

# Learning to Unicycle



*By Andrew Carter and Klaas Bil*

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## *SUMMARY*

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- 1. Set up beside a support on a flat surface.**
- 2. Get on the unicycle.**
- 3. Rock back and forth with the pedals about horizontal.**
- 4. Lean forward and ride along in half, then full rotations.**
- 5. Ride continuously while holding a support.**
- 6. Ride continuously unassisted.**

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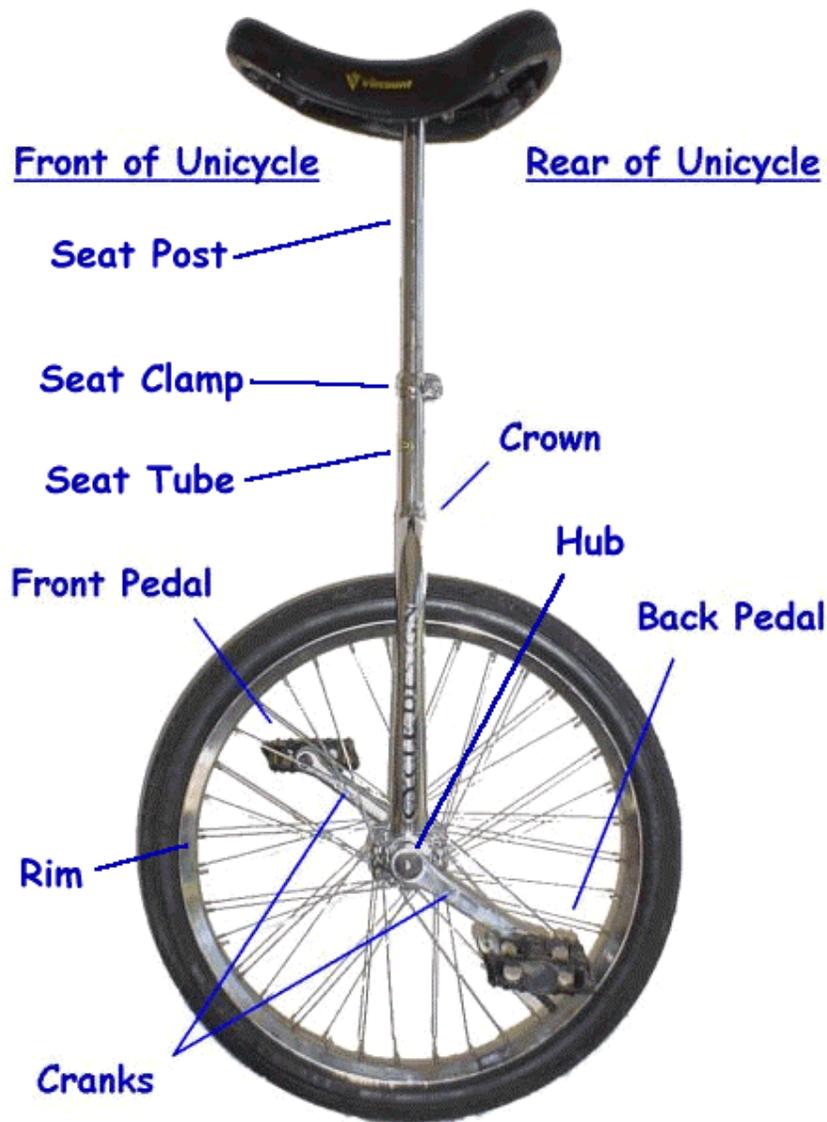
**\* Weight on seat, not on the pedals.**

**\* Sway your arm(s) for extra balance if you feel like it.**

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## — *THE STANDARD UNICYCLE* —



The size of a unicycle is characterised by the diameter of its wheel. The most common unicycle sizes are 20" (pictured) and 24"; however, sizes can vary from 12" to 36" and larger. For more information on wheel sizes and uses, see the 'links' section. To tell which end is the front of your unicycle, first check your seat. The wider end is the rear. If this is not obvious, you can check the inside of the cranks and the pedals. Most basic unicycles will have 'L' and 'R' written on the left and right cranks respectively and the pedals will always be marked similarly. To ensure that your pedals don't come loose when riding, you should always ride with the left pedal and crank on the left. The back pedal is whichever one is behind the other at a given time.

