



Statens vegvesen

Norwegian Public Roads
Administration

Manual

Curriculum Driving licence categories A1 and A



Curriculum
Driving licence categories A1 and A

*“...that if you aim to guide a person
towards a specific goal,
you must first discern where he is,
and start from there.*

Søren Kierkegaard

Manuals from the Public Roads Administration

This manual is one of a series of consecutively numbered publications.

The manuals are available to interested persons outside the Public Roads Administration.

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Curriculum

Driving licence categories A1 and A

No. 251 E in the manual series from the Norwegian Public Roads Administration

Preface	6
Chapter 1 - General	7
Developing road traffic competence	7
Topics in driver training	9
The teaching	10
Chapter 2 Training for categories A1 and A	13
Main objective	13
Step by step training	13
Definitions and clarification of concepts	15
Requirements for clothing during training	17
Communication equipment during training	17
Theory subjects for categories A1 and A	18
Chapter 3 Step by step objectives, course objective, subjects and main items	20
Step 1 Course in basic road traffic knowledge	20
1.1 The driver training	22
1.2 Basic understanding of road traffic	22
1.3 The human element in road traffic	23
1.4 Riding practice and riding experience	23
1.5 First aid	24
1.6 Road accident procedures	24
1.7 Night riding	25
Step 2 Basic competence with respect to vehicle and riding	29
2.1 Motor cycle riding, the environment, safety and training	30
2.2 The motorcycle	31
2.3 Clothing and personal protection	31
2.4 Preparations before riding	31
2.5 Starting off	32
2.6 Positioning	32
2.7 Stopping	32
2.8 Balancing	33
2.9 Changing gear	33
2.10 Steering	33
2.11 Braking	34
2.12 Combining and applying basic technical riding skills	34
2.13 Mandatory guidance lesson – evaluation of riding competence	34
Step 3 Road traffic competence and technical riding skills	35
3.1 Physics and technical riding skills	36
3.2 Road traffic psychology – information processing, attitudes and behaviour	36
3.3 Riding strategy and behaviour	37
3.4 Mandatory guidance lesson – evaluation of riding competence	39

Mandatory safety course in precise riding technique for category A	41
Step 4 Course in safe road riding Category A1	44
4.1 Preparation	44
4.2 Riding in a varied road environment	44
4.3 Reflection and summing up	45
Step 4 Course in safe road riding Category A	46
4.1 Riding a motorcycle, hazards and strategy	47
4.2 Riding in a varied, open road environment	47
4.3 Reflection, self-insight, exchange of experiences and summing up	48
Appendix	49
Suggestions for riding exercises in a manoeuvring area for step 2	49

Preface

Background

National Transport Plan 2002-2011 (NTP) points to the need for a comprehensive treatment of the entire driver training and augmenting the training for all categories.

Studies have shown that young, inexperienced drivers are particularly prone to accidents. The accident risk decreases quickly during the first months after the acquisition of a driving licence. Ideally drivers should acquire the necessary experience during driver training. Directing effort to better driver training is an important contribution to promoting the zero-vision.

The legal basis for the driver training

The Road Traffic Act of 18 June 1965 provides the legal basis for the regulations relating to driver training. In it the Ministry of Transport and Communications is authorised to issue regulations regarding the theoretical and practical training for persons who intend to acquire a driving licence, proof of competence or proof of having undergone other mandatory driver training. The objectives of the driver training and the requirements relating to the teaching have been laid down by the Directorate of Public Roads in Regulations of 1 October 2004 concerning driver training and driving tests etc.

The Regulation concerning driver training and driving tests etc. requires *i.a.* that the teaching shall be arranged so as to facilitate the learner driver achieving the objectives of the training. The Directorate of Public Roads prepares curricula for the driver training. Whereas the Regulations apply to all driving licence categories, the curricula are issued for each individual driving licence category. The curricula are based on the demands laid down in the Regulations with respect to objectives and teaching. A curriculum is not regarded as regulations pursuant to the Public Administration Act

The curriculum

The grounds for the choices made with respect to the contents and progression of driver training, have been collected together in Chapter I General. This was done for practical reasons. It is important to read the other parts of the curriculum in conjunction with this Chapter. Knowledge of the basis for the step-by-step objectives, subjects and course objectives in the curriculum is essential when planning the teaching.

In the following chapters, the main objectives of the training for the specific driving licence category are cited, as laid down in the Regulations concerning driver training and driving tests etc. In connection with the objectives, references are given to the relevant Sections in the Regulations. Furthermore, a description is given of the steps in the training as well as a description of the mandatory evaluation and guidance interviews and the scope of the mandatory training. This is followed by the step by step objectives for the driving licence category and the contents of the mandatory courses. The syllabus is subdivided in subjects, and main items are suggested for each subject.

Chapter 1 - General

Developing road traffic competence

Competence

Competence may be regarded as the knowledge, skills and other qualifications that a person must possess in order to perform tasks. What constitutes adequate competence varies, depending on the tasks to be performed. When assessing what constitutes adequate competence one must therefore first look to the tasks to be performed.

Road traffic competence

A wide range of knowledge and skills are needed to drive a vehicle in a safe manner. One condition is that the driver must be capable of mastering the vehicle in a technical sense. However the driver must also be able to cooperate with other road users, foresee how they will act and how situations on the road may develop. In order to drive safely the driver must realise what may constitute, or may develop into, dangerous situations. The driver must also realise how his/her own behaviour affects safety and wish to act in a way that makes him/her a safe driver. Road traffic competence may be considered as a collective term for the competence needed to perform all these tasks.

Road traffic competence then may be seen as the knowledge, skills, attitudes and motivation the driver needs to tackle the road traffic environment in a safe manner. Road traffic competence is more than just observable skills. The driver must be capable of interpreting various situations on the road and assess what constitutes proper behaviour. The driver must be able to mentally place him/herself in another person's situation; the driver must be capable of empathy. At the same time, the driver must possess the necessary self-control to act in accordance with his/her own judgement based on considerations of expedience and safety.

Well-developed road traffic competence is a prerequisite for successful driving. The driver must be able to control sudden impulses, aggression and other «distracting» emotions. The driver must be able to cooperate with and be considerate to other road users. People are not born with road traffic competence. This competence is acquired by imitation, understanding, practice and repetition. The wish to drive in a safe manner can be created by providing the driver with knowledge concerning the consequences of a choice between a safe manner of driving and a risky manner of driving. Developing road traffic competence takes time. .

Obtaining and processing information

Drivers have different objectives or motives for their driving, e.g. transport, excitement, sight-seeing and showing off. The driver is confronted, regardless of the objectives, with tasks that have to be solved while driving. The driver must keep his/her vehicle on the road, avoid running into other road users etc. The driver performs these tasks mainly by obtaining and processing information. Information from the surroundings which the driver considers relevant to the situation is singled out and linked to the knowledge that the driver has already stored. This knowledge tells the driver what he/she should do, and a decision is made which then leads to an action. How appropriate the chosen action is, will to a large extent depend on the

knowledge previously acquired by the driver. Knowledge in this context also includes the driver's accumulated experience.

Knowledge strongly influences which information the driver chooses from the surroundings for further processing. Inadequate knowledge may cause the driver to select irrelevant information for processing. Essential information may be neglected. The scope, the quality and the relevance of existing knowledge may also directly affect the appropriateness of the chosen actions. Inadequate knowledge leads to poor solutions and thus to unfortunate choices of actions.

When done consciously, processing of information can be rather demanding. Human beings have a limited capacity for conscious processing of information. When a considerable amount of information needs processing "overloading" may result. The information will not be processed properly and this can often lead to errors.

Regularly performed actions will gradually become automatic. This means that road traffic situations will trigger actions directly without the information being consciously processed first. This will release capacity. The driver can then perform some tasks automatically, while dealing with other tasks by conscious information processing. The driver will thus be able to perform more than one task at a time. Experienced drivers deal automatically with the simple tasks, such as changing gear, using direction indicators, keeping the vehicle on the road, pulling up for a red light, maintaining distance to the vehicle ahead etc. Conscious processing is used for more complex problems, such as assessing how other road users are going to move, how slippery the road is, whether the unobstructed road ahead is sufficiently long for overtaking, which road to choose etc.

The number of tasks that have to be solved while driving is so large that major problems would arise if they all had to be solved by conscious information processing. The driver would commit many mistakes and the likelihood of an accident would increase. It is a prerequisite for driving in today's traffic that most of the driving is performed automatically..

Automating actions is also important to the learning situation. Learning is mainly a matter of conscious information processing. If the learners tackle simple tasks by automatic action, capacity for conscious processing of new tasks will be set free. The learners will then be in a position to learn how to tackle more complex tasks. . Learners with inadequate training must consciously think of gear changes, keeping the vehicle on the road and other technical tasks. These learners will also be ill prepared for learning how to respond to other road users, because the capacity for conscious processing of information will always be limited.

It is thus important for driver training that technical driving skills have been automated to a reasonable extent before the learner attempts to solve more complex problems. Although learning is a continuous process, the instructor should keep a step by step model in mind when organising the lessons. In the early stages of the training, work is devoted to automating the simple tasks. The learner must, for example, first be able to control his vehicle, and then drive in the traffic.

The topics in driver training

The system of road traffic and legislation

Learners must from the very beginning reflect on the complex system that driving on the road is and the responsibility of the individual driver.

Before learners start driving on the road, they must have acquired an understanding of

- laws and rules that regulate the interaction between road users
- road traffic as a system
- the role of the driver in this system

Learners shall make use of this knowledge to organise and interpret the impressions acquired during the road traffic training.

Technical driving skills

A skillfull driver possesses good automatic technical driving skills. A learner who has to concentrate on changing gear, braking and steering during road traffic training will observe little of the other road users' behaviour. It is therefore important that learner drivers acquire sufficient training in technical driving skills to ensure that their basic actions are properly automated before road traffic training commences.

Road traffic competence

Training in mastering traffic situations normally constitutes the most comprehensive part of the training and will therefore occupy a central position. Learners must gradually learn to cooperate with other road users.

Knowledge of laws and rules and proper technical driving skills are prerequisites for efficient road traffic training. Experience which the learner gains from driving practice is important for insight in his/her own actions and assessments.

Economical and environment-friendly driving

In order to drive in an economical and environment-friendly manner, learner drivers must appreciate what characterises it, and have developed skills and motivation to drive in such manner. The training must provide learners with knowledge and skills and the opportunity to develop proper attitudes to the environment and to environment-friendly driving. This subject should be addressed at an early stage of the training. It must be linked to the driving practice, mainly in connection with training in technical driving skills and road traffic. The subject is therefore relevant throughout the major part of the training.

Tendencies with regard to actions and assessments

Knowing how the way a driver tends to act and assess situations can affect his/her driving behaviour is part of the driver training. Throughout their training, and particularly when they are learning road traffic skills, learners must gain experience in reflecting on the way they tend to act and make assessments and thereby gain a deeper understanding of what it means to travel on the road. The subject should be emphasised both initially and at the end of the training.

