#### VIT 132 Course Outline as of Fall 2022

### **CATALOG INFORMATION**

Dept and Nbr: VIT 132 Title: ADVANCES IN VINEYARD IPM Full Title: Advances in Vineyard Integrated Pest and Disease Management

Last Reviewed: 9/13/2021

Units		Course Hours per Week	l	Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	0.50	Lecture Scheduled	0.50	17.5	Lecture Scheduled	8.75
Minimum	0.50	Lab Scheduled	0	2	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	0.50		Contact Total	8.75
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 17.50 Total Student Learning Hours: 26.25

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:

### **Catalog Description:**

This course encompasses critical evaluation and discussion of current research papers related to viticulture, plant pathology, entomology and pest management. The papers will be selected from peer- reviewed journals.

### **Prerequisites/Corequisites:**

### **Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: This course encompasses critical evaluation and discussion of current research papers related to viticulture, plant pathology, entomology and pest management. The papers will be selected from peer- reviewed journals. (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. Read and comprehend current plant pest and disease research publications.
- 2. Synthesize and summarize contemporary integrated pest and disease management issues.
- 3. Incorporate the latest pest and disease management findings into vineyard management decisions.

### **Objectives:**

At the conclusion of this course, the student should be able to:

- 1. Read and critique vine pathology and entomology research publications.
- 2. Discuss new concepts regarding pest and disease control.
- 3. Summarize key points in a vine pathology and/or entomology research article from a peer-reviewed journal.
- 4. Evaluate the theories underlying the research.
- 5. Identify resources and locations for finding the latest vine pathology, entomology and pest management research publications.
- 6. Evaluate the potential of integrating research findings into a specific vineyard site management plan.

## **Topics and Scope:**

- I. Overview of Research Paper Format
  - A. Abstract
  - B. Introduction/ Literature review
  - C. Materials and methods
  - D. Results
  - E. Presentation of the data
    - 1. Tables
    - 2. Figures
    - 3. Statistics

- F. Discussion
- G. Conclusion
- H. References
- II. Examples of Contemporary Vineyard Issues
  - A. Genetically modified grapevines for disease and pest control
  - B. Soil microorganisms that can prevent vine disease
  - C. Pest and disease control methods without the use of pesticides and/or chemicals
  - D. Organic viticulture practices and regulations
  - E. Hyperparasitism
  - F. Development and testing of new beneficial insects

### **Assignment:**

- 1. Weekly reading (25-30 pages)
- 2. One written summary of each research paper presented (3-5 pages each). The student will write an abstract for each of the publications, highlighting the important points and including key words or one annotated bibliography with at least 8-10 peer-reviewed journal articles.
- 3. Develop a list of questions for each research publication
- 4. 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.

Summary, abstract, annotated bibliography; questions for each paper

Writing 50 - 70%

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

None

Problem solving 0 - 0%

**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.

Final exam

Exams 30 - 50%

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

None

Other Category 0 - 0%

# **Representative Textbooks and Materials:**

Instructor prepared materials

Representative journals:

Journal of Plant Pathology Journal of Applied Entomology. current edition Agriculture, Ecosystems and Environment Ecological Entomology. current edition Australian Journal of Experimental Agriculture Ecological Applications. current edition American Journal of Alternative Agriculture Australasian Plant Pathology. current edition Journal of Soil Ecology Applied Soil Ecology. current edition