D. Identify pests, diseases, nutrient deficiencies, and vine stress.

E. Develop budgets, cash flows and development costs for vineyards.

F. Understand the different marketing strategies for grapes and grape products.

G. Plan irrigation seasonal schedules and amounts.

H. Contrast and compare trellis and training systems.

I. Evaluate soil properties and nutrient status to prescribe optimum fertilizers types and rates, and other necessary amendments.

Academic Dishonesty: Plagiarism and cheating are serious offenses and may be punished by failure on exam, paper or project; failure in course; and or expulsion from the University. For more information refer to the "Academic Dishonesty" policy in the College Catalog.

Need for Assistance: If you have any condition, such as a physical or learning disability, which will make it difficult for you to carry out the work as I have outlined it, or which will require academic accommodations, please notify me as soon as possible.

Posting of Grades: Final grades will not be posted. If you wish to have your final grade sent to you, please bring a self-addressed, stamped envelope to the final exam.

Attendance

Attendance of lectures and labs is required and roll will be taken at each meeting. A "tardy" is considered an absence unless the student contacts and explains the incident. Students must make prior arrangements with the instructor to be excused from lectures and labs, make-up of missed tests and labs are permitted only with excused absences.

Office Hours - Ag 4

Monday 9:00 Wednesday 9:00 Friday 9:00

Lecture Schedule

Week	Topic	Reading Assignment
1	Introduction History/Species/Terms/Vine Structure	
2	Growth & Development	
3	Propagation	Chapter 1
4	Pruning	Chapter 4
5	Vineyard Establishment	Chapter 2
6	Training and Trellising	Chapter 3
7	Canopy Management	Chapter 5
8	**Review & Midterm**	
9	Irrigation	Chapter 6
10	Drainage and Soil Salinity	Chapter 7
11	Soil Management & Frost Control	Chapter 8
12	Grapevine Nutrition	Chapter 9
13	Pests	Chapter 10
14	Nematodes	
15	**Review & Midterm**	
16.	Grape Diseases and Vineyard Protection	Chapter 11
17	Harvest/Review	Chapters 13-15
18	**Final Exam**	