

<b>Title</b>	<b>Demonstrate and apply knowledge of alpine climbing in moderate alpine terrain</b>		
<b>Level</b>	<b>6</b>	<b>Credits</b>	<b>12</b>

<b>Purpose</b>	<p>This unit standard is intended for people who provide mountaineering skills in moderate alpine terrain.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of alpine climbing equipment appropriate to moderate terrain and weather in New Zealand; analyse the alpine climbing industry to inform planning and practice for alpine trips; demonstrate intermediate climbing skills on moderate alpine terrain; and demonstrate knowledge of meteorology, weather interpretation and forecasting skills.</p>
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<b>Classification</b>	Outdoor Recreation > Alpine
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 All learning and assessment leading to this unit standard must be carried out in accordance with the following:
  - relevant legislation including Health and Safety at Work Act 2015, Human Rights Act 1993, Vulnerable Children's Act 2014 and Health and Safety at Work (Adventure Activities) Regulations 2016;
  - Alpine Hiking Activity Safety Guidelines published by Worksafe New Zealand;
  - industry Codes including the Snow Responsibility Code, the Outdoor Safety Code and 'Leave No Trace' principles;
  - a recognised and approved safety management system including organisational policies and procedures including Emergency Action Plans (EAPs), Standard Operating Procedures (SOPs), and the use of personal protective equipment (PPE);
  - current industry good practice.
- 2 Definitions

*Current industry good practice* means the range of actions currently accepted within the adventure and outdoor sector to manage the risk of harm to staff, participants, and visitors.

*Moderate Alpine Terrain:* Requires the skills of intermediate climbing. Remote terrain with moderate exposure to hazards. Hazards require greater experience to manage with limited but still obvious options for avoidance or minimisation. Seasonal snow with permanent snowfields and/or small glaciers with minor crevassing or obvious and straightforward route finding options. Often a rope is required to add relative safety to travel. Ropes and harness could be used for pitched climbing or abseiling, glacier travel and crevasse rescue, and short sections of short roping.

- i. Example of this type of terrain: Mt Rolleston via Otira Valley and the Crow Glacier, Arthurs Pass National Park.

GPS means global positioning system.

- 3 Graduates working in avalanche terrain must operate within the terrain and supervision requirements defined by the scope statements set in the draft New Zealand Avalanche Terrain Operating Guidelines for Instructors/Guides, or an audited operational specific equivalent (see Appendix 1). Further information on the Avalanche Terrain Exposure Scale (ATES) can be found in Appendix 2.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of alpine climbing equipment appropriate to moderate terrain and weather in New Zealand.

#### Performance criteria

- 1.1 Describe equipment check procedures for equipment used in alpine climbing in New Zealand.

Range	includes – ropes, belay devices, karabiners, snow stakes, ice screws, rock protection, harnesses, helmets, ice axes and hammers, probes, shovels, and avalanche transceivers.
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- 1.2 Describe the advantages and limitations of the contemporary equipment used for alpine climbing in New Zealand.

Range	includes – ropes, belay devices, karabiners, snow stakes, ice screws, rock protection, harnesses, helmets, ice axes and hammers, probes, shovels, avalanche transceivers.
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### Outcome 2

Analyse the alpine climbing industry to inform planning and practice for alpine trips.

#### Performance criteria

- 2.1 Discuss the history and development of alpine climbing in New Zealand including the establishment of relevant mountaineering organisations.
- 2.2 Outline current trends in alpine climbing in New Zealand.

- 2.3 Analyse and review current issues and ethics in alpine climbing in New Zealand.

Range includes – climbing practices in areas of Māori/indigenous cultural significance, helicopter use in conservation areas, commercial guiding and concessions and access.

### Outcome 3

Demonstrate intermediate climbing skills on moderate alpine terrain.

#### Performance criteria

- 3.1 Demonstrate avalanche and snow safety skills through obtaining a weather and avalanche hazard forecast for an area and selecting a safe route and activity location.
- 3.2 Demonstrate movement techniques to maintain sure footing in a range of moderate alpine terrains.
- 3.3 Climb alpine rock to Ewbank Grade 12 and snow climb to Logan Grade 2 and demonstrate scrambling appropriate to Grade 2 peaks.
- 3.4 Demonstrate ice axe technique.
- Range includes – walking, climbing and self-arrests from multiple positions.
- 3.5 Demonstrate alpine climbing rope work.
- Range includes – pitching, lowering, top rope set up for mixed or ice climbing, personal safety system, escaping the system for rescue purposes, ridge travel and short roping.
- 3.6 Construct anchors that are suitable to the conditions and demonstrate abseiling and lowering.
- Range anchors include but are not limited to – rock anchors, snow anchors and ice anchors.
- 3.7 Construct an emergency snow shelter suitable for surviving the night in adverse weather.
- 3.8 Demonstrate route selection and navigation in alpine terrain during a whiteout using a range of navigational aids.
- Range includes – map and compass, GPS, map apps and altimeter.

### Outcome 4

Demonstrate knowledge of meteorology, weather interpretation and forecasting skills.

**Performance criteria**

- 4.1 Describe global weather systems including Coriolis Effect, Hadley Cells, El Niño, La Niña and outline global weather influences on New Zealand's weather systems.
- 4.2 Observe weather to make a 24-hour forecast for a mountain area of New Zealand.
- Range includes – any changes in clouds, temperature, wind direction and barometric pressure.
- 4.3 Apply weather interpretation skills to plan, manage and adapt alpine trips.

**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 2018	31 December 2026
Review	2	25 July 2024	31 December 2026

**Consent and Moderation Requirements (CMR) reference**

0099

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.