# —— *LEARNING TO UNICYCLE* ——

## **Ideal Conditions**

Unicycling will seem difficult at first no matter what conditions you're learning under, but the following can make things less frustrating and will hopefully shorten your learning time.

Surface - Ideally, you should learn to unicycle on a flat and completely smooth surface. Carparks are often quite good, as are gym floors.

Handrails and other supports – You should have access to something to hold onto between chest and waist height (when seated on the unicycle). You're not likely to find a support (other than a person) in the right position on both sides of you, but that would be ideal. Most handrails are at a good height for adults but are often too high for young kids. Cricket practice nets, tennis courts, and anything with that sort of wiring is ideal for both kids and adults. They can hold on at any height and pull and push on the fence to keep their balance.

If there is no fence available, get a friend either side of you for support. You can hold their hands or their shoulders. They should be beside you, or actually somewhat in front of you, so that your bent arms extend forward somewhat. Note: you should hold them, not the other way around. And they should not hold your unicycle, as YOU have to keep balance.

Shape and size of area – Width of the learning area isn't really important, but length is. If you know you're not going to run into a wall ahead, then that's one less thing to worry about which can only be a good thing. A long learning area will allow a less interrupted practise session, and will also allow you to set distance goals for yourself when learning.

Seat Height – As a rough guide, with your *heel* on the pedal which is all the way down in the 6 o'clock position, your leg should be reasonably extended but not overstretched. (This is not the foot position for riding, see next page.) Seat height is quite a subjective thing so just experiment for yourself and see what you prefer.

## **Learning the Basics**

This method of learning to unicycle is a combination of other methods and focuses on spending time to build a strong foundation of skills, and not rushing in. Some people have been known to pick up unicycling in a matter of minutes, but chances are it'll take you at least a few hours to be able to ride any considerable distance, so you might as well take your time and do things properly.

This method has been tried and tested, and has shown to give good results. Nevertheless, *you* will have to practice. Unicycling is not difficult and any normal person can learn it but your body just needs practice time.

Getting On – For raw beginners getting on the unicycle (also called mounting) can be surprisingly difficult (and funny to look at). A good way is to set up beside your support with the unicycle just in front of you. Positioning beside your support is important. You

must set yourself up so that when you grab the fence for support, you are not leaning towards or from it. Your body must be upright when unicycling. Put the pedal corresponding to your 'strong' foot at its lowest point. (This depends on the rider, so you may want to try both out and see what feels easiest.) Put the ball of one foot on the lowest pedal, hold the seat against your crotch with one hand and hold your support with the other. As you mount the unicycle, you may choose to leave one hand on the seat, or grab your support with both hands. Put more pressure on the lower pedal as you move your body over the wheel, that way the wheel won't roll away. Now put your free foot onto the second pedal. When you feel reasonably stable, gently ease more of your weight onto the seat rather than the pedals.

The Power Position – While keeping your weight on the seat, slowly roll backwards by pushing backwards on the top pedal until both pedals are level with each other (in the 3 and 9 o'clock positions). In this 'power position' you should feel comfortable and will have the most control over your unicycle.

Foot position on the pedal - If you are familiar with riding a bicycle, you will probably have a favourite foot position on the pedal, and you may use the same foot position on the unicycle. For learning to ride a unicycle, and mostly for riding in general, it is often considered best to have the *ball* of your feet on the pedals.

Rocking on the Spot – Unicycling feels completely different from riding a bike. A unicyclist must be balanced both side to side as well as forward and backward. When learning to unicycle you should take the time to become reasonably comfortable with forward and backward balance before working on any side to side balance. This way, you won't have as many things to concentrate on and should therefore learn to unicycle quicker and easier.

Get a firm grip with either one or two hands on your support. Gently rock backwards and forwards over a small distance, not more than, say, 4 - 8 inches. Remember to keep your weight on the seat, and while rocking keep your upper body straight and upright. Your lower body should act like a pendulum. Practice this with both power positions: left foot forward as well as right foot forward. Don't proceed to the next exercise until you only need to grip your support relatively lightly.

