

Cellar Worker (Wine)
RAIS Code: 1124
O*NET-SOC Code: 51-9012.00
Training Term: 2136 Hours

Description

The following pages outline the skill set that a cellar worker in the wine industry will be validated through participation in the CAAP wine apprenticeship program. These skills combine the knowledge, (KNOW), the practice (DO), the courses mapped to each skill (ILT Instructor Lead Training), and most importantly, the on-the-job validation (PERFORMANCE METRIC) that apprentices demonstrate during apprenticeship at a winery. ONLY an employer can validate the performance metric. Educators, mentors, and association managers may validate all other components. This skill card integrates with the on-line tool that allows all stakeholders to sign-off on the skills through the Internet and email. The online record becomes a permanent on-line record, which the apprentice can add to throughout their career, and reference to potential employers as a validated work experience.

Course Descriptions

The following courses from Napa College have been mapped to this Skill Card:

VITICULTURE WINE (VWT) 172

An introduction to winery laboratory practices, including basic principles, techniques and common methods of analysis for musts and wines. Students learn laboratory methods used to determine when to add amendments to wines and how to stabilize and clarify wines. Transfers to : California State University (CSU)

VWT 180

An introduction to the science of winemaking, including grape maturation, harvesting, fermentation, wine development, blending, filtration and bottling practices. Students learn the winemaking options available to create different wine styles. Transfers to: CSU

VWT 270

Advanced course in winemaking, including development of winemaking style, experimentation in production practices and enhancement of wine quality. Course provides essential skills for a career in commercial winemaking. Laboratory materials fee. Student must be at least 21 years of age in order to participate in wine tasting. Transfers to CSU.

VWT 272

Chemistry and microbiology of winemaking, including use of enzymes and yeasts; fermentation management; wine micro-organisms; phenols; aging; flavor development. Transfers to: CSU

VWT 280

Winery operations for the fall season, including grape maturity monitoring; grape harvesting; fermentation, handling and storage of new wines; maintenance of wines from previous vintages; general cellar practices. Class operates the Teaching Winery. Student must be at least 21 years of age in order to participate in wine tasting. Transfers to: CUS

VWT 281

Winery operations for the winter and spring seasons, including handling and storage of new wines; maintenance of wines from previous vintages; general cellar practices. Class operates the Teaching Winery. Student must be at least 21 years of age in order to participate in wine tasting. Transfers to: CSU

Cellar Worker (CW) Skill Cards and Practices

| Foundational (CW0) | | | Hours | | Job Related Competencies |
|--------------------|---------|---|---------------------------|--------------------------------|---|
| | | | OJL (on the job learning) | ILT (Instructor Lead Training) | |
| CW 0.1 | Know: | Organization's structure, rules, responsibilities, work ethics and related policies. Organization's safety policies. | | | Ability to effectively follow the organization's rules, responsibilities as well as basic workplace ethics and policies. Ability to explain basic principles of work ethics, interpersonal communication and the organization's basic structure and functions to other employees. |
| | Do: | Demonstrate a working understanding of the organization's structure, personnel rules, responsibilities and general understanding of work ethics, interpersonal communications and related policies. Understand and practice safety procedures and rules. Correctly execute and calculate written work orders. | 20 | | |
| | ILT: | Covered at winery. | | 6 | |
| | Metric: | Review and validate an understanding of the organization's structure, personnel rules, responsibilities and general understanding of work ethics, interpersonal communications and related policies. Understand and practice safety procedure and rules. | | | |
| CW 0.2 | Know: | Understand the specific terminology related to the wine industry. Understand the "right to know" information as it relates to the wine industry. Understand the components of cellar organization in the wine industry. | | | Ability to communicate in English on written and oral levels, the structure and organizational requirements of the winery. |
| | Do: | Review specific terminology related to the cellar. Understand the "right to know" information as it relates to the cellar. Familiarize yourself with the components of cellar organization for the cellar. | 16 | | |
| | ILT: | 172, 180,270,271, 272,280,281, 282 | | 40 | |

