



Australian Government

Department of Education, Employment and Workplace Relations

SISOCVE201A Demonstrate caving skills

Release: 2

SISOCVE201A Demonstrate caving skills

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to participate in supervised, minimal impact caving activities. This unit focuses on the demonstration of simple caving skills, such as navigation and laddering, in caves with frequently travelled tracks and marked routes.

Application of the Unit

This unit applies to those working as assistant outdoor adventure leaders, assistant caving guides, or support staff under supervision in caves with frequently travelled routes, tracks, markers and obvious natural surroundings.

This unit also applies to outdoor recreation 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 a caving activity. | <ul style="list-style-type: none"> 1.1. Identify <i>food and water requirements</i> according to <i>contextual issues</i> including suitability of food for the cave environment. 1.2. Access <i>relevant sources</i> to interpret <i>weather information</i>. 1.3. Identify an activity location and outline possible cave <i>features, hazards</i> and <i>risks</i> according to <i>relevant legislation</i> and <i>organisational policies and procedures</i>. 1.4. Establish and confirm an appropriate communication system to use in cave. 1.5. Obtain suitable <i>map or maps</i> and plan a route according to <i>map information</i>. 1.6. Identify emergency or contingency escape routes. |
| 2. Select equipment. | <ul style="list-style-type: none"> 2.1. Select <i>equipment</i> and check working order according to organisational policies and procedures. 2.2. Adjust and fit equipment to ensure comfort and safety. 2.3. Select personal clothing and footwear according to design and construction features appropriate to the location. |
| 3. Navigate in a cave. | <ul style="list-style-type: none"> 3.1. Follow a route in a cave, with and without a compass, demonstrating use of underground <i>navigation aids</i>. 3.2. Apply <i>techniques for estimating the distance</i> travelled. 3.3. Identify features in the cave using map and compass. 3.4. Select an efficient route suitable to the group and conditions. |
| 4. Move with minimal impact through a | <ul style="list-style-type: none"> 4.1. Move efficiently through cave and negotiate hazards and features according to organisational policies and |

ELEMENT	PERFORMANCE CRITERIA
cave.	procedures and relevant legislation.
	4.2. Apply <i>techniques and procedures to minimise cave impact</i> according to organisational policies and procedures and relevant legislation.
	4.3. Identify appropriate <i>techniques for newly discovered caves</i> .
	4.4. Identify types of damage and foreign material which should be isolated from the cave environment.
5. Navigate cave hazards and obstacles.	5.1. Negotiate cave hazards and <i>obstacles</i> according to caving techniques that minimise environmental damage.
6. Evaluate caving activity.	6.1. Evaluate <i>relevant aspects of the activity</i> .
	6.2. Identify improvements for future caving experiences.

Required Skills and Knowledge

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

Required skills

- literacy and numeracy skills to:
 - read and interpret maps
 - analyse weather information
 - calculate grid and magnetic bearings
- planning and organising skills to source and allocate resources and equipment
- communication skills to:
 - interact with group leader and other participants
- problem-solving skills to:
 - identify and negotiate cave hazards, features
 - follow a route and locate position in a cave using a map and compass

Required knowledge

- policies and procedures to enable safe conduct of all caving activities
- care and maintenance of caving equipment to ensure prolonged life span and safety requirements
- food and water requirements
- different types of caves, and associated features, hazards, risks, and how to apply minimal impact techniques
- safety procedures, such as common communication methods and calls used between participants
- navigation techniques to determine location, direction and potential hazards under supervision
- basic weather information to ascertain possible conditions and their affect on the activity
- emergency procedures and understanding of potential hazards relevant to the location to ensure risk minimisation to self and others.

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:

- applies relevant process to plan equipment and supply requirements appropriate for the conditions and duration of the caving activity
- navigates a route using a map and ensures movements are of minimal impact
- seeks advice and feedback from leader and evaluates and reflects on own caving performance to identify strengths, weaknesses and improvements.

Context of and specific resources for assessment

Assessment must ensure participation in multiple caving activities that are of sufficient breadth and duration to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information, such as maps and weather sources, to plan and prepare for the activity
- a suitable cave, with frequently travelled routes, tracks, markers and obvious natural surroundings
- a qualified leader or supervisor
- caving, navigation and safety equipment.

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 strategies used to plan a minimal impact caving route
- observation of safe participation and demonstration of simple caving skills, such as ascending and descending a ladder
- third-party reports from a supervisor detailing performance.

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

- SISOOPS201A Minimise environmental impact.

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
- cooking methods
- suitability of food for the cave environment.

Contextual issues may include:

- type of cave or site
- length of cave or site
- soundness of rock
- volume of water
- ease of access
- weather conditions at top and bottom

Relevant sources may include:

- bureau of meteorology
- media
- national parks and wildlife centres
- police.

Weather information may include:

- satellite images
- daily and weekly forecasts
- maximum and minimum temperatures
- weather warnings.

Features may include:

- squeezes
- rock piles
- sumps
- duckunders
- streams
- water pools
- mud
- crevasse
- loose floors
- false floors
- vertical pitches
- speleothems
- fossil and bone remains
- flowstone
- rimpools
- Dripholes

- oolite deposits
 - palaeokarst
 - soil crusts
 - cones
- Hazards** may include:
- rock piles
 - fauna and flora
 - sharp edges water
 - unstable floor or roof
 - darkness
 - elevated carbon dioxide levels.
 - vertical pitch.
- Risks** may include:
- hypothermia
 - flooding
 - exhaustion
 - dehydration
 - phobias
 - lost party member
 - stings or bites.
- 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
 - minimal impact caving codes
 - code of ethics
 - Australian Speleological Federation Codes and Guidelines.
- Map or maps** may include:
- detailed cave maps
 - developed long sections
 - cave maps with only wall details and labels
 - guide books and diagrams.
- Map information** may include:
- grid lines and numbers
 - magnetic declination
 - scale
 - map legend
 - significant cave features
 - topographic features
 - markers
 - distance estimations

- grid bearings
 - slope
 - water depth
 - speleothems
 - cross sections.
- Equipment*** may include:
- caving equipment
 - navigation equipment
 - safety and first aid equipment.
- Navigation aids*** may include:
- survey markers
 - track markers
 - lines
 - signs
 - arrows
 - compass
 - maps
 - air flow
 - water direction
 - man made infrastructure
 - significant cave features
 - speloethems.
- Techniques for estimating the distance*** may include:
- time
 - observation of surroundings
 - pacing.
- Techniques and procedures to minimise cave impact*** may include:
- caving slowly
 - avoiding sensitive areas
 - keeping to marked tracks
 - not touching anything except as required for safety purposes
 - avoiding disturbance to cave fauna, including bats, birds, nests, reptiles and arthropods
 - leaving bones where found or moving them carefully to side of track
 - carrying containers for removal of waste material, including all toileting waste
 - avoiding unnecessarily eating in a cave
 - avoiding strong smelling or messy food
 - eating over a container.
- Techniques inside caves*** may include:
- bridging
 - squeezing
 - crawling
 - rock scrambling
 - swimming

Obstacles may include:

- climbing
- chimneying
- wading.
- narrow passages
- water
- speloethems
- vertical squeeze.

Relevant aspects of the activity
may include:

- planning process
- factors affecting selection of equipment
- navigation and laddering skills.

Unit Sector(s)

Outdoor Recreation

Competency Field

Caving