

ASSESSMENT GUIDELINES

Unit 21041

Demonstrate knowledge of permaculture and
plan a site

Level 3, Credit 10, version 1

Demonstrate knowledge of permaculture and plan a site

Unit standard 21041

Level 3, Credit 10, Version 1

Level of performance required for this unit standard

This is a level 3 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under general supervision, with some independence; with significant responsibility for the standard of the outcome achieved.
- To apply technical skills and knowledge to complete the task to the specified standard, in a familiar context.
- To interpret available information, and use discretion and judgement.

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, P O Box 8638, Christchurch. Ph 03 9644 735, fax 03 9644 737, website www.hortito.org.nz.

Special notes:

1. References include but are not limited to:
Mollison, B. *Permaculture – a Designers Manual* (Tagari Publications, 1988).

Unit 21041: Demonstrate knowledge of permaculture and plan a site (Apprentice copy)

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Describe the principles of permaculture.	Yes/No	<ul style="list-style-type: none"> ▪ Philosophy and ethics behind permaculture are described. Range: caring for earth, caring for people, limiting consumption, cooperation compared to competition. ▪ General principles of permaculture design for horticultural operations are described. Range: relative locations, multiple functions, zoning, sectors, shapes and patterns, appropriate technology, observation, analysis, biological resources, diversity, planning, buildings, water, yield, conservation, shapes and patterns, climate, soil. ▪ General requirements for establishing permaculture principles in horticultural systems are described. Range: ecology principles, stability, sustainable use of species and habitat.
Element 2 Outline procedures used to analyse a site for permaculture.	Yes/No	<ul style="list-style-type: none"> ▪ The interaction of elements in the design of a total permaculture system is explained. Range: site, social, energy, abstract components. ▪ Factors to be evaluated in determining requirements for a specific site are identified. Range: climate, physical resources, existing infrastructure, catastrophe defences. ▪ Methods of gathering information for each factor are described. ▪ Zones in permaculture are defined in terms of importance in planning, frequency of use, and service requirements. ▪ Sectors in permaculture are defined and their importance in planning the use of a site is described. ▪ Use of site analysis in the site planning is described. Range: determining location and type of structures, selection of plant types and planting strategies, identifying use of energy and related resources, determination of environmental protection requirements and locations.
Element 3 Create a permaculture plan for a selected site.	Yes/No	<ul style="list-style-type: none"> ▪ Site map for the original layout of the property is drawn with all key features. Range: topography, climate and microclimates, soils, water sources and drainage, sites for infrastructure, catastrophe defences. ▪ Range of objectives intended for the site is defined with sufficient justification and are consistent with accepted principles of permaculture. Range: site, social, energy, abstract components. ▪ Permaculture plan is drawn and each element of the design is explained in an accompanying document. Range: site map, permaculture zones and sectors.
Element 4 Describe considerations when implementing the permaculture plan.	Yes/No	<ul style="list-style-type: none"> ▪ Considerations during implementation of the permaculture plan are described. Range: passive energy systems, climate control on site, low maintenance structures and grounds, site self sufficiency, minimising external energy needs, safe on site waste disposal, water supply provision and conservation. ▪ Considerations to be monitored when evaluating the success of a permaculture development are described. Range: energy use and savings; impact of external of events on the system; effectiveness of plantings, earthworks, and facilities in the landscape; efficiency of resource use.

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 21041 (version 1)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

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Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

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