



# **Rock 1 Syllabus**

## ***Self-directed training tool***

This training tool has been created for people who are learning the skills that will be assessed by this NZOIA award. It is a summary of many of the basic topics and tasks in which a candidate should be proficient before putting themselves forward for assessment. A good way to use this training tool is as a check-list that gives you feedback on the state of your preparation. Ask climbing friends, fellow trainee-candidates, and skilled instructors to “rate” you according to the criteria within this document. Also, use it as a means of raising issues for reflection about your own climbing and instructional experience.

Please note that no list of assessment criteria can ever fully capture all that you need to know in order to be an effective instructor. NZOIA believes that skill and good judgment are best gained through plenty of experience and considered reflection. This training tool is merely a supplement to the time you spend doing and thinking about climbing and instruction.

Compiled by Dave Moore, based on the original document by Marty Beare.

## NZOIA Rock I: Self-directed training tool

1. Skill and experience	Comments
<p><b>Experience: 40 days minimum</b></p> <ul style="list-style-type: none"> <li>• Minimum 20 days personal climbing</li> <li>• Minimum 10 days rock-climbing &amp; abseil instruction</li> </ul> <p>Tip These are considered bare minimum days for someone who has been provided with current training and feedback. More days are recommended.</p>	
<p><b>Variety of climbing venues</b></p> <ul style="list-style-type: none"> <li>• Minimum of 3 different sites</li> </ul> <p>Tip For Rock 1 we recommend at least half your minimum rock days are at venues which require natural and placed protection.</p>	
<p><b>Personal climbing skills</b></p> <p>Climbing</p> <ul style="list-style-type: none"> <li>• Can lead a grade 15 'sport' route with style 😊</li> </ul> <p>Belaying</p> <ul style="list-style-type: none"> <li>• Top rope climbing/lowering</li> <li>• Lead climbing</li> <li>• Holding a fall</li> </ul> <p>Tips</p> <ul style="list-style-type: none"> <li>• Consider significant weight discrepancies and effective solutions</li> <li>• Positioning while belaying (top roping and leading)</li> <li>• Use of standard climbing calls</li> </ul>	
<p><b>Current First aid certificate</b></p> <ul style="list-style-type: none"> <li>• Issued with in the last 3 years</li> </ul>	

2. History and ethics	Comments
<p><b>Describe how rock climbing developed as a sport</b></p> <ul style="list-style-type: none"> <li>• General history, with a focus on NZ</li> <li>• Development/history of local crag</li> </ul> <p>Tip Beyond the 'facts', learn a few stories/tales your clients may enjoy</p>	
<p><b>Local cultural considerations</b></p> <ul style="list-style-type: none"> <li>• Explain access protocols and issues for a given site. E.G. Access issues, reserves, by-laws farmland, Maori, private land, national parks</li> <li>• Demonstrate avoidance and consideration of 'user conflict' E.G. Other users, busy sites.</li> </ul>	
<p><b>Ethical issues for a given site</b> Local crag climbing ethics and history: E.G. Sport, Traditional, Bolting, Chipping brushing, Reining ethics?</p>	

3. Environmental awareness	Comments
<p><b>Describe and demonstrate "minimum impact" usage of the cliff and the surrounding natural environment.</b></p> <ul style="list-style-type: none"> <li>• Waste &amp; toileting</li> <li>• Access to/from sites</li> <li>• Care of flora &amp; fauna</li> <li>• Leave it as you find it... or better</li> </ul>	
<p><b>Demonstrate and discuss current environmental practice and awareness</b></p> <ul style="list-style-type: none"> <li>• Geology of local crag/s and implications for rock-climbers</li> <li>• Flora and fauna at local crag</li> <li>• 'Permanent alterations': Chipping, glue-ing, brushing, bolting</li> <li>• Demonstrate practices that minimise rope-wear on fixed anchors and the crag edge</li> <li>• Overuse, polished routes, chalk</li> </ul> <p>Tip Sometimes there are no 'right' answers for these things. Do show up with an opinion backed by information and experience</p>	

