

WINERY OPERATIONS, AAS

WINE & BEVERAGE MANAGEMENT CERTIFICATE

PROGRAM LEARNING OUCOMES

The assessment of student learning outcomes is not only a key indicator of program effectiveness; it is also one of the standards of excellence identified by the Middle States Commission (Standard 5) and is required through the SUNY assessment initiative.

Current Student Learning Outcomes - Winery Operations, AAS

Upon completion, students will:

1. Perform the necessary skills for seasonal vineyard operations of pruning, disease and pest control, grapevine canopy management, crop regulation and how they relate to wine quality.
2. Successfully manage a vineyard.
3. Develop plans for an integrated pest management program with the intent of maximizing wine quality.
4. Evaluate property for vineyard development through site orientation, slope, water and air drainage, soil composition and location.
5. Prepare reports to track ripening data, vineyard pesticide application, ground cover and canopy control.
6. Demonstrate an understanding of the government regulations (OSHA) related to pesticide use, field sanitation and employment regulations to maintain appropriate compliance through participation in a course for certified pesticide applications.
7. Incorporate the science of wine making, including the appropriate micro biological principals, and sanitation requirements to analyze their impact on final wine quality.
8. Discuss marketing, selling, retailing and visually merchandising cool climate wines, in particular New York and Niagara Escarpment wines, to tasting room patrons.
9. Identify wine varieties and describe the historical and cultural geography of the wines of the world, and the context of how cool climate New York and Niagara Escarpment wines fit into the wine market place.

CURRICULUM MAP – WINERY OPERATIONS, AAS

| COURSES IN THE MAJOR | SLO1 | SLO2 | SLO3 | SLO4 | SLO5 | SLO6 | SLO7 | SLO8 | SLO9 |
|---|-------------------|----------|--------------|-----------------|----------------|------------|-----------------|---------------------|---------------------|
| WBV 101 – Viticulture and Winemaking | L,E,I,P (I) | | | PR,I,E,P (I) | L,I,E (I) | | E,I,P (I) | L,P,E (I) | E, (I) |
| WBV 104 – Winery Operations | E,I,P,L (P) | L (P) | PR,I,E,L (I) | | PR,I (R) | PR,I,E (I) | E,I,P (P) | L,P,E (R) | E (R) |
| WBV 105 – Sensory Evaluations | | | | | | | | L,E,O, PO, (P) | L,E,O, PO (R) |
| WBV 106 – New and Old World Wines | | | | | | | | L,E,PR,O, PO (R) | L,E,PR,O, PO (R) |
| WBV 107 – Wine Chemistry | L, PR, E(P)(R) | | | L,PR, E (P) | L,PR, E (P) | | L,PR, (P)(R) | | |
| WBV 108 – Wine Regulations | | | | | | | E,PR (P) | E,PR (P) | E,PR (P) |
| WBV 109 – Food and Wine Pairings | | | | | | | | L,E,PR, PO (R) | O,P,PO (R) |

Assessment Key:

P=Paper E=Exam PO=Portfolio O=Oral Presentation L=Lab Assignment PR=Project I=Internship

Other(s): _____

Objective is introduced (I), Practiced (P), or Reinforced (R)

Current Student Learning Outcomes – Wine and Beverage Management Certificate

Upon completion, students will:

1. Demonstrate an understanding of management principles
2. Demonstrate knowledge of viticulture and wine making
3. Explain the characteristics associated with each of the distilled spirits
4. Discuss the variations that determine coffee qualities
5. Explain the day-to-day operation of a winery
6. Determine the variety of the beverage tasted

