

WINE 42.2 Course Outline as of Fall 2022**CATALOG INFORMATION**

Dept and Nbr: WINE 42.2 Title: SPR WINERY OPERATIONS

Full Title: Spring Winery Operations

Last Reviewed: 2/14/2022

| Units | | Course Hours per Week | | Nbr of Weeks | Course Hours Total | |
|---------|------|-----------------------|------|--------------|--------------------|-------|
| Maximum | 2.00 | Lecture Scheduled | 1.00 | 17.5 | Lecture Scheduled | 17.50 |
| Minimum | 2.00 | Lab Scheduled | 3.00 | 6 | Lab Scheduled | 52.50 |
| | | Contact DHR | 0 | | Contact DHR | 0 |
| | | Contact Total | 4.00 | | Contact Total | 70.00 |
| | | Non-contact DHR | 0 | | Non-contact DHR | 0 |

Total Out of Class Hours: 35.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: WINE 52.2

Catalog Description:

In this course, students will explore the hands-on operations used in a commercial winery for the spring season, including grape maturity monitoring, grape harvesting and crushing, fermentation, and handling and storage of new wines. This course also includes general industry standards for cellar practices.

Prerequisites/Corequisites:

Minimum Age 18 or older

Recommended Preparation:

Eligibility for ENGL 1A or equivalent

Limits on Enrollment:

Must be age 18 or older

Schedule of Classes Information:

Description: In this course, students will explore the hands-on operations used in a commercial winery for the spring season, including grape maturity monitoring, grape harvesting and crushing, fermentation, and handling and storage of new wines. This course also includes general industry standards for cellar practices. (Grade Only)

Prerequisites/Corequisites: Minimum Age 18 or older

Recommended: Eligibility for ENGL 1A or equivalent

Limits on Enrollment: Must be age 18 or older

Transfer Credit: CSU;UC.

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: |

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| IGETC: | Transfer Area | Effective: | Inactive: |
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| CSU Transfer: | Transferable | Effective: | Spring 2006 | Inactive: |
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| UC Transfer: | Transferable | Effective: | Spring 2006 | 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. Understand, evaluate and perform key winemaking and wine lab procedures applicable to the spring season.

Objectives:

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

1. Discuss winery layout and mechanical systems.
2. Evaluate wine in storage and recommend wine maintenance operations.
3. Determine appropriate techniques for fining, filtration, and removal of acid or alcohol.
4. Perform basic wine analysis and make necessary additions to wine in storage.
5. Operate basic wine making equipment to process wine including hoses, fittings, pumps, crossflow filtration, and a bottling line.
6. Explain and perform safe, sanitary, and legally compliant wine cellar operations
7. Identify different microbes and their relation to both positive and negative wine quality.
8. Evaluate and explain the process to correct wine faults.
9. Discuss the legal limits of blending, and use blending to improve a wine.
10. Identify and discuss packaging options available and the pros and cons of each item.
11. Discuss the steps in sustainable winery certification.
12. Understand the basics of organic and biodynamic wine making.

Topics and Scope:

- I. Processing grapes for wine
 - A. Hoses and fittings and cellar organization
 - B. Pump types and usage
 - C. Forklift usage
- II. Aging and storage

- A. Topping
- B. Racking
- C. Stave and oak adjuncts
- D. Monitoring
- E. Tartrate and protein stabilization
- F. Blending
- G. Barrel types and construction
- H. Barrel evaluation
- I. Barrel sanitation and storage
- J. Correcting wine faults
- III. Fining and filtration
 - A. Use of crossflow filter
 - B. Fining types and practices
- IV. Deacidification and dealcoholization
- V. Wine additives
- VI. Cellar practices and safety
 - A. Cellar organization and mechanical systems
 - B. Confined space safety
 - C. Legal requirements
 - D. Sanitation
 - E. Record keeping
 - F. Use of cellar software and/or workorders
 - G. Sustainable winery certification
 - H. Organic and biodynamic winemaking
- VII. Sensory analysis
 - A. Detecting faults
 - B. Tests for sulfides
- VIII. Other wine lab analysis
 - A. Test residual sugar
 - B. Test alcohol by AlcoLyzer
 - C. Test SO₂ by Ripper
 - D. Test SO₂ by Aeration-Oxidation
 - E. Test CO₂ by Carbodoseur
 - F. Test heat stability
 - G. Test wine with the OenoFoss
 - H. Test potassium bitartrate stability
 - I. Test dissolved oxygen
 - J. Basic wine microbiology
- IX. Wine packaging and closures
- X. Bottling
 - A. Sterile filtration
 - B. Use of bottling line
 - C. Sanitation
 - D. Quality control

Concepts presented in lecture are applied and practiced in lab.

Assignment:

Lecture related assignments:

1. Weekly reading (20-40 pages).
2. One article written summary (2-3 pages)

3. One oral presentation (5-10 minutes)
4. Group project (2-5 pages)
5. Quizzes (8-16)
6. One midterm
7. Final exam

Lab related assignments:

1. Under supervision of winemaker/farm manager, perform multiple hands-on winemaking and cellar tasks including:
 - A. Inspect wines in the cellar and assess characteristics
 - B. Measure wine traits
 - C. Evaluation of wine faults

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.

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| Group project; article summary | Writing 5 - 30% |
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Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

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| Group project; Winemaking and cellar tasks | Problem solving 5 - 25% |
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Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

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| Winemaking and cellar tasks; oral presentation | Skill Demonstrations 15 - 50% |
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Exams: All forms of formal testing, other than skill performance exams.

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| Quizzes; midterm and final exam | Exams 10 - 50% |
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Other: Includes any assessment tools that do not logically fit into the above categories.

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| Participation | Other Category 5 - 20% |
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Representative Textbooks and Materials:

Instructor prepared materials