VIT 124 Course Outline as of Fall 2018

CATALOG INFORMATION

Dept and Nbr: VIT 124 Title: VINE IRRIGATION/FERT
Full Title: Vineyard Irrigation and Fertilization
Last Reviewed: 2/12/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	6.00	3	Lecture Scheduled	18.00
Minimum	1.00	Lab Scheduled	0	2	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	6.00		Contact Total	18.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 36.00 Total Student Learning Hours: 54.00

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	AG 281.20

Catalog Description:
Soil types and irrigation requirements in the vineyard. Covers vineyard water and nutrition needs, water and fertilizer application techniques, and irrigation management for various rootstocks.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: Soil types and irrigation requirements in the vineyard. Covers vineyard water and nutrition needs, water and fertilizer application techniques, and irrigation management for various rootstocks. (Grade or P/NP)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:

Transfer Credit:
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:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:
At the conclusion of this course, the student should be able to:
1. Recognize vine mineral nutrition deficiency/toxicity symptoms.
2. Assess and evaluate a vineyard's fertilization and irrigation practices.
3. Make appropriate fertilizer and irrigation scheduling recommendations.

Objectives:
At the conclusion of this course, the student should be able to:
1. Give examples of North Coast geography and soil types.
2. Read and interpret a soil analysis.
3. Recognize foliar symptoms of grapevine nutrient deficiency.
4. Determine appropriate fertilizers and methods of application for grapevines.
5. Assess a plant's response to fertilizer application.
6. Discuss water management strategies for vine health.
7. Evaluate rootstocks for health and adaptability.

Topics and Scope:

I. North Coast Geology and Soils
II. Soil Chemistry
  A. Texture
  B. Clay types and chemistry cations
  C. Cation exchange and CEC (cation exchange capacity)
III. Nutrient Mobility and Fixation
IV. Reading and Understanding Soil Analyses
V. Tissue Sampling and Interpretation
VI. Visual Recognition of Foliar Symptoms
VII. Fertilizers
  A. Determining vine needs
  B. Methods of application

C. Assessing response to fertilizers
VIII. Soil Physical Traits
A. Texture
B. Structure
C. Water-holding capacity
IX. Water Management Strategies
A. Soil, plant, and weather-based techniques
B. Separating types of "stress"
X. Aerial Reconnaissance of Vineyards
XI. Rootstock Adaptability and Selection
XII. Phylloxera and Other Root Pests
XIII. Rootstock Evaluation and Pathogens

Assignment:

1. Read and analyze 3-5 soil samples; write 1-page interpretive report on each
2. Reading: 10-15 pages per week
3. Quizzes (1-2) and 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.	Writing 0 - 0%

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

Soil analysis	Problem solving 10 - 20%

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

None	Skill Demonstrations 0 - 0%

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

Quizzes and final exam: Multiple choice, True/false, Matching items, Completion, Short answer	Exams 80 - 90%

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

Participation	Other Category 0 - 10%

Representative Textbooks and Materials:
Instructor prepared materials.