



CURRICULUM

Übungsleiter
Snowshoeing

Winter 2019

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A) Educational objective

Übungsleiter for Snowshoeing are experienced volunteer snowshoers who have the skills to guide groups responsibly on snowshoe tours that they have chosen themselves. They are aware of the risks involved in mountain travel and able to help efficiently in case of emergency. *Übungsleiter* for Snowshoeing are also able to communicate basic skills for agreeable snowshoeing to beginners and intermediate snowshoers while being aware of the risks involved. The training for *Übungsleiter* for Snowshoeing primarily focuses on guiding and leadership skills.

Course volume: ca. **56 units** on 5 days.

B) Requirements

- Experience in planning snowshoe tours and in snowshoeing. Documentation of tours: „Indicate 6 snowshoe tours of a duration of at least 2 hours which you have completed during the last two years (without a guide or other help). Please name your partner and give the date (mm-yy) in brackets.“
- Technique: Surefootedness with snowshoes in moderate steep terrain (up to 30 degrees) and traversing such terrain. Controlled descending.
- Endurance and fitness: Good physical fitness. Tours of up to 4 hours net walking time are expected to be well within the limits of the participant’s performance capacity.
- Basic emergency equipment skills (beacon, shovel, probe)
- Basic skills in evaluating touring terrain and in track setting technique
- Basic knowledge of the decision making and procedure strategy Stop or Go®.
- Minimum age: 16 years.

C) 3 stages in the acquisition of competences

The letters (U), (A) and (T) indicate the extent to which the participants need to acquire the course content. The three stages – represented by the three letters – are defined as::

(U) „Understanding“:

- Comprehending and grasping meaning
- Having knowledge about ...

Prerequisite for this stage is „knowing“:

knowing → understanding

(A) „Applying“:

- Interpreting facts, recalling relevant knowledge and transferring it to other situations
- Using acquired tools e. g. being able to work with decision-making strategies.

Prerequisite for this stage is „understanding“:

understanding → applying

(T) „Teaching“:

- Being able to communicate acquired knowledge according to its meaning
- Being able to teach competences during guided section tours and to instruct at training events.

Prerequisite for this stage is „Understanding“ and „Applying“:

understanding/applying → teaching

The stage of competence to be reached (U, A or T) is indicated in the following pages. The method of teaching depends on the contents and will be one of the following: small groups, hands-on exercises, presentations, lectures and peer teaching/demonstration lessons.

D) Teaching objectives & methods

1. TOUR PLANNING [4 units]

Participants ...

- ✓ can choose and plan a tour suitable for the conditions and the group, using the weather forecast and the avalanche bulletin, the topographic map and information from the internet and guide books (A)
- ✓ know how to use the resources of alpenvereinaktiv.com for planning tours (A)
- ✓ are able to write a complete and clear description for a section tour and can chair and facilitate a planning meeting. (A)

Methods:

- [Indoors/group]
 - Groups of 2 participants plan a specific tour using map, coordinate scale and the form „Tourenplanung-Formular Schneeschuhwandern“
 - Plan a specific tour using the „Tourenplaner“ of alpenvereinaktiv.com (if a computer and WiFi are available).

2. INDIVIDUAL & GROUP

Participants...

- ✓ know about the advantages of small and the disadvantages of large snowshoeing groups; they know the recommendation by the ÖAV for the maximum group size of snowshoeing groups (8 +1) (A)
- ✓ can communicate decisions and leadership measures clearly and unmistakably (T)
- ✓ know about the influence of psychological processes and group dynamics on the readiness to take risks, on decisions and behavior (V)
- ✓ knows the „psychological danger signals“ listed in the „Mental-Check“ (mental check) and can detect them using self-reflection and counter a dangerous increase in risk (A)

Methods:

- [Indoors/plenum]
 - Lecture „Ski Touring“ (ppt)
 - Discussion and additions regarding the topic of snowshoeing
- [Outdoors/group]
 - Use the „Mental-Check“ in a specific situation („Thumb check“).

3. EQUIPMENT

Participants ...

- ✓ can draw up an equipment list for snowshoeing and know the most important quality characteristics of the respective items (T)
- ✓ know the emergency equipment as recommended by the ÖAV and its quality standards. (T)

Methods:

- [Indoors/plenum]
 - Discussion of the concrete equipment list (sitting circle, „equipment bazaar“)

4. ORIENTATION & NAVIGATION [4 units]

4.1. Map

Participants ...

- ✓ know the essential characteristics of a topographic map and the corresponding fundamental terms such e.g. declination, relief, key or scale. (U)
- ✓ can orient a topographic map (T)
- ✓ know the most important symbols of a topographic map (U)
- ✓ can determine their position in the terrain accurately enough (using an altimeter). (A)
- ✓ can pinpoint points, lines and surfaces from the map in the terrain and vice versa as well as differentiate between different shapes of terrain (A)
- ✓ can infer accessibility, walkability, steepness, exposition and shape of terrain which is concealed from view (T)
- ✓ can determine UTM coordinates on the map and also transfer them to the map (A)
- ✓ are familiar with the online maps and gradient layer in alpenvereinaktiv.com. (U)

Methods:

- [Indoors/group]
 - Teach basic map skills in groups („table of maps“)
 - Explain and practise how to determine and transfer UTM coordinates
 - Plan a specific tour using the map and the coordinate scale (Planzeiger)
- [Outdoors/group]
 - Various orientation tasks on terrain

4.2. Altimeter

Participants ...

- ✓ can calibrate their altimeters/multifunctional watches (T)
- ✓ use points of reference in order to minimise errors when determining elevation by barometer (T)
- ✓ know difference between barometric and geometric elevation determination. (U)
- ✓ know the connection between air pressure and elevation and can interpret it. (A)

Do not teach:

- X Orienteering compass
- X GPS

Methods:

- [Indoors/group]
 - Give information during tour planning
- [Outdoors/group]
 - Calibrate the altimeter at the start (equipment check)
 - Use the altimeter for determining the current position.

4.3. Smartphone

Participants ...

- ✓ can use the app „alpenvereinaktiv“ for orientation and navigation (A)
- ✓ can download tours and map segments for offline use (A)
- ✓ know how to use their smartphones to energy saving way. (A)

Methods:

- [Indoors/group]
 - Introduce app functions (menu)
 - Download map segments
- [Outdoors/group]
 - Use the app **alpenvereinaktiv.com** for determining the current position during hiking.

5. WEATHER [2 units]

Participants ...

- ✓ know sources for reliable (mountain) weather forecasts in Austria (T)
- ✓ can read, understand and apply a weather forecast for the respective tour (A)
- ✓ know the „Alpenverein-Wetterdienst“ (Alpenverein weather service) on **alpenvereinaktiv.com** resp. **alpenverein.at** (A)

- ✓ know about the utmost importance of visibility during snowshoeing tours. (A)

Do not teach:

- X Physical/geodynamic processes

Methods:

- [Indoors/group]
 - Get and compare weather reports from different sources
- [Indoors/plenum]
 - Lecture „Weather“ (ppt)
- [Outdoors/group]
 - Compare weather forecast and development of actual weather.

6. LEADING [30 units]

6.1. Welcoming address and equipment check

Participants...

- ✓ can communicate current information regarding avalanche bulletin, weather, destination clearly and concisely, proving their prudence and inspiring confidence (A)
- ✓ can inquire after safety-related equipment in a structured manner, thus finding and remedying possible deficiencies. (T)

Method:

- [Outdoors/group]
 - Have participants deliver welcome addresses and equipment checks. Give immediate feedback.

6.2. Avalanche beacon check

Participants...

- ✓ master performing the „full“ and the „short“ beacon check. Participants know: „All members of my group carry a fully functional beacon on their body, switched to transmit.“ (A)

Method:

- [Outdoors/group]
 - Demonstrate and explain. Have participants perform the check. For training purposes always perform the full beacon check at the start.

6.3. Uphill technique

Participants...

- ✓ can give advice on efficient uphill travel on snowshoes (T)
- ✓ can demonstrate and explain the proper technique for rounded turns and traverses and can elaborate thanks to specific exercises. (T)

Method:

- [Outdoors/group]

- Demonstrate and explain in suitable terrain. Have participants imitate and repeat. Participants step into trainer's role.

6.4. Downhill technique

Participants ...

- ✓ are familiar with the downhill techniques for snowshoeing (walking, running, sliding) and can teach them. (L)

Method:

- [Outdoors/group]

- Demonstrate and explain in suitable terrain. Have participants imitate and repeat. Participants step into trainer's role.

6.5. Walking speed

Participants ...

- ✓ know about the importance of a walking speed appropriate for the group when leading hiking tours for the ÖAV, in order to promote a positive touring experience (A)
- ✓ can switch from their „private“ snowshoeing speed to a generally slow pace suitable for leading groups on tours. (A)
- ✓ make breaks in good time, taking the terrain into account. (A)

Method:

- [Outdoors/group]

- Show and explain on suitable terrain. Have participants follow the example. Repeat. Participant steps into trainer's role.

6.6. Spacing

Participants...

- ✓ can put the Stop or Go[®] recommendation (standard procedure) of „10 m spacing (A) distances at 30° or more“ into practice as is appropriate to the situation. They know the reasons for this recommendation and also know the exceptions.

Method:

- [Outdoors/group]

- Demonstrate and explain in suitable terrain. Have participants follow the example. Repeat. Participants step into trainer's role.

6.7. Making the most of the terrain – „Setting track“

Participants...

- ✓ can recognise favourable and unfavourable shapes of terrain (A)
- ✓ observes the surroundings continuously – what is above me, what is below me, terrain traps? (A)
- ✓ can set a safe and efficient uphill track („comfort track“) and judge existing tracks critically. (A)

Method:

- [Outdoors/group]

- Participants take turns leading and setting track, trainer comments and corrects. For the sake of practice, a new track is to be set (most of the time) even if there is an existing one.

6.8. Decision making using Stop or Go[®]

Participants...

- ✓ understand the structure and internal logic of Stop or Go[®] (standard procedures, (A) check 1, check 2, go-factors)
- ✓ can categorize the steepness of a slope according to the 4 gradient classes : (A)
below 30°, 30-34°, 35-39°, 40° and above)
- ✓ can detect (“yes/no“) the alarm signs listed in check 2 („Stop or Go[®] danger patterns“) („yes/no“) and assess their specific relevance („dangerous for me?“) (A)
- ✓ know the definition of „densely covered in tracks“ and can identify the relevant (T) passages in the terrain; can differentiate thickly populated, dense „forest“ from single trees respectively slopes sparsely populated with trees and can identify “melt-freeze crusts”
- ✓ can make decisions using Stop or Go[®] in a structured manner. (A)

Do not teach:

- ✗ 10 typical danger situation (according to the Tyrolean avalanche bulletin)
- ✗ Other reduction methods (Snow Card, etc.)

Method:

- [Outdoors/group]

- Demonstrate and explain in suitable terrain. Participants follow the example. Repeat. Participants take over trainer's role.

7. SNOW & AVALANCHES [4 units]

7.1. Lawinenlagebericht (LLB)

Participants...

- ✓ know the most important sources for avalanche bulletins (T)
- ✓ know the definition of the avalanche hazard levels and know about the exponential increase of the risk potential (A)
- ✓ can understand the information on avalanche prone locations in the avalanche (A) bulletin and can locate them in the terrain
- ✓ can understand the information on causes of danger in the avalanche bulletin (A) und recognise them in the terrain.

Method:

- [Indoors/plenum]
 - Lecture „Skitouren“ (ppt)
- [Indoors/group]
 - Discuss the specific avalanche bulletin while planning a tour

7.2. Snow

Participants...

