Modification history

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

| FBPLAB2011 | Use basic laboratory equipment |
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| Application | This unit of competency describes the skills and knowledge required to operate a range of basic laboratory equipment in a wine operations laboratory environment.  This unit applies to individuals who are responsible for utilising a wide selection of equipment used within a wine laboratory. All work is carried out to comply with workplace procedures and the principles of good laboratory practice (GLP) under general supervision, with limited autonomy and accountability for their own work.  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 basic laboratory equipment for use | 1.1 Confirm work instructions and identify potential WHS hazards and controls  1.2 Select personal protective equipment and clothing and ensure correct fit  1.3 Confirm materials are available for use  1.4 Prepare materials to meet requirements  1.5 Confirm services are available and ready for use  1.6 Select and prepare equipment |
| 2. Use basic laboratory equipment and techniques | 2.1 Set up and operate equipment  2.2 Take accurate measurements  2.3 Identify and report out-of-specification process and equipment performance |
| 3. Complete equipment operation | 3.1 Prepare equipment for cleaning  3.2 Carry out work with consideration for workplace environmental guidelines  3.3 Record workplace information in the appropriate format |

| 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 | * Interpret information relating to laboratory equipment operation, work instructions and environmental guidelines |
| Writing | * Record equipment function on paper-based and electronic media and report maintenance requirements |
| Numeracy | * Calibrate equipment |
| Navigate the world of work | * Apply workplace procedures relevant to own responsibilities * Understand main tasks, responsibilities and boundaries of own role, including use of personal protective clothing and equipment, personal hygiene and housekeeping standards and procedures, and quality requirements |
| Interact with others | * Communicate and report operational and safety information to relevant persons * Use active listening, observational and questioning techniques to confirm information about the testing program and equipment operation * Select and use appropriate terminology when communicating with and explaining information to personnel |
| Get the work done | * Maintain a clean and hazard-free work area * Maintain hygiene standards and wear required PPE * Manage and prioritise tasks and timelines * Use the main features and functions of digital tools to complete computational analysis and recording of results * 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 |
| FBPLAB2011 Use basic laboratory equipment | FDFLAB2011A Use basic laboratory equipment | Updated to meet Standards for Training Packages | 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 FBPLAB2011 Use basic laboratory equipment |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all elements and performance criteria in this unit.  There must be evidence that the individual has used basic laboratory equipment on at least one occasion, including:   * accessing workplace information to identify requirements * selecting, fitting and using appropriate personal protective clothing and equipment * confirming supply of necessary materials, equipment and services * preparing materials as required * selecting equipment appropriate for the task * confirming equipment status and condition: * recognising and rejecting contaminated or faulty glassware and equipment * safety checks * replacing consumables * instrument setting and calibration * following operating procedures and delivering accurate amounts: * weighing * centrifuging * separating * pipetting * measuring * titrating * monitoring the process and equipment operation to identify out-of-specification results or non-compliance * taking corrective action and reporting out-of-specification results, anomalies or non-compliance * reporting and recording corrective action as instructed * sorting, collecting, treating, recycling or disposing of waste * shutting down equipment in response to emergency situations and routine shutdown requirements * recording workplace information * maintaining work area to meet housekeeping standards * preparing equipment for cleaning, including dismantling equipment or rinsing, in preparation for sanitation * cleaning and sanitising equipment * carrying out routine maintenance * identifying, rectifying and 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:   * purpose, principles and use of a range of basic laboratory equipment * identity, features and operating techniques of a range of basic laboratory equipment * equipment and instrumentation components, purpose and operation * process specifications, procedures and operating parameters * effect of process stages on results and/or outcomes * emergency procedures for a range of operational problems * services required * significance and method of monitoring equipment operation * common causes and knock-on effects of inaccuracies or cross-contamination, and preventive or corrective action required * 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 * cleaning and sanitising requirements of equipment and work area * recording requirements and procedures * cleaning and sanitation procedures * routine maintenance procedures * aseptic techniques. |

| 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 * equipment, services and corresponding information as required * products and materials as required * cleaning procedures, materials and equipment as required * documentation and recording requirements and procedures * specifications: * work procedures, including advice on company practices, safe work practices, food safety, quality and environmental requirements * instructions, information, specifications and schedules as required * relationships (internal and/or external): * internal and external customers and suppliers as required.   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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