VIT 132 Course Outline as of Spring 2009

CATALOG INFORMATION

Dept and Nbr: VIT 132 Title: ADVANCES IN VINEYARD IPM

Full Title: Advances in Vineyard Integrated Pest Management

Last Reviewed: 9/13/2021

| Units | | Course Hours per Week | 1 | Nbr of Weeks | Course Hours Total | |
|---------|------|-----------------------|------|--------------|---------------------------|------|
| 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: 34 - 4 Enrollments Total

Also Listed As:

Formerly:

Catalog Description:

This course encompasses critical evaluation and discussion of selected viticulture, plant pathology and entomology research papers. The papers will be recent publications in peer-reviewed journals. The intent is to broaden student experience and perspective beyond textbooks for understanding of new pest and disease management practices.

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 selected viticulture, plant pathology and entomology research papers. The papers will be recent publications in peer-reviewed journals. The intent is to broaden student experience and perspective beyond textbooks for understanding of new pest and disease management practices. (Grade or P/NP) Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

Repeatability: 4 Enrollments Total

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

Outcomes and Objectives:

Upon successful completion of this course, the student will be able to:

- 1. Read and comprehend 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/locations for finding the latest vine pathology and entolomogy research publications.
- 6. Evaluate the appropriateness of integrating research findings into a specific vineyard site management plan.

Students repeating Advances in Vineyard Integrated Pest Management (IPM) will be able to:

- 1. Access and evaluate different, most recent vineyard IPM research.
- 2. Demonstrate a more sophisticated comprehension of vineyard IPM research theories and concepts.
- 3. Demonstrate greater skill at incorporating the latest vineyard IPM research and concepts into pest and disease management for a specific vineyard site.

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. Biodynamic viticulture
 - F. Hyperparasitism
 - G. Development and testing of new beneficial insects
 - H. New concepts and topics recently published for repeatability
- III. Students repeating Advances in Vineyard Integrated Pest Management will review new, current peer-reviewed literature, building on both their knowledge of the research concepts and their skills at applying theory to a vineyard site.

Assignment:

- 1. Reading (15-20 pages/week)
- 2. Written summary of research papers (3-5 pages each). The student will write an abstract for each of the four publications, highlighting the important points and including key words.
- 3. Develop a list of questions for each research publication
- 4. Exams
- 5. Repeating students will:
 - a. Access most recent research publications.
- b. Write a 3-5 page in-depth analysis describing the application of a current research finding to a vineyard site.

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.

Summaries; questions for each paper

Writing 45 - 60%

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.

Matching items, Short answer; fill-in

Exams 15 - 25%

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

Participation and discussion; with repeat, demonstration of enhanced skill at comprehending and applying research theories and concepts. Other Category 20 - 30%

Representative Textbooks and Materials:

Instructor prepared materials
Representative journals:
Journal of Plant Pathology
Journal of Applied Entomology
Biodynamic Farming and Gardening Journal
Agriculture, Ecosystems and Environment
Ecological Entomology
Australian Journal of Experimental Agriculture
Ecological Applications
American Journal of Alternative Agriculture
Australasian Plant Pathology
Journal of Soil Ecology
Applied Soil Ecology