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| | Metric: | Discuss with supervisor to supervisor's satisfaction, the specific terminology, the "right to know information, and the components of cellar organization for the winery. | | | |
| CW 0.3 | Know: | Review the correct procedures for lifting boxes, crates, barrels, etc. Review the following gasses and their correct handling procedures: SO2, Ammonia, Nitrogen, Carbon Dioxide, Argon. Review sanitation chemicals, additives, filtration materials and their application in cellar work. Know how to contain biological materials. Understand the concept of MSDS. Know the types of different protective equipment used in the wine industry. Understand the safe behavior around working forklifts. Understand the concept of "Confined Space Entry" and know proper procedures for entry into wine tanks. Understand "Lock out / Tag out" concept and how it relates to procedures for broken equipment. | | | Ability to work safely and follow established safety procedures of the winery |
| | Do: | Practice and demonstrate safety concepts detailed in the knowledge component of safety procedures. | 8 | | |
| | ILT: | 270, 280, 281 | | | |
| | Metric: | Review and validate an understanding of all work safety procedures required in the work setting. | | | |
| CW 0.4 | Know: | Review and know the different types of chemicals, use, and preparation necessary for Cleaning and sanitation in a winery. Know the different types of equipment for each step in the cleaning and sanitation process. Understand and know the differences between cleanliness, tidiness, and sanitation as it relates to the wine industry. | | 24 | Ability to understand the general cleaning and sanitation requirements of the winery. |
| | Do: | Perform cleaning and sanitation techniques used in a winery using cleanliness, tidiness, and sanitation procedures. | 80 | | |

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| | ILT: | 270, 280, 281 | | | |
| | Metric: | A review validates an understanding of the sanitation and cleanliness procedures used in a winery. Application of procedures will be evaluated in each sanitation and cleaning requirement at the winery. | | | |
| CW 0.5 | Know: | Review and know the different types of additions as it relates to the wine industry. | | | Ability to understand the general additions requirements of the winery. |
| | Do: | Perform proper additions to the wine making process in a practice winery setting | 80 | | |
| | ILT: | Cellar Practices and Procedures | | | |
| | Metric: | A review validates an understanding of the basic types of additions used in a winery. Application of procedures will be evaluated in each addition requirement at the winery. | | | |
| Grape Handling (CW1) | | | | | Job Related Competencies |
| | | | OJL | ILT | |
| CW1 1.1 | Know: | Understand the different documents, weighing and sampling procedures involved with grape receivables. | | | Ability to assist with the receipt of grapes into the winery including the necessary documentation, weighing, and sampling procedures required for receipt. |
| | Do: | Assist in receipt of grapes into the winery and use of proper documentation to track receipts. | 120 | | |
| | ILT: | 180,172,270,271,280,281 | | 30 | |
| | Metric: | Validate proper receipt of grapes into the winery using proper documentation. Manage the sorting lines of different MOG (material other than grapes) activities at the wineries. | | | |
| CW1 1.2 | Know: | Understand the concepts and operation of grape processing equipment and proper grape transfer. | | | Ability to conduct initial grape handling and processing of a winery. |
| | Do: | Participate in the successful operation of a destemmer. | 120 | | |
| | ILT: | 271,280,270 | | | |
| | Metric: | Competently perform initial processing of red and white grapes using grape processing | | | |

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| | | equipment in the winery. | | | |
| CW1 1.3 | Know: | The methods of proper grape transfer from the destemmer and/or crusher in a winery operation. | | | Ability to properly transfer grapes from the destemmer and/or crusher. |
| | Do: | Participate in the grape transfer in a winery. | 120 | | |
| | ILT: | 180,280,270 | | | |
| | Metric: | Competently perform grape transfers from the destemmer and/or crusher in a winery operation. | | | |

| Press Operations (CW2) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW2 2.1 | Know: | The general types and uses of presses implemented in the wine industry. | | | Ability to properly operate wine presses in a winery operation. |
| | Do: | Competently use presses commonly used in a winery operation. | 120 | | |
| | ILT: | 180,280,270 | | 24 | |
| | Metric: | Perform press operation using presses during operation and record the type of press used. | | | |
| CW2 2.2 | Know: | The proper cleaning & sanitation requirements of different presses with different types of grapes. | | | Ability to properly sanitize and clean wine presses. |
| | Do: | Perform cleaning and sanitation on presses. | 40 | | |
| | ILT: | 280,270 | | | |
| | Metric: | Successfully clean and sanitize presses during operations to a supervisor's satisfaction and inspection. | | | |
| CW2 2.3 | Know: | Basics of safe loading, operating, and emptying procedures for press operations. Basics of wine pomace and the proper disposal techniques used in the wine industry. | | | Ability to properly load, operate, and empty a wine press including proper disposal of wine pomace |
| | Do: | Participate in the loading, operating, emptying, and disposal procedures of presses used in wine operations. | 120 | | |
| | ILT: | 180,280,270 | | | |

