



STAGE 1 SESSION 3

CORE BIKE- HANDLING SKILLS

AIMS & OUTCOMES

Core bike handling skills, control of speed and all-round observation.

This session covers:

- Getting on and off the bicycle from both sides.
- Moving off and pedalling while keeping a straight line.
- Riding through a corner.
- Moving the bike safely to avoid objects and other riders.
- Looking over the left and right shoulders while keeping control of the bicycle.
- Riding the bicycle one handed.
- Controlling the speed of the bike by freewheeling.
- Cornering.
- Braking.
- The precision stop.
- The emergency stop.
- Safe stopping distance.
- Looking around and identifying objects while keeping control of the bicycle.

BIKE FIT

Bike fit is a way of fitting and matching the bicycle to the rider. This will vary over time depending on the experience and confidence of the rider, the type of cycling they are doing, the distance they travel and any physical developments, such as a growth spurt, that may occur.

• Correct size

- Children's bikes are determined by the wheel size, up to about 10yrs of age, dependent on the height of the child. Adult bikes tend to be based on frame size (length of the seat tube).
- Too big or too small may compromise
 - › bike handling
 - › control and comfort
- When sitting on the bike both feet should be able to touch the ground. Depending on the confidence of the rider the saddle should be set so that:
 - › both feet are firmly on the ground
 - › just the toes are touching the ground
- when sitting on the bike both hands should be able to reach the handlebars and brakes comfortably.
- both hands should be able to pull the brake levers easily.
- the saddle should be level and parallel to the ground.
- seat post and stem should not exceed the minimum insertion mark which is usually marked by a circular notch on the post.

TECHNIQUES

Techniques are bike-handling skills riders need to master to become proficient on the bike and to ensure competent and confident cycling.



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Getting On the Bike

- **Both hands on the handlebars**, hold the brakes, to prevent bike roll.
- **Getting on from the left**, lean the bicycle slightly towards the left leg and swing the right leg over the back wheel.
- **Getting on from the right**, lean the bicycle slightly towards the right leg and swing the left leg over the back wheel.
- **Check behind** before moving off.

Participants should be encouraged to get on and off the bike from/to the left generally, as this mirrors the road in Ireland where the edge is on the left.

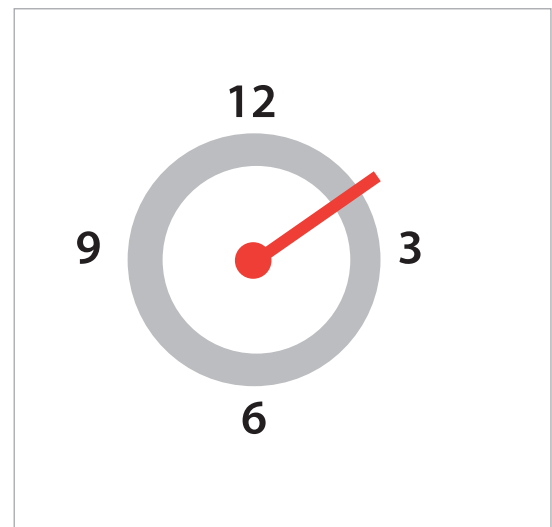
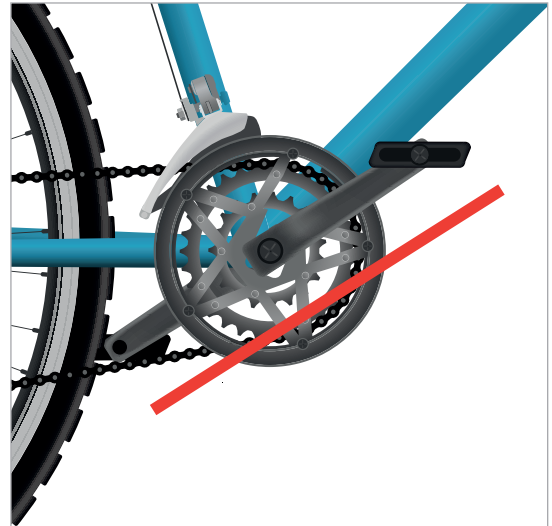
Getting Off the Bike

- **Feet to the ground** once the bike has stopped
- Lean the bike towards the standing leg and swing the other leg over the back wheel.
- **Hold the brakes** while dismounting to prevent the bike rolling forward.

Starting Off and Keeping Control of the Bike

- Keep **one foot firmly on the ground**.
- Place the sole of the **pushing foot on the pedal**, in the **2 O'Clock Pedal Ready position**, ready to push down and quickly away.
- Generally, **start from a sitting** position.
- **Push strongly** to bring the other pedal up.
- Keep the **head up and the eyes forward**, not looking down at the pedals.
- Press the **ball of the free foot** firmly to the pedal keeping the **toes pointing forward** in the line of travel.
- Keep **looking in the direction of travel**, keep the **arms long** but relaxed, **sit upright** and push the pedals with a **steady rhythm**.
- Keep feet on the pedals through the **whole circle**.