Rotations – Now set yourself up in the power position and start with moving forwards in half-rotations of the wheel alongside your support (or while your support moves along with you). Initiate each half rotation by slightly leaning forward. For a brief moment keep the wheel stationary then pedal forward for a half rotation relatively quickly, so as to 'catch up' with your centre of gravity. Stopping in the power position between each half-rotation will allow you to regain your balance and composure, and force you to practise putting pressure on the back pedal. When you feel ready, move onto full rotations at a time. While you're doing this, remember to keep your upper body straight and upright and always keep the pressure on the seat.

Continuous Riding – Now you can move on to riding in continuous straight lines beside your support. The key to this is to keep your momentum so that you can make it past the least controlled position (with the cranks vertical). As you gain confidence, try to put less and less pressure on the support. As soon as possible, you should be using only one hand for support and the other for extra balance.

Riding Without Support – When practising this you should ride beside your support and let go after you've gathered some momentum. Once you're free from the support you

may want to hold your arms out wide for extra balance but feel free to flail your arms around if they 'want to'. It's perfectly natural to flail your arms wildly when learning to ride.

Some general tips:

- Don't ride too slow. Riding slowly is a challenge in itself, because it is in fact *more difficult* to keep your balance. On a 20", a walking person would be about the right pace. On a 24", the easiest speed is a little faster.
- Chances are that you will fall off the front of the unicycle. Surely, you should be leaning forward, but you also have to pedal so that the unicycle can keep up. It may be useful to think of it as keeping the unicycle under you rather than staying on top of it. You may find the idea of having to pedal faster to stop from falling a little intimidating. If so, try slowing the pace down and leaning back more.
- When riding forward, any tendency to fall to the side should be corrected by steering into that direction. You steer by swiveling your hips, so that the wheel rolls to the desired direction. (Keeping the wheel under you, remember.) You don't have to be overconscious about this, your body will find this out on its own.
- If you find yourself falling to the side (or any other direction) and not being able to do anything about it, don't worry. We all have had the same problem and it can be frustrating. With practice it will become more and more natural, and the actions you use to correct your balance will become more and more effective. After a while they will be engraved in your motor memory, and keeping balance will happen as unconsciously as in walking or riding a bike.

### **Important Extras**

It's generally accepted that if you can ride 50 metres or so you can ride a unicycle, but it's a lot more fun (and impressive) if you can pick up some of the following skills. In sequence of importance and difficulty:

Stopping and Dismounting – If you're showing off your new unicycling ability, it'll be a lot more impressive if you don't fall off at the end of each run. All you need to do to gracefully dismount is slow down by leaning back more and putting more pressure on the back pedal, then stop and either step off the front or the back of the unicycle. Stepping off the front may be easier because you don't have to completely stop to make it look reasonably controlled. However, stepping off the back is preferred because you can see where the wheel goes. Also, for level 1 of the official Unicycle Skill Levels you'll have to dismount with the unicycle in front of you (and gracefully at that!).

Turning – When first learning to turn you really just need to do what feels natural and 'pull' yourself around a corner by waving your arms to the front and side. After some practise, you'll find that you can turn smoothly simply by twisting your upper body and allowing your legs and the unicycle to follow. To turn right, place your right arm behind you and your left arm in front and across your body. Do this and look where you want to go, and you should go there. Do the opposite to turn left. A really good exercise using this method is to ride along in a zigzag pattern by swinging your arms smoothly between the left-turn and right-turn positions. Leaning slightly to the side you want to turn will help to make your turning smooth.

You'd better avoid jerky turns, in which you suddenly force the unicycle into another direction by a sudden and jerky hip-twisting motion although it may be easier for a

beginner. This technique might have its use in tight spaces, but it will wear the tyre more, it is difficult to do at speed and it doesn't look that good.

Freemounting – You'll be able to enjoy unicycling so much more once you can mount the unicycle without a support. This is called freemounting and requires quite a bit of practice. The two most popular standard mounts (ways of mounting a unicycle) are the *static* and *roll-back* mounts. During a static mount the wheel is essentially static, i.e. it doesn't roll (or hardly so), while during a roll-back mount the wheel rolls backwards. Hey, is that logical or what? Most beginners find the static mount easier, but you could try them both to see what feels easiest for you. You will find a list of more advanced (and entertaining) freemounts at <http://www.unicycling.org/unicycling/mounts> .