CURRICULUM MAP – WINE AND BEVERAGE MANAGEMENT CERTIFICATE

| COURSES IN THE MAJOR | SLO1 | SLO2 | SLO3 | SLO4 | SLO5 | SLO6 |
|---|-------------|----------------|----------------|----------------|----------------------|----------------------|
| WBV 101 – Viticulture and Winemaking | | E, P (I, P) | | | | |
| WBV 102 – Distilled Spirits | | | E, P (I, P) | | | |
| WBV 103 – Coffees of the World | | | | E, P (I, P) | | |
| WBV 104 – Winery Operations | E, P (I) | | | | E, P, L (I, P, R) | |
| WBV 105 – Sensory Evaluations | | | | | | E, P, L (I, P, R) |

Assessment Key:

P=Paper

E=Exam

PO=Portfolio

O=Oral Presentation

L=Lab Assignment

PR=Project

I=Internship

Other(s): _____

Objective is introduced (I), Practiced (P), or Reinforced (R)

Student Learning Outcome Rubric for Winery Operations, AAS

| | | Criterion | | | |
|--|---|--|--|--|---|
| Student Learning Outcomes | Assessment Measure | Does Not Meet Standard Grade: F | Approaches Standard Grade range: D- to C- | Meets Standard Grade range: C to A- | Exceeds Standard Grade: A |
| 1. Perform the necessary skills for seasonal vineyard operations of pruning, disease and pest control, grapevine canopy management, crop regulation and how they relate to wine quality. | Students are given a theoretical base of knowledge in WBV 101 and 104 and the opportunity to practice skills during lab sessions in WBV 101, 104, and 107. However, students miss some practical vineyard skills due to the lack of required summer sessions. | Do not complete tests based on the study of the botany of the grapevine nor the chemistry of wine, or receive less than 65% on both. | Complete an understanding at less than the 75% level of what constitutes a healthy vineyard and a stable, and commercial wine. | Complete an understanding at the 75%-90% level of what constitutes a fully healthy vineyard and a stable and commercial wine. | Complete an understanding at the 90% level or above of what constitutes a healthy vineyard and a stable and commercial wine. |
| 2. Successfully manage a vineyard. | Critique from lab site. | Student does not understand any basics of winery operations. | Student somewhat understands winery operations. Growing, harvesting and bottling. No understanding of growing regions within the US. | Student understands basic winery operations and growing, harvesting, and bottling. Growing regions within the US are understood. | Student fully understands winery operations from a management perspective from growing to harvest and bottling. Growing regions within the US are understood. |

Student Learning Outcome Rubric for Winery Operations, AAS

| | | Criterion | | | |
|--|---|--|--|--|---|
| Student Learning Outcomes | Assessment Measure | Does Not Meet Standard Grade: F | Approaches Standard Grade range: D- to C- | Meets Standard Grade range: C to A- | Exceeds Standard Grade: A |
| 3. Develop plans for an integrated pest management program with the intent of maximizing wine quality. | Instruction and reinforcement for this SLO is mostly theoretical and because of the seasonal nature of winegrowing, students are not able to adequately practice these skills. | Do not complete insect threshold exams, that is, those testing when insecticides ought to be sprayed, or receive 65% or less on them. | Complete threshold exams at the 65%-80% level. | Complete threshold exams at the 80%-90% level. | Complete threshold exams at the 90%-100% level. |
| 4. Evaluate property for vineyard development through site orientation, slope, water and air drainage, soil composition and location | An extensive project in WBV 101, examination of international growing regions in 105 and 106 and soil survey labs in 107 give students an opportunity to fully realize this SLO | Do not complete research paper on site selection and project determining whether a specific piece of ground is suitable for a vineyard; receive below 65% on both. | Complete paper or project and receive between 65%-80%. | Complete both paper and project and receive between 80%-90% on both. | Complete both paper and project and receive between 90%-100% on both, thereby demonstrating an excellent grasp of how crucial proper site selection is for later financial success. |