Pedal Ready or 2 O'Clock Start Position





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Braking

- Identify which lever controls the front and back brakes.
- Cover the brake levers with the fingers at all times to ensure easy and quick access to the brakes.
- Generally, look behind first to check if a full stop is likely to cause a collision.
- Keep safe stopping distance to ensure time to react and stop safely – in wet weather, it takes longer to stop and more distance is required.
- Keep the feet on the pedals until the bike has stopped.
- For a standard stop, pull the back brake first, followed by a gradual front brake.
- For a precision stop, pull the back brake first, followed quickly by the front brake, to stop at an exact point.
- For an emergency stop, pull both brakes sharply, with the back brake just before the front.
 - Keep weight over the saddle, with long, straight arms, to prevent the bike tipping forward.
- Keep the bike straight and upright without swerving or skidding.
- Watch out for poor surface conditions, downhill and bad weather.
- When stopped, bring pedal to the 2 O’Clock Pedal Ready position to be prepared to go again.

Brake Check

Moving the bike along with the hands positioned ready to pull the brakes



Pulling only the back brake causes the back wheel to skid, but will not stop the bike straight away



Pulling only the front brake will cause the front wheel to stop and the back wheel to lift off the ground



Pulling both brakes, back just before the front, should stop the bike smoothly and quickly



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Riding One Handed

- **Steady** and controlled pace, possibly freewheeling.
- **Sit upright** with hands on the handlebars looking ahead.
- Start by **easing a hand** so only the finger tips touch the handlebar.
- Next, **hover** the hand just above the handlebar.
- Gently remove the hand fully off the handlebar, initially for a very short time.
- **Look ahead** to maintain a straight line.
- **Shift the body weight** between the saddle and the supporting arm to keep control.
- Keep a good, but relaxed, **grip on the handlebar with the supporting hand**.
- Place the **hand back on** the handlebar after 3 to 4 seconds.

Shoulder Checking

- Steady and controlled pace
- Sit upright with hands on the handlebars – thumbs under and fingers over – looking ahead.
- Hold the pedals still
 - Hold the handlebars, keep the arm of the checking shoulder quite straight and steady for control and look smoothly back. Soften the opposite arm/elbow to help keep the handlebars straight.
 - Practice until comfortable shoulder checking to either side while cycling in a straight line.
 - If nervous, freewheel and then look behind.

Freewheeling

- **Stop pedalling, keep both feet on the pedals**, leading to a steadying and gradual slowing

Back Pedalling

- **Push the pedals back** instead of forward, just once, **keeping both feet on the pedals** to change pedal position without pushing the bike forward

Cornering

- **Control speed** into the corner.
- **Look forward** and **move the head to look through** and round the corner on approach.
- Keep **both hands on the handlebars** for control when cornering.
- Generally, take a corner with a small, smooth movement of the handlebars.
- Keep the **inside pedal** (on the turning side) **up** to ensure balance and readiness to cycle out the far side of the corner, and to avoid the pedal hitting the ground while leaning.
- Generally, **freewheel through**, and then **pedal out** of the corner
- If the inside pedal is down, back pedal to bring it up just before entering the corner.



FEEDBACK AND EVALUATION



Where school teachers can facilitate practice on bikes for pupils the following questions can be used to promote learning. These can be posed as self-reflective questions by the teacher, or can be used directly to prompt pupils.

- Are helmets adjusted to the correct size and position?
- Are there any clothing problems such as open laces?
- Has everyone performed a bike check and ensured the bike is the right height for them?
- Are there any aspects of the cycling environment and/or the weather which might be problematic over the course of the session?
- Is everyone getting on the bike correctly and are they taking up a safe, effective starting position?
- On starting off, is everyone cycling steadily in a straight line to the designated stop point, or is work needed to build pedalling and balancing techniques before moving to more complex manoeuvres?
- Is everyone using their brakes to stop safely and in a controlled way in both standard and emergency conditions?
- Is everyone reverting to the 2 O'Clock pedal ready position after stopping in preparation for cycling again?
- Is everyone able to balance and control their bike both when looking behind and when cycling one handed?
- Is everyone showing all-round awareness while cycling and can they actively show the difference between looking and seeing when they shoulder check?
- Is everyone keeping safe speed and safe stopping distance at all times, altering these depending on conditions and proximity to other people or riders?
- Is everyone demonstrating safe cornering technique with appropriate speed and positioning?