NZOIA
Excellence in Outdoor Leadership

Alpine 2

Scope and Syllabus

With the support of:

SPORT NEW ZEALAND

NZOIA™ Alpine 2
Scope

Alpine 2 Profile

The NZOIA Alpine 2 can:
- Lead and manage clients during top rope, lead and multi-pitch alpine climbing
- Apply effective safety management
- Instruct safe, well managed and positive learning experiences
- Prepare and deliver teaching sessions
- Assess climbing routes for hazards and make safe route selections
- Demonstrate a range of technical mountaineering skills
- Apply weather interpretation and forecasting skills
- Role model and promote accepted environmental practices

Scope

Mountain Terrain Scope

The holder of this qualification may operate in terrain up to and including Mt Cook technical grade 2 and serious grade 3 on peaks less than 3000 meters. Trips are on easy glaciated terrain where travel is straight forward. Crevasse hazard may be present, and options exist to reduce or eliminate exposure to risk through careful route selection.

Avalanche terrain scope:

This scope applies when snow conditions are deemed as above threshold (snow quantities sufficient to produce an avalanche).

The holder of this qualification can operate where avalanche hazard may be present, and options exist to reduce or eliminate exposure to risk through careful route selection and/or group management.

Outside of this scope the Avalanche Risk Management Level 5 holder (ARM5) should consult with an Avalanche Risk Management Level 6 holder (ARM6), or an avalanche risk management programme.

Prerequisites

Be a current Full Member of NZOIA

Be 20 years old or over

Hold a current First Aid Certificate

Hold a current NZOIA Alpine 1 qualification. Refer to NZOIA's policy for exemptions

Hold a New Zealand Certificate in Avalanche Risk Management (Level 5)

Have the following experience as evidence in a log book:

> **Total experience** – at least 80 days alpine climbing experience (a climbing day is considered to be at least 6 hours)

Personal experience - at least 40 days personal climbing and a minimum of three, 3000m peaks and three alpine Grade 3 climbs

Instructional experience – at least 40 days instructing/leading groups in alpine climbing, at least five of these days will include co-instructing or being an assistant instructor/trainee beyond the scope of Alpine 1

The prerequisite experience requirements are minimums, extra days are recommended so that a broad range of experience is gained.

Registration and Revalidation

Registration and revalidation with NZOIA provide proof of currency for NZOIA qualification holders.

Syllabus

Assessment Notes

The syllabus outlines what the content of the assessment will include and gives an idea of what assessment tasks the candidate will be asked to complete. All judgements on how the candidate meets the syllabus must be based on current good practice and industry standards. Assessors use three types of direct evidence to judge a candidate's competency:

- Written questions/assignment
- Questioning and discussion
- Observation of practical tasks

The NZOIA Alpine 2 candidate is expected to demonstrate any of the competencies outlined in the NZOIA Alpine 1 Scope and Syllabus, as well as the following competencies:

Technical Competence

1. **Describe alpine climbing history and ethics**

   The candidate will have understanding and awareness of:

   1.1 The development of alpine climbing as a sport and current developments and trends
   1.2 The DOC Climbing Care Code
   1.3 Current ethical issues in alpine climbing e.g. bolting, helicopter access, human waste disposal

2. Demonstrate and/or describe the care and correct use of alpine climbing equipment and clothing

The candidate will:

2.1 Role model the use of equipment that is in good condition, well maintained and is used in accordance with the manufacturer's recommendations and current good practice

2.2 Describe the advantages and disadvantages of contemporary equipment used for alpine climbing and reasons for choice e.g. ropes, belay and abseil devices, karabiner types, snow stakes and pigs, ice screws, harnesses, helmets, ice axes and hammers, probes, shovels, avalanche transceivers

2.3 Complete a pre-activity check of equipment and describe how to identify worn/damaged equipment and the checking/logging system of the equipment used

2.4 Carry and use the appropriate clothing and equipment for environmental conditions

3. Demonstrate route selection and navigation skills in alpine terrain

The candidate will:

3.1 Demonstrate the skills required to navigate across alpine terrain in a whiteout, using a range of navigational aids e.g. map, compass, GPS, altimeter

4. Demonstrate technical mountaineering skills

The candidate will demonstrate:

4.1 Tying knots suitable for the application they are being used

4.2 Movement techniques to maintain sure footing at all times in all conditions

4.3 Flat-footed crampon techniques on slopes to 35°

4.4 Steep ice climbing techniques on slopes to 90° (top-roped demonstration)

4.5 Performing a self-arrest from several positions

4.6 Ridge travel to show rope management e.g. moving together, short pitches for awkward section

4.7 The use of short roping to safeguard a client

4.8 Efficient rope management techniques on a multi-pitch climb, abseil or lower

4.9 The construction of an emergency snow shelter suitable for surviving a night in adverse weather conditions

4.10 The construction of anchors suitable to the conditions:
- Rock anchors e.g. wires, stoppers, hexes, camming devices
- Snow anchors e.g. vertical snow stake, snow pig, mid-clip, T-slot, snow bollard
- Ice anchors e.g. ice screws, ice bollard, V-thread

4.11 Lead climbing on steep snow or ice to 60°

4.12 Leading climbing on alpine rock to grade 10

4.13 Safe and efficient belay methods suitable for the application they are being used, including:
- clear communication and systematic checks
- efficient rope management techniques
- describing the advantages and disadvantages of a variety of belay methods and their suitability for managing leaders and/or seconds e.g. Italian hitch, manual locking belay device, standing ice axe belay (Austrian or Stomper), waist/shoulder belay, direct belay