Self-insight

Towards the end of the training, when they possess a more varied driving experience and a better understanding of the importance of the way they tend to act and assess,

learners should be confronted with and reflect on the way they themselves tend to behave. This insight constitutes important ballast when learner drivers shall start driving on their own

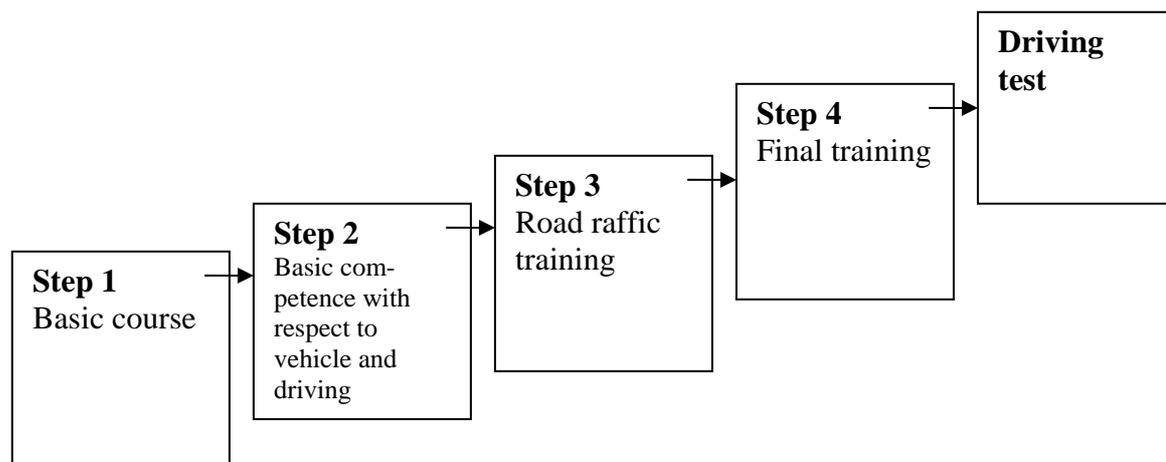
Planning and preparations before driving

Preparations before driving include choices that must be made in advance, for example the day before driving a vehicle. The driver must have proper routines with respect to eating, sleeping, alcohol, choosing routes and planning the time for departure. This subject is best suited for theory classes and discussions, and should for the most part be dealt with in the final part of the training. However, it is also possible to practise parts of this subject during the road traffic training and when the learner is driving independently.

The teaching

Step by step training

The training is conducted in four steps. The objectives of the training in Steps 1-3 describe what is necessary to benefit properly from the training in the next step. It is the intention that the contents in each step should be carried forth in the following step. The driving skills decide which step the individual learner is at. The objectives for Steps 1-4 put together indicate the competence which is required for passing the driving test.



Module-based training

A module based training scheme has been introduced to ensure that a learner who wants a driving licence in several categories does not have to go through the same teaching material more than once. In the case of the light categories, this is primarily evident from the course in basic road traffic knowledge which is a common module for all categories. For the heavy categories, most mandatory courses are common to several categories.

Mandatory courses

The purpose of driver training is to help learners to acquire road traffic competence. After completing the training the learner should possess the knowledge, skills, attitudes and motivation that a driver needs to deal with the road traffic environment

in a safe manner. Some teaching objectives, which are intended to contribute to this competence, do not readily lend themselves to assessment by means of a test. Other teaching objectives would be too time-consuming to measure during the driving test. To ensure that these topics are nonetheless covered in the training, mandatory courses have been introduced. The learners will then have to attend a specified number of lessons. In the mandatory courses emphasis is given to exercises which, for safety, practical or economical reasons, are not easy for the learner to carry out alone, and to topics such as understanding of risk, understanding of the system and other subjects which largely concern attitudes to road safety.

Mandatory evaluation and guidance lessons

In those cases where knowledge and skills can be measured fairly simply, calling for an assessment will usually be more expedient than to require the learner to attend a specific number of lessons. The assessment will primarily be made during the driving test. Although this procedure offers the learner the freedom to choose the progression of his/her own training towards the driving test, the training should nonetheless be structured to a certain degree. To this aim it is stipulated that learners shall *inter alia* complete two evaluation and guidance lessons in the course of the training.

Based on the learner's driving achievements, the learner and the instructor shall jointly establish the extent to which the objectives for the step have been reached. The instructor shall advise the learner driver whether he/she possesses the necessary basis to benefit properly from the training in the next step. The purpose of the interview is to guide the learner with respect to what has been achieved and the further learning process. The purpose of the interview is also to help the learner to develop self-insight and the ability to assess his/her own strong and weak points.

The learner decides if he/she will follow the advice of the instructor or not. If the instructor recommends the learner to practice more in Step 2 or 3, an additional evaluation and guidance lesson is not required when this practice has been completed. A learner driver cannot be turned away until the mandatory practical training has started. The Regulations lay down that the training institution can turn away a learner if it is doubtful whether the learner driver possesses the necessary driving skills to complete the mandatory practical training in a meaningful way.

Procedures

The training must be organised in a way that induces the learner driver to develop a capacity for reflection, to see the situation from the perspective of others and to cooperate on the road. It should improve the learners' awareness and perception of and attitudes to risk, and willingness to accept responsibility, take precautions and choose a manner of driving which reduces the risk of accidents or incidents. How far the instructor has advanced with respect to his/her teaching plans is not so important if the learner has not advanced equally far in his/her learning. Emphasis should be placed on procedures that turn learners into active participants. The organising, the choice of activities and the asking of questions must in all parts of the training be adapted with a view to benefit the learners.

The learners must feel that the lessons are so well organised that the time devoted to individual training is used optimally. When choosing training areas, consideration should be given to the stage the learner is at. It is important that the technical driving

skills become sufficiently automatic before the learner commences the training in solving more complex tasks. The learner must be able to control his/her vehicle first, and then drive in the traffic. Step 2 of the training must therefore be carried out in areas with little traffic.

During the practical training it may be wise for the instructor, in the interests of safety as well as efficiency, to demonstrate the exercises first in order to let the learners see what constitutes proper and efficient driving. Other subjects may be introduced by letting the learners find out first and gain experience. Conclusions are then drawn and rules are made. It will often be expedient to arrange for problem-oriented instruction by formulating problems for the learners to find answers to. Teaching should be based on two-way communication with plenty of room for discussion, exchange of experiences and questions from the learners.

Individual adaptation of the training

The need for training will vary. Some learners already hold a driving licence and have driving experience in another category. The availability of private driving practice will also vary. The individual learner's background of experience and his/her manner of acquiring the contents of the syllabus must therefore be considered when planning the progression of the training.

"The hidden curriculum"

Understanding of risk is a subject that recurs regularly throughout the driver training. It is a problem, during the training as well as later, that some learners begin to take higher risks as they gain more driving experience. For example, a learner who has completed a skid pan driving course may choose to drive at a higher speed than he/she would otherwise have done because some of the respect for driving on slippery roads will be gone. In that event, the learner has learnt something that is not one of the objectives in the curriculum. The term "hidden curriculum" is used by some for this kind of learning. The term is ambiguous. It means basically that in the process learners also pick up something which is not stated as an objective in the curriculum. The hidden curriculum is a problem only when this learning is at odds with the real objective of the training, for example when working with risk understanding. As an example, when working on risk understanding it is not unusual for an instructor to ask the individual learners what speeds they have travelled at. Some would answer that they have travelled at speeds exceeding 200 km/h in Norway. As the persons telling this are still very much alive, the instructor cannot prevent the other learners from drawing the conclusion that people survive even if they have driven very fast. The "hidden" lesson may then be that it is all right to drive at 140 km/h when others have survived driving at 200 km/h. The instructor cannot prevent unintended learning, but must take into account that it happens.

Chapter 2 Training for categories A1 and A

Main objective (see Section 9-1 in the Regulations)

After completing rider training for category A or A1, the learner rider shall possess the necessary competence to ride a motorcycle in the relevant category in a responsible manner.

The learner rider shall possess the knowledge and skills, self-insight and understanding of risk required to ride the motorcycle in a manner which

- *is safe on the road*
- *provides proper cooperation*
- *promotes traffic flow*
- *shows consideration for health, the environment and the needs of others*
- *is in compliance with regulations in force*

Step by step training

The training is conducted in four steps. The objectives of the training in Steps 1-3 describe what is necessary to benefit properly from the training in the next step. The intention is that the main items in each step shall be continued in the following step. The riding skills decide at which step the individual learner is at any one time.

The main objective for the training and the objectives for Steps 1-4 put together indicate the competence which is required for passing the driving test for categories A1 and A respectively.

The individual learner's background of experience must be considered when planning the progression of the training. The mandatory training is the minimum training that everybody has to undergo. Most learner riders will need more extensive training and riding practice.

Step 1

The objectives in step 1 are mainly linked to the learners' understanding of risk and the road traffic system. The training consists of a course in basic road traffic knowledge. The course is common to all the light categories and shall help learners to acquire a basic understanding of the implications of driving. The course includes first aid training and night driving.

The course comprises seventeen lessons and contains common material for all "light" driving licence categories. The intention is that the course shall provide the learner drivers with basic understanding of road traffic as a system where the various participants cooperate to achieve a well functioning and safe transport system. Subjects such as self-insight and tendencies with regard to actions and assessments are central subjects in this step. The course provides the basis for the further training in all driving licence categories.

Step 2

All subject matter in this step is common to the categories A1 and A.

Subject 2.1 Motor cycle riding, the environment, safety and training is a mandatory subject for the learner riders. The subject consists of three theory lessons and shall be completed before any practical training in this step commences.

In Step 2 the learner rider shall acquire knowledge of the motorcycle and motorcycle riding and shall learn to technically master his/her vehicle without having to pay attention to other road users. No specific number of lessons has been stipulated for this step, the learner's riding skills decide the extent of the training.

The learner rider shall complete a mandatory evaluation and guidance lesson at the conclusion of Step 2. The evaluation and guidance lesson shall comprise riding practice as well as a guidance interview. Based on the learner rider's achievements, the learner rider and the instructor shall jointly assess whether the learner possesses the necessary technical riding skills to be able to transfer his/her attention from the vehicle to the cooperation with other road users.

Suggestions for riding exercises in a manoeuvring area have been prepared for this step.

Step 3

The subject matter in step 3 is common to the categories A1 and A, with the exception of the «Safety course in precise riding technique category A». This course is mandatory for category A only, it consists of theory lessons as well as riding practice. The course comprises a total of four lessons, and the focus is mainly on precise riding technique when braking and steering a motorcycle.

The other objectives in step 3 are linked to the learner rider's learning and riding in varied traffic. The learner rider must also acquire knowledge of those provisions in the road traffic legislation which regulate the riding. Except for the «Safety course in precise riding technique category A» no minimum number of lessons have been specified for the training in this step, the learner's riding skills decide the extent of the training.

The learner rider shall complete a mandatory evaluation and guidance lesson at the conclusion of Step 3. With the learner's riding as a background, the learner and the instructor shall jointly assess whether the learner possesses adequate riding competence to ride independently and properly for a sustained period in a demanding road and traffic environment.

Step 4

Step 4, The course in safe road riding is the concluding part of the training, and is in its entirety mandatory for learner riders in category A1 as well as A. The subject matter in this step differs somewhat for categories A1 and A, and this step is therefore divided into two separate parts, one for category A1 and one for category A.

In category A1 the safety course comprises a total of four lessons, three of which shall be continuous riding practice. The theory part is divided into one part before and one part after the riding practice.

For category A, the safety course comprises a total of eight lessons, which are allocated to four theory lessons and four practical lessons. The practical part consists of 4 lessons of continuous riding. There are two theory lessons as the course starts, and two at its conclusion.

The objectives in step 4 for categories A1 and A are mainly linked to the learner's understanding of risk in relation to motorcycle riding.

Definitions and clarification of concepts

Instinctive faulty reactions

Your subconscious inadequate responses when you get scared.

A precise riding technique, a basic technique for motorcycle riding

The degree of precision when executing various technical riding exercises.

Action preparedness

The motorcyclist's main task is to perceive and appreciate hazards. As a consequence, the motorcyclist must often prepare situations by entering a state of readiness. This may imply adapting speed, preparing for braking, adjusting riding position, securing proper anchoring and/or being more conscious (being ready). This state of readiness is designated in this curriculum as the main concept of action preparedness.

"Buffer zone".