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| | Metric: | Correctly perform loading, operating, emptying, and disposal procedures for wine press during operations to the satisfaction of a supervisor. | | | |
| CW2 2.4 | Know: | Basics of juice/wine transfer as they apply in the wine industry. | | | Ability to perform juice/wine transfers in a wine operation. |
| | Do: | Participate in both juice and wine transfer in a practice environment. | 120 | | |
| | ILT: | 172,180,280,270.272,281,282 | | | |
| | Metric: | Perform both juice and wine transfers during operation to the satisfaction of a supervisor. | | | |

| Fermentation Operations (CW3) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW3 3.1 | Know: | Basics of temperature control concepts as they are deployed during the fermentation process in a winery. Basic steps involved with monitoring the brix and temperature requirements during the fermentation process. | | | Ability to understand the concepts and practices of temperature control and the required monitoring responsibilities during the fermentation process. |
| | Do: | Participate in the fermentation process in a practice setting. | 80 | | |
| | ILT: | 172,180,280,270.272,281 | | 40 | |
| | Metric: | Participate in the fermentation process during operation and provide documentation to supervisor's satisfaction of involvement during the fermentation process. Record the type of grape processed | | | |
| CW3 3.2 | Know: | Basics of pumpovers, rack and return, rack and splash, and punch down relating to the wine industry. | | | Ability to perform the necessary duties and responsibilities involved in juice-skin contact during the fermentation process in a wine operation. |
| | Do: | Practice pumpover procedures, rack and return procedures, rack and splash procedures, and punch down procedures in a practice setting. | 120 | | |
| | ILT: | 180,280,270.272 | | | |
| | Metric: | Perform all of the following during a operation: pumpovers rack and return rack and splashpunch down | | | |

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| | Know: | Basics of pomace removal including digging, sluicing, and mechanical removal. | | | Ability to perform correct pomace removal during the fermentation process. |
| | Do: | Practice pomace removal using at least one of the above techniques. | 60 | | |
| | ILT: | 172,180,280,270.272 | | | |
| | Metric: | Perform correct pomace to the satisfaction of a supervisor. | | | |

| Tank Operations CW4 | | | OJL | ILT | Job Related Competencies |
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| CW4 4.1 | Know: | Basics of tank maintenance and how to check out components for wear and tear. | | | Ability to perform tank maintenance in a wine operation. |
| | Do: | Perform tank maintenance operations in a practice setting. | 40 | | |
| | ILT: | 180,270,280 | | | |
| | Metric: | Participate in the tank maintenance practices at a winery. | | | |
| CW4 4.2 | Know: | Basics of different types of chemicals, their use, and proper preparation in cleaning and sanitizing different tanks used in the wine industry. | | | Ability to properly clean and sanitize tanks used in a wine operation. |
| | Do: | Participate in the cleaning and sanitizing of a tank in a practice setting. | 40 | | |
| | ILT: | 280,270,281 | | 40 | |
| | Metric: | Successfully clean and sanitize at least two tanks to the satisfaction of a supervisor. | | | |
| CW4 4.3 | Know: | Basics of understanding temperature control as it is used in the wine industry. | | | Ability to properly understand proper temperature control of tanks in a wine operation. |
| | Do: | Participate in exercises that involve temperature control of tanks using air conditioning, glycol heating/ cooling, and cool /heat exchangers. | 80 | | |
| | ILT: | 280,270,281 | | | |
| | Metric: | Successfully understand and interpret tank temperature in a variety of settings to the satisfaction of a supervisor. | | | |
| CW4 4.4 | Know: | Basics of tank filling, transfer, blanketing, drain, rack musk, juice and wine used in the wine | | | Ability to properly manage juice/ wine movements |

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| | | industry. | | | blanketing of a tank in a wine operation. |
| | Do: | Practice tank filling, transfer, blanketing, drain, rack musk, juice and wine procedures. | 120 | | |
| | ILT: | 180,270,272,280,281 | | | |
| | Metric: | Successfully perform all of the above to the satisfaction of a supervisor. | | | |
| CW4 4.5 | Know: | Basics of mixing, sparging, and circulation as they are used in the wine industry. | | | Ability to perform juice/ wine homogenization tasks in a wine operation. |
| | Do: | Practice on at least one of the techniques used for juice/wine homogenization. | 40 | | |
| | ILT: | 172,180,272,270,281 | | | |
| | Metric: | Perform the necessary juice/wine techniques as required in a wine operation. | | | |
| CW4 4.6 | Know: | Basics on how to prepare and add yeasts, nutrients, acids, bases, enzymes, sulfur dioxide as utilized in the wine industry. | | | Ability to provide proper additions to a tank in a wine operation. |
| | Do: | Practice adding proper amounts of yeasts, nutrients, acids, bases, enzymes, and sulfur dioxide to a tank following a practice work order. | 20 | | |
| | ILT: | 172,180,270,272,281 | | | |
| | Metric: | Document to supervisor the successful completion of carrying out work orders for additions to a tank. | | | |
| CW4 4.7 | Know: | Basics of understanding the fining process and the techniques used in the wine making process. | | | Ability to perform fining to a tank in a wine operation. |
| | Do: | Practice fining during the wine making process in a lab or winery setting. | 16 | | |
| | ILT: | 182,180,270,281 | | 4 | |
| | Metric: | Perform fining techniques to the satisfaction of a supervisor during operations. | | | |

| Barrel Operations (CW5) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW5 5.1 | Know: | Basic methodology of inspection and tracking concepts for barrel receipt and tracking operations as it relates to the wine industry. | | | Ability to know the methods required for barrel receipt /tracking and perform barrel inspections in a wine operation. |
| | Do: | Practice inspection methods of barrels in a training winery setting. | 16 | | |
| | ILT: | 180,270,281 | | | |
| | Metric: | Perform Barrel receipt/tracking and inspection at a winery operation to the satisfaction of a supervisor. | | | |
| CW5 5.2 | Know: | Understand the procedures and requirements for proper maintenance of barrels and barrel handling including SO2, emptying barrels, repairing leaks and bung patrol in the wine industry. | | | Ability to properly store barrels in a wine operation. |
| | Do: | Practice all of the above in a training setting at a training winery. | 80 | | |
| | ILT: | 180,270,281 | | | |
| | Metric: | Perform SO2 on empty barrels, repair leaks and perform bung control and demonstrate proper barrel handling to the satisfaction of a supervisor. | | | |
| CW5 5.3 | Know: | Basics of different types of chemicals, their use, and proper preparation in cleaning and sanitizing different barrels used in the wine industry. | | | Ability to properly clean and sanitize barrels in a wine operation. |
| | Do: | Participate in the cleaning and sanitizing of barrels in a practice setting. | 80 | | |
| | ILT: | 180,270,281, 272 | | | |
| | Metric: | Successfully clean and sanitize barrels to the satisfaction of a supervisor. | | | |
| CW5 5.4 | Know: | Basics of wine filling, transfer, drain, rack musk, and oxygen monitoring used in the wine industry. Basics of mixing, sparging, and circulation as they are used in the wine industry. | | | Ability to properly manage juice / wine movements and homogenization of barrels in a |

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| | | | | | wine operation. |
| | Do: | Practice barrel filling, transfer, drain, rack must, homogenization, juice and wine procedures. | 40 | | |
| | ILT: | 180,270,281, 272 | | | |
| | Metric: | Successfully perform all of the above to the satisfaction of a supervisor. | | | |
| CW5 5.5 | Know: | A basic of topping as it applies in the wine industry. | | | Ability to perform topping of barrels in a wine operation. |
| | Do: | Practice topping of barrels in a training winery setting. | 40 | | |
| | ILT: | 172,180,270,272,281 | | | |
| | Metric: | Perform topping activities to barrels to the satisfaction of a supervisor. | | | |
| CW5 5.6 | Know: | Basics on how to prepare and add yeasts, nutrients, acids, bases, enzymes, sulfur dioxide as utilized in the wine industry. | | | Ability to provide proper additions to barrels in a wine operation. |
| | Do: | Practice adding proper amounts of yeasts, nutrients, acids, bases, enzymes, and sulfur dioxide to barrels following a practice work order. | 16 | | |
| | ILT: | 180,270,281, 272 | | | |
| | Metric: | Document to supervisor the successful completion of carrying out work orders for additions to barrels. | | | |
| CW5 5.7 | Know: | Basics of understanding the fining process and the techniques used in the wine making process. | | | Ability to perform fining to barrels in a wine operation. |
| | Do: | Practice fining during the wine making process in a lab or winery setting. | 4 | | |
| | ILT: | 172,180, 272 | | | |
| | Metric: | Perform fining techniques to the satisfaction of a supervisor during operations. | | | |

| Filtration (CW6) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW6 6.1 | Know: | General types and uses of used in the wine industry. | | | Ability to perform filtration in techniques in a on; |
| | Do: | Practice at least one type of training winery setting. | 16 | | |
| | ILT: | 180, 281, 270 | | | |
| | Metric: | Demonstrate understanding and filtration to the satisfaction of a Record the type of filtration ized. | | | |
| CW6 6.2 | Know: | The cleaning and sanitation or filtration systems in the wine | | | Ability to clean and sanitize filtration wine operation. |
| | Do: | Practice at least one type of d sanitation filtration technique in a ery setting. | 24 | | |
| | ILT: | 270, 281 | | 1 | |
| | Metric: | Perform cleaning and sanitation systems during operation to the of a supervisor. | | | |

| Juice and Wine Transfers (CW7) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW7 7.1 | Know: | Basics of air, centrifugal, impellor, positive displacement, screw, bull dog pup, and gravity pumps as used in the wine industry. Know the operation, trouble-shooting, and maintenance required for different pumps. | | | Ability to competently move must, juice and wine in a wine operation. |
| | Do: | Practice using different pumps to move must, juice and wine in a training winery. | 40 | | |
| | ILT: | 270, 281 | | | |
| | Metric: | Perform juice and wine transfers to the satisfaction of a supervisor. Record the type of pumps utilized | | | |

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| CW7 7.2 | Know: | The required cleaning and sanitation process for air, centrifugal, impellor, positive displacement, bull dog pup, and gravity pumps as used in the wine industry. | | | Ability to sanitize and clean pumps in a wine operation. |
| | Do: | Practice cleaning and sanitizing pumps in a training winery. | 40 | | |
| | ILT: | 270, 281 | | | |
| | Metric: | Perform to the satisfaction of a supervisor cleaning and sanitizing of at least two types of pumps. | | | |

| Analysis (CW8) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW8 8.1 | Know: | Basics of different ways of collecting samples from different containers and understanding basic analysis used in the wine industry. | | | Ability to collect samples from different containers and understand basic analysis in a wine operation. |
| | Do: | Practice collecting samples from different containers and perform analysis in a training winery. | 40 | | |
| | ILT: | 172, 180,270,281 | | | |
| | Metric: | Collect samples from different containers and demonstrate a basic understanding of analysis to the satisfaction of a supervisor. | | | |
| Bottling (CW9) | | | | | Job Related Competencies |
| | | | OJL | | |
| CW9 9.1 | know | Basics of bottling as it applies in the wine industry | | | Ability to be familiar with the components and concepts of bottling in the winery. |
| | Do: | Practice bottling in a demonstration winery. | 40 | | |
| | ILT: | 271 | | | |
| | Metric: | Discuss the concepts of bottling to the satisfaction of a supervisor during operations. | | | |

| Record Keeping (CW10) | | | | | Job Related Competencies |
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| | | | OJL | ILT | |
| CW10 10.1 | Know: | Basics of writing, understanding, and completing work orders as they apply in the wine industry. | | | Ability to understand and complete work orders in a wine operation. |
| | Do: | Practice writing, and completing work orders in a lab setting. | 40 | | |
| | ILT: | 271 | | | |
| | Metric: | Complete work orders to the satisfaction of a supervisor during operations. | | | |
| CW9 10.2 | Know: | Basics of receipt of goods including bills of lading, bio-terrorism documentation, and quality assessment as it applies to the wine industry. | | | Ability to receive goods in a wine operation. |
| | Do: | Practice the process of receipt of goods including bills of lading, bio-terrorism documentation, and quality assessment at a training winery setting. | 40 | | |
| | ILT: | 271 | | | |
| | Metric: | Perform receipt of goods in a winery operation to the satisfaction of a supervisor. | | | |
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| Totals of OJL and ILT Hours | | | 2136 | 209 | |