VIT 54 Course Outline as of Spring 2010

CATALOG INFORMATION

Dept and Nbr: VIT 54 Title: VIT: SUMMER PRACTICES
Full Title: Viticulture: Summer Practices
Last Reviewed: 2/7/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.00	Lab Scheduled	1.00	6	Lab Scheduled	17.50
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00 Total Student Learning Hours: 70.00

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:	

Catalog Description:
Viticulture practices for summer including pest and disease monitoring and management, weed control, crop load assessment, canopy assessment, vine water status measurements and fruit quality improvement techniques.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: Viticulture practices for summer including pest and disease monitoring and management, weed control, crop load assessment, canopy assessment, vine water status measurements and fruit quality improvement techniques. (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:	Spring 2010	Inactive:
UC Transfer:		Effective:		Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon completion of the course, students will be able to:
1. Identify and explain appropriate vineyard practices to be implemented during the fruit ripening phase of vine growth.
2. Identify vine pests and diseases.
3. Explain and discuss life cycles of vine pest and disease organisms.
4. Discuss the specific life stage of vine pests and diseases that are most damaging to vines and fruit.
5. Discuss various farming strategies for management of vine pests and diseases, e.g., sustainable, organic, biodynamic.
6. Assess efficacy of vine pest and disease management program.
7. Demonstrate proficiency in use of leaf pressure chamber and leaf porometer for determination of vine water status.
8. Make irrigation recommendations based on vine water status data.
9. Demonstrate proficiency in crop spatial distribution and crop load data collection.
10. Make appropriate crop load adjustments based on spatial distribution and crop load data.
11. Demonstrate proficiency in canopy assessment.
12. Interpret canopy assessment data and make appropriate canopy management recommendations based on computational canopy assessment data .
13. Build a Gantt diagram time line that includes all summer vineyard practices.
14. Project costs and build a budget for all summer vineyard practices.

Topics and Scope:

I. Vine phenology
   A. Vegetative phase
   B. Reproductive phase
   C. Fruit ripening phase
   D. Root growth phases
II. Vineyard practices implemented during fruit ripening phase

A. Pest and disease management
B. Canopy management
C. Crop load adjustment
D. Irrigation

III. Vine pests and diseases
A. Identification
1. In the field
2. Under microscope
B. Life cycles of pest and disease organisms
C. Parts of vine susceptible to specific pests / diseases
D. Window periods and efficient timing when pests and diseases must be managed
E. Risk assessment for potential infestation/infection
F. Farming strategies for disease and pest management
1. Conventional
2. Sustainable
3. Organic
4. Biodynamic
G. Evaluation of pest and disease management program efficacy
1. Costs
2. Materials
3. Labor
4. Equipment

IV. Vine water status and irrigation
A. Leaf water potential
B. Stomatal conductance
C. Use of leaf pressure chamber
1. How the instrument works
2. Collection of representative of data
3. Interpretation of data
D. Use of leaf porometer
1. How the instrument works
2. Collection of representative of data
3. Interpretation of data
E. Appropriate irrigation recommendations based on vine water status

V. Canopy and Crop Load Management
A. Canopy assessment
1. Richard Smart method
2. Point Quadrat Analysis (PQA)
3. Computational PQA
4. Light readings
a. Canopy interior
b. Fruit zone
c. Ambient
5. Interpretation of data
B. Crop load assessment
1. Determination of pounds of fruit per vine
2. Fruit cluster distribution mapping
3. Interpretation of data
C. Appropriate recommendations for canopy and crop load management based on assessments.

VI. Time-Lines and Budgets for Summer Vineyard Practices
A. Gantt Diagrams

B. Spreadsheets
C. Costs of all summer vineyard operations

Assignment:

1. Reading; 10-15 pages per week
2. Lab activities
   a. Use of leaf pressure chamber and porometer
   b. Use of light meter
   c. Use of Point Quadrat
   d. Entering collected data into spreadsheets
3. Lab reports, 1-2 pages per activity
4. Two quizzes, one 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 and skill demonstrations 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, vineyard timeline and budget	Problem solving 20 - 30%

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

Use of instruments; collection of data	Skill Demonstrations 30 - 40%

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

Quizzes and final exam	Exams 40 - 50%

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

None	Other Category 0 - 0%

Representative Textbooks and Materials:
Grapes, Glen L. Creasy. CABI, Series: Crop Production Science in Horticulture Series, 2009.
Instructor prepared materials