4.14 Escaping the system for rescue purposes

5. Construct a top rope climbing system

The candidate will construct a top rope climbing system for an ice climbing or mixed climbing session ready for operation in a variety of places which demonstrates:

5.1 Use of a personal safety system while exposed to a potential fall during setup

6. Demonstrate and apply knowledge of glaciated terrain skills

The candidate will:

6.1 Describe glacier processes and identify landforms associated with glaciation
6.2 Describe the hazards associated with glaciated terrain
6.3 Demonstrate roping up for glacier travel
6.4 Select a route and travel through glaciated terrain using safe practices
6.5 Demonstrate crevasse rescue: Hold a fall; build anchor, transfer load to the anchor and escape the system, check victim by doing a self-protected abseil, prussic back to stance, construct hauling system, preparing lip as required, haul with assistance from victim and turn this into an unassisted haul for an unconscious victim

7. Demonstrate avalanche and snow safety skills

7.1 Obtain and describe the significance of the weather and avalanche hazard forecast for the assessment area
7.2 Demonstrate making route selection and activity location choices that fit with the weather and avalanche hazard forecast
7.3 Be able to demonstrate any skills or knowledge contained within the New Zealand Certificate in Avalanche Risk Management (Level 5)

The Environment

8. **Demonstrate knowledge of meteorology and apply weather interpretation and forecasting skills**

The candidate will:

8.1 Be able to describe global weather systems and global influences on New Zealand's weather e.g. Coriolis Effect, Hadley Cells, El Niño, La Niña

8.2 Demonstrate the ability to anticipate weather conditions from changes in clouds, temperature, wind direction and barometric pressure in a mountain area of New Zealand, and based on these observations make a 24 hour forecast

9. **Role model and promote accepted environmental practices**

The candidate will:

9.1 Demonstrate and/or describe the responsibilities to land owners and other users, including access protocols

9.2 Understand the broader social and political issues regarding land use, resource management and conservation in New Zealand's alpine regions, and the effects of these on outdoor recreation

9.3 Demonstrate ways to minimise rubbish and deal with biodegradable waste to avoid pollution of waterways in the alpine environment

9.4 Role model and promote the principles of Leave No Trace

10. **Demonstrate and/or describe cultural and environmental knowledge of the New Zealand alpine environment**

The candidate will:

10.1 Demonstrate a broad knowledge of the flora, fauna, geology and history of New Zealand's alpine regions

10.2 Understand and connect concepts of tikanga Māori to the alpine environment e.g. Kaitiakitanga, creation stories, tapu summits

10.3 Have significant knowledge of and be able to describe the history and purpose of the major organisations involved in the administration, protection and advocacy of New Zealand's alpine environments e.g. DOC, NZ Alpine Club, Federated Mountain Clubs, Mountain Safety Council, Forest and Bird

Group Management and Leadership

11. Apply effective safety management

The candidate will:

11.1 Manage client safety by appropriate route and site selection, equipment use and checks as required

11.2 Demonstrate the knowledge and ability to identify, assess and manage natural hazards in an alpine environment. These include:
- Avalanche and ice fall
- Rock-fall
- Falling/Sliding (snow, ice, rock, tussock, water-ways)
- Crevasse fall
- Extreme weather (lightning, wind, precipitation)
- Volcanic events (lahar, gas, rocks)

11.3 Identify, assess and manage hazards and risks associated with working at height with or without a rope, managing self and others

11.4 Use effective communication and a systematic checking system with clients

11.5 Have a first aid kit and be able to deal with first aid situations if required

11.6 Take reasonably practicable steps to eliminate or minimise the effect of significant risks for self and others

11.7 Demonstrate safe practices and good judgment and decision making within the scope of this qualification

12. Lead and manage clients during alpine climbing

The candidate will be responsible for clients during a climbing session, which may include top rope, lead and multi-pitch climbing. The candidate will demonstrate:

12.1 Effective briefing and debriefing

12.2 Supervising and coaching climbers and belayers

12.3 A leadership style that is appropriate for the clients; their skill and experience level and their needs

12.4 Establishing rapport with clients and having an awareness of their emotional, cultural or other needs

12.5 Manage clients safely and effectively both climbing and descending

Instruction

13. Prepare and deliver teaching sessions

The candidate will:

13.1 Develop aims based on knowledge of clients and timeframes

13.2 Plan a logical and safe sequence of teaching progressions

13.3 Select and prepare a suitable location for client success

13.4 Brief the clients and outline the learning outcomes

13.5 Demonstrate a wide and in-depth knowledge of the topic

13.6 Use a variety of clear demonstrations and explanations

13.7 Be able to discuss the theory behind a particular technique

13.8 Use appropriate terminology

13.9 Use a range of teaching skills and methods

13.10 Provide opportunities for clients to practice

13.11 Deliver a variety of feedback methods that are timely and specific

13.12 Adapt the session to suit the client needs and progress

13.13 Maintain a positive learning environment

14. Instruct safe, well managed and positive learning experiences for clients

The candidate will provide clients with effective instruction in the following climbing skills (must include but not limited to):

14.1 Use of terrain and route selection

14.2 Snow, Ice and Rock movement skills

14.3 Placing protection for lead climbing

14.4 Safe and efficient belaying of a lead climber including clear communication between belayer and climber

14.5 Climbing and descending a multi-pitch route

14.6 Ice and mixed climbing techniques