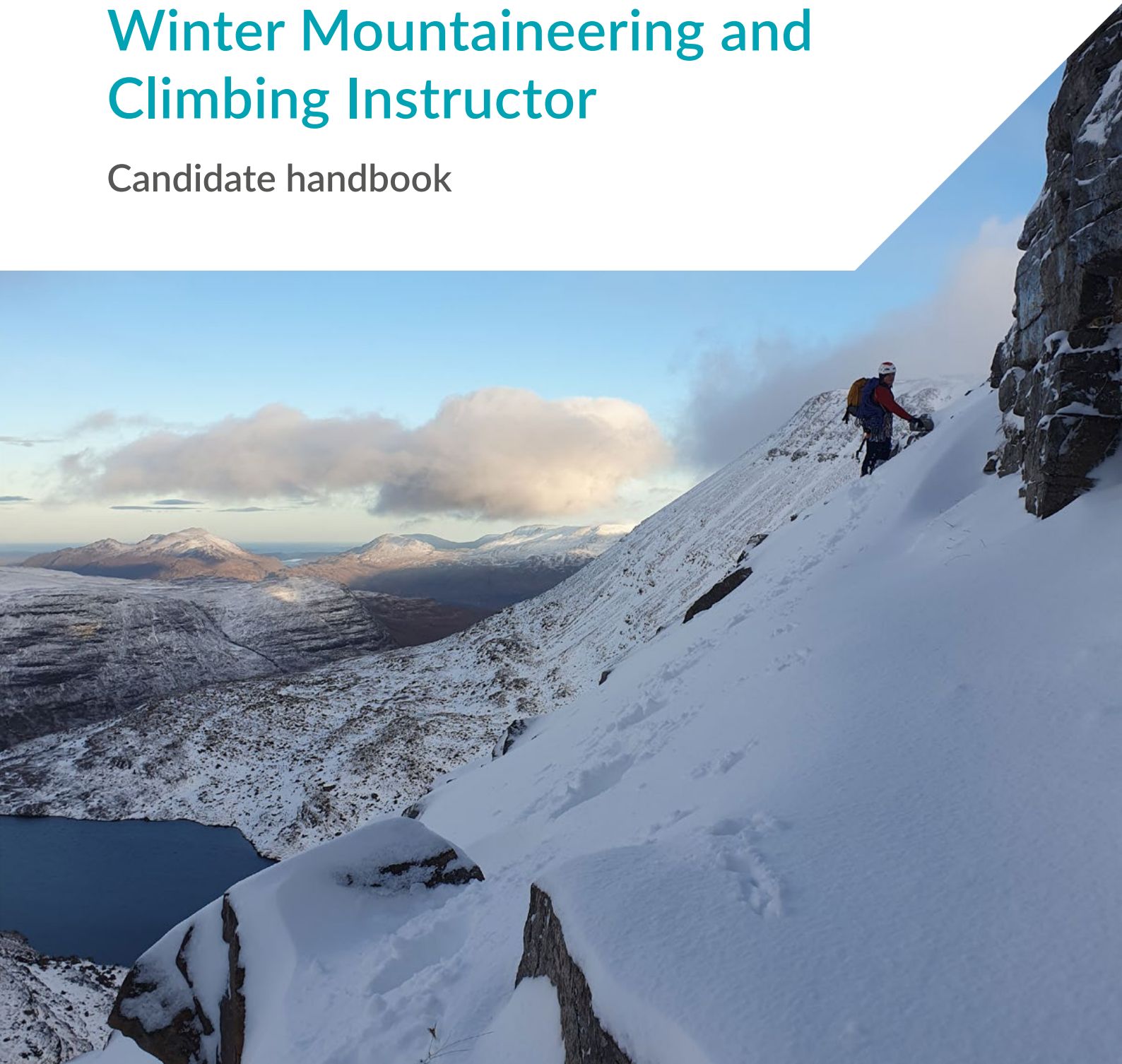




**Mountain  
Training**

# Winter Mountaineering and Climbing Instructor

Candidate handbook





# Contents

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1. Qualification pathway .....	4
2. Course structure .....	7
3. Course delivery.....	7
4. Awarding organisation .....	7
Syllabus and guidance notes .....	8
1. Personal winter mountaineering.....	8
2. Winter mountaineering instruction.....	10
3. Winter climbing instruction .....	11
4. National qualifications .....	12
Appendix 1 - Definitions.....	14
Appendix 2 - Course programmes .....	15



# Preface

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This handbook has been designed to support candidates through Mountain Training's Winter Mountaineering and Climbing Instructor qualification. It contains useful information about the various stages in the qualification as well as the syllabus and guidance notes.

## Participation statement

Mountain Training recognises that climbing, hill walking and mountaineering are activities with a danger of personal injury or death. Participants in these activities should be aware of and accept these risks and be responsible for their own actions. Mountain Training has developed a range of training and assessment schemes and associated supporting literature to help instructors manage these risks and to enable new participants to have positive experiences while learning about their responsibilities.

## Acknowledgements

Many people have contributed to the preparation of this handbook by attending working party meetings and by making detailed and constructive comments on the draft. Grateful thanks are due to Board members, staff of the National Centres and home nation Training Boards and the Association of Mountaineering Instructors for help in the production of this publication.

Thanks to the following people whose images bring this handbook to life: John Cousins, Karl Midlane, Libby Peter and Nicola Jasieniecka-Evans.



## Winter Skills

Throughout this handbook there are references to *Winter Skills* by Andy Cunningham and Allen Fyffe which we publish to support developing winter walkers, climbers, leaders and instructors. It is packed with essential information and techniques and we have listed the relevant chapter(s) for each syllabus area.



# 1. Qualification pathway

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## 1.1 Introduction

The Winter Mountaineering and Climbing Instructor scheme provides comprehensive training and assessment for individuals working as instructors in winter mountaineering activities, including winter climbing. It is designed for the specific situations and conditions found in the UK and Ireland and it integrates training, experience and assessment in a variety of testing situations.

## 1.2 Scope of the qualification

A qualified Winter Mountaineering and Climbing Instructor can:

- Teach, train and assess general winter mountaineering, snow and ice climbing and related activities.

### 1.2.1 Terrain

A qualified Winter Mountaineering and Climbing Instructor can operate on:

- Mountains in the UK and Ireland in winter conditions.

## 1.3 Stages in the qualification

### 1.3.1 Registration prerequisites

Registration for the Mountaineering and Climbing Instructor qualification is an application process and you need to meet the following prerequisites:

- You must have passed Mountaineering and Climbing Instructor assessment.
- You must have 20 days logged experience of teaching/leading post Mountaineering and Climbing Instructor assessment.
- You must have passed Winter Mountain Leader assessment.
- You must have 20 days logged experience of winter party management. At least half must be post Winter Mountain Leader assessment.
- You must have led winter climbs at Grade III or above.
- You must have logged at least 10 routes at Grade II or above and at least a further 10



at Grade III or above in a minimum of three main mountain areas of the UK.

- You must provide a reference from someone who is prepared to endorse the registration application, preferably a Mountaineering Instructor, Guide or training board approved provider. A long term climbing partner or suitable employer would also be considered as an appropriate referee. The referee should be able to endorse the candidate's suitability as a potential Winter Mountaineering and Climbing Instructor and vouch for the accuracy of the application. It is therefore vitally important that potential referees have an overview of the climbing and work experience of an applicant.

Once your experience is recorded in DLOG you are required to;

- Register for the Winter Mountaineering and Climbing Instructor qualification through CMS. Registration incurs a non-refundable fee.
- Notify Mountain Training (via the 'Send To Mountain Training' button on the 'Share' tab in DLOG) that your DLOG is ready to be reviewed.

A technical officer will then review your experience in DLOG and if it meets the minimum requirements, you will be notified by email that your registration on the scheme has been approved.

Applications with less than the minimum experience cannot be approved.

If your application is not successful, you will receive feedback on how best to fulfil the experience requirements and your registration application will be held open until your successful registration.

## Winter climbing experience at registration

The Winter Mountaineering and Climbing Instructor scheme is UK orientated and the experience recorded should reflect this. Whilst experience gained ice climbing in, for example, the Chamonix Valley is undoubtedly valuable, it must be backed up with considerable UK experience. The Board is looking for both depth and breadth of experience since candidates who have only the minimum experience are unlikely to benefit fully from either the training or assessment course.

In general terms, successful applicants will have climbed at least 40 or 50 winter climbs of which the 10 routes at Grade II or above and 10 at Grade III will be a representative sample.



### 1.3.2 Training prerequisites

- Your registration must have been approved.
- You will not be able to book onto a training course until your registration has been approved by Mountain Training UK & Ireland.

### 1.3.3 Consolidation period

The period between training and assessment varies in length for each person and it is recommended you allow a minimum of twelve months. Consolidation is an opportunity to develop your skills, paying particular attention to any weaknesses identified during the training course. You can use the excuse 'I'm preparing for assessment' to have as many mountain adventures as you like, so get out there and explore this beautiful country of ours! The minimum DLOG experience that needs to be gained during the consolidation period is listed below, but it should be noted that most successful candidates will have far in excess of this. In addition, they will have a robust and realistic action plan that ensures no aspects of the syllabus are forgotten. Many candidates will also seek the support of a mentor, or look for opportunities to shadow experienced Winter Mountaineering and Climbing Instructors.



### Trainee membership

After you have completed a Mountaineering and Climbing Instructor training course and the course report has been processed, you will receive an email offering you complimentary Trainee membership of AMI until the end of the membership year. Click on the link in the email to accept the offer and your account will be updated.

By joining the Association of Mountaineering Instructors there is also access to workshops and a community of practice.

### 1.3.4 Assessment prerequisites

Post training and before presenting yourself for assessment:

- 10 days in the mountains managing parties in winter conditions.
- 5 days climbing experience at Grade III or above.
- You must have physically attended and completed (i.e. not online) a first aid course which involved at least two full days or sixteen hours of instruction and included an element of assessment.



## 2. Course structure

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### 2.1 Training

Training is delivered over a minimum of 5 days.

Results: Completed, Not yet completed, Withdrew, Did not show, Exemption.

### 2.2 Assessment

Assessment is delivered over a minimum of 4 days.

Results: Pass, Defer, Fail, Not yet completed, Withdrew, Did not show.

There is no exemption from any element of the assessment.

Reassessments cannot be more than two days in length and cannot take place within three months of the previous assessment. A candidate may take two reassessments before being required to take the entire assessment course again. Since the reassessment will be based on information gained during the initial assessment, all reassessments should be completed within five years of the original assessment.

## 3. Course delivery

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### 3.1 Training

Course directors are approved by Mountain Training UK & Ireland

Min course size: 2, max course size: 12, max ratio: 1:4

### 3.2 Assessment

Course directors are approved by Mountain Training UK & Ireland

Min course size: 2, max course size: 8, max ratio: 1:4.

## 4. Awarding organisation

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- Mountain Training UK & Ireland





# Syllabus and guidance notes



## 1. Personal winter mountaineering

- 1.1 Demonstrate safe and assured leadership on multi-pitch snow and ice climbs up to Grade III.
- 1.2 Demonstrate efficient movement over all types of mountain terrain.
- 1.3 Have a theoretical and practical understanding of snow and avalanche conditions.

## Guidance

Winter climbing conditions in the UK are legendary and have contributed to the development of many of our greatest mountaineers. Winter Mountaineering and Climbing Instructors have to be at home in this environment if they are to help others enjoy the peculiar delights of limited daylight, difficult belays, extreme navigational challenges, appalling weather and a pretty unstable medium to walk or climb across! It is stating the obvious to say that Grade III is a very broad standard when compared to a summer grade such as VS 4c. Not only is Grade III harder to define but the start and finish of any climb is less obvious, requiring the instructor to make more decisions about appropriate methods for safeguarding everyone. Instructors have to rely on a real breadth of experience, drawn





from as many different winter climbing venues as possible, if they are to deal with the range of terrain that they will encounter.

Evaluating snow and avalanche conditions is a process that needs constant monitoring and decision making. Instructors should be teaching this process by gathering clues such as reports and forecasts and then assessing the mountain environment constantly during their journey. The use of profiles and stability tests should be part of the information gathered and used in conjunction with all the other observations, the aim being to enable students to make their own judgements regarding the conditions. This decision-making process should help build a basis for safe travel in the mountains. Instructors' advice should allow practical decision-making on the hill and not dwell on the science of the subject.



#### Part 4 Security on steep ground

#### Part 5 Winter climbing





## 2. Winter mountaineering instruction

- 2.1 Instruct all elements of winter navigation.
- 2.2 Structure teaching sessions and give demonstrations of appropriate techniques in all aspects of the basic winter mountaineering skills.
- 2.3 Demonstrate and instruct the use of standard equipment such as an ice axe, crampons and belay devices.
- 2.4 Understand the limitations of winter camp craft and the use of alternative methods, planned and emergency.
- 2.5 Demonstrate the technical skills required to safeguard a party on difficult terrain, including the use of short-rope techniques as appropriate.
- 2.6 Demonstrate the ability to select a suitable route, given the ability and aspirations of the party and the likely weather and conditions.

### Guidance

Navigation in winter requires confidence, skill and experience. A Winter Mountaineering and Climbing Instructor should be able to navigate accurately, assess snow conditions and move efficiently on difficult terrain. They should also be able to teach these skills to others.

Instructors must be able to teach in such a way that their students can then coach others in a logical and clear manner. Emphasis must be on progressive practical coaching and the ability to be flexible in ever changing winter conditions.

Instructors should be familiar with the wide array of modern winter walking and climbing equipment. Advice that is given to students concerning equipment must match the individual's experience and the intended use.



Chapter 4 Winter navigation

Part 4 Security on steep ground

Part 5 Winter climbing



### 3. Winter climbing instruction

- 3.1 Demonstrate safe and assured leadership on multi-pitch winter climbs up to Grade III.
- 3.2 Supervise and control a party in descent or retreat from winter climbs or steep and broken ground.
- 3.3 Select a suitable winter climb, taking into account the ability and aspirations of the party and the likely weather and conditions.
- 3.4 Provide safe and enjoyable instruction on winter climbs up to Grade III.

#### Guidance

To operate safely and efficiently in a winter climbing environment, instructors must be capable of moving confidently on both mixed and ice climbs of Grade III. This level of expertise will enable the instructor to make quick decisions on route choice, pace of movement and the hazards found on the climb. Leading and managing groups on this type of ground requires plenty of personal and instructional experience. Winter Mountaineering and Climbing Instructor candidates must feel confident operating at this grade to maximise the benefits of the training course and to be able to coach novice climbers on this type of terrain.



Trainers and assessors should instil a sense of pace into their teaching, which should be comparable with the speed necessary on winter climbs.

Instructors must consider the suitability of the rope systems they demonstrate when teaching climbing. Instructors must differentiate between situations when a guided approach is appropriate and when instructing the basics of winter climbing is the main objective.

Instructors must be very familiar with the use of a variety of winter anchors on snow, ice and rock. Transferring summer belay skills to winter requires a whole new set of judgements. Instructors must be able to coach climbers from novices upwards in building their own set of skills and judgements. In case of an emergency or planned retreat, instructors must be familiar with the potential hazards and judgements required for lowering, counterbalancing and stacked abseils.

Confidence roping and short roping are commonly used skills while approaching and descending from winter climbs. Choosing when and where to use these techniques will depend on many factors. Instructors should be able to coach winter leaders in the basics of confidence roping on appropriate terrain (see Appendix 1).

Introducing students to winter climbing should follow a logical progression. Communicating the required skills and judgements to others to enable them to make judgements themselves is a challenging task. This process is aided by sound demonstrations from the instructor and well considered venues. Allowing novice climbers to lead should be managed in a controlled and safe way. Both instructor and novice leader must be aware of the potential dangers of leading.



## Part 5 Winter climbing

### 4. National qualifications

4.1 Where appropriate, instruct and assess on Winter Mountain Leader courses.

#### Guidance

Candidates should familiarise themselves with the contents of the relevant literature in order to gain a deeper appreciation of the organisation, philosophy and standards of all Mountain Training schemes. Experience gained working on these courses is invaluable even if only in an observational role.





Experience of working on Mountain Training courses will promote understanding of the skills required to brief candidates, observe tasks and give feedback at appropriate moments. The requirements at registration, training and assessment will also become more clearly defined, enabling candidates to work effectively and at the correct level on training and assessment for each scheme and have an understanding of the associated administration and organisation.