4. Risk Management	Comments
<p><b>Identify the hazards at a given site</b></p> <ul style="list-style-type: none"> <li>• Consider: People, Equipment, Environment and the Activity</li> <li>• Keep it real and relevant</li> </ul>	
<p><b>Demonstrate risk management principles to minimize or avoid these hazards</b></p> <p>Tip</p> <ul style="list-style-type: none"> <li>• Risk management is assessed via your actions throughout the assessment</li> </ul>	
<p><b>Have a 1<sup>st</sup> aid kit on site</b></p>	
<p><b>Crisis Management</b></p> <ul style="list-style-type: none"> <li>• Demonstrate awareness of procedures and actions to take in the event of an incident, including a means of quick contact with outside help</li> </ul>	
<p><b>Demonstrate safe practices at all times</b></p> <ul style="list-style-type: none"> <li>• Never compromise the safety of yourself, your clients or the public</li> </ul>	

5. Rock climbing equipment & knowledge	Comments
<p><b>Describe and demonstrate recommended use and limitations of</b></p> <ul style="list-style-type: none"> <li>• rock shoes</li> <li>• harnesses</li> <li>• helmets</li> <li>• karabiners</li> <li>• tape</li> <li>• dynamic rope</li> <li>• static rope</li> <li>• rock protection – jamming and camming</li> <li>• bolts</li> <li>• chain link (as used for anchors)</li> <li>• daisy chains, cows tails</li> <li>• Cordalette</li> <li>• 'Popular' belay devices (Gri-gri, ATC/belay plates)</li> </ul> <p>Tip</p> <ul style="list-style-type: none"> <li>• Be able to ID the condition of equipment used. Explain wear Vs structural damage</li> </ul>	

<p><b>Describe and demonstrate care of ropes</b></p> <p>This may include</p> <ul style="list-style-type: none"> <li>• Use of rope protectors</li> <li>• Site selection 'user friendly'</li> <li>• Alignment of ropes to minimise friction and wear</li> <li>• Use of rope bags/mats</li> <li>• Substances that damage nylon ropes</li> <li>• Recording of rope use in rope log</li> <li>• Storage</li> <li>• Coiling and coiling of ropes</li> </ul>	
<p><b>Knots and hitches</b></p> <p>Be able to tie and explain their uses, advantages, and disadvantages</p> <ul style="list-style-type: none"> <li>• figure 8 knot</li> <li>• double figure 8 knot on a bight</li> <li>• re-threaded figure 8 knot</li> <li>• double fisherman knot</li> <li>• bowline/double bowline</li> <li>• tape (water) knot</li> <li>• clove hitch</li> <li>• italian hitch</li> <li>• overhand knot</li> <li>• belay device lock-off knot</li> <li>• prusik hitches</li> <li>• release-able prusik hitch (eg french)</li> </ul>	
<p><b>Demonstrate effective use of a rock climbing guide-book</b></p> <ul style="list-style-type: none"> <li>• Access and use crag, climb information</li> </ul>	

<p><b>6. Rock climbing skills: Personal safety</b></p>	<p>Comments</p>
<p><b>Can role-model the use of personal safety systems</b></p> <ul style="list-style-type: none"> <li>• When exposed to a fall during set up or operation</li> </ul> <p>Tip</p> <ul style="list-style-type: none"> <li>• Instructors will often move in and around exposed areas unroped while working. This can be safe as long as you are focused on careful movement. Be attached as soon as your focus changes or you 'feel exposed'</li> </ul>	

