

## **Alpine 2**



Photo: Mike Atkinson

## **Scope and Syllabus**

With the support of:



# 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

The holder of this qualification can organise, instruct and guide:

- Multi-day alpine climbing trips up to grade 2 on peaks less than 3000m
- Trips 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 route selection.

### Prerequisites

Be a current Full Member of NZOIA

Be 20 years old or over

Hold a current First Aid Certificate (minimum of 12 hours or 2 day course including some direct contact with course tutors)

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) or NZ Avalanche Stage 1

Have the following experience as evidence in a log book:

**Total experience** – at least 80 days alpine climbing experience (an 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.

The NZOIA Alpine 2 will be conversant with a range of relevant publications: e.g.

The New Zealand Weather Book (Brenstrum E.)

The rise and fall of the Southern Alps (Coates G. and Cox G.)

Mountain Skills Training Handbook AMI (Hill, P & Johnston, S.)

Avalanche Awareness in the NZ Backcountry (Goddard, P.)

A Climbers Guide to NZ Mountaineering Techniques (Cotter, G and Sedon, M.)

## **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

## **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 following will be demonstrated on terrain that is within the scope of the NZOIA Alpine 2 qualification.

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** Conservative use of confidence/short roping on slopes where a client feels uncomfortable to be un-roped
- 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:
  - 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

- Escaping the system for rescue purposes
- Clear communication and systematic checks
- Efficient rope management techniques

## **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** Be able to describe glacier processes and identify landforms associated with glaciation

**6.2** Describe the hazards associated with glaciated terrain and considerations for selecting a safe route through glaciated terrain

**6.3** Demonstrate roping up for glacier travel

**6.4** 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, and minimise exposure to avalanches

**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
- 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 assessing climbing routes for hazards and demonstrate risk management principles to minimize or avoid the impact of any identified hazards
- 11.3** Use effective communication and a systematic checking system with clients
- 11.4** Have a first aid kit and be able to deal with first aid situations if required
- 11.5** Never compromise their personal safety or the safety of their clients
- 11.6** 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. Instruct safe, well managed and positive learning experiences for clients**

The candidate will provide clients with effective instruction in the following climbing skills:

- 13.1** Use of terrain and route selection
- 13.2** Snow, Ice and Rock movement skills
- 13.3** Placing protection for lead climbing
- 13.4** Safe and efficient belaying of a lead climber including clear communication between belayer and climber
- 13.5** Climbing and descending a multi-pitch route
- 13.6** Ice and mixed climbing techniques

The candidate will use:

- 13.7** A logical sequence of teaching progressions
- 13.8** Clear demonstrations and explanations

### **14. Prepare and deliver teaching sessions**

**14.1** The candidate will prepare and deliver teaching sessions on any topics or skills contained in the NZOIA Alpine 2 Scope and Syllabus which may include, but is not limited to; anchor building, snow safety and avalanche rescue, glaciated terrain travel and crevasse rescue, ethics and issues, ice and mixed climbing techniques

The candidate will demonstrate:

- 14.2** A range of teaching skills e.g. introduction, appropriate voice, language and body language, teaching/visual aids, demonstrations, use of teachable moments, evaluation of learning
- 14.3** A wide knowledge of the topics and skills
- 14.4** Creating a positive learning environment which encourages enthusiasm, interest and learning