

**VIT 133 Course Outline as of Spring 2008****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: 00 - Two Repeats if Grade was D, F, NC, or NP

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: Two Repeats if Grade was D, F, NC, or NP

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

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

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
---------------	----------------------	------------	-----------

<b>CSU Transfer:</b>	Effective:	Inactive:
----------------------	------------	-----------

<b>UC Transfer:</b>	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 viticultural research publications.
2. Discuss new concepts regarding quality winegrape growing.
3. Summarize key points in a viticultural research article from a peer-reviewed journal.
4. Evaluate the theories underlying the research.
5. Identify resources/locations for finding the latest viticultural research publications.
6. Evaluate the appropriateness of integrating research findings into 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
  - 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

**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

**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	Other Category 20 - 30%
---------------	----------------------------

**Representative Textbooks and Materials:**

Instructor prepared 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