# Cardiff University Students’ Union Mountaineering Club Activity Risk Assessment

Please read the guidance notes, or visit a member of the Activities staff team, for assistance to complete. Useful guidance can also be found from your relevant National Governing Body.

THIS IS A LIVE DOCUMENT THAT NEEDS REGULARLY REVIEWING AND UPDATING.

1. **General Information:**

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| Club / Society: | Cardiff University Mountaineering Club | | |
| Name of most recent assessor / reviewer: | Rebecca Carman | Date of most recent review: | 17/09/2024 |
| Committee position of most recent assessor / reviewer: | Secretary | Date of original assessment: | 17/09/2024 |

1. **Description of Activity:**

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| **What is the activity?** Attach any routes and maps if applicable.  Winter mountaineering is the term used to describe a range of climbing adjacent activities done during winter in snowy or icy conditions. For the club these activities can be split into ice climbing, mountaineering and winter walking.  Ice climbing involves using crampons and ice picks to climb ice and rock routes.  Mountaineering involves scrambling and mountaineering on snow, rock and ice using crampons and ice picks  Winter walking involves walking in deep snow to practice safe mountaineering skills, learning how to use ice picks and crampons, and learning about mountain safety.  Winter mountaineering boots, crampons, ice axes, helmets, ice screws, ropes and trad climbing gear may be used for winter mountaineering.  Winter trips run by the Club are done through use of experienced and qualified guides. These guides will work with the trip organisers to decide on the best teaching experiences to maximise enjoyment and skill learning opportunities based on members experience levels. The guides have their own risk assessment and provide necessary safety gear to participants.  The Club will not allow members to participate in an activity, participants wishing to do mountaineering or ice climbing must provide evidence of having the necessary skills required to do so. This evidence could be doing the lower level courses on a previous winter trip with the club or having previous mountaineering experience outside of club activities.  In cases where the weather does not allow for winter mountaineering other activites may take place including scrambling, navigation skills, rope skills and mountain leadership skills. These activities will still be ran by the guides.  **Location / address of the activities:**  Mountains, hills and Tors local to the bunkhouse being used for the duration of the trip.  **Approximately how many people are involved?**  Small groups of varying sizes, from 2 to 8 people per guide. Approximately 18 people in total, depending on demand and transport capabilities  **Approximate duration of the activities:**  08:00 to 20:00, 12 hours. Typically our outdoor activities are done for as long as is permitted by the daylight and weather at the crag. |

1. **Hazard Assessment:**

Please continue this assessment for as many pages as required.

If your National Governing Body or managed facility provider have their own Risk Assessment, please attach and reference it within your assessment. Ensure that you act on any control measures that require implementation as a result of this assessment.

A hazard is anything that has the potential to cause harm, for example, a hole in the playing surface.

A hazardous event takes place when someone or something interacts with the hazard. Every hazardous event has a likelihood and a consequence.

Likelihood is a measure of the chance that a hazardous event will occur.

The consequence / severity is the most likely outcome should the hazardous event occur.

Risk is a combination of the likelihood of a hazardous event occurring, with the consequence / severity of the event.

Use the scales below (1-3) to complete the risk matrix.

*Areas for consideration (non-exhaustive list):*

* *Activity that has the potential to cause injury to those participating.*
* *Different levels of ability.*
* *The safe use of equipment required to do activity.*
* *Facilities / location where the activity takes place on/in/at, for example, surfaces, fixtures and fittings.*
* *Environmental factors that would impact the activity, for example, lighting and temperatures.*
* *Risk to both participants and non-participants from each other’s interaction.*
* *Appropriate leadership and information distribution / collecting, for example, participants brief and medical details.*
* *Transport / getting to and from the activity.*

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| **LIKELIHOOD** | **CONSEQUENCE / SEVERITY** |
| **1** = unlikely the event will happen, although conceivable. | **1** = unlikely for an injury to occur, although conceivable, and minor if so. For example, minor cut / graze. |
| **2** = the event could occur sometimes and is fairly likely. | **2** = something more than a ‘scratch’ or ‘bruised ego’. A ‘three day’ injury, requiring further medical assistance. For example, cuts needing stitches. |
| **3** = it is likely the event would occur quite easily / regularly. | **3** = a major injury. For example, broken bones, loss of consciousness, loss of limbs, death. |