Space for manoeuvring is that margin of safety or safety zone which the motorcyclist acquires by maintaining a distance to potential hazards. This space for manoeuvring may provide the motorcyclist with necessary time and space to "make good" any faulty assessments or actions.

Positioning when riding straight ahead

When riding straight ahead, considerations of visibility, road grip, being seen, oncoming traffic as well as traffic behind shall be the basis for choosing position on the road. The normal position will be a little to the left of the centre of one's own lane.

Normal position when riding on bends

Safe riding on bends depends on a number of factors. Proper positioning (choosing the proper line, proper speed adaptation, proper steering technique and that the motorcycle and its rider should normally occupy a position within one's own lane.

The motorcyclist's choice with respect to positioning is expressed by the path followed by the motorcycle at any one time.

Riding through a bend turning right carries the hazard of veering into the oncoming lane, while turning left carries the hazard of riding off the road.

The positioning is often contingent on the state of the road, such as deep grooves (worn surface), reduced friction, and not least large radii of curvature which to a lesser extent create the need for establishing "reserves" in terms of road grip and space for manoeuvring.

The positioning should ensure optimal road grip and yield a smooth curve. The motorcycle should normally, when turning right as well as turning left, be operated in a way that makes it follow a path that is slightly less curved than indicated by the road's layout.

When **turning right**, in order to ensure maximum space for manoeuvring, the motorcycle should be positioned in the left hand part of the lane well ahead of entering the bend. You should furthermore select a point of tangency approximately half way through the bend that is well to the right of the centre of the lane.

To ensure maximum space for manoeuvring when **turning left**, position the motorcycle along the edge line of your lane well ahead of entering the bend, and then proceed to a point of tangency to the left of the centre of your lane.

The path described by the motorcycle leaving a bend depends on factors like oncoming traffic, the state of the road, obstructions and the further run of the road.

Interaction

This implies that the motorcyclist must ride in a clear manner and behave in a way that allows other road users to see, recognise and understand the motorcyclist's intention in a given situation.

Visibility

This concept is closely related to the previous one (interaction). The physical conditions for being seen, such as the colours used on the motorcycle and clothing are also part of this concept. Not least important are the motorcyclist's strategic choices with respect to actions to make himself/herself seen.

Anchoring

Describe how to be properly anchored on the motorcycle in order to be able to operate and steer the motorcycle effectively and precisely.

Steering command

That action on a two-wheeled motorcycle produced by the handlebar being pushed forwards on the side to which you intend the motorcycle to turn.

Steering point

That point on the road where the motorcycle begins to turn as a result of the steering command. Exercises where the learner is given the task to demonstrate this help tell the instructor how the learner acts on the motorcycle to make it turn.

Throttle control

Describes how you, by controlling the throttle (accelerator) through a bend, can compensate for the decreasing rolling circumference and also stabilise the motorcycle in the desired banking angle which you have already determined with your steering command. Throttle control also contribute to determining whether the motorcycle will oversteer or understeer

Rider development course

Organised supplementary on-road riding courses for motorcycle riders.

Requirements for clothing during training (Section 4 – 9 in the Regulations)

During riding practice with a paid instructor in categories A and A1, the learner rider shall, in addition to the mandatory crash helmet, wear a transparent visor or goggles, gloves, footwear covering the ankles and appropriate clothing covering the other parts of the body and suitable for motorcycle riding. Gloves, footwear and clothing shall be made of material which will not melt, burn or tear if the vehicle overturns and which will offer protection against blows and impact.

Communication equipment during training (Section 2 – 2 in the Regulations)

A two-way communication device shall be used between the instructor and the learner when practicing among other traffic.

Theory subjects for categories A1 and A

The theory part of the curriculum is divided into 10 main subjects. The curriculum gives an overview of the steps in which the individual theory subjects are dealt with, which are mandatory and what is their scope.

The curriculum emphasises that the theory subjects should be integrated with the practical exercises with respect to content. Theory subjects and practice subjects are therefore coordinated and allocated to the step in which their content belongs. Nor does the curriculum specify individual objectives for theory and practice, objectives are stated in terms of the competence that the learner rider shall acquire in each step (see Chapter 1 General). An exception is made in the safety course in “precise riding technique for category A” where individual objectives for theory and practice are specified

Subject	Topics	Step	Number of lessons
General topics for categories A1 and A			
2.2	The motorcycle - vehicle knowledge	2	Not specified
2.3	Clothing/personal protection	2	”
3.1	Basic physics and technical riding skills	3	”
3.2	Road traffic psychology	3	”
3.3	Riding in various kinds of road traffic environment - riding strategy and behaviour (objectives a-d)	3	”
Mandatory topics for categories A1 and A			
2.1	Motorcycle riding, the environment, safety and training	2	3
Mandatory topics, <u>category A1 only</u>			
4.1/4.3	Preparation and summing up/reflection	4	1
Mandatory topics, <u>category A only</u>			
	Physics and riding technique (safety course in precise riding technique)	3	1
4.1	Riding a motorcycle, hazards and strategy	4	2
4.3	Reflection, self-insight, exchange of experiences and summing up	4	2

Category A 1 og A					
	Step 1	Step 2	Step 3	Step 4	Test
A	Course in Basic Road Traffic Knowledge 17 lessons	Motorcycle riding, the environment safety and training 3 lessons	Safety course in precise riding technique (blocked off area) 4 lessons (incl. 3 practical lessons)	Course in Safe Road Driving 8 lessons (incl. 4 practical lessons)	<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">★ Practical</div> <div style="border: 1px solid black; padding: 2px;">★ Theoretical</div>
A1				Course in Safe Road Driving 4 lessons (incl. 3 practical lessons)	<div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">★ Practical</div> <div style="border: 1px solid black; padding: 2px;">★ Theoretical</div>
A1 → A			Safety course in precise riding technique (blocked off area) 4 lessons (incl. 3 practical lessons)	Course in Safe Road Driving 8 lessons (incl. 4 practical lessons)	<div style="border: 1px solid black; padding: 2px;">★ Practical</div>



 ★ = specified level of competence
 ◇ = mandatory advisory lesson

 = voluntary education
 = mandatory education

Chapter 3 Step by step objectives, course objective, subjects and main items

Step 1 Course in basic road traffic knowledge

Objectives for Step 1, see Section 9-2 in the Regulations

After completing Step 1, the learner shall possess the necessary foundation to benefit properly from further training.

The learner shall have an understanding of traffic and driver training which is adequate for the learner to commence riding practice.

The learner shall complete the mandatory course in basic road traffic knowledge as stipulated in Chapter 8 of the Regulations concerning driver training.

The training in Step 1 is mandatory and consists of a course in basic road traffic knowledge. The course in basic road traffic knowledge is common to all driving licence categories and is the base for further training and a condition for riding practice. The objectives are mainly linked to the learners' understanding of risk and the road traffic system.

The course comprises the following parts:

Part 1: The driver training

Part 2: Basic understanding of road traffic

Part 3: The human element in road traffic

Part 4: Rider training and riding experience

Part 5: First aid

Part 6: Road accident procedures

Part 7: Night driving

There are specified objectives for each subject. The main items are listed for each subject, showing what the teaching in the subject must at least cover.

The course comprises a total of seventeen lessons and may be held with a maximum of sixteen learners. There shall be four lessons devoted to first aid and road accident procedures. One of these lessons shall be allocated to practical exercises in connection with an arranged accident. There shall be three lessons devoted to night driving. At least one of these lessons shall consist of an out-door demonstration. This demonstration may be carried out with up to six learners per instructor. At least one of the night driving lessons shall take the form of a demonstration in a vehicle with the learner as passenger. This may be carried out with a maximum of two learners in the vehicle. The remainder of the training shall consist of ten lessons distributed over at least three sessions. Any transport to and from the demonstration sites is not included in the time allotted to the above lessons.

Instruction in first aid shall be given by persons who are specially qualified and approved by the Norwegian First Aid Council

To have the course approved, the learner must have attended all the lessons that belong to subjects 1 to 7 inclusive. If a learner is absent for parts of the course,

arrangements must be made for missed lessons to be made up in a corresponding course later. Driving practice during the period 16 March – 31 October is permitted when part 6 has been completed. A candidate who has passed a driving test taken during the period – 16 March - 31 October, but who has not completed the night driving training, will only receive a driving entitlement that is valid until 1 March the following year.

Objectives for course in basic road traffic knowledge see Section 8-2 in the Regulations

The learner shall through experience, activities and summing up arrive at a conscious understanding of what it means to show consideration and be alert and cautious so that no danger is created nor any damage caused, and so that other traffic is not unduly obstructed or inconvenienced.

The learner shall

1. *be familiar with the formal reasons for having driver training, the conditions for acquiring a driving licence and the existence of curricula for driver training*
2. *have a basic understanding of traffic through a conscious perception of how the rules applicable to positioning, speed, giving way, signs and road markings contribute to a safer and more efficient flow of traffic*
3. *have a basic knowledge of the human element in traffic by*
 - a). *describing the important elements of the driving process and being conscious of the significance of motivation and emotions*
 - b). *understanding the importance of communication and interaction.*
 - c). *being conscious of how responsibility, self-insight and will have a significant bearing on our behaviour on the road.*
4. *have knowledge about driver training and driving experience by*
 - a). *being familiar with the rules concerning driver training*
 - b). *knowing that there is a correlation between riding experience and accident risk*
 - c). *understanding the importance of automating basic actions and patterns of behaviour*
5. *master basic first aid skills in connection with road accidents by*
 - a). *having knowledge of his/her duties in the event of a road accident*
 - b). *being familiar with procedures for securing and taking proper action at the scene of an accident*
 - c). *being able to assess the injuries and give first aid in practice*
6. *take part in rescue operations at an arranged accident and thereby*
 - a). *experience being the first to arrive at the scene of the accident, realise the importance of knowing the extent of injuries before reporting the accident and know how to report*

- b) *acquire skills in basic procedures at the scene of an accident*
 - c) *further develop practical skills in basic, life-saving first aid at road accidents*
7. *realise, through demonstrations outdoors and in a vehicle, how accidents in the dark can be avoided by*
- a) *observing and experiencing the causal relationships of typical accidents which happen in the dark and having a basis on which to assess hazards when riding at night*
 - b) *being conscious of what constitutes proper use of lights and other behaviour when riding, parking and making emergency stops at night.*

The learner shall assess his/her own competence to embark on further training and have sufficient understanding of traffic and driver training to start riding practice.

1.1 The driver training

The learner shall be familiar with the formal reasons for why we have driver training, the conditions for acquiring a driving licence and the existence of curricula for driver training.