Student Learning Outcome Rubric for Winery Operations, AAS

| Student Learning Outcomes | Assessment Measure | Criterion | | | |
|--|---|--|---|---|--|
| | | Does Not Meet Standard <i>Grade: F</i> | Approaches Standard <i>Grade range: D- to C-</i> | Meets Standard <i>Grade range: C to A-</i> | Exceeds Standard <i>Grade: A</i> |
| 5. Prepare reports to track ripening data, vineyard pesticide application, ground cover and canopy control. | Tracking and reporting of ripening data is fully practiced in WBV101, 104, and 107. Some aspects of pesticide application and soil management are covered in WBV 104 and 107 but practical experience is lacking. | Do not complete a written sample 5 year pesticide plan, and written exams, or receive below 65% on both. | Receive a grade of 65%-80% on the pesticide plan and exams. | Receive a grade of 80%-90% on the pesticide plan and exams. | Receive a grade of 90%-100% on the pesticide plan and exams. |
| 6. Demonstrate an understanding of the government regulations (OSHA) related to pesticide use, field sanitation and employment regulations to maintain appropriate compliance through participation in a course for certified pesticide applications | There is a unit in WBV 104, including a guest lecture, and labs, however, it cannot, in the time allotted, prepare the students for a DEC Applicators License. | Do not complete exams testing OSHA and employment regulations or receive less than 65% on them. | Complete exams at the 65%-80% level. | Complete exams at the 80%-90% level. | Complete exams at the 90%-100% level, demonstrating an excellent grasp of course material and OSHA and employment regulations. |

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| Student Learning Outcomes | Assessment Measure | Criterion | | | |
|--|--|--|--|--|--|
| | | Does Not Meet Standard <i>Grade: F</i> | Approaches Standard <i>Grade range: D- to C-</i> | Meets Standard <i>Grade range: C to A-</i> | Exceeds Standard <i>Grade: A</i> |
| 7. Incorporate the science of wine making, including the appropriate micro biological principals, and sanitation requirements to analyze their impact on final wine quality. | Through theoretical instruction, practical application, multiple essays and lab assignments, in WBV 101, 104 and culminating with a semester long winemaking project in 107, students have ample opportunity to realize this objective. | Do not complete wine making project and receive below 65% on the wine's quality, microbiology exams and sanitation research paper. | Complete wine making project and exams and receive a grade of 65%-80% on the wine's quality, microbiology exams and sanitation research paper. | Complete wine making project and receive a grade of 80%-90% on the wine's quality, microbiology exams and sanitation research paper. | Complete wine making project and receive a grade of 90%-100% on the wine's quality and microbiology exams and sanitation research paper. |
| 8. Discuss marketing, selling, retailing and visually merchandising cool climate wines, in particular New York and Niagara Escarpment wines, to tasting room patrons | Through an understanding of international and American labeling laws provided in WBV 104 and 108, an in-depth study of product history and regionalism provided in WBV 105, 106 and 109, and additional business and marketing skills provided | Do not complete required tasting room design project or exams covering the retail wine business, or receive below 65% on both. | Complete both the design project and exams with overall grades of 65%-80%. | Complete both the design project and exams with grades of 80%-90%. | Complete both the design project and exams with grades of 90%-100%. |

Student Learning Outcome Rubric for Winery Operations, AAS

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|--|---|---|--|--|--|
| Student Learning Outcomes | Assessment Measure | Does Not Meet Standard Grade: <i>F</i> | Approaches Standard Grade range: <i>D- to C-</i> | Meets Standard Grade range: <i>C to A-</i> | Exceeds Standard Grade: <i>A</i> |
| 9. Identify wine varieties and describe the historical and cultural geography of the wines of the world, and the context of how cool climate New York and Niagara Escarpment wines fit into the wine market place. | through BUS 113, students fully realize requirements for SLO 8 and 9. | Do not complete vine morphology quizzes, research papers and exams, or received below 65% on all. | Complete required quizzes, research papers and exams with overall grades of 65%-80%. | Complete required quizzes, research papers and exams with overall grades of 80%-90%. | Complete required quizzes, research papers, and exams with overall grades of 90%-100% thus completely understanding wine varieties and historical and cultural geography of the wines of the world and local cool climate wines. |

