

NZOIA™ Cave Instructor Level 1 Syllabus

SCOPE

For those who deal with students in easier caves with short pitches that can be negotiated using ladder and belay (lifeline) techniques.

1. SKILL AND EXPERIENCE

- 1.1.1 It is expected that the NZOIA Cave 1 Instructor will have no less than twenty personal days in a variety of caves, and in addition, no less than ten days experience as a cave leader taking groups caving.
- 1.1.2 The NZOIA Cave 1 Instructor should have an overview of all aspects of caving and be able to demonstrate caving, swimming and river crossing techniques well.
- 1.1.3 The NZOIA Cave 1 Instructor should have the ability to lead parties in the bush, have good navigation skills and be able to organise river crossing.
- 1.1.4 The NZOIA Cave 1 Instructor should have a good understanding of New Zealand weather patterns and how rainfall flows effect caves conditions.
- 1.1.5 The NZOIA Cave 1 Instructor will hold a current First Aid Certificate (Outdoor First Aid recommended) issued within the last three years.

These are minimum requirements, extra days are advised so that a broad spectrum of variables are experienced.

In the following areas the NZOIA Cave 1 Instructor/leader will be expected to:

2. CONSERVATION CAVING ETHICS

- 2.1.1 Show a good knowledge of natural cave features, the rate and types of processes at work within the cave environment.
 - Speleothems
 - Cave fauna eg habitats, invertebrates
 - Fossil deposits
 - Sediment deposits
 - Geological features
 - Cave climate
 - Cave lifecycles
 - Types of caves
 - Stream & drip processes
- 2.1.2 Understanding the common impacts of visitation on cave features and processes.
 - Erosion and trenching
 - Sediment transfer (tracking mud)
 - Speleothem breakage and degradation
 - Dig impacts (change in air, destruction or burial of fossil and sediment records etc)
 - Littering and leaving food behind
 - Heating from bodies & CO₂ level alterations.

- Impacts of climbing and rigging (bolts, potential bolts fields, wire strops, use of speleothems).
- 2.1.3 Cave, route selection and party size is justified in terms of cave conservation.
- Minimising impact on caves and their environment
 - Understand reasons for taping in caves and group management around taped zones
 - Route selection is justified using the New Zealand Speleological Society (NZSS) ethical practises found in NZSS handbook.
- 2.1.4 Waste generated within caves is dealt with in accordance to NZSS ethical practices.
- Food scraps and wraps carried out
 - Eating in designated areas to reduce spread of dropped food particles; washing areas after eating if appropriate, or eating on a carried in plastic sheet
 - Carry out whenever possible, body wastes
 - Carry out all batteries and waste carbide
- 2.1.5 Understanding the use of discretion in disseminating information relevant to the location of caves and significant vulnerable features.
- 2.1.6 DetailUnderstand and demonstrate the NZSS ethical practices.
- Where ever possible encourage the use of electrical lighting
 - Ensure the non removal of cave features
 - Ensure parties do not remove or alter the position of any features specific to cave
- 2.1.7 Understand and respect local access issues
- Waitomo Museum Cave register, payment to land owners
 - Respect landowners
 - DOC permits (Metro, Honeycomb Hill, Puketiti Flower Cave)
 - Cultural, i.e. Maori caves which are Tapu

3. CAVING HISTORY

- 3.1.1 Should show a general knowledge of the history of speleology and how speleology has developed within New Zealand.

4. EQUIPMENT

- 4.1.1 Should be familiar with the use, care and characteristics of caving equipment and clothing used in New Zealand.
- 4.1.2 Should be capable of checking ropes, ladders and other caving gear for wear or damage, and know when to retire that piece of equipment from further use. Demonstrates knowledge of this equipment and its usage within caving domains.
- 4.1.3 Know suitable helmets and lights available in New Zealand. Be able to service faulty lights in a caving situation.

5. RIGGING

- 5.1.1 Should be able to rig handlines and ladder and belay (lifeline) systems using natural and placed anchors, in suitable novice caves, whether previously known to the leader or not.

6. EFFICIENT AND SAFE CAVING PRACTICE

6.1.1 Pitches and climbs

- Identify locations in the cave where rigging is needed
- Organise suitable tie-on systems and belay systems
- Organise student positioning
- Organise a suitable communication system detail

6.1.2 Belaying

- Be able to use, and instruct in the use of a variety of belaying devices and methods.
- Know the advantages and disadvantages of the various methods
- Be aware of the problem inherent in belaying students on ladder pitches

6.1.3 Organisation

- Organise students for efficient and safe management during caving trips
- Organise equipment for efficient and safe management during caving trips.

7. GEAR HANDLING

Element - The Level 1 Instructor should be able to demonstrate smooth, efficient handling of ropes and ladders. Specifically

- 7.1.1 Coiling ropes and ladders and uncoiling them for use.

7.1.2 Know how to tie and use

- Figure eight knot
- Alpine butterfly
- Bowline
- Clove hitch
- Double fisherman
- Italian hitch
- Tape knot
- Prussick knot
- Improvised harnesses

8. CAVE RESCUE

Element - The Level 1 Caving Instructor should have a working knowledge of the New Zealand Cave Search and Rescue system and should be able to deal with emergencies that could occur on novice caving trips. Specifically:

- Detail Hauling tired students on pitches and climbs using assisted hoists (with and without the use of harnesses)
- Lowering tired students on pitches and climbs
- Top rope rescues
- Assisting students through narrow passages and squeezes
- Dealing with light failures
- Administering basic first aid
- Hypothermia