Subject 1.1 The driver training

Main items

- The reasons for driver training
- Conditions for acquiring a driving licence
- Main objectives for driver training in the light categories
- Curricula

1.2 Basic understanding of road traffic

The learner shall have a basic understanding of traffic through a conscious perception of how the rules applicable to positioning, speed, giving way, signs and road markings contribute to a safer and more efficient flow of traffic

Subject 1.2.a Positioning the vehicle

Main items

- The importance of positioning for safe and efficient flow of traffic
- Buffer (safety) zones

Subject 1.2.b Vehicle speed

Main items

- The importance of speed for safe and efficient flow of traffic
- Speed limit signs
- The relationship between positioning and speed adaptation

Subject 1.2.c Giving way

Main items

- The importance of the rules for giving way for safe and efficient flow of traffic

Subject 1.2.d Signs and road markings

Main items

- The importance of signs and road markings for safe and efficient flow of traffic
- Hazard warning signs
- Prohibitory signs
- Mandatory signs
- Continuous lines and hazard warning lines

1.3 The human element in road traffic

The learner shall have a basic knowledge of the human element in road traffic in that he/she

- a) describes the important elements of the riding process and being conscious of the significance of motivation and emotions
- b) understands the importance of communication and cooperation
- c) is conscious of how responsibility, self-insight and will have a significant bearing on our behaviour on the road

Subject 1.3.a The driving process

Main items

- Essential elements of the driving process
- The significance of motivation (emotions) for the way we act in road traffic

Subject 1.3.b The cooperative perspective

Main items

- Use of signals
- Communication between road users
- Sensitivity with respect to other persons' situations
- Interpreting situations on the road

Subject 1.3.c Sense of responsibility, self-insight and willingness to obey the rules

Main items

- What causes accidents (human failure)
- The rider's faulty judgement
- Risk threshold
- The rider's own attitude to risk
- Self-insight

1.4 Riding practice and riding experience

The learner shall have knowledge about driver/rider training and driving/riding experience in that he/she

- a) is familiar with the rules concerning driver/rider training
- b) knows that there is a correlation between riding experience and accident risk
- c) understands the importance of automating basic actions and patterns of behaviour

Subject 1.4.a Rules concerning riding practice

Main items

- Requirements applicable to the learner

- Requirements applicable to the lay instructor
- Requirements applicable to the vehicle.

Subject 1.4.b Riding experience and accident risk

Main items

- Riding experience and accident statistics

Subject 1.4.c Automating acts and patterns of behaviour

Main items

- The necessity of automating basic actions and patterns of behaviour
- The relationship between automating riding skills and information processing

1.5 First aid

The learner shall master basic first aid skills in connection with road accidents by

- a) having knowledge of his/her duties in the event of a road accident
- b) being familiar with procedures for securing and taking proper action at the scene of an accident
- c) being able to assess the injuries and give first aid in practice

Subject 1.5.a Obligations in the event of an accident

Main items

- Obligations in the event of an accident

Subject 1.5 b Procedures for securing and taking proper action at the scene of an accident

Main items

- Securing the accident site
- How to behave at the scene of an accident

Subject 1.5.c Assessing injuries and offering practical first aid

Main items

- Assessing injuries
- Practice in first aid

1.6 Road accident procedures

The learner shall take part in rescue operations at an arranged accident and thereby

- a) experience being the first to arrive at the scene of the accident, realise the importance of knowing the extent of injuries before reporting the accident and know how to report
- b) acquire skills in basic procedures at the scene of an accident
- c) further develop practical skills in basic, life-saving first aid at road accidents

Subject 1.6.a Being the first to arrive at the scene of an accident

Main items

- Securing
- Assessing injuries
- Reporting

Subject 1.6.b Basic routines at the scene of an accident

Main items

- Practice in how to behave at the scene of an accident

Subject 1.6.c Basic life-saving first aid at road accidents

Main items

- Practice in first aid

1.7 Night driving

The learner shall realise, through demonstrations outdoors and in a vehicle, how road accidents in the dark can be avoided by

- a) observing and experiencing the causal relationships of typical accidents which happen in the dark and having a basis on which to assess hazards when driving at night
- b) being conscious of what constitutes proper use of lights and other behaviour when riding, parking and making emergency stops at night

Subject 1.7a Accidents and hazards associated with driving at night

Main items

- Visible distance as perceived by pedestrians and riders
- Distance, speed and time
- Visible distance using full beam and dipped headlights
- Clothing and reflective devices

Subject 1.7.b Use of lights and other behaviour at night

Main items

- Correct use of lights, adjustment of speed and positioning when meeting, catching up with and overtaking
- Correct use of lights, adjustment of speed and positioning in the event of an emergency stop
- Correct use of lights, adjustment of speed and positioning when parking
- Hazards

Comments on Step 1

The background for a course in basic road traffic knowledge

There are strong indications that an increasing proportion of the population are lacking social skills. Many people are exposed to violence or threat of violence every year. Some say that selfishness has become more dominant than the feeling of community. A number of teaching programmes have been prepared with a view to improving social skills among the pupils in the public school system. The measures that have proven most successful, are those that aim to develop the whole person by involving both intellect, emotions and actions. A general feature of those measures has been to create understanding of the need for rules and procedures and the need to follow them.

The road is an important social arena for many people. Work on social skills must therefore be kept up in the driver training. The aim of the course in basic road traffic knowledge is to help driving licence candidates to become responsible riders. The course's objectives are generally applicable and are often found at a higher level. Only to a minor extent will the course contain material that can be read at home. The focus is on understanding road traffic as a system involving varied kinds of

participants, on conditions that affect the hazards, on the drivers' responsibilities and on the importance of self-insight and self-critical assessment.

There are several reasons for having a course in basic road traffic knowledge

- It is important that the teaching at an early stage has focus on conditions that affect risk and the need for self-insight and self-critical assessment
- It is expedient to collect together the parts of the curricula which apply to all the light categories so that persons wishing to acquire a driving licence for more than one category do not have to go through the same curricula more than once.
- It is important that the learners get a basic understanding of road traffic before they commence riding practice so that they possess a more proper perspective on riding and a basis for facilitating learning later.

The intention is that many of the topics raised in the course in basic road traffic knowledge will be continued in the individual driving licence categories This applies, for example, to such topics as setting limits, self-insight, empathy on the road, attitude to risk etc.

The perspective of time

The developing and learning of social skills is a comprehensive process that takes place over a long time. The formal training for a driving licence takes place over a comparatively short time. In this perspective of time the riding instructor cannot take on the responsibility for teaching the learners basic social skills. The instructor must build on the social skills already present and help learners to understand that rules concerning adjustment of speed, giving way, positioning, signalling etc. are necessary on the road. Simple traffic rules, signs etc. shall be used to illustrate any topics raised.

Contents

The objectives of the course in basic road traffic knowledge are generally applicable and are often found at a higher level. The course shall contain not only factual information, but equally provide a better understanding of the road traffic as a system. It is better for the learners to acquire an understanding of why the rules are worded the way they are rather than to memorise them word by word. The value of knowing what a sign is called is far less than the value of knowing why it is put up in a specific place. But in order to create this kind of understanding, there must also be knowledge about the sign.

When deciding what subject matter is to be mandatory, two specific considerations have to be taken into account. The first is whether the training is difficult for the learner to complete on his/her own for practical reasons. The second is whether it is difficult to assess to what extent the objectives have been achieved during the driving test. For an in depth treatment of the rules and regulations, emphasising to a larger extent the factual matter, the instructor shall refer to text books, category-specific voluntary theory courses etc. Factual information is important, and learners should be encouraged to seek this knowledge. It is nonetheless a fact that speeding, dangerous overtaking, accidents etc. are usually caused by rules and regulations not being appreciated, rather than by lack of knowledge about them. In the course in basic road traffic knowledge, focus shall be on the rider's responsibilities and the importance of self-insight and self-critical assessment.

The schools are free to expand the course. It must then be made clear to the learners that the mandatory part comprises 17 lessons. The school may invite any lay instructors or other resource persons (e.g. the Public Roads Administration) to a voluntary information session on the subject of driving practice after the conclusion of the course proper. The subject of driving practice is allotted time at a stage of the training when the instructor has learnt to know the learners. This voluntary offer may then more easily be adapted to the learners needs.

The teaching

Problem-oriented teaching

The instructor should arrange for problem-oriented teaching. This implies that the instructor must prepare concrete problems in advance, thus allowing the discussions to lead to specific conclusions. The problems must be formulated with reference to the main objectives of the lessons, and the instructor must have prepared a plan for subjects, activities and summing up. The learners have already acquired a certain road traffic skill from being pedestrians, passengers and cyclists. Many of them possess a good knowledge of traffic rules, signs, road markings, causes of accidents, special hazards etc. Although some learners have a rather relaxed attitude to this knowledge, the problems must be based on the assumption that the learners already have substantial road experience. A good rule when preparing problems is to move from the known to the unknown, from the concrete to the abstract.

The problem-oriented teaching method may appear to some people to be less “efficient” than plain lecturing. The method may also be more demanding in that the teacher must to a large extent stay in the background but at the same time remain open to all kinds of input. But there is ample support for the problem-oriented teaching method in pedagogical research, in particular where attitudes and motivation are concerned. Just as in all other teaching, the important question will be whether the learners have achieved the objective and not whether the teacher has got to the end of his manuscript or over-head programme.

The main implication of recommending problem-oriented teaching is to ensure that the teaching typically does not take the form of a lecture. Group work and dialogue are common procedures in problem-oriented teaching. When choosing methods, the teacher should among other things consider the following: To what extent will the learners be able to achieve the objective for the topic on their own? To what extent will it be possible for me to give the learners a clear task they can work on independently? To what extent is this task one that will activate everyone and will the groups require approximately the same time to solve it?

Organising the teaching

The learners should be seated in the classroom in a circle or horse-shoe so they can see each other and the teacher.

Technique when asking questions

The teacher must make use of techniques that encourage participation. It is important to give all the learners some time for reflection after the question has been posed. It

may often be of advantage for learners to cooperate with the person sitting next to them to arrive at answers. There should be many open problems in the sense that there may be more than one solution. In these cases the teacher should not immediately comment on the validity of a specific answer. Rather than saying: "Yes, good, are there any other solutions?" the teacher might say: "That is one way of doing it, are there other ways?" Questions that start with an interrogative word are more open than questions starting with a verb, since the former avoids simple yes/no answers.

The dialogue must not have the character of an "interrogation". The teacher must indicate when he/she is satisfied with the answers. In cases where there is more than one solution, the teacher should avoid commenting immediately on the validity of the first answer.

It is easy to get off the track when teaching in this manner because the learners or the teacher easily find associations to other interesting problems. Many problems must be referred to the theory courses for the individual driving licence categories, even if the teacher feels that this deviates from the principle of taking the learners' interests as a basis. The teacher must at all times remain conscious of the lesson's main objective, of the topic, of the problem as presented and of what to express when summing up.

Step 2 Basic competence with respect to vehicle and riding, categories A1 and A

General

The subject matter in this step is common to the categories A1 and A.

The intention is that subjects and main items from step 2 shall be continued in Steps 3 and 4 and they will also constitute part of the basis for the tasks given in the driving test.

Suggestions for riding exercises in a manoeuvring area for step 2 are included as a separate annex to the curriculum. It is not mandatory to use them for the training, they are intended to be of help when teaching.

Objectives for Step 2 see Section 9-3 in the Regulations

After completing Step 2, the learner rider shall possess the necessary foundation to benefit properly from the road traffic training in Step 3.

The learner rider shall possess adequate technical riding skills and operational habits to be able to transfer his/her attention from the vehicle to the traffic picture and to cooperate with other road users.

The learner rider shall

1. *in the course of three lessons of mandatory training*
 - a) *discuss possible conflicts between motorcyclists and other groups of road users*
 - b) *discuss the concepts of riding skills, the motorcycle's power resources and the relation between them, and the demands made on motorcyclists by the road environment*
 - c) *discuss and arrive at an opinion with respect to hazards when riding a motorcycle, as well as the causes of the most common and serious motorcycle accidents and effective measures to counteract them*
2. *explain the proper use of the motorcycle's main components and the information contained in the vehicle registration card, as well as carry out a safety check of the motorcycle and explain what is being checked and why the checks are made*
3. *explain the use of proper motorcycle clothing and mandatory personal protection*
4. *prepare for riding and, while walking beside the motorcycle move it forwards and backwards, straight ahead and round a bend, without the use of the engine*
5. *while observing, signalling, using the throttle, clutch lever and proper anchoring set the motorcycle in motion maintaining proper balance, straight ahead, to the right and left, on a level road and up- and downhill*
6. *place the motorcycle in an appropriate position in the lane when going straight ahead*
7. *while observing, signalling, using both brakes properly and maintaining proper balance, bring the motorcycle to a halt in a gentle and comfortable manner*
8. *by proper anchoring, use of his/her eyes and operating clutch, throttle. and brakes, maintain proper balance when riding the motorcycle at walking speed*

9. *have acquired basic skills in changing gear by*
 - a) *performing gear changes quickly and precisely, with the help of proper anchoring and operation of throttle., clutch lever and gear selector, while maintaining a stable course and without undue movements of the motorcycle*
 - b) *selecting gears appropriate to speed, curvature and the road's incline with the help of proper anchoring, use of eyes, steering command and throttle control, have acquired basic skills in steering the motorcycle by*
 - a) *steering the motorcycle so that it turns at the right instant and follows a smooth curve*
 - b) *being capable of basic riding on bends in open roads with moderate traffic and few points of conflict*
10. *acquire basic skills in braking by*
 - a) *having the proper riding position with arms relaxed and slightly bent, looking ahead and being properly anchored on the motorcycle when braking*
 - b) *using both brakes when braking normally, but using the front brake as the main brake*
 - c) *being able to pull up at a specified point by applying sufficient brake force initially and adjusting it as required in order to stop at the exact point.*
 - d) *being able, by being properly anchored and making proper use of the brakes, to perform hard and controlled braking and achieve at least 70 - 75 % of optimal retardation*
11. *combine his/her basic, technical riding skills to operative functionality and be ready to assume action preparedness when required during uninterrupted riding in a simple environment with moderate traffic*
12. *be capable of assessing his/her own competence as a rider*

**Subject 2.1 Motorcycle riding, the environment, safety and training
(mandatory subject – three lessons)**

The learner rider shall, in the course of three lessons of mandatory training

- discuss possible conflicts between motorcyclists and other groups of road users
- discuss the concept of riding skills, the motorcycle's power resources and the relation between them, and the demands made on motorcyclists by the road environment
- discuss and arrive at an opinion with respect to the hazards of riding a motorcycle, as well as the causes of the most common and serious motorcycle accidents and effective measures to counteract them.

Main items

The motorcycle community and the motorcycle culture

Conflicts of interest between motorcyclists and other groups of road users

Motorcycle accidents – hazards

- The demands of the road environment and the motorcyclist's level of achievement
- The importance of riding experience

Subject 2.2 The motorcycle

The learner rider shall explain the proper use of the motorcycle's main components and the information contained in the vehicle registration card, as well as carry out a safety check of the motorcycle and explain what is being checked and why the checks are made

Main components and vehicle registration card

Main items

- The owner's and the rider's responsibilities
- Statutory and safe condition
- The motorcycle's vehicle registration card, net vehicle weight, payload and power
- Engine and transmission
- Emergency stop switch and the fuel cock
- Emissions
- The braking system and systems that help make braking simpler on a motorcycle (integral and ABS brakes)
- Steering
- Wheels, tyres and road grip
- Steering arm and front fork
- Sidecar
- 3- and 4-wheeled motorcycles

Safety check

Main items

- Front wheel and tyre
- Exhaust system
- Transmission
- Front fork
- Rear suspension and shock absorbers
- Steering
- Wheels, tyres
- Frame and drive chain
- Lights and electrical system
- Front brake and rear brake
- Clothing

Subject 2.3 Clothing and personal protection

The learner rider shall explain the use of proper motorcycle clothing and mandatory personal protection

Main items

- The purpose of and requirements applicable to safety equipment
- Mandatory safety equipment
- Various types of clothing for safety and riding

Subject 2.4 Preparations for riding

The learner rider shall prepare for riding and, while walking beside the motorcycle move it forwards and backwards, straight ahead and round a bend, without the use of the engine.

Main items

- The motorcycle's instruments and controls
- Starting and stopping the engine
- Using the motorcycle's parking stands.
- Moving the motorcycle, without the use of the engine, forwards and backwards, straight ahead and round a bend, by walking beside the motorcycle
- Choosing a motorcycle that corresponds to the individual's need and level of skill
- Adopting an appropriate riding position with relaxed arms and elbows slightly bent
- Adjusting mirrors and any adjusting of levers and pedals HIT
- The motorcycle's anchoring points

Subject 2.5 Starting off

The learner rider shall by observing, signalling, using the throttle, clutch lever and proper anchoring set the motorcycle in motion while maintaining proper balance, straight ahead, to the right and left, on a level road and up- and downhill.

Main items

- Starting off from the edge of the road, straight ahead on a level road, downhill and uphill: observing and signalling, proper balance, proper use of throttle and gentle use of clutch
- Steady speed increase after starting off
- Using brakes, or brakes combined with clutch and gear, (brief stop, new start) on an incline in order to stay put and/or avoid rolling backwards
- Starting off just before or on a bend, to the right and to the left, smooth curve and precise positioning, on the bend as well as after the bend, using eyes, steering command, anchoring and throttle control
-

Subject 2.6 Positioning

The learner rider shall place the motorcycle in an appropriate position in the lane when riding straight ahead

Main items

- Proper positioning in the lane when going straight ahead, normally left of centre in one's own lane

2.7 Stopping

The learner rider shall, while observing, signalling, using both brakes correctly and maintaining proper balance, bring the motorcycle to a halt in a gentle and comfortable manner

Main items

- Pulling up along the edge of the road with observation, signalling, positioning and proper balance when the motorcycle stops
- Anchoring/riding position with relaxed arms and the knees pressed against the fuel tank.
- Use of the front brake as the main brake, coordinate and adjust front and rear brakes to pull up gently
- Clutch lever at the right instant when pulling up
- The sequence for operating throttle, front brake, rear brake and clutch when pulling up

- Changing to 1st gear just before stopping

Subject 2.8 Balance

The learner rider shall, by proper anchoring, use of his/her eyes and operating clutch, throttle and brakes, maintain proper balance when riding the motorcycle at walking speed.

Main items

- Coordinate throttle, clutch and brakes to maintain a slower than walking speed (crawling)
- Balance and directional stability, proper anchoring, looking up and ahead
- Crawling while making directional changes to right and left
- Crawling on a small incline while making directional changes to right and left

Subject 2.9 Changing gear

The learner rider shall have acquired basic skills in changing gear by

- performing the gear changes quickly and precisely, with the help of proper anchoring and proper use of the throttle, clutch lever and gear selector, while maintaining a stable course and without undue movements of the motorcycle
- selecting gears appropriate to speed, curvature and the road's incline

Main items

- Quick and precise coordination of the throttle rpm), clutch lever and gear selector in order to avoid undue movements of the motorcycle
- Steady speed increase without undue loss of speed when changing gear, on level road and going uphill and downhill
- Steady course while changing gear going straight ahead and on bends
- Same speed before and after changing when changing to a lower gear
- Choosing the appropriate gear to match the speed after slowing down and with regard to the road's gradient

Subject 2.10 Steering

The learner rider shall with the help of proper anchoring, use of eyes, steering command and throttle control have acquired basic skills in steering the motorcycle by

- steering the motorcycle so that it turns at the right instant and follows a smooth curve
- being capable of basic riding on bends in open roads with moderate traffic and few points of conflict

Main items

- Simple exercises in giving steering command
- Steering point, steering command, use of eyes and precision when riding on a bend (exercises preferably performed in a manoeuvring area)
- Turning right and left in regular intersections with little or no traffic, observing, signalling and precise positioning before, in, and after the bend (steering point, looking into the bend, anchoring, steering command and throttle control)
- Making a smooth curve
- Riding on bends in open roads (practical exercises in steering technique with little surrounding traffic)

- Positioning, choosing gear and action preparedness before the bend
- Steering point and steering command
- Looking into the bend
- Throttle control through the bend

Subject 2.11 Braking

The learner rider shall acquire basic skills in braking by

- having the proper riding position with arms relaxed and slightly bent, looking ahead and proper anchoring on the motorcycle when braking
- using both brakes when braking normally, but using the front brake as the main brake
- being able to pull up at a specified point by applying sufficient brake force initially and adjusting it as required in order to stop at the exact point
- being able, by proper anchoring and proper use of the brakes, to perform hard and controlled braking and achieve at least 70 - 75 % of optimal retardation.

Main items

- Anchoring on the motorcycle with knees against the fuel tank, looking up and ahead, and relaxed arms when braking
- Proper use of eyes
- Letting the muscles of back and abdomen absorb the braking momentum
- Using both front and rear brakes
- Exercise adjusting front-wheel lock (low speed)
- Adjust brake pressure to pull up exactly at a designated point
- Change to 1st gear just before stopping
- Setting the motorcycle in motion immediately after having pulled up, going straight ahead as well as turning right and left (normal braking)
- Assess stopping point with a view to making it simpler to start off again when making a right or left turn (normal braking)
- Braking from 50 km/h to full stop (70 – 75 % of maximum retardation)
- Braking from 50 km/h to full stop followed directly by starting off again, turning right or left as directed by the instructor
- Adjust locking wheels when braking

Subject 2.12 Combining and applying basic technical riding skills

The learner rider shall combine individual riding skills and assume action preparedness when required during uninterrupted riding in a simple environment with moderate traffic

Main items

- Combine individual skills such as braking, steering, choosing and changing gear, crawling and hill start techniques into a comprehensive capability during continuous riding in a simple environment
- Action preparedness

Subject 2.13 Mandatory guidance lesson – evaluation of riding competence

The learner rider shall be capable of assessing his/her own competence as a rider.

What shall be subject to assessment

- Knowledge about the motorcycle
- Balancing skills
- Braking skills

- Steering technique
- Handling of the vehicle during continuous riding
- Self-insight

Step 3 Road traffic competence and technical riding skills

General

Step 3 contains common material for categories A1 and A. The exception is “Safety course in precise riding technique for category A” which is mandatory for category A only.

The step contains mainly subjects and items related to road traffic, and it concludes with a mandatory evaluation and guidance lesson. The intention is that subjects and main items shall be continued in Step 4.

The mandatory “Safety course in precise riding technique for category A” is a course in precise riding technique comprising four lessons, at least three of which shall be riding practice on a track or other manoeuvring area. The course must be completed in full before the conclusion of Step 3.

Objectives for Step 3, see Section 9-4 in the Regulations

After completing Step 3, the learner rider shall possess the necessary foundation to benefit properly from the final training in Step 4. The learner rider shall be capable of independent riding in varied traffic.

The learner rider shall

1. *describe the forces acting on a motorcycle during riding and explain the relationship between physics, the motorcycle's properties and applied riding technique*
2. *describe and explain information processing and the factors affecting it during riding, and explain how the rider's attitudes and disposition with respect to safe riding affect behaviour*
3. *have acquired sufficient competence with respect to riding strategy and behaviour when riding in various road environments in that the learner rider*
 - a) *is familiar with the basic rule for road traffic, the traffic rules, road signs and regulations, and explains manner of riding based on these*
 - b) *describes situations that imply a special hazard to motorcyclists and gives an account of a safe and appropriate manner of riding*
 - c) *indicates the appropriate position before and on a bend and explains how the learner rider, by selecting position and adapting speed, secures adequate buffer zone in relation to the edge of the road and oncoming traffic*
 - d) *explains a precise riding technique and manner of riding on bends*
 - e) *chooses a safe manner of riding up to, through and between junctions, on multi-lane roads and in one-way streets in all types of road environment*

- f) *rides as indicated by road markings and signs or other instructions that regulate traffic*
 - g) *identifies, takes account of and chooses a safe manner of riding in situations that imply a special hazard to motorcyclists when riding in heavy traffic*
 - h) *chooses a safe and appropriate manner of riding when entering and leaving a major road*
 - i) *identifies and describes the road's condition and shape, and applies and masters a precise riding technique when riding on bends*
 - j) *recognises and takes into account conditions that imply a special hazard to motorcyclists riding on the open road*
 - k) *rides independently, using a systematic observation technique which*
 - l) *offers a complete view and contributes to efficient traffic flow*
 - l) *chooses a manner of riding that ensure safety for the rider, the passengers and other road users*
4. *The learner rider shall show self-insight by assessing his/her own riding competence*

Subject 3.1 Physics and technical riding skills

The learner rider shall describe the forces acting on a motorcycle during riding and explain the relationship between physics, the motorcycle's properties and applied riding technique.