6. Rock climbing skills: Anchors	Comments
<p><b>Create bombproof directional anchors using natural and placed protection</b></p> <ul style="list-style-type: none"> <li>Placed protection: Cam, nut, hex</li> <li>Natural protection: Bollard, thread</li> </ul> <p>Tips</p> <ul style="list-style-type: none"> <li>Choose anchor points according to rock quality, crack size, crack shape, fit/surface-contact of protection item, &amp; orientation to force.</li> <li>Ensure there is an element of 'independence' between anchor points</li> <li>Ensure there is a minimal angle at focal point (&lt;60° ideal; &lt;90° max.), the load is shared amongst anchor arms, and the anchor arms are independently linked.</li> <li>Arrange the anchor linking and focal point so that it cannot be damaged by sharp rock edges</li> </ul>	
<p><b>Create bombproof directional anchors using fixed protection</b></p> <ul style="list-style-type: none"> <li>Fixed protection: Bolts</li> </ul> <p>Tips</p> <ul style="list-style-type: none"> <li>Check quality of fixed anchors</li> <li>Ensure there is a minimal angle at focal point (&lt;60° ideal; &lt;90° max.), the load is shared amongst anchor arms, and the anchor arms are independently linked.</li> <li>Arrange the anchor linking and focal point so that it cannot be damaged by sharp rock edges</li> </ul>	
<p><b>Demonstrate anchor setting judgment</b></p> <ul style="list-style-type: none"> <li>Demonstrate bombproof 'fit for purpose' anchors</li> <li>Do not employ excessive 'over-engineering'</li> </ul> <p>Tips</p> <ul style="list-style-type: none"> <li>Choose sites which help you and your session aims</li> <li>Choose quality anchor points only(usually 1 to 3 different points)</li> <li>Employ principles of redundancy where <b>most</b> needed</li> <li>Keep linking simple and tidy</li> </ul>	

<p><b>Top-rope climb set-up</b> (set up ready to use within 20mins)</p> <p><b>Top down set-ups</b></p> <ul style="list-style-type: none"> <li>• Construct a safe workable top rope system from the top of the crag</li> <li>• Demonstrate the use of a personal safety system at the cliff edge</li> </ul> <p>Tip</p> <ul style="list-style-type: none"> <li>• Arrange the focal point low so that a top-rope runs freely at the top of the climb</li> <li>• Focal/working point recommendation: Two focal point 'loops' and two karabiners(at least one locking)</li> </ul> <p><b>Ground up set-ups</b></p> <ul style="list-style-type: none"> <li>• Climb a sport route and leave it set up for top rope climbing</li> <li>• Clear a sport route after top rope use(rap off bolts)</li> </ul> <p>Tips</p> <ul style="list-style-type: none"> <li>• Maintain personal safety while doing changeovers (leading to lowering, and climbing to abseiling). Attach to 2 good anchor points when the climbing rope is out of the system.</li> <li>• Focal/working point recommendation: Two focal point 'loops' and two karabiners(at least one locking)</li> </ul>	
<p><b>Abseil set-up</b> (within 30mins)</p> <ul style="list-style-type: none"> <li>• Construct a safe workable abseiling set-up</li> </ul> <p>Tips</p> <p>Set up an abseil</p> <ul style="list-style-type: none"> <li>• Make the anchor focal point at or above the abseiler's waist height. Place anchors back from the cliff edge and high</li> <li>• Release-able abseil line</li> <li>• Belayed safety line for the student abseiler</li> <li>• Instructor safety line</li> <li>• Ensure you have enough 'working space' before the cliff edge</li> </ul>	

