

ASSESSMENT GUIDELINE

Mountain bike on easy to intermediate terrain.

Unit Standard: 20137

Level: 1 Credit: 1 Version: 1
Published by Sfrito 2005

Purpose:

People credited with this unit standard are able to: prepare for mountain biking on easy to intermediate terrain; complete mountain bike rides on non-sealed surfaces of easy to intermediate terrain; and demonstrate responsible environmental and safety practices.

Special Notes:

1. The bike is suitable if it is road worthy and has a range of gears, and front and rear brakes.
2. Suitable safety helmet for cycling must be worn.
3. For assessment purposes at least three rides lasting at least one hour each must be completed.
4. The rides should be done under supervision, however the role of the supervisor is to participate and only provide leadership if events occur beyond the requirements identified within the unit standard.
5. *Easy to intermediate* terrain is terrain that ranges from flat, smooth, wide tracks through to steep slopes (10-20 degrees) with loose track surface.
6. All activities must comply with any relevant environmental, legislative and/or regulatory requirements set out in the *New Zealand Environmental Care Code*, Health and Safety in Employment Act 1992, Injury Prevention, Rehabilitation, and Compensation Act 2001, and their subsequent amendments. The *New Zealand Environmental Care Code* is available from the Department of Conservation, Head Office, PO Box 10420, Wellington.
7. Mountain Bike New Zealand's *Off Road Code* can be used instead of the *New Zealand Environmental Care Code*. The *Off Road Code* is available from Mountain Bike New Zealand, PO Box 1057, Wellington, <http://www.mountainbike.co.nz/nzmba/>
8. There are minimum assessor requirements for assessment against this unit standard. The details of these requirements are available on the Sfrito website <http://www.sfrito.org.nz/>.

Overview of assessment:

This assessment has 3 tasks -

- Task 1 : Demonstrate background knowledge for mountain biking(written or oral questions)
- Task 2 : Get yourself and your bike ready for mountain biking
- Task 3: Complete 3 mountain bike rides (each a minimum of 1 hour continuous duration)

Notes to Assessor:

1. The assessor should choose 3 contrasting rides with different terrain, location and conditions.
2. The assessor should brief the candidates on each of the different routes before the trip, candidates could then either answer oral questions or written questions in Task 1 on the possible hazards that could be encountered and equipment required.
3. With regard to special note 3, the candidate is required to show evidence that they have the experience to perform to the standard required through either logbooks, attestation or practical demonstration. At least one trip of one hour is required for the assessment - it is the assessor's role to decide whether further assessment is required to fulfill the criteria.
4. The grading system of Beginner, Intermediate and Expert has been replaced in many areas by a 6 point grading system as follows:

| Grade | Description | Previously graded as |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1 | Flat, smooth, wide track or gravel road. Suitable for all beginners. | Beginner or Easy |
| 2 | Gentle slopes (10 degrees maximum), some pot holes and rocks to avoid, 1-3m wide. Requires attention but possible by most beginners | Beginner or Easy |
| 3 | Challenging riding with steep slopes and/or tricky obstacles, possibly narrow with drop-offs and tricky stream crossings, etc. Requires riding experience for most. | Intermediate |
| 4 | Steep slopes (10-20 degrees), loose track surface, many objects to jump, ride over or avoid. Probably easier to walk. | Expert or Experienced |
| 5 | Very steep (up to 30 degrees), many large difficult obstacles, sharp turns, dangerous drop-offs, logs, rocks and/or slippery roots. Crashes very likely, definitely easier to walk. Rated as for experienced riders. | |
| 6 | Trials skills needed to clear many gnarly obstacles. High risk level. Only a handful of riders in NZ enjoy this grade, apart from bike 'n' hike enthusiasts. | |

The new grading system consists of two parts:

1. OVERALL GRADE

The first number grades the overall difficulty of a ride, and takes into consideration several factors such as, track surface, length, number of tricky challenges, remoteness and navigational difficulty, risk, climatic extremes, slope and altitude gained in climbs.

2. MAXIMUM GRADE

The second number (which is in brackets) shows the technical difficulty of the hardest rideable section (or 'crux problem') of the ride. This section may be very short and can always be walked. It takes into account slope, track surface, complexity, minimum turning radius of corners, line of sight, length, potential fall height and risk of injury. Unquestionably unrideable obstacles such as swingbridges, fences, cliffs, marshlands, etc, are ignored here.