Main items

- The forces acting on a motorcycle in motion, acceleration and braking, straight ahead and on bends (kinetic energy, braking distance and turning forces)
- Directional stability, the self-balancing ability of the motorcycle, centre of gravity and caster/fork angle on various motorcycle types, placing luggage
- Gyro effect
- The tyre's profile and rolling circumference in bends
- Sitting posture and anchoring
- Steering technique
- Braking technique and brake distribution between front and rear wheel brakes on various motorcycle types
- Acceleration

Subject 3.2 Road traffic psychology – information processing, attitudes and behaviour

The learner rider shall describe and explain information processing and the factors affecting it during riding, and explain how the rider's attitudes and disposition with respect to safe riding affect behaviour.

Main items

- Human psychical and physical preconditions with regard to being a road user
- The process of driving, eyesight and field of vision, processing of **sensory** input, perception and assessment of speed and distance, the position of the head when riding through a bend etc.
- Attention, action preparedness, reaction time and response time
- Systematic observation technique

- How cold and humidity influence information processing
- Attitudes, disposition and behaviour

Subject 3.3 Riding strategy and behaviour

The learner rider shall have acquired sufficient competence with respect to riding strategy and behaviour in various road environments in that the learner rider

- is familiar with the basic rule for road traffic, the traffic rules, road signs and regulations, and explains a manner of riding based on these
- describes situations that imply a special hazard to motorcyclists and gives an account of a safe and appropriate manner of riding
- indicates the appropriate position before and on a bend and explains how by selecting position and adapting speed the learner rider secures an adequate buffer zone in relation to the edge of the road and oncoming traffic
- explains a precise riding technique and how to ride through bends
- chooses a safe manner of riding up to, through and between junctions, on multi-lane roads and in one-way streets in all types of road environment
- rides as indicated by road markings and signs or other instructions that regulate traffic
- identifies, takes account of and chooses a safe manner of riding in situations that imply a special hazard to motorcyclists when riding in heavy traffic
- chooses a safe and appropriate manner of riding when entering and leaving a major road
- identifies and describes the road's condition and shape, and applies and masters a precise riding technique when riding on bends
- recognises and takes into account the hazards that apply to motorcyclists in particular when riding on an open road
- rides independently, makes use of a systematic observation technique offering a complete overview and leading to efficient traffic flow
- chooses a manner of riding that ensures safety for the rider, the passenger and other road users

Behaviour on the road

Main items

- The traffic system
- The basic rule for road traffic, the traffic rules and regulations
- Positioning and space for manoeuvring when riding in heavy traffic
- Speed, positioning and signalling, rules and cooperation
- Special hazards and special features of various road traffic environments
- Road signs and road markings of particular significance to the motorcyclist
- Parking a motorcycle
- Multiple lane roads, one way traffic and public transport lanes
- Riding in regulated and non-regulated junctions in various road traffic environments
- Riding in simple bends and S - combinations, identifying types of curves, road surfaces, lateral banking and grooves, the road ahead (optical guidelines), speed and appropriate positioning
- Overtaking

Riding in residential areas, urban environments and built-up areas

Main items

- Riding in junctions, regulated and non-regulated, in heavy traffic; where to look and what, in particular, should the motorcyclist look for
- Choice of stopping point when required to yield
- Making use of time gaps and situations where others are required to yield
- Special hazards in junctions, in particular oncoming traffic making a left turn
- Adapting speed, signalling and positioning with regard to visibility, traffic conditions, the road's condition and anticipated behaviour from other road users (buffer zone, secure road grip, to see, to be seen and interpreted correctly)
- Action preparedness when required
- Riding in residential areas
- Riding on multi lane roads, changing lanes and appropriate choice of lane as directed by road signs, road markings and traffic conditions/traffic flow
- Positioning and special hazards in one way streets
- Use of public transport lanes, traffic flow and hazards
- Riding in queues, and overtaking stationary queues

Riding in an open road environment

Main items

- Quick and precise acceleration from 0 – 80 km/ht, straight ahead, to the right and left after entering a major road (may also be practised in a manoeuvring area)
- Identify and describe the road traffic environment and present a strategy for the continued riding.
- Entering/leaving a major road, visibility, traffic volume, intersecting and oncoming traffic, gaps and special hazards
- Slip roads / access roads
- Adapting to the traffic rhythm during sustained riding
- Identify and describe bends, road conditions and construction and apply a precise riding technique
- Overtake and being overtaken
- Special hazards and action preparedness when riding on a major road (oncoming traffic intending to turn left, traffic entering from side roads, oncoming road users etc.)

Independent riding, consolidating and making use of items related to road traffic

Main items

- Efficient and safe traffic flow by making use of gaps in junctions, when changing lanes and by appropriate choice and use of lanes
- Exploit the motorcycle's advantages to enhance traffic flow
- Precise and expedient positioning with regard to vision, instructions by road signs, traffic volume and the road's condition
- Applying a precise riding technique
- Always assume action preparedness when required

Subject 3.4 Mandatory guidance lesson – evaluation of riding competence

The learner rider shall show self-insight by assessing his/her own riding competence

What shall be subject to assessment

- Efficient and safe traffic flow in various environments
- Understanding hazards
- Precise riding technique (steering technique, turning point, steering command, anchoring, use of eyes and throttle control)
- Efficient and precise braking technique

Mandatory safety course in precise riding technique for category A

Proper operational habits and techniques for braking and steering a motorcycle should be established before this course. During the course the learner rider shall, through additional, specific training, further develop these. The exercises in the course have been selected to further develop the motorcycle rider's technical riding competence and thereby reduce the risk of accidents.

The theory part will be carried out prior to and following the practical part. Each practical sequence is introduced by a theoretical presentation of the objectives, goals and practice items. The theory part which follows after the practical exercises shall take as their starting point the practical experiences which the individual participants have made and their reflections on their own chosen actions and encounters. The intention is not to impart factual knowledge. The theory parts are to be carried out as class-room lessons.

The practical part is to be carried out as a continuous sequence comprising at least three lessons on a track or manoeuvring area. The learner rider may also use his/her own motorcycle for this part. Learners below the age of nineteen who wish to use their own motorcycle, must use a medium weight motorcycle as defined in regulations concerning driver training, if it is not an approved learner-vehicle.

If the motorcycle is fitted with anti-lock brakes, the system shall be capable of being rendered inoperable. In such cases it may none the less be expedient that the learner rider is given the opportunity to brake the motorcycle with and without ABS brakes.

Each instructor may teach up to three learners at a time in this course.

The curriculum indicates four exercises with a specific content which is mandatory (exercises 1 - 4); these shall be included in the course. It is not a requirement that the exercises are being performed in the given sequence. The instructor may consider another sequence, based on what the learner is capable of, the construction and location of the training area or other conditions.

The curriculum contains sketches illustrating the exercises.

Main objectives of the course, see § 9-7 in the Regulations

The learner rider shall

1. *develop an understanding of a precise riding technique as the basis for all control of the motorcycle when riding*
2. *be familiar with the human physical and mental limitations which play a part for motorcyclists, and be able to explain how the rider may take these into account in practical situations*
3. *arrive at a conscious understanding that riding a motorcycle is a demanding task and that repeated practice is required in order to counteract instinctive faulty reactions*
4. *further develop his/her riding competence*
5. *experience the relation between well-developed skills and riding pleasure*

Theory

Subsidiary objective

The learner rider shall

- 1a) *understand how a motorcyclist can become less accident prone by applying a precise riding technique*
- 1b) *reflect on how a precise riding technique helps the motorcyclist gain the necessary control of the motorcycle when riding*
- 1c) *develop an understanding of how the motorcycle's design, including its steering geometry, has a bearing on the riding technique*
- 1d) *be familiar with anchoring points that are used on a motorcycle and experience how riding position and anchoring affect the rider's control of the motorcycle*
- 1e) *know the concept of instinctive faulty reactions. citing examples of such actions and understand that they can be counteracted by consciously drilling proper riding techniques.*

Subject Preparation

Main items

- Objectives, subjects for practicing, learning items, rules and organising of practical exercises
- Brief review of basic physics and riding technique

Subject Summing up of experiences

Main items

- Exchange of experiences and reflection (let the participants run the discussion)
- The relationship between physics and riding technique
- Being accident prone, instinctive faulty reactions and the need for volume training
- Summing up and conclusions

Practice

Subsidiary objectives

The learner rider shall, during the course, further develop his/her riding competence by:

- 4a) *braking the motorcycle effectively while maintaining a steady course by means of proper anchoring/riding position and use of eyes*

- 4b) *steering the motorcycle in a precise manner by means of proper anchoring, proper use of eyes, steering command at the right instant and proper use of the throttle*

Exercise 1 Braking on a straight course

Main items

- High speed braking (80 – 0 km/h) on a straight road, with braking to commence at a specified point
- Items from previous braking exercises are carried forth
- Braking here should be close to optimal considering the available road grip

Exercise 2 Braking in right and left bends

Main items

- Braking from about 50 km/h to walking speed (not full stop) on a right-hand and left-hand bend, with braking to commence at a specified point
- Use of brakes and distribution of pressure when braking on a bend
- Steering the motorcycle when braking

Exercise 3 Precision when steering and changing direction

The exercise is prepared by using cones. The cones shall be placed in such a way that the learner rider must, by means of a steering input to the left, arrive at a course midway between the next two cones and then proceed to changing direction to the right in the same way. Speed about 40 km/h.

Main items

- Anchoring, use of eyes and steering command
- Emphasis on precision and accuracy

Exercise 4 Technique on bends

The items relating to technique on bends may be practiced by a number of exercises. In principle, the exercise shall be arranged by laying out a semi-circle (see sketch) with a radius of curvature at least 10 metres and cones to mark the points of entry, mid point and exit. As an alternative, the exercise may be performed in a corresponding natural curve, e.g. on a go-cart track, or by laying out a full circle with a radius at least 10 metres.

The exercise must be performed as right hand as well as left hand bends.

Main items

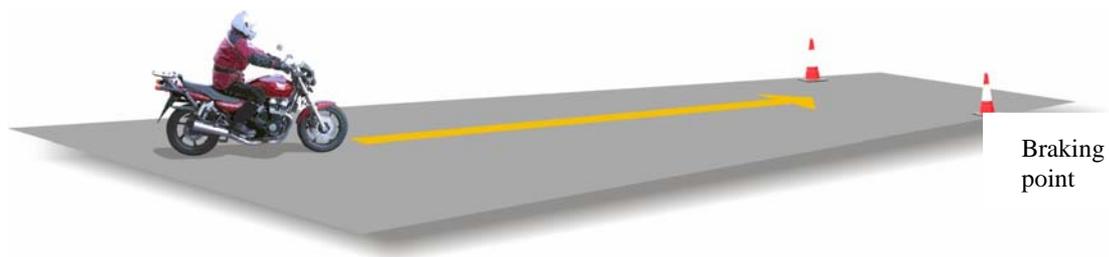
- Anchoring to the motorcycle, use of eyes, turning point, steering command and throttle control

Exercise 5 Loop track

Main items

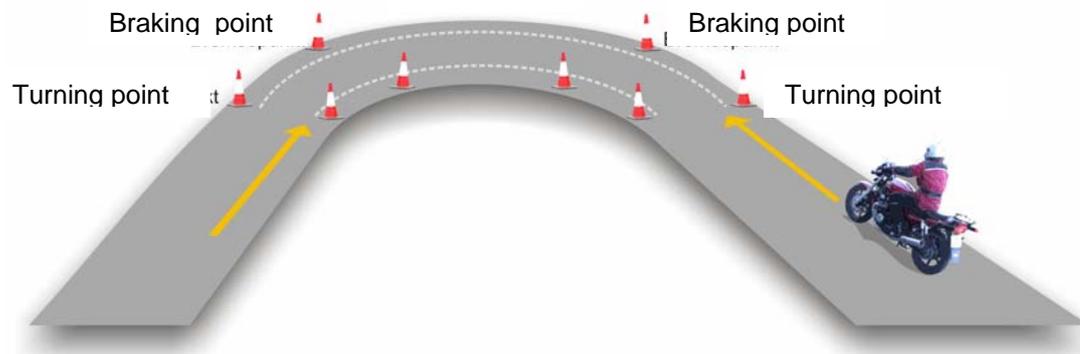
- The preceding exercises are organised on a loop track and, conditions permitting, carried out without interruption.