Student Learning Outcome Rubric for Wine and Beverage Management Certificate

| | | Criterion | | | |
|--|---|---|--|--|---|
| Student Learning Outcomes | Assessment Measure | Does Not Meet Standard <i>Grade: F</i> | Approaches Standard <i>Grade range: D- to C-</i> | Meets Standard <i>Grade range: C to A-</i> | Exceeds Standard <i>Grade: A</i> |
| 1. Demonstrate an understanding of management principles | This is accomplished through five management classes each with various assessment measures. Bus 101, 113, 115, 116, 140 | Do not complete management exams and required management research paper or receive below 65% on both. | Complete exam and research paper with grades of 65%-80%. | Complete exam and research paper with grades of 80%-90%. | Complete exam and research paper with grades of 90%-100%. |
| 2. Demonstrate knowledge of viticulture and winemaking | Assessment is completed in WBV 101, through written tests, field work, and related lecture material | Do not complete required pruning field test, and winemaking exams, or received below 65% on both. | Complete pruning field test and winemaking exams with grades of 65%-80%. | Complete pruning field test and winemaking exams with grades of 80%-90%. | Complete pruning field test and winemaking exams with grades of 90%-100%. |

Student Learning Outcome Rubric for Wine and Beverage Management Certificate

| | | Criterion | | | |
|--|---|---|--|--|---|
| Student Learning Outcomes | Assessment Measure | Does Not Meet Standard Grade: F | Approaches Standard Grade range: D- to C- | Meets Standard Grade range: C to A- | Exceeds Standard Grade: A |
| 3. Explain characteristics associated with each of the distilled spirits | Accomplished thru WBV 102 distilled spirits and 105 sensory evaluation. methods include tasting wheel | Do not complete required sensory evaluation of selected spirits and distillation exams, or receive below 65% on both. | Complete sensory evaluation and distillation exams with grades of 65%-80%. | Complete sensory evaluation and distillation exams with grades of 80%-90%. | Complete sensory evaluation and distillation exams with grades of 90%-100% exhibiting excellent ability to explain characteristics associated with each of the distilled spirits. |
| 4. Discuss the variations that determine coffee qualities | Through lecture in WBV 103 students are exposed to the various climate and geological effects on the growing and production of coffee beans | Do not complete required coffee brewing presentation and coffee exams, or receive below 65% on both. | Complete presentation and exams with grades of 65%-80%. | Complete presentation and exams with grades of 80%-90%. | Complete presentation and exams with grades of 90%-100%. Able to fully discuss the variations that determine coffee qualities. |

Student Learning Outcome Rubric for Wine and Beverage Management Certificate

| | | Criterion | | | |
|---|---|--|--|--|--|
| Student Learning Outcomes | Assessment Measure | Does Not Meet Standard Grade: F | Approaches Standard Grade range: D- to C- | Meets Standard Grade range: C to A- | Exceeds Standard Grade: A |
| 5. Explain day to day operation of a winery | Students are given a theoretical base of knowledge in WBV 101 and 104 and the opportunity to practice skills during lab sessions in WBV 101, 104, | Do not complete required sample weekly work order, or receive below 65% on exams covering winemaking basics. | Complete both work order and exams with grades of 65%-80%. | Complete both work order and exams with grades of 80%-90%. | Complete both work order and exams with grades of 90%-100% thus able to explain day to day operation of a winery. |
| 6. Determine the variety of the beverage tasted | Accomplished in WBV 105 Sensory evaluations. | Do not complete both duo-trio and individual varietal tasting sessions or receive below 65% on both. | Receive a grade of 65%-80% on both. | Receive a grade of 80%-90% on both. | Receive a grade of 90%-100% on both. Complete both duo-trio and individual varietal tasting sessions with exceptional results. |