<http://www.mountainbike.co.nz/politics/articles/grading.htm>

Task 1 : Demonstrate background knowledge for mountain biking(written or oral questions)

Resources:

- 20137 Assessment Questions (attached at the end of this document)
- 20137 Model Answers (available from a Sfrito Client Liaison)

Instructions to candidate:

During this task you are required to:

- Identify appropriate equipment for an hour long mountain bike ride
- Explain the safety procedures and riding hazards associated with a chosen route

Element 1: Prepare for mountain biking on easy to intermediate terrain.

Element 3: Demonstrate responsible environmental and safety practices.

| Performance criteria | Evidence/Judgement |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1.1 Footwear and clothing worn are selected and their selection justified based on safety and suitability for the weather conditions and environment.</p> | <ul style="list-style-type: none"> • Candidates answers all questions in full • Answers match those supplied in the model answers |
| <p>1.2 Food and drink to be carried are identified and reasons for their selection are justified based on the length of the ride, the weather conditions and the environment.</p> | |
| <p>3.1 Rider safety procedures are demonstrated.</p> <p>Range: may include but is not limited to – procedure if lost, return times, meeting points, equipment failure, incident, accident.</p> | |
| <p>3.2 Riding hazards are identified.</p> <p>Range: may include but is not limited to – trees, ruts, drops, cliffs, loose surfaces, rocks, tree roots, logs, mud, water, sand.</p> | |

Task 2 : Get yourself and your bike ready for mountain biking

Resources:

- <http://www.ltsa.govt.nz/road-user-safety/cyclists/framework.html> – Helmet safety
- <http://www.bikewise.co.nz/default.asp>
- Candidate's bike, helmet
- Bike tools and maintenance gear such as spanners, allen keys, screwdrivers, chain break, puncture repair kit, pump, bike oil etc.

Instruction to candidate:

During the task you are required to:

- get ready with clothing and footwear for the bike trip
- demonstrate the correct fitting of a cycle helmet; and
- set up a bike correctly for yourself.

Element 1: Prepare for mountain biking on easy to intermediate terrain.

| Performance criteria | Evidence/Judgement |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1.1 Footwear and clothing worn are selected and their selection justified based on safety and suitability for the weather conditions and environment.</p> | <ul style="list-style-type: none"> • Footwear and clothing matches one set specified in Task 1. If weather conditions / environment are different to one of the examples given in Task 1, then candidate provides additional justification for the footwear and clothing worn. |
| <p>1.3 The helmet is fitted and worn correctly according to LTSA standards.</p> | <ul style="list-style-type: none"> • Ensure a snug fit on the head. • Helmet is positioned flat and square on the head protecting the forehead as well as the top of the head • Buckle is under the chin (can still breath and talk normally) • Adjust back straps so they meet chin straps just below each earlobe • Helmet is worn in this fashion for the entire ride. |
| <p>1.4 Bike selection and set up are demonstrated and meet the requirements of the terrain and rider.</p> <p>Range: may include but is not limited to – bike size, maintenance check, seat height, seat position, handlebar height, tyre pressure.</p> | <ul style="list-style-type: none"> • Candidate comes with a mountain bike that they can ride for the trip. • Conducts a maintenance and sizing check on their bike, covering: <ul style="list-style-type: none"> - Chain clean and re-oiled, free from grit/ sand etc - Front and rear brake pads have sufficient depth - Pedals are spinning smoothly - Tyres have sufficient tread - Tyre pressure appropriate for terrain - Seat height and position - Handlebar height set for comfort |

Task 3: Complete 3 mountain bike rides (each a minimum of 1 hour continuous duration)

Resources:

- Each candidate will need to have available:
 - Bike, helmet, and appropriate food and clothing for location and duration of ride.
- The assessor may need safety equipment, and other equipment dependant on the conditions and duration of the assessment which may include:
 - First aid kit, puncture repair kit, tyre pump, cell phone, spare warm clothing, thermos with a hot drink, extra food.
- http://www.bikewise.co.nz/bike_info/pro_riding_tips/default.asp – Off-Road Code

Instruction to candidate:

During this task you are required to:

- Demonstrate that you can choose an appropriate bike for a specified mountain biking trip and safely make set up adjustments to suit your ability and size.
- Complete at least 3 off-road rides of a minimum of one hour duration each
- Demonstrate the following skills during the three rides you need to:
 - Choosing uphill and downhill controlled lines
 - Changing gear for appropriate terrain
 - Braking and cornering
 - Pacing yourself to complete the ride comfortably
- Behave in a safe and environmentally friendly way

Element 2: Complete mountain bike rides on non-sealed surfaces of easy to intermediate terrain.