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| **INJURY**  What type of injury / damage can occur? | **HAZARD**  What is the hazard that can cause the injury? For example, activity, equipment, procedure, location, environment, participants. | **EXISTING CONTROL MEASURES**  What measures are currently in place to reduce the risk of injury? | **LIKELIHOOD** of injury, taking account of existing control measures  (use scale 1-3). | **SEVERITY** of injury, taking account of existing control measures (use scale 1-3). | **RISK**  = Likelihood X Severity. |
| Traffic collision | Not following the Highway Code and Road Traffic Act 1988 while driving | All drivers must have passed the necessary driving tests that are provided SU Transport | 1 | 3 | 3 |
| Mountaineering under the influence of alcohol | Drinking alcohol before competing in any sport activity impairs the participants ability to safely complete the activity | Ensure that all members do not drink alcohol before any sport activity | 1 | 2 | 2 |
| Spread of sickness | Attending group activity while sick and can infect other members and cause them to also become sick | Encourage any member who is showing signs of sickness to stay away from activity until signs have gone | 1 | 2 | 2 |
| Stuck mountaineer | Stress/anxiety  Depending on the scenario with which the mountaineer is stuck other injuries may happened due to exposure, such as hypothermia. | Participants correctly briefed on the activity beforehand, mountaineers should not attempt activities far beyond their limit. Mountaineers should know who to call for emergency services. | 1 | 3 | 3 |
| Entanglement or entrapment in ropes | Friction burns, stress, anxiety | Clothing to protect body from fiction burns. Ensure people do not twist the rope around themselves. Excessively loose clothing should be avoided. | 1 | 2 | 2 |
| Climber falling due to rock breaking | Sprains, bruises | Mountaineers should check for loose rock before weighting it. Helmets should be worn to reduce the risk of head injury from falling rock. | 2 | 1 | 2 |
| Slipping and/or sprains whilst mountaineering | Broken limbs, dislocations, sprains, bruising | Appropriate footwear to be worn for the approach, taking into account weather conditions and length/difficulty of activity. Avoid having equipment dangling across the body that could limit leg or arm movement. | 2 | 2 | 4 |
| Injury on sharp segments of rock | Cuts, scratches | Clothing can be used to protect knees, elbows and other body parts from the rock. Gloves will typically be worn whilst mountaineering which will protect a mountaineers hands. | 2 | 1 | 2 |
| Changes in body temperature do to long periods of time spent outside in rain/sun/wind/snow | Hypothermia, hyperthermia, shock, stress, heat stroke , dehydration | Appropriate clothing brought for weather conditions with enough spare layers. Water bottles to be bought. Committee to make participants away of the weather predictions and inform them on what suitable clothing should be bought. Enough First aiders will be present in all groups and trips, and all groups will have adequate first aid kits provided.  Having a warm drink and food available can help reduce coldness. | 1 | 3 | 3 |
| Rings getting caught on rock and causing injury | Degloving of skin on fingers | Dangers of climbing with rings on will be explained to mountaineers. | 1 | 2 | 2 |
| Rope breaks due to sharp rocks or friction against rocks | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Sideways motion of the rope underweight should be avoided | 1 | 3 | 3 |
| Rope or other equipment lands on someone after being dropped/falling | Bruises, cuts, bleeding | Equipment should be suitably attached to peoples bags or inside pockets. Helmets should be warm when mountaineering. | 1 | 2 | 2 |
| Avalanche due a variety of reasons, e.g. avalanche triggered by mountaineers | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death, burial in snow | Avalanche kit should be carried by a guide or group members in scenarios where avalanches are likely. When necessary and safe to do so mountaineers may connect themselves with a rope. | 1 | 3 | 3 |
| Falling ice and snow | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death, burial | Mountaineers should always wear helmets, mountaineers should avoid being under other mountaineers where possible. Belayers should wear helmets and avoid standing directly underneath a mountaineer. | 1 | 3 | 3 |
| Injury from mountaineering equipment | Cuts, bruises, excessive bleeding, implement | Participants will be taught the correct use of equipment by guides. Participants will be reminded to wear gaiters to reduce risk of injury from crampons. Wearing the correct clothing can reduce the risk of injury. Helmets should be worn by mountaineers. | 1 | 3 | 3 |
| Falling or tripping and as result sliding down the mountain | Loss of consciousness, bruising, broken limbs, death | Participants should wear helmets to reduce the risk of head injury. Participants should leave space between each other to reduce the risk of collision. Participants should be aware of Self Arrest using ice axes. Wearing crampons reduces the risk of falling. | 1 | 3 | 3 |
| Protection fails e.g. gear pops out | Loss of consciousness, bruising, broken limbs, death, sprains, dislocations, loss of consciousness | Wearing a helmet can reduce the risk of a head injury, ice climbers will be taught about gear placement with their guide. | 1 | 3 | 3 |
| Climber stranded because of jammed belay device | Stress/anxiety of both climber and belayer.    Other injuries (bruising, shock, sprains) may occur depending on the circumstances of the jam | Ensure long hair is tied back, tuck in hoodie strings, remove all jewellery before climbing, keep fingers a safe distance away from belay device, all to ensure they do not get caught when belaying. Ensure rope is running through belay device correctly before the climber starts climbing | 1 | 1 | 1 |
| Climber falling because of belayer error and taking a large fall as a result | Broken limbs, sprains, bruises, dislocations, shock, | Climbers are encouraged to ‘buddy check’ before each climb to ensure belayer has set up equipment correctly. | 1 | 3 | 3 |
| Climber falling because of personal equipment failure | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Regular inspection of club kit to be carried out by instructors, the elected Gear Secretary and other experienced committee members. Any faulty or expired equipment will be removed immediately from the kit store. Club members should be regularly inspecting any personal equipment for damage and should avoid using equipment past its expiration date. Guides may provide their own equipment for participants use. | 1 | 3 | 3 |
| Climber falling because of personal knot failure | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Climbers are encouraged to ‘buddy check’ before each climb to ensure that all knots have been tied correctly. | 1 | 3 | 3 |
| Climber falling because of failure of belayers equipment | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Regular inspection of club kit to be carried out by instructors, the elected Gear Secretary and other experienced committee members. Any faulty or expired equipment will be removed immediately from the kit store. Club members should by regularly inspecting any personal equipment for damage and should avoid using equipment past its expiration date. | 1 | 3 | 3 |
| Inversion occurs when falling | Broken limbs, bruising, sprains, dislocations, shock | Climbers are encouraged to ‘buddy check’ before each climb to ensure that the climber is correctly tied in (i.e. tied into both loops of belay point). Ensure the climber knows what can lead in inversion upon falling. | 1 | 2 | 2 |
| Rope slips through belayers hands during a catch of a falling climber | Shock, anxiety    Broken limbs, bruising dislocations, sprains for climber | Belayers belaying ice climbers should be very competent at lead belaying. Ensure that the belayers attention remains on the climber for the entirety of their climb | 1 | 2 | 2 |
| Rope climber and belayer collide following a fall from a low height, injuries may be caused by the climbers ice spikes or axes | Bruising, sprains, dislocations, cuts, bleeding | Climbers and belayers will be taught the importance of climbing with someone of a similar weight, and should understand the dangers of falling low down. Helmets can reduce the risk of head injury. | 1 | 3 | 3 |
| Lead climber injured due to failure to place suitable first or second protection point | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Belayers should spot the climber up until they place the first bit of gear if they are on stood on the ground. Guides will teach gear placement to ice climbers | 1 | 3 | 3 |
| Lead climber falling because rope is too short and slips through belay device | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Tying a safety knot in the end of the dead rope to ensure it does not slip through the belay device. | 1 | 3 | 3 |
| Miscommunication between belayer and climber resulting in a large fall or the someone fall whilst they are not safe. | Broken limbs, sprains, bruises, dislocations, loss of consciousness, shock, death | Climbers should know commonly used terms such as ‘safe’, ‘on/off belay’. Walkie Talkies can be used in areas where it may be hard for climbers and belayers to communicate with each other. | 1 | 3 | 3 |
| Belayer hits into the rock/ice when a climber falls | Sprains, bruises, dislocations, shock, cuts | Belayers should avoid creating a belay point where they will be weighted before the anchor when belaying from the top. Belayers should wear suitable shoes and clothing to reduce the risk of injuries. | 1 | 2 | 2 |
| Injuries due to sudden changes in weather or extreme weather | Hypothermia, burial, death, shock, anxiety | Mountaineers should wear suitable technical clothing and bring spare layers. Guides should have appropriate first aid kits on them | 1 | 3 | 3 |
| Snow Blindness | Temporary or permanent eye damage or blindness | Snow goggles should be worn when necessary | 1 | 3 | 3 |
| Injury due to overexertion without a proper warm up or strengthening plan, climbing injuries for these reasons notably occur to fingers, wrists and shoulders | Temporary muscle or joint pain when doing activity, ligament, muscle or tendon damage | Participants should ensure that they are suitably warmed up before attempting technical or strenuous climbs. Training guidence can be provided by the Training and Competition Secretary. Participants should stop any activity which causes them pain and seek medical advice. | 2 | 2 | 4 |
| Bleeding from a graze or cut, bleeding due to climbing can commonly occur on fingers or hands | Spread of disease or illness | Participants should use a plaster, bandage or climbing tape to prevent the spread of blood to any climbing surface. Participants should tape any skin that is close to bleeding before it happens. | 2 | 2 | 4 |

**ADD MORE ROWS IF REQUIRED, THIS SPACE IS NOT LIMITING.**

1. **Risk Evaluation:**

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| Risk factor from assessment matrix | Level of risk |
| 1 - 2 | **LOW RISK:** no further control measures should be required at this time but ensure any in place are maintained and reviewed. |
| 3 - 4 | **MEDIUM RISK:** ensure that the suitable control measures are in place as described in the hazard assessment. You must continuously consider and implement additional control measures where possible. Do not do the activity if you are uncomfortable with the equipment, guidance and support available. |
| 6 - 9 | **HIGH RISK: DO NOT DO ACTIVITY** until risk has been considered, reduced and additional control measures have been enforced. You must identify the additional, necessary control measures and re-evaluate the activity to understand if it is appropriate. Speak to the Activities department for advice. |

1. **Supervision / Safety of the Activity**

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| **What supervision is required for the activity?** Coach / leader registration via the student portal is to be completed for all coaches and activity leaders, including volunteers and current students.  All winter mountaineering trips done by the club make use of experienced guides with the necessary qualifications.  **What appropriate ratio of coach / leader to student is required for the activity?**  The club will follow the instructions of experienced and qualified guides when planning the size group activity. More technical activities will have less students per guide.  In the past the following ratios have been used:  Winter Walking – 1:8  Winter Mountaineering – 1:4  Ice Climbing – 1:2  **What First Aid provision is required?** If not required within the student group, how / where can you access this?You can source assistance with First Aid training from the Activities department if it is identified that provision is needed.  Each group should have there own first aid kit in one member’s bag, other group members should know whose bag this is. Each group will have at least one, but ideally multiple trained first aiders within the group. Group members should know how to call for emergency services.  Guides will also have appropriate first aid qualifications and carry a first aid kit.  **What safety equipment do you need to provide for this activity to go ahead?**  Guides will provide safety equipment, however the club may provide helmets.   * Ensure that you and your members are aware of the Cardiff University Students’ Union Emergency Procedures – these can be found on ‘committee resources’ on cardiffstudents.com. * **All incidents, accidents and near misses** are required to be reported / recorded to the Activities department as soon as possible after the event. |

1. **IMPLEMENT THE CONTROL MEASURES** detailed in this assessment and communicate the findings to members via Operating Procedures. A template can be found on ‘committee resources’ on cardiffstudents.com.

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| **What do you need to tell your members / the participants following this assessment? Where can they find your Operating Procedures?**  Make them aware of where to find the risk assessment (web page), this is also where the operating procedure will be.    Ensure that members are aware of the risks associated with climbing. |

1. **Review**

All safety-related documents must be reviewed each year by incoming committees and activity leaders. They also need reviewing in the event of a serious accident / incident or should any hazards / control measures change.

Each time this document is reviewed or updated, please complete and sign the below. Within the document, please note any additions with the date it was updated in brackets.

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| **NAME** | **COMMITTEE POSITION** | **REVIEW DATE** |
| Rebecca Carman | Secretary | 17/09/2024 |
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1. **Activities Department Contacts for Student Groups**

Athletic Union – [AthleticUnion@cardiff.ac.uk](about:blank)

Guild of Societies – [Societies@cardiff.ac.uk](about:blank)

Volunteering – [Volunteering@cardiff.ac.uk](about:blank)

1. **Enjoy your activity!**