

**VIT 133 Course Outline as of Fall 2017****CATALOG INFORMATION**

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

<b>Units</b>	<b>Course Hours per Week</b>		<b>Nbr of Weeks</b>		<b>Course Hours Total</b>	
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:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**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. Analyze current viticultural research publications.
2. Synthesize and evaluate contemporary viticultural theories and issues.
3. Incorporate the latest viticultural findings into vineyard management decisions when appropriate.

**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.

**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

- I. Accessing peer reviewed journals
- 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 including use of drones

**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

**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	Writing 45 - 60%
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**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None	Problem solving 0 - 0%
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**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None	Skill Demonstrations 0 - 0%
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**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%
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**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

Oecologia

American Journal of Horticultural Science