Element 3: Demonstrate responsible environmental and safety practices.

| Performance criteria | Evidence/Judgement |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>2.1 Safe and efficient riding skills are demonstrated.</p> <p>Range: avoiding obstacles, ascending, descending, maintaining controlled lines, braking, cornering, changing gears.</p> | <ul style="list-style-type: none"> • Candidate participates in and completes a minimum of 3 different rides lasting at least one hour each. • All of the following riding skills are observed during each ride: <ul style="list-style-type: none"> - avoiding obstacles, - ascending, - descending, - maintaining controlled lines, - braking, - cornering, - changing gears. |

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>2.2 A comfortable pace is maintained for the terrain encountered.</p> | <ul style="list-style-type: none"> • Completes each of the routes comfortably, showing control of the bike at all times. Speed of riding should be appropriate for fitness and skill level. |
| <p>2.3 Rider etiquette is demonstrated.</p> <p>Range: other riders, other road users.</p> | <ul style="list-style-type: none"> • Other track users are treated with consideration and care, the rider has the necessary skill and ability to move clear of all users. |
| <p>3.1 Rider safety procedures are demonstrated.</p> <p>Range: may include but is not limited to – procedure if lost, return times, meeting points, equipment failure, incident, accident.</p> | <ul style="list-style-type: none"> • Demonstrates safe rider procedures. For example: <ul style="list-style-type: none"> - Complies with the Mountain Bike NZ “Off Road Code” - rides with the group - stops and re-groups at major decision and agreed meeting points - returns at agreed times - carries emergency first aid kit and bike repair equipment - deals with any incidents/accidents as agreed |
| <p>3.3 Environmental care is demonstrated and follows the New Zealand Environmental Care Code or Mountain Bike New Zealand's Off Road Code.</p> | <ul style="list-style-type: none"> • Follows the principles of NZ Environmental Care Code and Mountain Bike NZ Off Road Code. |

Candidate name _____ NSN _____

| Unit 20137 (v1) Checklist | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|--------------|
| Mountain bike on easy to intermediate terrain | | | |
| Assessor name: _____ | | | |
| Organisation name: _____ | | | C/NYC |
| Task 1: Prepare for a ride – (Written or Oral questions) | | | |
| Answered in full and match those supplied in model answers | | | |
| Task 2 : Get yourself and your bike ready for mountain biking | | | |
| <ul style="list-style-type: none"> Footwear and clothing is appropriate Helmet is correct size and fitted correctly Comes with a mountain bike that they can ride for the trip. Conducts a maintenance and sizing check on their bike, covering: <ul style="list-style-type: none"> - Chain clean and re-oiled, free from grit/ sand etc - Front and rear brake pads have sufficient depth - Pedals are spinning smoothly - Tyres have sufficient tread - Tyre pressure appropriate for terrain - Seat height and position - Handlebar height set for comfort | Ride 1 | Ride 2 | Ride 3 |
| Task 3: Complete 3 mountain bike rides | | | |
| <ul style="list-style-type: none"> Completes 3 different rides lasting at least one hour each. All of the following riding skills are observed: <ul style="list-style-type: none"> - avoiding obstacles, ascending, descending, maintaining controlled lines, braking, cornering, changing gears. Completes each of the routes comfortably, showing control of the bike at all times. Speed of riding should be appropriate for fitness and skill level. Other track users are treated with consideration and care, the rider has the necessary skill and ability to move clear of all users. Demonstrates safe rider procedures Follows the principles of NZ Environmental Care Code and Mountain Bike NZ Off Road Code. | | | |
| DATE | CANDIDATE'S SIGNATURE | ASSESSOR'S SIGNATURE | C/NYC |
| | | | |
| Comments | | | |



ASSESSMENT QUESTIONS

Mountain bike on easy to intermediate terrain.

Unit Standard:20137

Level:1 Credit:1 Version:1

Published by Sfrito 2005

Candidate Name:.....

Answer all Questions in full.

The purpose of these questions is to check that you are able to:

- Select and justify selection of suitable footwear/ clothing/ food and drink for an hour long ride (minimum) based on stated weather and environmental conditions.
- Demonstrate knowledge of rider safety procedures
- Identify possible riding hazards

Questions meet the assessment requirements for PCs 1.1, 1.2, 3.1 and 3.2

1. Select appropriate footwear/ clothing/ food and drink for two contrasting rides and weather conditions that could be experienced and justify selection.

| Conditions | Selection | Justification |
|------------|-----------|---------------|
| | | |
| | | |

2. How would you react in the following scenarios to demonstrate knowledge of rider safety procedures?

| |
|---------------------------------------------------------------------------------------------|
| You become lost and disorientated: |
| You are half an hour away from the meeting point and you have a puncture and no repair kit: |
| You come across an injured friend within your group who cannot carry on without assistance: |

3. Identify common riding hazards

Identify 7 possible hazards that could be encountered on different mountain biking rides.

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