



Australian Government

Department of Education, Employment and Workplace Relations

SISOMBK201A Demonstrate basic off-road cycling skills

Release: 2

SISOMBK201A Demonstrate basic off-road cycling skills

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to participate in off-road cycling activities under supervision. This unit focuses on the demonstration of basic off-road cycling skills on gravel roads and single tracks with easy to intermediate terrain.

Application of the Unit

This unit applies to those working as assistant off-road cycling guides or support staff under supervision in controlled conditions, including easy to intermediate terrain.

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

SISOCYT202A Demonstrate basic cycling skills

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.

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|---|--|
| 1. Plan for the off-road ride. | <p>1.1. Identify <i>food and water requirements</i> according to <i>principles of nutrition</i>, ride duration and what is able to be carried on a cyclist.</p> <p>1.2. Select routes that minimise damage to the environment according to <i>contextual issues, relevant legislation</i> and <i>organisational policies and procedures</i>.</p> <p>1.3. Identify potential <i>hazards</i> and <i>obstacles</i> associated with off-road cycling and procedures to minimise <i>risks</i>.</p> |
| 2. Select and check equipment. | <p>2.1. Select and set up a <i>bicycle</i> ensuring it is <i>correctly proportioned</i> according to rider and <i>terrain</i> requirements.</p> <p>2.2. Select off-road cycling <i>equipment</i> and protective clothing and footwear according to expected weather conditions.</p> <p>2.3. Use <i>spare and tools</i> to perform routine checks and maintenance on the bicycle.</p> <p>2.4. Identify <i>comfort items</i> to improve ride.</p> <p>2.5. <i>Load</i> an off-road bicycle on to a vehicle, where required.</p> |
| 3. Apply basic off-road cycling skills. | <p>3.1. Adopt a comfortable cadence for the terrain encountered to enable safe and efficient <i>riding skills</i>.</p> <p>3.2. Maintain a straight line when riding on straight gravel roads.</p> <p>3.3. Adopt correct posture for descents, uphill riding and bumps, potholes, ruts, rocks, logs, man-made objects.</p> <p>3.4. Navigate route and apply efficient <i>cornering techniques</i>.</p> <p>3.5. Adjust tyre pressure according to the terrain and organisational policies and procedures.</p> <p>3.6. Survey track to identify and negotiate hazards and</p> |

ELEMENT**PERFORMANCE CRITERIA**

- obstacles, minimise risks and take measures to guard personal and group safety.
- 3.7. Conduct routine and non-routine bicycle *maintenance* checks and repairs.
4. Evaluate the cycling activity.
- 4.1. Evaluate *relevant aspects* of the off-road cycling activity.
- 4.2. Identify improvements for future off-road cycling activities.

Required Skills and Knowledge

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

Required skills

- problem-solving skills to:
 - negotiate hazards and obstacles
 - modify cycling technique to account for changes in terrain
 - conduct pre and post cycling checks and maintenance on bicycle
- planning and organising skills to source and allocate bicycle and equipment to enable safe off-road cycling
- problem-solving skills to navigate the chosen route
- first aid and emergency response skills appropriate to the location to enable initial response to emergencies and personal health care.

Required knowledge

- legislation and organisational policies and procedures and rider etiquette to enable safe conduct of all off road cycling activities
- minimal impact cycling codes to ensure protection of the environment
- equipment and bicycle types, construction features, characteristics and technology used for off-road cycling
- personal and protective cycling gear and the design and or construction features that make it appropriate for off-road cycling activities
- maintenance tools and spare parts to conduct routine and non routine maintenance checks and repairs
- cycling techniques applicable to different terrain
- hazards, obstacles and risks associated with off-road cycling and how to negotiate these
- weather and environmental information to ascertain possible conditions and their effect on the activity
- emergency and first aid procedures 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:

- plans equipment and supply requirements according to the conditions
- applies riding skills to safely negotiate route and identify and negotiate hazards, obstacles and risks while maintaining personal and group safety
- uses tools and spare parts to perform routine and non-routine checks and maintenance on the bicycle to ensure it is correctly proportioned and in safe working order
- evaluates and reflects on own off-road cycling performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation in multiple off-road cycling activities on easy to intermediate terrain types to demonstrate competency and consistency of performance

Assessment must also ensure access to:

- an off-road cycling location with gravel roads, single tracks and easy to intermediate terrain to allow cyclist to demonstrate a variety of techniques
- a qualified leader or supervisor
- off-road cycling, navigation, tools, spare parts and safety equipment
- resources and information to plan and prepare for the 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 and or written questioning to assess knowledge of potential hazards, obstacles and risks associated with off-road cycling
- observation of safe participation and demonstration of off-road cycling techniques over easy to intermediate terrain
- observation of dealing with hazards, obstacles and

contingencies, such as bicycle or equipment failure and change in conditions

- observation of conducting routine and non-routine bicycle maintenance checks and repairs
- 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:

- SISONAV201A Demonstrate navigation skills in a controlled environment
- SISONAV302A Apply navigation skills in an intermediate environment.

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 bicycle and equipment
 - communication protocols
 - code of ethics.
- Hazards*** may include:
- temperature extremes
 - slippery or unstable terrain
 - dangerous animals and insects
 - stinging trees and nettles
 - dense vegetation
 - group management hazards.
- Obstacles*** may include:
- creeks
 - tree branches
 - ruts
 - logs
 - rocks
 - bumps
 - berms
 - depressions and pot holes

- Risks** may include:
- bridges
 - drainage grates
 - loose surface.
 - hypothermia
 - heat exhaustion
 - injuries
 - exhaustion
 - lost party or party member
 - equipment failure.
- Bicycle** may include:
- cross country mountain bike
 - full rigid - no suspension
 - head tail - front suspension only
 - full suspension
 - mountain bikes
- Correctly proportioned** may include:
- frame size
 - saddle position and height
 - handlebar height and width
 - distance from saddle to handlebars
 - position of gears and breaks
 - suspension set up.
- Terrain** may include:
- easy to intermediate terrain with moderate inclines
 - sloping terrain
 - small sections of rocky areas and sand
 - gravel roads and single tracks
 - ruts
 - shallow water crossings, with smooth bottom
 - small tree roots and logs
 - man made features.
- Equipment** may include:
- helmet
 - gloves
 - protective eyewear
 - lights
 - reflectors
 - bright and protective clothing
 - bell
 - hydration system
 - maps
 - first aid kit for off-road cycling.
- Spares and tools** may include:
- hanger
 - tube

- tyre levers
 - puncture repair kit
 - mini pump
 - allen keys
 - multi-tool.
- Comfort items*** may include:
- gloves
 - padded shorts
 - glasses or goggles.
- Load*** may include:
- trailer
 - roof rack
 - bike rack.
- Riding skills*** may include:
- ascending
 - descending
 - controlled line
 - braking
 - cornering
 - changing gears.
- Cornering techniques*** may include:
- lofting front wheel
 - picking your line
 - braking early
 - start wide
 - outside foot down
 - looking as far ahead as possible
 - entering wide
 - cutting to the apex
 - exiting wide with outside pedal down.
- Maintenance*** may include:
- repairing punctures
 - lubricating chain
 - cleaning
 - adjusting gears.
 - adjusting brakes
 - cleaning cables.
- 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

Mountain Biking