Exercise sketches - safety course in precise riding technique



Exercise 1 Braking on a straight course

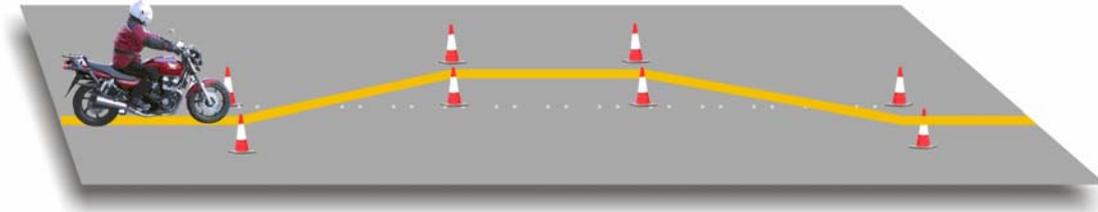
Approach: 200 metres, including 100 metres for final acceleration and braking as well as safety margin.



Exercise 2 Braking in right and left bends

Speed about 50 km/h.

Approach: about 50 metres



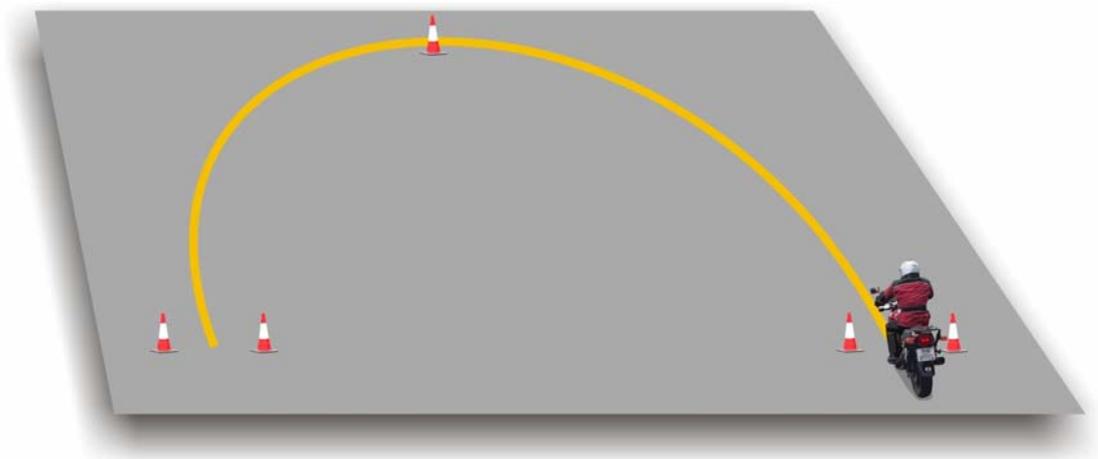
Exercise 3 Precision when steering and changing direction

Speed about 40 km/h.

Approach: about 50 metres

Width: 2×3 metres

Distance between gates: 15 metres



Exercise 4. Technique on bends

Radius of curvature: at least 10 metres (inner limitation)

Distance between cones at bend's entry and exit: 2 metres

Step 4 Course in safe road riding

Category A1

In category A1 the course in safe road riding consists of a total of four lessons, three of which shall be continuous riding practice. The theory lessons are allocated to one part before and one part after the riding practice.

The practical exercises in Step 4 may also be performed by the learner riding solo on the motorcycle. The condition is that the instructor rides an accompanying motorcycle and has the use of a communication device. The instructor may teach only one learner rider at a time. The instructor may nonetheless carry an additional learner as a passenger on his/her own motorcycle.

Objectives for Step 4 see Sections 9-5 and 9-6 in the Regulations

After completing Step 4, the learner riders shall have acquired the necessary competence to ride a motorcycle in accordance with the main objectives. The learner rider shall have developed willingness to accept responsibility, take precautions and interact with other road users.

The learner rider shall

1. *with the aid of a map, road description etc. plan a continuous journey, and take account of special conditions associated with the ride*
2. *ride in an independent, safe and efficient manner, covering substantial distances in a demanding and varied environment, and describe and state the reasons for the chosen riding strategy.*
3. *reflect on and assess his/her own competence as motorcyclist*

Subject 4.1 Preparation

The learner rider shall, with the aid of a map, road description etc. plan a continuous journey, and take account of special conditions associated with the journey.

Main items

- Objectives, practice subjects, learning items and the organising of practical exercises
- Planning a journey, route, weather and road conditions, clothing etc.
- Checking the motorcycle
- Placing and securing loads

Subject 4.2 Riding in a varied road and road traffic environment

The learner rider shall ride in an independent, safe and efficient manner, covering substantial distances in a demanding and varied environment, and describe and state the reasons for the chosen riding strategy.

Main items

- Riding in urban and built up areas, the place in the traffic picture (be seen and correctly interpreted), signs and road markings, traffic flow and safety
- Riding in an open road environment, varying standards with regard to width, surface (gravel roads should be included), curvature, slopes, banking and visibility

- Special hazards associated with riding in junctions with limited visibility, special construction or other conditions which require special solutions and/or precautions
- Describing the riding environment, visibility, buildings, signs, road markings etc.
- A precise riding technique in relation to visibility, radius of curvature, road grip, the environment and the traffic situation.
- Describe and state reasons for the chosen riding strategy

Subject 4.3 Reflection and summing up

The learner rider shall reflect on and assess his/her own competence as motorcyclist

Main items

- Situations, experiences and encounters
- Conclusions and the road ahead

Step 4 Course in safe road riding

Category A

Step 4, "Course in safe road riding" comprises four lessons of theory and four lessons of practice. The theory parts and the practice parts shall as far as possible be coordinated with respect to content and timing so that they appear as a whole to the learners.

The practical exercises in Step 4 may also be performed by the learner riding solo on the motorcycle. The condition is that the instructor rides an accompanying motorcycle and has the use of a communication device. Learners below the age of nineteen who wish to ride on their own motorcycle, must use a medium weight motorcycle as defined in regulations concerning driver training, if it is not an approved learner-vehicle.

The instructor may teach only one learner rider at a time. The instructor may nonetheless carry an additional learner as a passenger on his/her own motorcycle.

The final theory part is carried out as teaching in the classroom with not more than sixteen learners. The classroom shall be organised in a way that facilitates the learners' communicating with each other in a natural manner.

Objectives for Step 4 see Sections 9-5 and 9-8 in the Regulations

After completing Step 4, the learner riders shall have acquired the necessary competence to ride a motorcycle in accordance with the main objective. The learner rider shall have developed willingness to accept responsibility, take precautions and interact with other road users.

The learner rider shall

1. *assess and consider different solutions to a given problem, explain his/her opinion and state the reasons for it*
2. *discuss and arrive at an opinion with respect to the concept of risk and how motorcyclists can influence their own risk levels*
3. *discuss and arrive at an opinion with respect to the concept of riding strategy*
4. *with the aid of a map, road description etc. plan a continuous journey, and assess and take into account the special conditions associated with the journey*
5. *ride in an independent, safe and efficient manner, covering substantial distances in a demanding and varied environment, and describe and state the reasons for the chosen riding strategy.*
6. *perceive and assess traffic situations where motorcyclists are particularly prone to accidents*
7. *apply a precise riding technique*
8. *reflect on and assess his/her own competence as a motorcyclist and show the ability and willingness to reconsider and criticise his/her own riding*
9. *discuss the concept of riding skill, assess his/her own strong and weak points as a motorcyclist and select areas with potential for improvement*

Subject 4.1 Riding a motorcycle, hazards and strategy

(Two theory lessons)

Objective No. 1-4

The learner rider shall

- assess and consider different solutions to a given problem, explain his/her opinion and state the reasons for it
- discuss and arrive at an opinion with respect to the concept of risk and how motorcyclists can influence their own risk levels
- discuss and arrive at an opinion with respect to the concept of riding strategy
- with the aid of a map, road description etc. plan a continuous journey, and assess and take into account the special conditions associated with the journey

Main items

- Hazardous situations are assessed and discussed (Video, pictures, sketches, illustrations etc. may be utilised.)
- Riding skills
- Self-insight and hazards, standards, values, responsibility, group pressure, independence and the rider's own choices
- Riding strategy
- Planning prolonged, sustained riding with respect to
 - the route
 - anticipating challenges presented by traffic, environment and climate
 - riding together
 - distance to be covered, time for riding, location and frequency of pauses
 - rested and in proper condition
 - checking the motorcycle
 - placing and securing loads

Subject 4.2 Riding in a varied, open road environment

Objective No. 5-7

The final part shall be carried out as four lessons that make up a continuous teaching unit. Breaks are taken as required. The routes shall be laid out in a way that provides the learner rider with experience from various types of road (classified roads, county roads and municipal roads) road standards and environment (built up/open road).

Riding on gravel road should be included in this part.

The learner rider shall

- ride in an independent, safe and efficient manner, covering substantial distances in a demanding and varied environment, and describe and state the reasons for the chosen riding strategy.
- perceive and assess traffic situations where motorcyclists are particularly prone to accidents
- apply a precise riding technique.

Main items

- Special hazards associated with entering/leaving junctions where limited visibility, special construction or other conditions require special solutions and/or precautions
- Signs and road markings

- Riding on roads of varying standard with regard to width, surface, curvature, slope, banking and visibility.
- Manner of riding in relation to the road ahead, road signs, road markings, the landscape and visibility
- Describe the conditions with regard to the riding environment, such as visibility, buildings, road signs, road markings or other items that are of consequence for the riding
- Describe and state reasons for the riding strategy before and after a given situation
- Riding on bends, a precise riding technique in relation to visibility, radius of curvature, road grip, environment and the traffic situation.

Subject 4.3 Reflection, self-insight, exchange of experiences and summing up

(Two theory lessons)

Objective No. 8-9

The learner rider shall

- reflect on and assess his/her own competence as a motorcyclist and show the ability and willingness to reconsider and criticise his/her own riding
- discuss the concept of riding skill, assess his/her own strong and weak points as a motorcyclist and select areas with potential for improvement.