- ✓ can differentiate between loose snow avalanche, slab avalanche and gliding (T) avalanche and understand their formation
- ✓ can recognise freshly fallen snow, wind-transported snow, wet snow, firn, depth (A) hoar and surface hoar and knows the conditions for their formation
- ✓ know the term „critical quantity of new fallen snow“ and its definition (U)
- ✓ know about the paramount importance of the alarm sign „recently wind-transported snow“ and can differentiate between unbounded „loose“ powder snow and „soft but bounded“ wind-transported snow. (A)

Do not teach

- X Digging a snow profile
- X Compression test (CT, ECT), rutschblock test, “Nietentest”
- X Systematic snowpack analysis and interpretation

Methods:

- [Indoors/plenum]
 - Lecture „Ski Touring“ (ppt)

- [Outdoors/group]
 - Give explanations during tours

8. RESCUE TECHNIQUE [5 units]

Participants...

- ✓ are able to help efficiently in case of an avalanche accident and to put the emergency algorithm into practice as required by the situation (A)
- ✓ can fulfill their role as tour leader competently and coordinate their group appropriately (A)
- ✓ can locate two buried subjects in a depth of about one meter within 10 minutes (A) (“probe hit”) and excavate one buried person („head/mouth&nose free of snow”)
- ✓ know the advantages and the mode of operation of avalanche airbag systems (U)
- ✓ can teach a group of beginners (6 people) within an hour how to rescue a fully (T) buried person (about 1 m deep) in about 10 minutes (= „head/mouth&nose free”).

Do not teach:

- X Open probing, deep burials
- X Three circle search method, micro search strips
- X Avalanche ball, Avalung
- X “Biwaksackschleife” (provisional evacuation by sliding injured person wrapped in a bivvybag)
- X Building a bivouac shelter.

Methods:

- [Indoors/plenum]
 - Lecture „Ski Touring“ (ppt)
- [Outdoors/group]
 - Teach management of avalanche emergencies (basic operating procedure)
 - Improvise avalanche accident scenario time permitting

9. LAW & INSURANCE [2 units]

Participants...

- ✓ know the free of charge „Notfall-Hotline“ (emergency hotline) of the Alpenverein and the services and support it offers and they know when and how to use it (U)
- ✓ understand that they are only responsible under criminal and/or civil law if negligent behaviour on their part can be proven (U)
- ✓ know that all Alpenverein tour guides resp. all officials are insured against third-party risk and have legal protection insurance. Consequently, they will not suffer any financial damage even if negligence should be proven (A)
- ✓ is aware that the third party risk insurance does not protect against the consequences of a criminal conviction and that the latter may entail a prison sentence resp. a fine calculated of a certain number of daily rates of pay („Tagessatz“). Depending on the income, this may be between € 4,- and € 5.000,-
- ✓ know the insurance benefits offered by the Alpenverein relevant to their situation and know where to find detailed information (U)
- ✓ understands the role and duty of the authorities to record and present the facts after a mountaineering accident (U)
- ✓ know how to deal with the authorities and are familiar with the recommendation of the Alpenverein to refrain from police interrogation immediately after the accident. (T)
- ✓ understand the legal terms „Fahrlässigkeit“ (negligence), „Kausalität“ (causation), „Maßfigur“ (standard conscientious tour leader), „Einlassungsfahrlässigkeit“ (reckless endorsement), „Auswahlverschulden“ (culpa in eligendo – fault through a poor choice of one’s vicarious agent) und „Verkehrsnorm“ (common standard of generally accepted behaviour). Participants are aware of the main differences between criminal and civil law. (U)

Do not teach:

- X In-depth knowledge about all the insurance benefits of the Alpenverein
- X Detailed legal knowledge.

Methods:

- [Indoors/plenum]
 - Option 1: Present „Rechts- und Haftungsfragen“ (Questions of law and liability) (ppt) followed by discussion.
 - Option 2: Have an FAQ session or work through case study with group.