6. Rock climbing skills: Client safety	Comments
<p><b>Teach and role-model harness use</b></p> <ul style="list-style-type: none"> <li>• Harness use and checks</li> </ul> <p>Tips</p> <ul style="list-style-type: none"> <li>• Keep checking especially after breaks/toilet stops</li> <li>• Get students to dress as a climber – tucked in, harness visible</li> </ul>	
<p><b>Teach and role-model belaying</b></p> <ul style="list-style-type: none"> <li>• Belaying methods: Gri-gri, Belay plates(ATC etc), Back-up belayer, Counterweight, Italian hitch</li> <li>• Positioning of belayer and back-up belayer</li> <li>• Lowering techniques for belayer and climber</li> </ul>	
<p><b>Teach and role-model climbing calls</b></p> <ul style="list-style-type: none"> <li>• Organise and use a system of standard climbing calls for communication</li> </ul> <p>Tip</p> <ul style="list-style-type: none"> <li>• Keep it simple...</li> </ul>	
<p><b>Organise effective and safe tie-in systems</b></p> <ul style="list-style-type: none"> <li>• Re-threaded fig. 8 knot</li> <li>• Twin krabs (at least one locking)</li> </ul>	
<p><b>Site checks</b></p> <ul style="list-style-type: none"> <li>• Ensure site is 'fit for purpose'</li> </ul> <p>Tip</p> <p>Choose a site that matches</p> <ul style="list-style-type: none"> <li>• The ability of the students</li> <li>• The difficulty of the climbs</li> <li>• The session objectives</li> <li>• The <i>real</i> risk involved in working at that site</li> </ul>	
<p><b>Client safety/gear checks</b></p> <ul style="list-style-type: none"> <li>• Demonstrate site and client safety checks throughout the instructional session, including set-up and break-down</li> </ul> <p>Tip</p> <ul style="list-style-type: none"> <li>• Many methods and systems out there. Make sure gear/safety checks happen whenever they NEED to</li> </ul>	

6. Rock climbing skills: Rescues	Comments
<p><i>Note</i>  <i>The Rock 1 rescues are designed to test a range of skills related to cliff rescue, not cover all possible scenarios.</i>  <i>If the student is not in immediate danger, consider “talking” them through a self-rescue before involving yourself.</i></p>	
<p><b>Top rope rescue</b></p> <p>Demonstrate a safe and efficient rescue of a top-rope climber involving the following situations:</p> <ul style="list-style-type: none"> <li>• climber has ‘frozen’, and refuses to be lowered to the ground</li> <li>• climber has foot or knee jammed in a crack in the rock</li> <li>• climber has been injured by rock-fall, and ‘blocky’ terrain does not allow them to be ‘free’-lowered to the ground</li> <li>• top-rope has become jammed in a crack at the top of the climb</li> </ul> <p><b>What ever techniques you use ensure you...</b></p> <ol style="list-style-type: none"> <li>1.Maintain tension on the ‘live’ rope</li> <li>2.Can tie off &amp; release a belay plate/device</li> <li>3.Can prusik up a rope to client(using rope as ‘back-up’ safety, re:2)</li> <li>4.Two person self protected abseil to ground</li> </ol> <p>Tips</p> <ul style="list-style-type: none"> <li>• Practice this to ensure it is safe, efficient and effective</li> <li>• Also try this rescue by ‘taking over’. Begin with the student-climber being belayed by another student</li> </ul>	
<p><b>Abseil rescues</b></p> <p>Demonstrate a safe and efficient rescue of an abseiler involving the following situations:</p> <ul style="list-style-type: none"> <li>• Release the abseil line to free jammed abseil device (clothing, hair etc)</li> <li>• Lower an abseiler to the ground if they have frozen (heart attack, fear etc)</li> <li>• Deal with an inverted abseiler</li> </ul>	