## Appendix 1 - Definitions

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### Confidence roping

This is used to safeguard an individual within a hill walking group to boost confidence in an apparently exposed situation. The individual is tied to a short length of rope that is held by the instructor or leader. The instructor might even choose not to tie into the rope. Both will usually move at the same time, thereby not impeding the progress of the group as a whole. The use of the rope is normally unplanned. Confidence roping is for use in situations where a fall or slip will not have serious consequences.

### Short roping

This is the use of the rope to safeguard one or two individuals in ascent or descent on terrain that is exposed and where a slip could have serious consequences. The terrain is not continuous rock climbing or scrambling but may have short sections of technical difficulty approaching the V Diff grade. Sections that require safeguarding will generally be very short but could be anything from a few metres to 20 metres or more. The instructor or leader will generally climb the section first leaving the clients secure, possibly belayed, on a ledge. Normally clients will move over the difficult ground at the same time, tied a few feet apart. The instructor or leader will safeguard them using direct belay methods or, where necessary, a braced stance with a body belay. The whole party will move at the same time between sections of difficulty and in less exposed situations. Occasionally in descent it may be appropriate to lower the clients either together or individually. Leaders or instructors will not normally place running belays for their own safety but place them for the safety of the clients and for directional stability when safeguarding the clients.

### Moving together

The party will travel at the same time over terrain that presents a combination of exposure and technical difficulty or extreme exposure alone. Most commonly this technique is linked with moving along alpine type ridges or mixed climbs where speed, with a degree of safety, is important. A competent and compatible rope of two will move together, arranging running belays between each climber. On arriving at anything of greater difficulty the party will stop and initiate 'normal' climbing procedures.

### Winter

When winter conditions, including snow and ice, prevail or are forecast. This cannot be defined by a portion of the year.

### Summer

Any conditions not covered under winter.



## Appendix 2 - Course programmes

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### Training

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The purpose of the Winter Mountaineering and Climbing Instructor training course is three-fold:

- to expose candidates to the skills and techniques needed for safe operation as a winter climbing and mountaineering instructor in the United Kingdom and Ireland under winter conditions.
- to prepare candidates for the assessment.
- to explain the role of the Winter Mountaineering and Climbing Instructor in other Mountain Training schemes.

Candidates should come to the training course prepared to contribute to a structured learning experience. Much of the time Mountaineering Instructors work in isolation and courses like this, which bring together candidates from different climbing and instructional backgrounds, offer unrivalled opportunities for exchanging ideas and discussing techniques and teaching methods.

The course aims to cover those aspects of the syllabus that candidates usually find most problematic and which are difficult to practise in isolation. Therefore areas such as technical climbing will receive less in-depth coverage than subjects such as problem solving and stance management. If there is any broad area that candidates would like to cover in greater depth, they should raise this with the instructors. However, it must be recognised that not all of the syllabus can be covered in the five-day training course.

Skills are not taught in isolation. They are transferable through all syllabus areas. Therefore an integrated approach to the syllabus material will be taken. Candidates are recommended to take a holistic approach to subject matter and not assume that because a specific technique was taught in one situation this is the only situation for which it is appropriate.

The following training course outline gives an approximate breakdown of the course content. Candidates should realise that this is only an outline and Mountain Training recognises the freedom of each provider to run a training course that:

- satisfies the requirements of the Board



- satisfies the requirements of the majority of course members
- makes best use of prevailing conditions and weather

A typical five day Winter Mountaineering and Climbing Instructor training course will usually include the following elements:

## Basic winter mountaineering skills

Teaching and instructing walkers, mountaineers and climbers in the fundamental skills of winter mountaineering is an important part of the job of an instructor. The emphasis will be on teaching these skills to novices and on coaching other leaders and instructors. It is vital that candidates at training are already competent in all these areas. It will be assumed that candidates will have some practical experience of teaching novice winter walkers in the basics, as part of their Winter Mountain Leader qualification. Other basic skills include weather, navigation, movement over snow, self-arrest, use of crampons, avalanche assessment, basic roped climbing and snow belays.

## Personal winter climbing skills

Candidates should already be competent winter climbers with a wealth of experience on which to draw. Candidates are expected to be capable of leading Grade III on snow, ice and mixed climbs during the course.

Emphasis will be placed on efficient movement over varying climbing terrain and sound belay and anchor choice. The training course is dedicated to helping the winter climber transfer their skills to becoming a winter climbing instructor. It is not about teaching them how to climb. As all winter climbers are well aware the mountain days in Scotland are long and the light is short. Candidates should be physically and mentally prepared for this, in order to make the most of the course.

## Teaching winter climbing

Instructors must be capable of coaching winter climbing at a variety of levels as follows:

- instructing and coaching winter walkers in the use of the rope in an emergency situation.
- introducing novice climbers to the basic climbing skills



- coaching winter climbers in safer and more efficient techniques
- leading clients effectively on winter climbs.

Emphasis will be on coaching and instructing at an appropriate level and on suitable ground for the conditions. Instructors should be capable of structuring suitable programmes to teach winter climbing to students with varying abilities, backgrounds and aspirations. The ability to demonstrate sound winter climbing practice is an essential skill of a Winter Mountaineering and Climbing Instructor.

## Situational leadership styles and appropriate skills

A skill commonly required in the winter environment is that of safeguarding students on terrain that does not necessitate a pitched approach. The techniques of confidence roping and short roping are often used in these situations. However, the technique of moving together may also be employed in places such as mountain ridges.

These skills may also be appropriate when leading students up long climbs in Scotland.

## Other areas covered

Time will be spent looking at modern climbing equipment and what the a Winter Mountaineering and Climbing Instructor is expected to carry when instructing in the winter. The various roles of a Winter Mountaineering and Climbing Instructor as trainer, assessor and advisor will be discussed.

Candidates at training should be familiar with the basics of snow structure and how to assess the stability of snow slopes. Further theory on snow and avalanche awareness will be covered during evening sessions.

Time will be made available during the course to discuss the requirements at assessment and how best to structure the consolidation period.



# Assessment

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A candidate's personal ability as a winter mountaineer will be under assessment at all times during the course. This includes navigation, route-finding ability and assessment of snow and avalanche conditions.

A typical Winter Mountaineering and Climbing Instructor assessment course will be at least four days in duration and will usually include the following elements:

## Personal climbing

Candidates will be assessed on multi-pitch climbs at Grade III. They must demonstrate that they can climb confidently and fluently at that grade and are able to look after their own personal safety and the safety of those climbing with them. They should be able to protect routes effectively, choose appropriate rope techniques and construct belays safely and efficiently. Candidates may also be asked to perform an abseil retreat from the crag. During this day a candidate's whole approach to winter climbing will be assessed.

Candidates experience difficulty on this day if they do not climb to the required standard and if they make very slow progress. It is important that candidates are able to find adequate runner placements and construct belays efficiently. Their ropework system must be appropriate to the winter climbing environment. They will also be assessed on their ability to solve problems commonly encountered when winter climbing.

If candidates are not considered competent on this day it is unlikely that they will be successful on the other days.

If the course director decides that a candidate's lack of ability would put themselves or other candidates at risk, they may be asked to withdraw from the rest of the course. It is therefore most important that candidates arrive for assessment climbing well and confidently at the required standard.

## General mountaineering

This day will assess a candidate's all round ability as a winter mountaineer. This includes navigation, route choice, techniques appropriate for various terrain and conditions, safeguarding a party both roped and unroped and teaching the basic techniques of winter mountaineering. As a general rule, the majority of this day will be conducted on ground of approximately Grade I/II and will involve the use of a single ice-axe.





## Teaching climbing

Two days are allocated to this area of the syllabus and candidates should have the same two students for both days. A key part of the assessment will be a candidate's ability to structure the days so as to take best advantage of the conditions and the aspirations of their students. Candidates will be expected to complete a graded climb (up to Grade III) on both days. In the past candidates have experienced difficulty with this day either because they have been too ambitious, or have embarked on routes that are too long or difficult for their students, or because they have underestimated their students' abilities and have run an inappropriate session.

While the teaching of basic techniques is an important part of the assessment process, candidates must structure the days so that the climbing requirements detailed above are met.

## Evening sessions

Mountain Training's expectations of Winter Mountaineering and Climbing Instructors, their role in the training schemes and other related issues will be discussed.