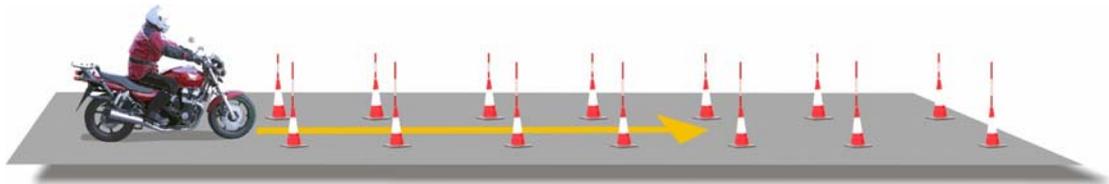
Main items

- Situations, experiences and encounters
- Choices and considerations when certain decisions have to be made, including choice of motorcycle
- Expressing his/her attitudes, values, standards and assessments in the class, thus making them the object of discussion and reflection
- Assessing his/her own strong and weak points and tendencies with regard to actions and assessments and their potential consequences in a road traffic environment
- Conclusions and the road ahead

Appendix

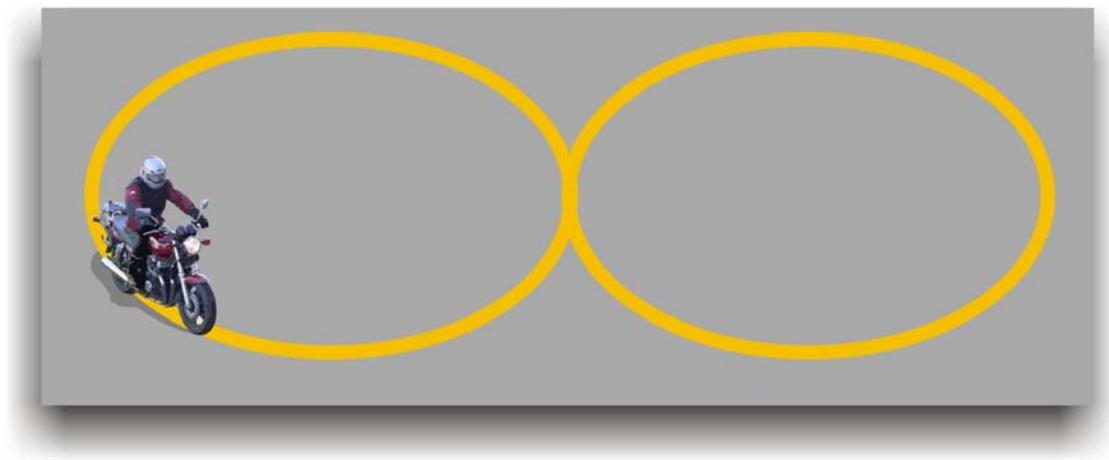
Suggestions for riding exercises in a manoeuvring area for step 2

Balance exercises



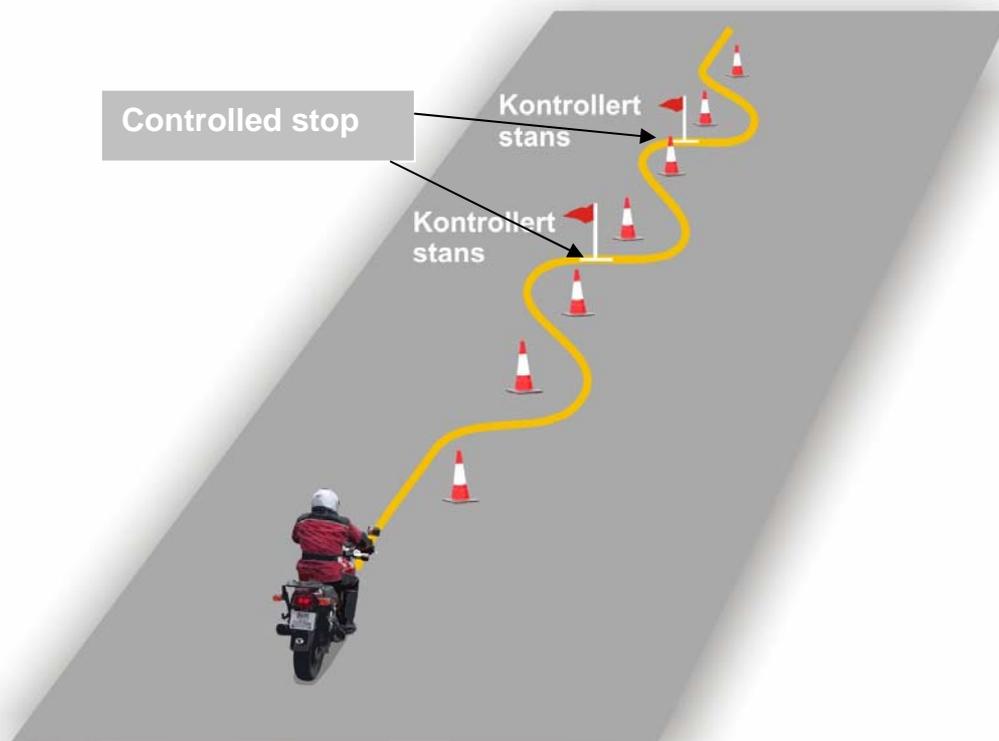
Exercise A. Riding at walking speed (crawling) straight ahead (about 15 metres) on a road with tall markers (taller than the handlebar grips), the lateral distance between the markers being 10 cm larger than the uttermost points on the motorcycle (usually the handlebar grips) on each side.

The markers are to be placed 2 metres apart.



Exercise B. Riding at walking speed (crawling). The exercise should commence with riding in figure 8 without space restrictions. As the skill increases, the figure 8 is repeated within a rectangular area limited by markers or as a «garage exercise» (alternatively with two double garages with entry and exit.) The circle's radius should be varied to correspond to the learner rider's skills and progression.

Exercises for turning technique and steering



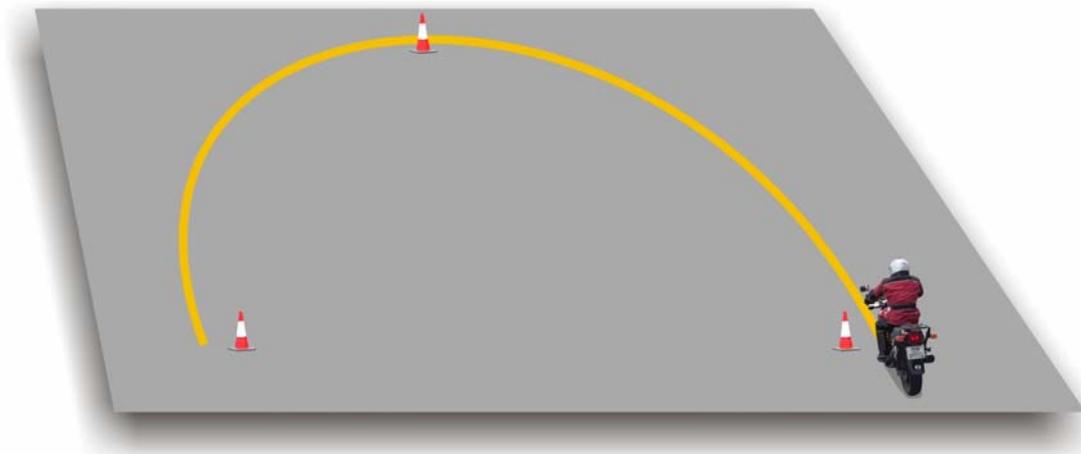
Exercise C. Riding slalom at walking speed (crawling) between markers. The markers are placed in a way that requires the candidate to use almost maximum steering input to make the turns. Two controlled stops shall be made on the course.



Exercise D. Starting off while turning right/left. Markers are placed to indicate a T-junction. The learner rider starts off from stationary and proceeds immediately into a right or left turn as directed or told by the teacher/instructor. It should be emphasised that the motorcycle should arrive at the correct position in the “lane” which is entered, and that the acceleration and the curve taken should be smooth. The area must be adequate for the starting off to be completed with speeding up and changing to 2. gear.



Exercise E. Steering command. This exercise is an introduction to exercise 3 in «Safety course in precise riding technique - category A». The intention is that the learner riders should practice how and when to give steering command. The exercise is prepared by placing cones. The cones are placed in such a way that the learner rider must change direction by means of steering command to left and right. The learner rider shall enter through the gate, give steering command to the left and then to the right for the purpose of arriving at the centre of the next gate (see sketch). Emphasis should be on precision and accuracy for the learner rider to benefit properly from the exercise. Distance between «gates»: about 15 metres. Gate width: about 3 metres. Lateral distance between gates: about 3 metres.



Exercise F. Steering point, steering command and throttle control. This exercise is an introduction to exercise 4 in «Safety course in precise riding technique - category A». The purpose of the exercise is to give the learner rider experience with regard to finding the steering point, being properly anchored, giving steering command at the right instant, use of his/her eyes and throttle control to perform a smooth curve. The learner rider shall follow a semi-circle indicated by 3 markers (see sketch). The exercise must be performed with specific requirements with respect to positioning before, on and after the bend. The entry speed should initially be about 30 km/h. The radius of curvature should be varied in relation to the learner rider's level of skill.

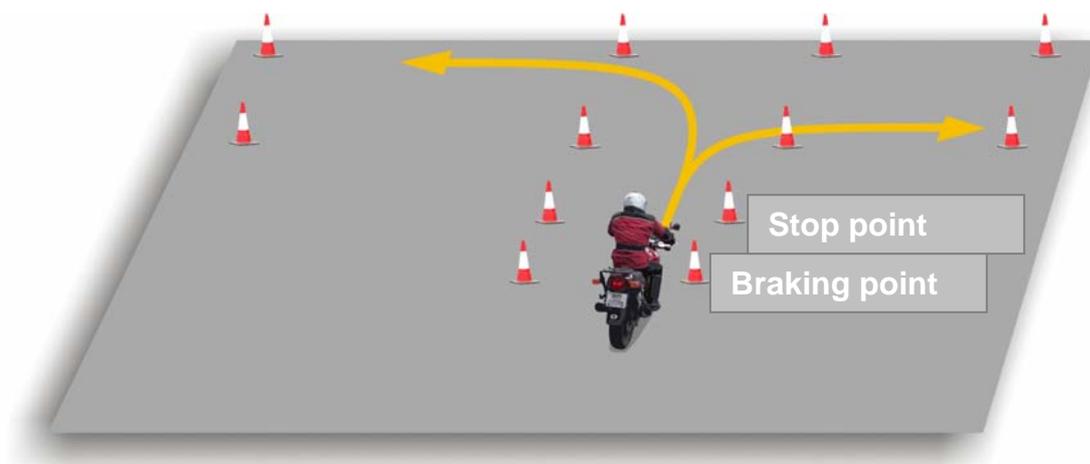
Braking exercise



Exercise G. Braking, stop at a specified point. This exercise is an introduction to exercise 1 in «Safety course in precise riding technique - category A». The purpose of the exercise is to establish proper operational habits and techniques when braking rather hard.

An area is prepared where the motorcycle can accelerate from 0 to 50 km/h. Points for stopping and applying the brakes are indicated with markers (cones). The distance between the points should initially be large (about 25 metres), and should be gradually reduced to 18 – 20 metres as the braking skill is improved.

Combined steering technique and braking exercises



Exercise H. Braking, brief stop and starting off again. This exercise combines the exercises D and G, that is a T - junction is arranged in connection with exercise G. Time for braking and stopping point are indicated with markers. The learner rider shall here, in addition to braking in the proper manner and applying proper pressure, also set the motorcycle in motion directly after having stopped, turning right or left as directed by the instructor.

This exercise may also be altered so that the learner rider him/herself chooses the stopping point in relation to immediate setting in motion and consequent turn. The time for braking shall be indicated and varied.

Exercise I. Brief stop new start from 50 km/h with consequent setting in motion in right or left turn. (Same riding exercise in a manoeuvring area as exercise H). The difference is the required braking performance. In this exercise, the candidate shall be able to stop within 15 metres with an initial speed of 50 km/h. Otherwise the same procedure shall be followed.



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