7. Group Management & Instructing	Comments
<p><b>Positioning is Key: Abseiling</b></p> <p><b>Instructor positioning</b></p> <ul style="list-style-type: none"> <li>• Can communicate with the student abseiler throughout the descent</li> <li>• Can supervise students at cliff-bottom (if required)</li> <li>• Can supervise students at cliff-top</li> </ul> <p><b>Student positioning</b></p> <ul style="list-style-type: none"> <li>• Minimise hazards while approaching, using, leaving the site</li> <li>• Be able to supervise students at cliff top/bottom</li> <li>• Have simple/safe access from cliff-bottom supervised area to cliff-top supervised area</li> <li>• Set clear boundaries for positioning</li> <li>•</li> </ul>	
<p><b>Positioning is Key: Top rope climbing</b></p> <p><b>Instructor positioning</b></p> <ul style="list-style-type: none"> <li>• Position yourself throughout the activity so that you are able to observe and communicate with all students. This is essential to provide quick feedback on climbing, belaying, checks, behavior etc</li> </ul> <p>Tip</p> <ul style="list-style-type: none"> <li>• This usually means at the bottom of the cliff with the students. Two favorite positions are: Against the cliff and to the side looking at all checks and belaying. Or, back and to the side with an overview off all activity, especially checks and belaying. Don't get too stuck in the action. Be in a position to do all safety checks with your eyes not your legs</li> </ul> <p><b>Student positioning</b></p> <ul style="list-style-type: none"> <li>• Keep belayer in line with and under the anchors</li> <li>• If using a back-up belayer ensure they are in a useful 'lock-off' position and not interfering with normal belay technique</li> <li>• Other students are best kept involved in a designated area back from the cliff</li> <li>• Be wary of belayer distraction by other students/groups</li> <li>• Set clear boundaries for positioning</li> </ul>	
<p><b>Bouldering</b></p> <ul style="list-style-type: none"> <li>• Conduct a safe and informative bouldering session</li> </ul> <p>Tips</p> <p>Disclosure of hazards of the particular site; warm-ups; low traverses; spotting; height above ground; demonstrations that are useful and well-executed; instructions that are informative; general enthusiasm and fun; sequential lesson plan incorporating technical progressions; training tips</p>	

<p><b>Specific 'people' skills and responsibilities</b></p> <ul style="list-style-type: none"> <li>• Give clear instructions and checks that they are understood</li> <li>• Be approachable, open and tolerant</li> <li>• Stop unacceptable behaviors constructively</li> <li>• Be assertive and directive when required</li> <li>• Deal constructively with conflict</li> <li>• Deal effectively with own anger and/or frustration</li> <li>• Deal constructively and efficiently with crisis</li> <li>• Facilitate group discussions</li> <li>• Use language appropriate for the situation/group</li> <li>• Be aware of sensitivities of minority members in group</li> <li>• Deal with individual's fear and anxieties</li> <li>• Raise enthusiasm in other students/instructors</li> <li>• Gain co-operation and interest from students/instructors</li> <li>• Be client-orientated</li> <li>• Describe / demonstrate a system for checking client medical conditions, and for obtaining relevant client details; e.g., contact address/phone, next of kin</li> <li>• Demonstrate an awareness and sensitivity to the cultural / special needs of a given group</li> </ul>	
<p><b>Coaching</b></p> <ul style="list-style-type: none"> <li>• Provide motivational coaching advice in any other Rock 1 syllabus area to assist in making the climbing experience an enjoyable one for the students</li> <li>• Adapt the instructional programme and teaching style to the situation</li> <li>• Explain why specific techniques are best suited to a particular time, place and purpose</li> </ul>	
<p><b>Demonstrate the leadership styles relevant to a given group</b></p> <ul style="list-style-type: none"> <li>• Match style to individual and group knowledge and maturity</li> <li>• Match style to level of risk inherent in activity</li> <li>• Create a participative learning environment</li> <li>• Role-model an open and tolerant approach to others</li> <li>• 'Listen' to individual and group needs</li> </ul>	
<p><b>Prepare and deliver a session plan for any given topic or skill contained within this award to a given audience</b></p> <p>Present a given teaching session that demonstrates</p> <ul style="list-style-type: none"> <li>• Preparation</li> <li>• Clear introduction to session/topic</li> <li>• An interest and knowledge of the subject</li> <li>• A bit of personality (X-factor!)</li> <li>• Effective use of voice and body language</li> <li>• Teaching/visual aids</li> <li>• Demonstrations</li> <li>• Evaluation of learning</li> </ul>	

<b>Demonstrate an effective and full group briefing and de-briefing</b>	

Further comments: