Modification history

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| Release | Comments |
| Release 1 | This version released with FBP Food, Beverage and Pharmaceuticals Training Package Version 2.0. |

| FBPLAB3005 | Perform instrumental tests or procedures on wine samples |
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| Application | This unit of competency describes the skills and knowledge required to optimise and use spectrometers and other laboratory instrumentation in the wine operations laboratory environment using standard methods.  This unit applies to individuals who are responsible for using instrumental tests or procedures determined by the scope and classification of the laboratory.  No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.  All work must be carried out to comply with workplace procedures, in accordance with State/Territory work health and safety, and food safety regulations, legislation and standards that apply to the workplace. |
| Prerequisite Unit | Nil |
| Unit Sector | Laboratory (LAB) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Prepare wine sample | 1.1 Identify work health and safety hazards, assess risks and implement control measures  1.2 Identify wine to be tested and select appropriate standard method and safety requirements  1.3 Use personal protective equipment and safety procedures as specified for test method  1.4 Record wine sample description, compare with specification and report discrepancies  1.5 Prepare wine sample for testing or analysis |
| 2. Test wine sample | 2.1 Measure wine sample for testing  2.2 Set up equipment and materials to meet workplace requirements  2.3 Check calibration status of equipment is to specification  2.4 Carry out testing in accordance with laboratory practice  2.5 Read and interpret results accurately  2.6 Identify out-of-standard results and take appropriate action  2.7 Shut equipment down in accordance with laboratory and manufacturers specification |
| 3. Process data | 3.1 Record test data accurately noting atypical observations  3.2 Confirm that calculated quantities are consistent with estimations  3.3 Record and report results to meet workplace procedures  3.4 Interpret trends in data and results, and report out-of-specification or atypical results to appropriate personnel  3.5 Identify and rectify basic procedure or equipment problems which have led to atypical data or results |
| 4. Maintain a safe work environment | 4.1 Apply established work practices to ensure personal safety and that of other laboratory personnel  4.2 Minimise the generation of waste and apply environmental standards, including the safe disposal of laboratory wastes  4.3 Clean, maintain and store equipment and reagents in accordance with workplace practice |
| 5. Maintain laboratory records | 5.1 Record approved data in a timely manner  5.2 Maintain confidentiality and security of workplace information and laboratory data  5.3 Maintain equipment logs accurately |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Access and interpret information to identify testing requirements for wine samples * Interpret information relating to testing methods, test results and correct disposal of waste |
| Writing | * Record wine sample test information on paper-based and electronic media |
| Numeracy | * Perform mathematical calculations in the process of analysis and recording of test results for wine production |
| Navigate the world of work | * Interpret and follow regulatory requirements and seek clarification or other assistance when required * Identify and describe own skills, knowledge and experience within context of job role * Seek advice and feedback on current work performance |
| Interact with others | * Ask questions to clarify understanding or seek further information * Recognise personal strengths and challenges associated with interacting with others in the workplace * Provide information about innovative practices, processes and products |
| Get the work done | * Use laboratory instrumentation in the wine operations laboratory * Identify current innovative practice and organisational trends * Use a computer, keyboard and software to collect and file test information on wine samples * Use the main features and functions of digital tools to identify and apply information in wine industry operations * Recognise and act on opportunities for continuous improvement in accordance with workplace practices |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FBPLAB3005 Perform instrumental tests or procedures on wine samples | FDFLAB3005A Perform instrumental tests or procedures on wine samples | Updated to meet Standards for Training Packages  Removal of prerequisites due to no longer required by industry | Equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4> |

| TITLE | Assessment requirements for FBPLAB3005 Perform instrumental tests or procedures on wine samples |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has performed instrumental tests or procedures on wine samples on at least one occasion, including:   * selecting, fitting and using appropriate personal protective clothing and equipment * liaising with other work areas: * laboratory * winemaking * production * marketing * supply * confirming supply of necessary materials, equipment and services * preparing samples for testing * preparing materials as required * confirming equipment status and condition: * confirming that test equipment is operating accurately * recognising and rejecting contaminated or faulty glassware and equipment * performing safety checks * replacing consumables * performing instrument setting and calibration * operating equipment according to test procedure * carrying out tests * reading and interpreting results * recording results and complete workplace information * monitoring the process and test equipment to identify out-of-standard results or non-compliance * taking corrective action in response to out-of-standards results, anomalies or non-compliance * reporting and recording corrective action * following procedures to repeat or confirm results * sorting, collecting, treating, recycling or disposing of waste * shutting down equipment in response to an emergency situation * shutting down equipment in response to routine shutdown requirements * maintaining work area to meet housekeeping standards * preparing equipment for cleaning * taking samples * cleaning and sanitising equipment * carrying out routine maintenance * identifying, rectifying or reporting environmental non-compliance. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * principles of the test method * purpose of the test * relevant standards, specifications and basic legislative requirements (e.g. quality, health, safety, labelling and equipment) and their implications * principles and concepts related to instrumentation operation and testing * modes of separation and the concepts related to instrument operation and testing * function of key components of the instrument * effects of modifying instrumental variables on output * procedure for optimising equipment through changing operation parameters * sample preparation procedures * equipment and testing method troubleshooting procedures * use of instrumentation for qualitative and/or quantitative analysis * use of calibration charts * calculation steps to give results in appropriate units * effect of process stages on results * start-up and set-up procedures as required * services required * common causes and knock-on effects of inaccuracies or contamination, and preventive or corrective action required * how to read and interpret results * recording requirements and procedures * work health and safety hazards and controls * lock-out and tag-out procedures as required * procedures and responsibility for reporting problems * shutdown sequence as required * environmental issues and controls * procedures and responsibility for reporting problems * cleaning and sanitising requirements of equipment and work area * recording requirements and procedures. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace or an environment that accurately represents workplace conditions * resources, equipment and materials: * personal protective clothing and equipment as required * standard laboratory equipped with appropriate spectrometers * laboratory reagents and equipment * documentation and recording requirements and procedures * specifications: * work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements * standard operating procedures (SOP) and testing methods.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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