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Everyone is free to use the course material in non-commercial activities, as long as the sender Trollhättans Stad remains.



## OVERVIEW

Stadsbyggnadsförvaltningen in Trollhättan applied for and received government funds, distributed by the municipal council's administration, for the summer of 2016, to run the project Cykelsommar during the summer break. The activities were directed at children 6-12 years and all families in the municipality with children of these ages were informed by letter.

The project consisted mainly of the children practicing a fun and challenging obstacle course in 13 different districts of Trollhättan on the same number of occasions. Basic understanding of traffic awareness and -regualtions was also a part of the concept. At each training session, the children were invited to one of the three driving licence tests that the project organized at the city square Drottningtorget. The majority of the children who participated in these tests had participated in one or more of the training sessions, so we changed places of the obstacles to make the course exciting again. The children who participated did also write a theory test and can now proudly show their own bike driving license. The laminated driving license that was designed like a real driving license with the child's name and picture became a good final to a successful summer activity. The division between participating girls and boys was perfectly even and we consciously worked to ensure that children and parents from different districts would meet during the tests at Drottningtorget.

The manual contains information about the courses different elements as well as the rules and laws, which apply for bicyclists. This information can be used by you to educate students, members, adults, children or friends to become safer bicyclists. You can start from the course base and make your own adjustments in the steps to suit your target group.

**In the theoretical part** you learn by text and images on the traffic rules for bicyclists, rules for what should be on the bicycle and important things to remember for all moving in traffic.

**Practical part** consists of bicycling on the obstacle course. You train balance, brake technique, recognize traffic signs and their meanings, sharp turns and more.

**Test part** gives you the chance to see how much you have learned about the contents of the course. Contains seven questions with three response options for each question.

#### Evaluation

It is possible to evaluate the course at the end of the course. For example, you can talk about:

- How difficult was the course?
- What can we do differently during the next possible course?
- What have you learned?
- What's good about cycling?

At the end of the manual, you will find attachments that have been used for this course. Traffic signs to cut out for use on an obstacle course, ones we have used and some extra examples for the development of your own course. A traffic-memory game and a diploma is also attached!

Good luck!

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### THEORY PART Signs & Rules

#### The pedestrian/walking

access path. On a pedestrian/walking path, you are allowed to walk, but you are not allowed to bicycle or ride a class II moped. A pavement is also a pedestrian/walking path.



#### Pedestrian/Walking

**Street**. The sign for pedestrian street is similar to the pedestrian access path but it is a square sign instead of the round sign. On a pedestrian street, you are allowed



to bicycle and to ride a class II moped, but not faster than walking speed. Bicyclists and those riding a class II moped must also leave access for pedestrians, and they are only allowed to park in the bicycle racks or where there is a sign that allows them to park their bicycle or class II moped.

#### Walking speed area. A

walking speed area is a section of the street where you may only drive at walking speed. Motorists, mopeds



and bicyclists shall provide access to pedestrians using the road. If you want to park your bicycle or moped, you must do so in a bicycle rack, or where there is a sign that shows you where you can a park a bicycle or a moped.

### Pedestrian/walking path

and bike path. Here you are allowed to walk, bicycle and ride a class II moped. Sometimes there is an additional sign that shows that you cannot ride a class II



moped here. When a pedestrian/walking and bicycle path is combined, this means that pedestrians, bicyclists and class II mopeds have to share the path. If you walk, you should walk on the left side, bicycles or class II mopeds must be driven to the right. If there is a bike path next to road, you should bicycle on the bicycle path and not on the road.

#### The bicycle access path.

Is for bicycling and class II mopeds to use. Sometimes there is an additional sign that shows you cannot ride a class II moped here. You may walk here if there is no



better alternative. If there is bicycle path next to the road, you should bicycle on the bicycle path and not on the road.

**Pedestrian/walking path and bike paths**. The pedestrian/walking and bicycle traffic is divided into two different parts of the path. This sign shows you that you should walk on the left side



and bicycle on the right side, but it can be the other way round. You are not allowed to bicycle on the walking path and you can only walk on the bicycle path if you must. Class II mopeds are allowed to ride on the bicycle path if there is no additional sign showing you that you cannot drive a class II moped here. If there is a bicycle path next to road you should use the bicycle path and not the road.



**Zebra crossing**. When you walk on a zebra crossing, vehicles and bicyclists on the road should stop and let you go over the road. Keep in mind that vehicles may not see you, so be careful. The



vehicles do not have to stop for bicyclists that cross the road at a zebra crossing. If you bicycle on a zebra crossing, you must wait until the vehicles have passed.

**Give way**. This means that you must make sure that you do not hinder traffic on the road you intend to enter. If there is any traffic on the road, you must stop and let it pass first.



**Stop sign**. This means that you need to stop first and then look around for other traffic. You may only continue if you do not hinder other traffic on the road, you intend to enter. Sometimes



there are stop signs on many of the roads that meet in an intersection (crossroad). Here it is the first one that stops that is allowed to drive first, but be careful and interact (have contact) with the other road users.

Vehicles not allowed. You may pass this sign, but you are not allowed to bicycle or ride a class II moped. The ban applies in both directions on the road. Here you must walk with your bicycle and not ride it.



#### No entry for vehicles.

This means that the road is a one-way road. You are not allowed to bicycle or ride a class II moped passed this sign. You are allowed to walk with your bicycle.



Sometimes there is an additional sign under the sign showing you that it does not include bicycles. Look for the painted symbols on the tarmac (road) that shows you how to bicycle.

The prohibition of traffic with other motor driven vehicles other than a moped class II. This means that you may walk, bicycle or ride a class II moped past



this sign. Sometimes there is an additional sign under the sign showing you that it is not allowed to ride a class II moped here.

#### Direction of traffic. The

sign shows the direction of traffic and vehicles may only travel in the direction of the arrow.



**Circulation area/round** 

**about**. Are found on roads, showing you that there is a circulation area ahead (round about).



More information on road signs is available at: www.transportstyrelsen.se/vagmarken



### THEORY PART What the law says regarding...

#### Lighting & reflexes

When you bicycle in the dark, a bicycle must have:

- A lamp that emits a white or a yellow light and a reflector that reflects white when travelling forward.
- A lamp that displays a red light and a reflector that reflects a red light toward the rear. Both the front and rear lamp and the reflex are often combined.
- Also reflexes on the wheels/spokes, which casts an amber light.

#### A bicycle bell

A bicycle bell is mandatory and must be on all bicycles.

#### Brakes

On a bicycle, there should be a service brake to reduce speed to make the bicycle stop safely and quickly. There are both hand brakes and foot brakes.

#### Helmet

Children under the age of 15 years old must wear a helmet while cycling.

#### Where you can and cannot bicycle?

If there is a bicycle path, you are allowed to bicycle there. If the bicycle path is missing then bicycling on the right-hand side of the road is allowed, as long as the road is wide enough, otherwise as far to the right as possible.

You are allowed to bicycle on the access path and pavement if you are of 8 years old or younger. After 8 years of age, it is forbidden.

At the zebra crossing, you should walk with your bicycle, if you bicycle over a zebra crossing you have to give way to cars, pedestrians and other vehicles.



#### Bicycle passage/bicycle crossing

When crossing over a bicycle passage you should give way to vehicles/cars, vehicles/cars on the road do not need to stop for you. The bicycle passage is shown with marks on the ground. When you pass over a bicycle crossing, it is the vehicles on the road that should

give way for you. Bicycle crossings are marked with both marks on the ground and signs.

#### **Speed limits**

Speed Limits are for all kind of vehicles, also for bicycles.

#### Signaling when turning

When you are to turn a corner (left or right), you are to show this for all vehicles and pedestrians, you do this by stretching out your arm to the side – showing which direction you wish to turn.

#### **Bicycling with passenger**

On a bicycle, it is not allowed to carry more people than the bicycle is built for. If the bicycle has appropriate seats and effective wheel/spoke protection, you are allowed the following:

- when you are 15 years old you are allowed to have a passenger under the age of 10 years old.
- when you are 18 years old you are allowed to have two passengers under the age of 6 years old.











### CHECKLIST FOR A BICYCLE

What is the name of the bicycle parts? Write the right words in the boxes.



By law these parts must be on all bicycles, certain parts must always be on the bicycle when you travel in the dark. Do you have all eight on your bike?

When you have completed all of the boxes, check your own bicycle and make sure you are prepared for the next step!



# MATERIAL FOR THE OBSTACLE COURSE

This is necessary to for the obstacle course:

- Bicycles in the appropriate sizes (you can share the bicycles with others when you are not using your bicycle, someone else can use it).
- Bicycle helmet is mandatory for those under 15 years.

This is what we used on our obstacle course:

- Small cones 10 in total (500 kr).
- Small round cones 20 in total (200 kr).
- Rope 40 meters (80 kr).
- Plastic covered signs
- Large cones 4 in total
- Stop lines and lines for the zebra crossing
- Oblique boards
- Seesaw

#### Signs, stop line and lines for the zebra crossing:

We printed out the traffic signs (some of them are in the annex at the end of the manual) in color on A3 paper and used a plastic film to protect them. We then made two holes in the bottom edge of the sign and used a cable tie to support in the holes on the large cones. Plastic protected white A4 papers taped together.

#### Wooden boards:

The oblique board is made of two wooden boards, at its longest side 125 cm long and 50 cm wide. Saw to create a desired angle. Attach wooden blocks that raise the boards in the middle where the angle is created. Drill holes in the blocks underneath and screw them together with bolts and nuts.

The tilting board is made of a 200 cm long and 50 cm wide wooden board. Bottom on both outer sides of the board, wedge-shaped wooden blocks are screwed. The blocks are at the lowest about 1 cm and at the highest 7.5 cm high (see the third photo from the left). An additional block of the same size is attached below the center of the board.

The board rocks like a seesaw when you cycle over it.



## PRACTICAL PART Obstacle course, how does it work?



Lines show you how you can place out the ropes to show those who are bicycling and for them to know which lines to keep inside of.

- 1. This is the start of the obstacle course, get in line and wait for your turn.
- 2. Zebra crossing (sign + lines) here you must keep an eye, look in both directions, if anyone wants to walk over you must stop and let them pass. (The leader can go over here).
- 3. Left Turn (sign), Stretch out your arm and check behind you and left before turning.
- 4. The dots are the small cones, here you are to bicycle slalom, round the cones on the outside and then swing back around the next cone on the outside.
- 5. Round about (sign) the smallest round cones form a circle with a smaller circle in the middle. Bicycle to the right, then bicycle around in one complete circle and then turn to the right with a sharp turn.
- 6. Stop Sign (sign + stop line) (as shown in the illustration but not in reality is 4 cones). Stop the bicycle before the white line, check carefully to both sides/left and right, and then continue to bicycle if the path is free. This is where those that have a little better balance can be encouraged to stop the bicycle without putting down there feet.
- 7. At the left turn is where we had the oblique piece of wood, bicycle towards the oblique piece of wood and turn. Try to keep the whole bicycle on the piece of wood.
- 8. Seesaw, increase your speed to get up and try to keep in the middle.
- 9. Brake safely, but rapidly at the end of it (stop the bicycle).



### TEST PART Knowledge test

Circle the correct answer!

#### 1. Who must have a bell on their bicycle?

- 1. Everyone
- 2. Children under 8 years old
- 3. Nobody

### 2. Up to what age must you use a bicycle helmet?

- 1. You do not need to have a helmet if you can bicycle good
- 2. 15 years old
- 3. 18 years old

#### 3. What does this sign mean?

- 1. Prohibited/not allowed to walk and bicycle
- 2. Warning for cyclists and pedestrians
- 3. Pedestrian/walking and bicycle path

#### 4. What does this sign mean?

- 1. Stop, so that the wheels are completely stopped
- 2. You do not need to do anything
- 3. Turn around and take a different path









#### 5. What do you need to do, to show that you are going to turn on a bicycle?

- 1. Nothing
- 2. Scream out to tell everybody where you are going
- 3. Stretch out an arm in the direction you are going

#### 6. Are you allowed to bicycle on the path when you see this sign?

- 1. No
- 2. Yes, but only at walking pace
- 3. Yes, as quickly as you want to



#### 7. Are you allowed to have passengers on your bicycle?

- 1. No
- 2. Yes, if you are over 15 years old and the passenger is under 10 years and there is also an appropriate seat
- 3. Yes, you can always have passengers



### CORRECT ANSWERS

Check list:



- 1. 1
- 2. 2
- 3. 3
- 4. 1
- 5. 3
- 6. 2
- 7. 2

## TRAFFIC SIGNS FOR THE OBSTACLE COURSE



The pedestrian/walking access path sign





Zebra crossing sign





Direction of traffic sign





Round about sign





Stop sign





Give way sign





The prohibition for traffic of vehicles sign





No entry for vehicles sign



### MEMORY

Cut out the images and play Memory! The next page is patterned. You can paste the page or a piece of cardboard on the back of the page with the game cards before cutting them out. Then the images do not appear through the paper.