10. ECOLOGY [4 units]

Participants...

- ✓ learn about ecological processes in the alps (U)
- ✓ get to know about typical wildlife and plants while being on walking trails (U)
- ✓ are able to lead groups in ecological endangered terrain (A)

Method:

- [Outdoors/group]
 - Show and explain on suitable terrain.

11. DEMONSTRATION LESSONS [5 units]

On the last day of the course, participants give demonstration lessons either at differently themed stations or during a demonstration snowshoe tour, revising and practicing essential leadership qualities. Participants receive feedback on their performance promptly.

The topics listed below are discussed during the demonstration lessons and revisions. There will be time for questions and discussions should anything have remained unclear. Presentations in front of groups are practiced.

- Avalanche bulletin
- Avalanche beacon training
- Basic map reading
- Correct tour planning
- UTM coordinates
- Avalanche beacon check
- Equipment for snowshoeing
- Ascending, descending, traversing
- Basic emergency equipment
- Emergency algorithm

E) Evaluation of the participants

Successfully completing the training course „Übungsleiter Schneeschuhwandern“ qualifies the participants to guide and instruct. It is the responsible trainer who decides if a participant has passed or failed. The criteria for a pass respectively the key qualifications are communicated at the beginning of the course (resp. are available online.)

Key qualifications

During the entire period of the course, participants are observed and evaluated using the following key qualifications. (The order in which the key qualifications are listed below does not imply order of importance.):

- (Q 1) Fitness & sports motor skills:** The participant possesses the necessary physical (endurance, strength, technique) and psychological (courage, prudence) characteristics and skills necessary for successfully practising the sport. Regarding endurance/fitness, a tour of 4 hours total walking time is expected to be well within the limits of the participant's performance capacity.
- (Q 2) Expertise:** The participant is sufficiently competent in order to guide a group on backcountry snowshoe tours or in order to teach a group basics skills for agreeable snow shoeing while being aware of the risks involved. In order to prevent accidents the participant can put into practice the decision making algorithm (check 1 and check 2) and the Stop or Go © standard procedure. The participant is able to put into practice the basic operating procedure for avalanche emergencies and can coordinate a group in order to help efficiently in case of an avalanche accident.
- (Q 3) Risk management & self assessment:** The participant possesses pronounced risk awareness and displays generally prudent behaviour. They have realistic self assessment and one can trust that they will only take responsibility for those guided tours and courses for the Alpenverein that they can definitely cope with.
- (Q 4) Willingness to learn & learning progress:** The participant is curious and very eager to improve their know-how and to share their personal experience. They can quickly and successfully put demonstrations, explanations, directions and corrections into practice and integrate them into their behavioural repertoire.
- (Q 5) Social skills:** The participant is sufficiently emphatic and thoughtful, able to communicate with others and is appreciative towards them, has leadership qualities and is a team player. These skills are to be evaluated taking into account the specific educational objective.

pass/fail

Participants of the course „ÜL Schneeschuhwandern“ have passed if the responsible trainer gets a „positive“ impression in all 5 key qualifications. A “fail” – if the deficit in one key qualification is too pronounced – results in retaking the entire course. “Pass/fail” is communicated on the last evening of the course, possibly on the last day of the course.

A) Time Table

	Day 1	Day 2	Day 3	Day 4	Day 5			
7:00	Arrival							
8:00								
9:00								
10:00	Check in & move into accommodation Course opening	First Aid	Leadership Skills Orienteering	Leadership Skills Orienteering	Demonstration Lessons			
11:00								
12:00	Equipment check Methodological basics Leadership skills							
13:00								
14:00								
15:00					End of Course			
16:00	Break	Break	Break	Break	Departure			
17:00	Equipment	First Aid	Orienteering Weather	Law & Insurance				
18:00	Dinner	Dinner	Dinner	Dinner				
19:00								
20:00	Tour Planning	Tour Planning	Tour Planning	Pass/Fail				
21:00								
22:00								