



Australian Government

Department of Education, Employment and Workplace Relations

SISOSKT407A Overnight ski tour in difficult terrain using advanced ski touring skills

Release: 2

SISOSKT407A Overnight ski tour in difficult terrain using advanced ski touring skills

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to participate in overnight ski tours in difficult terrain using advanced ski touring skills. This may include non patrolled areas which are untracked and un-groomed.

Application of the Unit

This unit applies to those working as ski touring leaders who conduct overnight ski touring trips and activities in a range of non patrolled, untracked and un-groomed conditions with slopes angled up to and including 25 degrees. This unit also applies to leaders working for outdoor education or adventure providers; volunteer groups; not-for-profit organisations or government agencies.

Licensing/Regulatory Information

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.

1. Plan for the ski touring activity.

- 1.1. Identify and plan ***food and water requirements*** according to ***principles of nutrition*** and the conditions of the activity.
- 1.2. Address packaging and storage considerations of different foods when menu planning.
- 1.3. Identify an appropriate activity site and route according to ***contextual issues, relevant legislation and organisational policies and procedures***.
- 1.4. Access ***relevant sources*** to interpret ***weather and environmental information*** and determine activity plans.
- 1.5. Identify potential ***hazards*** associated with ski touring away from patrolled areas.

2. Select equipment.

- 2.1. Select ***equipment*** after consideration of construction features and contextual issues, and check serviceability.
- 2.2. Adjust and fit equipment, according to manufacturer's specifications to ensure ***comfort and safety***.
- 2.3. Select personal clothing according to location and activity requirements.
- 2.4. Pack and carry or tow an overnight pack or sled which includes clothing and ***minimum supplies*** to meet safety requirements and minimise hazards and emergencies.

3. Perform skiing techniques whilst ski touring.

- 3.1. Select and execute ***skiing techniques*** according to terrain, weather and ***snow conditions***.
- 3.2. Link together ***advanced turns*** through the fall-line under a ***range of snow conditions***, with speed and ***turn-shape*** for conditions and terrain.
- 3.3. Chose the angle of climb and selection of slope, and complete climbs, taking into account the terrain, weather and snow conditions.
- 3.4. Select the ***method of climbing and turning***

ELEMENT

PERFORMANCE CRITERIA

- according to ***skier's needs*** and contextual issues.
- 3.5. Adhere to safe ski touring practices and approach hazards in a safe manner, minimising ***risks*** to self and group where possible.
- 3.6. Take measures to guard personal safety and ***safety of others*** while skiing on difficult terrain.
4. Evaluate skiing activity.
- 4.1. Evaluate ***relevant aspects*** of the activity.
- 4.2. Identify improvements for future ski touring experiences.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- planning and organising skills to allocate and select relevant food, water, clothing and equipment for overnight activities
- communication skills to interact with other participants to maintain a positive and safe skiing environment
- problem-solving skills to respond to changing conditions and to determine techniques to use according to the difficult conditions
- numeracy skills to plan routes and calculate grid and magnetic bearings using a map and compass
- self management skills to:
 - review and reflect on own performance
 - set goals to improve technique
- literacy skills to analyse, interpret and apply weather and environmental information, relevant legislation and organisational policies and procedures
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies such as an avalanche, and personal health care.

Required knowledge

- legislation and organisational policies and procedures to enable safe conduct of all overnight ski touring activities in difficult terrain
- Alpine Responsibility Code, safe mountain travelling, and minimal impact codes to ensure safety and protection of environment
- equipment types, characteristics and technology used for ski touring and camping, the advantages and disadvantages, and factors affecting appropriate selection of equipment
- clothing requirements for outdoor activities and factors affecting appropriate clothing selection, such as layering and protective clothing
- advanced ski touring techniques in difficult terrain, including slopes angled up to and including 25 degrees
- principles of nutrition to maintain health and energy throughout the overnight trip
- weather and environmental information to ascertain possible conditions and their affect on the activity
- emergency procedures and potential hazards, such as avalanches, relevant to the location to ensure risk minimisation to self and group.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- plans equipment and supply requirements appropriate to the conditions and duration of the overnight ski touring activity
- applies to the full range of ski touring skills to and advanced level of technique when moving up and downill on slopes angled up to and including 25 degrees.
- evaluates and reflects on own skiing performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation in advanced overnight ski touring activities in non patrolled areas with untracked and un-groomed snow to demonstrate competency and consistency of performance
Assessment must also ensure access to:

