

**VIT 133 Course Outline as of Spring 2011****CATALOG INFORMATION**

Dept and Nbr: VIT 133 Title: ADVANCES IN VITICULTURE  
 Full Title: Advances in Viticulture  
 Last Reviewed: 5/8/2023

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	0	5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.00		Contact Total	17.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00

Total Student Learning Hours: 52.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 39 - Total 2 Times

Also Listed As:

Formerly:

**Catalog Description:**

This short course encompasses critical evaluation and discussion of selected viticultural research papers. The papers will be recent publications in peer-reviewed journals. The intent is to broaden student perspective beyond textbooks for understanding the most current vineyard practices that aim for efficiency and fruit quality improvement.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 1A or equivalent

**Limits on Enrollment:****Schedule of Classes Information:**

Description: This short course encompasses critical evaluation and discussion of selected viticultural research papers. The papers will be recent publications in peer-reviewed journals. The intent is to broaden student perspective beyond textbooks for understanding the most current vineyard practices that aim for efficiency and fruit quality improvement. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 1A or equivalent

Limits on Enrollment:

Transfer Credit:

Repeatability: Total 2 Times

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>
<b>UC Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>

**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. Discuss new concepts regarding quality winegrape growing.
2. Summarize key points in a viticultural research article from a peer- reviewed journal.
3. Evaluate the theories underlying the research.
4. Identify resources/locations for finding the latest viticultural research publications.
5. Evaluate the appropriateness of integrating research findings into a specific vineyard site.

Repeating students will:

1. Access and evaluate recent viticultural research.
2. Demonstrate a more sophisticated comprehension of research theories and their application and incorporation into vineyard management decisions.
3. Demonstrate greater skill at appraising the latest viticultural research and integrating the concepts into management of a specific vineyard site.

### **Topics and Scope:**

- I. Overview of how to read a research paper
  - 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 may include:
- A. Deficit irrigation techniques
  - B. Relationship between soil chemistry and winegrape quality
  - C. Genetically modified grapevines for new cultivar and rootstock development
  - D. Biodynamic viticulture
  - E. Evaluation and assessment of wine grape quality
  - F. On-site weather stations and using sensors in the vine canopy
  - G. NDVI - Normalized Differential Vegetative Index
  - H. GIS - Geographical Information Systems
    - 1. Data collection
    - 2. Database management
    - 3. Vineyard decision making based on GIS data
- III. Repeating students will read and review new peer-reviewed literature, building on both their knowledge of the research concepts and their skill at applying theory to a vineyard site.

**Assignment:**

- 1. Reading (15-20 pages/week)
- 2. Written abstracts of four research papers (3-5 pages each).
- 3. Class discussions on research topics.
- 4. Develop a list of questions for each research publication.
- 5. Mid-term and/or final exam.
- 6. Repeating students of Advances in Viticulture will access new, recent research on Viticulture and write a 3-5 page in depth analysis describing the application of a specific 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 publication: application analysis (repeat students)

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.

Mid-term and/or final exam. Matching items, short answer, fill-in.

Exams  
15 - 25%

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

Participation in class discussions

Other Category  
20 - 30%

### **Representative Textbooks and Materials:**

Representative journals:

American Journal of Enology and Viticulture

Australian Journal of Grape and Wine Research

Australian and New Zealand Grapegrower and Winemaker

Wine Business Monthly

Practical Winery and Vineyard

Oecologia

American Journal of Horticultural Science