- Static mount: Set yourself up closely behind the unicycle with the back crank (corresponding to your 'strong' foot) anywhere between the 4 and 6 o'clock positions, and both pedals aligned with the cranks. Place the seat in your crotch, then put your foot on the back pedal. Move your whole body forward with some speed, allowing the wheel to roll. As the pedal reaches the 3 o'clock position, place just enough pressure on it to stop the wheel from rolling forward any further. As you do this, push your foot off the ground, project your body upwards and over the wheel and step onto the free pedal. (The important thing in this move is to NOT put too much pressure on the back pedal, otherwise the wheel will shoot out backwards from under you.) Now, pedal forward to ride out of the mount. This mount can be done without any movement of the wheel (starting at 3 o'clock), however for beginners it is usually easier to build momentum in the body before stepping up.  
Tips: (1) Some people prefer to set themselves up with their non-leading (or 'weak') pedal at the back. You may want to try it.  
(2) It may help to practice on a slight downhill; or alternatively to have something behind the wheel to stop it from rolling backwards; a roadside curb (kerb) has helped many people and the term 'kerb mount' refers to this. Obviously, this is not yet a freemount, just an exercise to get there.  
(3) Encourage me (Klaas) to put more freemounting tips on my website.
- Roll-back mount: Set yourself up with the back pedal (corresponding to your strong foot) in about the 4 o'clock position. Place the seat in your crotch, then put your foot on the back pedal. When you feel comfortable, put most of your weight on the pedal and let the wheel roll backwards underneath you; your body should hardly move forward in this phase. As you do this, step off the ground, place your free foot on the other pedal and push it *backwards* for almost a 1/4 of a revolution. This should result in a slight forward lean. Then pedal forward to ride out of the mount.

Idling – Idling is riding half revolutions forward and backwards repeatedly, effectively staying on the spot. Learning to idle may take quite a while and can be very frustrating, however it is an extremely important skill. Firstly, you will often find yourself in a situation where you're riding and need to stop for some reason but want to stay on the unicycle. This is where idling is very useful. Secondly and possibly even more importantly, the coordination you develop in learning to idle is needed for many more advanced skills and will give you a much greater control of the unicycle.

- In the "Learning the basics" chapter we have described "Rocking on the spot" while holding onto a support. In it, the cranks oscillate around the *horizontal* position. If this is done without support it is called "Horizontal Idling". This is more difficult than normal idling, which involves oscillating the cranks around the *vertical* position.
- To start learning (normal) idling, sit on the unicycle beside a support with the cranks horizontal. Hold on to your support with one or both hands. Lean slightly forward while keeping the wheel stationary for a little while. Then pedal forward for half a

rotation, at the end of which you should be leaning slightly backward. Immediately after the forward half rotation, pedal a half rotation backwards, at the end of which you should be slightly leaning forward again, so you can rightaway start the next idling cycle.

- Focus on using a pendulum motion as opposed to moving your whole body back and forth. That is, your body should ideally stay more or less in the same place, while the wheel "swings" forward and backward under you. Remember to keep your upper body straight and upright and to keep your weight on the seat. Your leading (or "strong") foot should be on the bottom and move back and forth past the 6 o'clock position.
- Try to maintain forwards/backwards balance by adjusting the timing and power of your pedal strokes, as opposed to pushing the support. It is OK to use the support for sideways balance for now, but try to push and pull as lightly as possible.
- If you idle too slowly it will be more difficult to maintain balance. On a 20" wheel the idling frequency should be about 1 per second, on a 24" wheel it is usually somewhat less.
- Now it's time to leave your support. Ride forwards in the open, not too fast. Slow down while leaning back, throw in one half revolution backwards, during which you should regain your forward lean. Then continue riding forward. Repeat.
- If you are somewhat solid at throwing in single idles, try inserting two idling cycles at once, then three, etc.
- The greatest difficulty is usually found in controlling the side to side balance. Focus on keeping the unicycle under you rather than you staying on top of the uni. If you find yourself leaning too far to the right, you must move the wheel to the right to keep it underneath you. To do this, twist your lower body to the right as the wheel rolls forward and to the left as the wheel rolls backwards. That way, you turn the whole unicycle by the seat.

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# STYLES

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## Freestyle

Freestyle is the oldest specific style of unicycling which involves concatenating a variety of skills and tricks on a unicycle in an artistic way. A freestyle performance is usually done on music and can be compared to figure skating. Freestyle unicycles, generally 20", have relatively slick tyres and often short cranks and a flat crown. The crown is where the frame splits into the two fork legs and many freestyle riders prefer this to be flat for more advanced skills. Artistic freestyle routines are a key element of many unicycling competitions.

## MUni (mountain unicycling)

MUni is a relatively new style of unicycling which basically involves riding on rough terrain. Like in mountain biking, there are a variety of substyles of MUni such as cross country, downhill, and so on. Mountain unicycles are equipped with knobby tyres (mostly 24"), a handle fixed to the seat or frame to pull on, pinned pedals for more grip, and a strong wheel. Most MUni riders run a wide tyre (e.g. 3") with a low pressure to help tackle the rough terrain. High-end MUnis often have splined cranks and hubs for additional strength, and sometimes a hand brake. Many people believe MUni to be the fastest growing style of unicycling.

## Trials

Trials unicycling, another reasonably new style, involves a lot of hopping up onto, between, and down from objects and riding in situations where there is very little room for error such as on a narrow beam. Trials unicycles generally have very strong wheels (usually 20") and wide tyres that can be run at a very low pressure for extra bounce.

## Other

Other styles of unicycling include *racing* (in official races there are prescribed wheel sizes and crank lengths), *distance riding* (also called *touring*) which is often done on a large wheel (28" or larger), and *street* which includes elements of trials coupled with tricks. Street is the newest style of unicycling and is growing in popularity mainly with youngsters, a bit like skateboarding but obviously a lot cooler. *Giraffes* are high unicycles with a chain drive, and are mostly useful for performances. Riding a giraffe is not that difficult but it evokes a lot of wow's.

## LINKS

There is sooooo much out there on the net, here are just a few sites to get you started.  
From here, you can link away forever...

<b>GENERAL INFORMATION</b>	
News and forums, <i>the</i> principal information site for unicyclists	<a href="http://www.unicyclist.com">http://www.unicyclist.com</a>
The main forum of the site mentioned above, in newsgroup format	<a href="news:rec.sport.unicycling">news:rec.sport.unicycling</a>
The unicycle page, including e.g. official skill levels, mounts, rules	<a href="http://www.unicycling.org">http://www.unicycling.org</a>
Wobbling unicyclist	<a href="http://wobbling.unicyclist.com">http://wobbling.unicyclist.com</a>
Information collected by John Foss, one of the world's principal unicyclists	<a href="http://www.unicycling.com">http://www.unicycling.com</a>
Toronto Unicyclists (check out their wheel size info)	<a href="http://www.torontounicyclists.ca">http://www.torontounicyclists.ca</a>
Lots of stuff by the Marsh sisters, gotta love those colours though.	<a href="http://marsht.tripod.com">http://marsht.tripod.com</a>
The MUNIAC, focuses on Mountain Unicycling. Again, funky colours.	<a href="http://www.muniac.com">http://www.muniac.com</a>
Site by Dutch top-unicyclist Leo Vandewoestijne including more than 1000 (!) instruction-videos	<a href="http://www.unicyclist.org">http://www.unicyclist.org</a>
Unicycling Tips and Tutorials, very useful. By Andrew Carter and Peter van Boekhout.	<a href="http://www.unicycle.2ya.com">http://www.unicycle.2ya.com</a>
Kris Holm, a ridiculously good unicyclist	<a href="http://www.krisholm.com">http://www.krisholm.com</a>
Concise information for beginners (including learning time estimation)	<a href="http://www.xs4all.nl/~klaasbil/uni_beginners.htm">http://www.xs4all.nl/~klaasbil/uni_beginners.htm</a>
<b>ONLINE UNICYCLE SHOPPING</b>	
Online unicycle stores in US, UK, New Zealand, Sweden	<a href="http://www.unicycle.com">http://www.unicycle.com</a>
Online unicycle store in Germany	<a href="http://www.municycle.com">http://www.municycle.com</a>