

Cycle Maintenance

Rationale

This practical course aims to give students the basic skills and knowledge to assess their own bikes for road worthiness and safety and enable them to maintain their bikes at home.

Objectives

The students will learn:

- how to mend a puncture
- how to check a tyre and a wheel for road worthiness
- how to test and adjust brakes
- how to test and adjust gears
- how to maintain and check the chain

Assessment

The students will assess their own skills and knowledge with support from the tutor using an evaluation format for the practical tasks they complete (see Worksheet – Cycle maintenance)

Timescale

Week 1	Introduction to cycle maintenance	Importance of roadworthiness Naming parts of a bike Visual checks Flat tyres – tools, etc.
Week 2	Wheels, tyres and inner tubes	Changing a tyre Mending a puncture Taking wheels off (front and rear) Wheel sizes and variety (road, off-road, etc.)
Week 3	Wheels, tyres and inner tubes	Practical cycling activity (Road user awareness)
Week 4	Brakes and chains	Checking brakes Changing brake blocks Checking chain – clean and lubricate
Week 5	Brakes and chains	Practical cycling activity (Road signs and markings)
Week 6	Gears	Checking gear changing mechanism Adjustments



Information sources

<http://www.lcc.org.uk/index.asp?PageID=565>

http://news.bbc.co.uk/sport1/hi/other_sports/cycling/get_involved/4250552.stm

Student resources

- Worksheet – The bike (Name parts of a bike)
- Worksheet – Tools
- Worksheet – Wheels and tyres maintenance sheet
- Worksheet – Brakes and gears maintenance sheet
- Worksheet – Chain maintenance sheet
- Worksheet – Cycle maintenance (Practical assessment and review sheet)

MT – April 2009

Name: Date:

Parts of a bike



1	Frame	12	Hub
2	Fork	13	Spokes
3	Shock absorber	14	Rim
4	Handle bars	15	Tyres
5	Stem	16	Cassette
6	Head set	17	Chain
7	Saddle	18	Front derailleur
8	Seat post	19	Back derailleur
9	Cranks	20	Gear levers
10	Rod	21	Brakes
11	Pedals	22	Brake levers

Image source:

<http://upload.wikimedia.org/wikipedia/commons/d/d5/MountainBikePartsEnglishAndSpanish.jpg>

Name: Date:

Bike maintenance tools



What's the cost?

Bicycle pump	.....
Spare inner tube	.....
Puncture repair kit	.....
A set of tyre levers	.....
Lube	.....
Cleaning rags	.....
A set of Allen keys	.....
A flat head screwdriver	.....
A Philips head screwdriver	.....
Set of spanners	.....
A small adjustable spanner	.....
Total	.....

Tips

- Whenever you put a bolt or a cable back on your bike, lubricate it with a touch of grease. This helps protect and make the parts last.
- Always use the correct tool for the job.
- Make sure that the tool is fully engaged before you apply force to it.

Source: London Cycling Campaign website <http://www.lcc.org.uk/index.asp?PageID=331>

Name: Date:

Wheels and tyres



When you spin the front wheel, it should keep on turning for quite a while and there should not be any kind of grinding or cracking noise.



What to look for?

If it seems to slow quite quickly or you can hear odd noises:

Check

If you can feel any side-to-side movement:

Check

If you can see that the rim is buckled:

Check

If you can see obstacles in the tyre tread:

Check

If the tyre is flat:

Check

Source: BBC website

http://news.bbc.co.uk/sport1/hi/other_sports/cycling/get_involved/4250552.stm

Name: Date:

Brakes and gears



Are your brake blocks worn down? Are the blocks lined up correctly? Do the gears change smoothly?



What to look for?

Brakes

If you notice you have to pull the brake levers fairly close in to the handlebars when braking:

Check

If the rubber material is too hard:

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If the rubber material is too soft:

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Gears

If you hear grinding noises when the gears change:

Check

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Source: BBC website

http://news.bbc.co.uk/sport1/hi/other_sports/cycling/get_involved/4250552.stm

Name: Date:

Bike chains



Keep the chain on your bike as clean as possible. If you don't clean and lubricate it properly it will make pedalling much harder.



What to look for?

If the chain is squeaky:

Check

If the chain is slack and you can pull it away from the chain ring

Check

Cleaning routine:

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Source: BBC website

http://news.bbc.co.uk/sport1/hi/other_sports/cycling/get_involved/4250552.stm

This certificate recognises that

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has taken part in a six week course in



Cycle maintenance

This has involved learning the following skills:

- Identifying basic faults
- Checking tyre pressure
- Maintaining the brakes
- Maintaining the gears
- Maintaining the chain
- Mending an inner tube

Signed:

Date: