Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version X.0 |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0 |

| AHCPER4X1 | Develop recommendations for integrated plant and animal systems |
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| Application | This unit of competency describes the skills and knowledge required to develop recommendations for the integration of plant and animals into a permaculture system using a sound knowledge of plant and animal interrelationships.  This unit applies to individuals who take responsibility for their own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Permaculture (PER) |

| 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. Identify scope of integrated plant and animal system required | 1.1 Identify objectives and performance metrics for an integrated plant and animal system according to client brief  1.2 Assist client to understand concept of integrated plant and animal systems  1.3 Investigate and observe permaculture site to support client objectives  1.4 Collate and document client objectives and performance metrics for plant and animal integration system |
| 2. Develop options for preferred solutions | 2.1 Investigate possible options or strategies to achieve client objectives  2.2 Identify and examine possible solutions to achieve clients permaculture system outcomes  2.3 Evaluate solutions most compatible with client objectives and performance metrics  2.4 Determine solution most applicable to desired client objectives |
| 3. Prepare recommendation for integrated plant and animal system | 3.1 Compile details of solution into logical sequence  3.2 Develop drawings and tables to explain performance metrics  3.3 Document a recommendation for integrated plant and animal systems  according to workplace procedures |
| 4. Recommend the preferred solution | 4.1 Communicate integrated plant and animal system solution to client  4.2 Respond to client requests for clarification  4.3 Record and report recommendation and client interaction according to workplace procedures |

| 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 |
| Writing | * Accurately compiles information into documented recommendations including diagrams and drawings using industry terminology with clear explanation for client understanding |
| Oral Communication | * Effectively participate in verbal exchanges using collaborative and inclusive techniques including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify recommendations and permaculture information to clients |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCPER4X1  Develop recommendations for integrated plant and animal systems | AHCPER302  Develop recommendations for integrated plant and animal systems | Minor change to Application for clarity  Changes to content and sequence of Elements and Performance Criteria for clarity and to better reflect a job outcome | Not equivalent |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72 |

| TITLE | Assessment requirements for AHCPER4X1 Develop recommendations for integrated plant and animal systems |
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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 on at least one occasion:   * identified and clarified client objectives and performance metrics for an integrated plant and animal system including the interpretation of site specific: * designs * maps * ground plans * and specifications * determined possible solutions for an integrated plant and animal system * assessed possible solutions and selected most appropriate to meet client objectives and metrics * collated solutions and documented recommendation for integrated plant and animal system for client, which must include: * method of establishment * probable outcomes * identity, origin and characteristics of plant and animal species and their cultural requirements * function of plants and animals in integrated system * drawings to show plant and animal integration * tables to show performance metrics for improved yields, labour and waste reduction * communicate solution to client * recorded and reported recommendations and client interaction. | |

| 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: * permaculture principles related to integrated plant and animal systems * permaculture practices and performance metrics, including: * minimising work effort for maximum effect * multiple uses for each element in the system * more than one way of providing important functions * re-using and valuing resources and energy * maximising yield and encouraging productivity of the system * seeing solutions not problems * using vertical space and other edges and connections * preventing waste and loss of resources from the system * methods of design, such as planning spatially and allowing for overhead and underground structures, shadow, slope and sun angle * characteristics and interrelationships of integrated plant and animal systems, including: * ecological principles * climate and weather * water * soils * earthworks * aquaculture * species identification and selection * plants in integrated systems * animals in integrated systems * supply issues for integrated plant and animal system, including: * local plant and animal suppliers * access to professional services, consultants and contractors * availability of local resources and supplies * patterns in permaculture design, including: * patterns in space, such as planting patterns, naturally occurring patterns in nature (radial and bilateral symmetry, spirals, circles, dendritic and mandala patterns) * patterns in time, such as succession planting, breeding cycles, seasonality * patterns in human culture, such as gardening systems * nature as the model for design, such as stacking or layering as with a natural forest * gravity as a force for design, such as using contours in design * nutrient, water and energy capture, storage and re-use according to the inputs, outputs and intrinsic features of the system * documentation and drawing skills for developing recommendation. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated for a site requiring a permaculture system or an environment that accurately represents workplace conditions * resources, equipment and materials: * use of tools and equipment used for conducting site observations * use of reference materials * use of drawing tools * specifications: * use of workplace procedures and processes * use of workplace client brief * access to specific legislation and industry codes of practice * relationships: * client   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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