- a suitable non patrolled ski touring location with untracked and un-groomed slopes angled up to and including 25 degrees
- ski touring, safety, first aid, overnight and navigation equipment
- resources and information to plan and prepare for the overnight ski touring activity.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- oral or written questioning to assess knowledge of overnight ski touring strategies and techniques
- observation of safe participation and demonstration of advanced ski touring skills, such as the application of a variety of climbing and turning methods while carrying a back pack or towing a sled in difficult terrain
- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

Industry has determined that this unit must be assessed with the following unit:

- SISOOPS202A Use and maintain a temporary or overnight site.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Food and water requirements may include:

- menu planning and preparation
- range of foods.

Principles of nutrition may include:

- food groups
- dietary guidelines
- individual food requirements and allergies.

Contextual issues may include:

- weather conditions, including times
- season
- transport
- location
- trip distance and duration
- group objectives
- group size.

Relevant legislation may include:

- occupational health and safety
- permits or permission for access
- environmental regulations.

Organisational policies and procedures may include:

- occupational health and safety
- use and maintenance of equipment
- communication protocols
- emergency procedures
- snowsport area signs and regulations
- Alpine Responsibility Code
- code of ethics.

Relevant sources may include:

- Bureau of Meteorology
- ski patrol
- land managers or agencies
- local knowledge.

Weather and environmental information may include:

- satellite images
- daily and weekly forecasts
- maximum and minimum temperatures
- event warnings
- river level
- synoptic charts.

Hazards may include:

- poor visibility

- temperature extremes
- difficult snow conditions
- dense vegetation
- group management hazards.

Equipment may include:

- towing skis
- ski boots
- ski poles
- ski bindings
- backpack or sled to carry overnight provisions
- overnight equipment
- navigation equipment
- sunglasses or goggles
- first aid equipment
- search and rescue equipment
- communications equipment.

Comfort and safety may include:

- length, weight and width of ski
- grip and glide zones of skis
- flex and shape of ski
- edges tuned
- free-heel
- longitudinal rigidity
- surfaces waxed and or cleaned
- length of poles and basket type
- bindings and boots in good working order.

Minimum supplies may include:

- waterproof clothing
- whistle
- food and water
- first aid kit
- map and compass
- stove and fuel
- torch
- space blanket
- repair kit
- small shelter
- sleeping bag
- sleeping mat
- snow shovel
- mobile phone or EPIRB or PLB.

Skiing skills must include:

- kick and tacking turns
- diagonal stride
- snow plough, glide, brake and turn
- step turns
- double pole
- side slipping
- herringbone
- traverse

- self arrest
- stopping
- stem-turns
- linked telemark turns or linked parallel turns.

Snow conditions may include:

- surface snow
- snow stability
- steepness of slope
- run-out
- terrain features
- visibility
- wind
- sun
- human alteration
- aspect
- vegetation.

Advanced turns may include:

- linked telemark turns
- linked parallel turns.

Range of snow conditions may include:

- powder
- corn
- crust
- soft, wet snow
- icy snow
- solid base with softening surface.

Turn-shape may include:

- long radius
- medium radius
- short radius.

Method of climbing and turning may include:

- kick-turns
- wedge turns
- parallel turn
- jump turns
- traverse
- side-step
- herringbone
- diagonal stride.

Skier's needs may include:

- physical
- psychological
- efficiency of energy
- locational goal.

Risks may include:

- hypothermia
- heat exhaustion
- injuries
- exhaustion
- lost party or party member
- equipment misuse.

Safety of others may include:

- speed
- distance from other skiers.

Relevant aspects may include:

- objectives
- planning process
- activity site
- weather
- equipment selection
- clothing selection
- food selection
- instructional content
- instructional technique
- assessment technique
- group feedback
- directing techniques
- rescue techniques employed.

Unit Sector(s)

Outdoor Recreation

Competency Field

Skiing - Ski Touring