

Alpine Instructor – Level 1



Photo: Mike Atkinson

Assessment Guide For Assessors and Candidates

Assessment Notes

This Assessment Guide is to assist assessors with judging a candidate's competency. All judgements must be based on current best practice and industry standards. This guide is also to help candidates know what they will be assessed on and what assessment tasks they will be asked to complete.

Assessors use three types of direct evidence to judge a candidate's competency:

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

Technical Competence

1. Demonstrate and / or describe the care and correct use of gear and equipment commonly used in New Zealand for alpine trips.

The candidate will:

- Have knowledge about equipment commonly used in New Zealand, including the types, characteristics, advantages, limitations, cost, care, maintenance and storage for a range of equipment e.g. clothing, boots, tents, packs, sleeping bags, ice axes, crampons, helmets
- Be able to describe the technological advantages of using GPS and Altimeters as navigation aids in alpine terrain
- Role model the use of gear and equipment that is in good condition and well maintained. Wear clothing and footwear that is appropriate for use in an alpine environment and shows an understanding of the specific requirements for an alpine environment
- Demonstrate how to pack personal and group equipment for an overnight alpine trip
- Be able to impart basic knowledge about appropriate alpine clothing and equipment to participants e.g. principles of layering, use of sunglasses, gloves

2. Demonstrate alpine navigation skills.

The candidate will demonstrate:

- Efficient and safe route selection in alpine terrain
- The skills to navigate across alpine terrain using a map and natural features, in limited visibility
- Locating a position on a ridge using resection (triangulation)

3. Demonstrate safe practices in and around alpine waterways.

The candidate will:

- Identify the hazards in alpine streams
- Describe their decision making process prior to crossing a given alpine stream
- Demonstrate safe techniques when travelling in or across an open or snow covered alpine stream

4. Demonstrate avalanche and snow safety skills.

The candidate will:

- Obtain and describe the significance of the avalanche hazard forecast for the assessment area
- Demonstrate making route selection and activity location choices that fit with the avalanche hazard forecast and minimise exposure to avalanches
- Be able to demonstrate any skills or knowledge contained within the Mountain Safety Council Backcountry Avalanche Risk Management Course

5. Demonstrate alpine camping skills.

The candidate will:

- Demonstrate selecting an alpine campsite and identifying any natural hazards present
- Describe the advantages and disadvantages of a range of different camping shelters - tent, bivvy bag and snow shelters
- Demonstrate building a snow shelter suitable for an overnight stay and describe the advantages and disadvantages of different types of snow shelters
- Describe the advantages, disadvantages and safe use of a range of different stove types suitable for use in alpine environments - gas, methylated spirits and white-spirits
- Demonstrate the organisational skills required for managing gear and cooking in alpine conditions
- Demonstrate hygienic methods for handling/preparing food and preventing water contamination in an alpine environment
- Describe appropriate toileting practices for use at alpine campsites, including for snow and delicate vegetation sites

6. Demonstrate mountaineering skills.

The following will be demonstrated on terrain that is within the scope of the NZOIA Alpine Instructor Level 1 qualification and using equipment that would normally be carried on a trip in Alpine 1 terrain.

The candidate will demonstrate:

- Using an ice axe for walking, self-belay, self-arresting and step cutting.
- Cramponing on slopes in non-technical terrain where a rope is not normally required
- Tying the following knots for use in an alpine application e.g. overhand, clove hitch, Italian hitch, Figure 8
- Tying an improvised harness
- Lowering an unconfident climber down a short slope using limited gear (an ice axe, karabiner, sling and short rope) and a waist or direct belay
- An appropriate method of confidence roping
- Setting up and using a fixed handline

The Environment

7. Apply weather interpretation and forecasting skills in an alpine environment

The candidate will:

- From a weather forecast for a given mountain area of New Zealand, describe the effect on mountain conditions this forecast would have
- Be able to identify what the symbols on a synoptic weather map represent and from a synoptic map make a 48-72 hour weather forecast for a given mountain area in New Zealand
- Demonstrate the ability to anticipate weather conditions from changes in clouds, temperature and wind direction in a mountain area of New Zealand and based on these observations make a 24 hour forecast

8. Role model accepted environmental practices

The candidate will:

- Demonstrate and/or describe the responsibilities to land owners and other users, including access protocols and issues
- Role model the principles of Leave No Trace and/or the New Zealand Environmental Care Code

9. Demonstrate and / or describe cultural and environmental knowledge and interpretation of a given alpine area

The candidate will have an understanding of, and provide interpretive information about:

- The natural and cultural history of the area
- The geology of the area
- Local flora and fauna
- Concepts of tikanga Māori and be able to connect these to the alpine environment e.g. Pounamu trails, traditional food gathering and Kaitiakitanga

Group Management and Leadership

10. Plan and prepare for an overnight alpine trip

The candidate will prepare a written plan for an overnight alpine trip, camping in snow, which is suitable for the intended student group and outlines:

- The aims, objectives and purpose of the trip
- Route information including; estimated distances and times, emergency and alternative routes
- Risk and hazard identification and management
- Any consent or access issues
- How to get weather information and an avalanche hazard forecast
- Gear and equipment lists for both individuals and the group
- A menu plan which includes balanced, nutritious and varied food, fuel requirements, emergency food and identifies safe methods for organising group cooking
- Intentions information, communications and emergency procedures

11. Lead and manage a group in an alpine environment

The candidate will demonstrate leading and managing a group in a range of alpine terrain (e.g. tracks, snow, tussock, rocky broken ground, scree, slippery ground), including:

- Effective management of the group including; pacing, rest stops, explaining potential dangers, keeping the group together and a system for accounting for everyone
- Establishing rapport and using a leadership style appropriate to the group
- Organise and motivate a group / individuals in an alpine environment

12. Apply effective safety management

The candidate will:

- Be familiar with the use of and can describe the advantages and limitations of different methods of communication suitable for use in an alpine environment - mountain radio, VHF, cellphone, GPS tracker, PLB and SAT phone
- Have a first aid kit and be able to deal with first aid situations as required

- Demonstrate awareness of the risks and appropriate risk management strategies during a given alpine trip and the ability to adjust plans when required
- Be able to describe procedures used in the event of an incident e.g. accident or illness in the party, party member being missing, party becoming lost
- Be able to describe the prevention, symptoms and remedies for snow related First Aid scenarios e.g. snow blindness, frostbite, dehydration, hypothermia, hyperthermia and sunburn
- Never compromise their personal safety or the safety of their participants
- Demonstrate safe practices and good judgement and decision making within the scope of this qualification

Instruction

13. Prepare and deliver teaching sessions

The candidate will prepare and deliver teaching sessions on any given topic or skill contained in the NZOIA Alpine Instructor Level 1 Assessment Guide which demonstrates:

- A range of teaching skills e.g. introduction, appropriate voice, language and body language, teaching/visual aids, demonstrations, teachable moments, evaluation of learning
- A wide knowledge of the topics / skills
- Engaging students in positive learning experiences which encourage enthusiasm and interest

14. Teach mountaineering skills

The candidate will demonstrate teaching, including appropriate site selection:

- The use of an ice axe to aid walking, including self-arresting on easy snow slopes
- Cramponing on easy snow slopes
- Terrain and route choice

Teaching cramponing to peers may occur if it is deemed inappropriate to teach cramponing to the model students due to environmental conditions or student ability.