Curriculum level 3. Farmers Machine operator

Basic course Food, agriculture and experiences, version 01

Rating To be admitted to school education in the main course you must have: - passed the Biology F-level - passed the degree in science F-level - passed the final exam - acquired driving license, at least for tractor - Achieved competencies related to traffic related first aid - Achieved competencies corresponding to elementary fire fighting - achieved target pointers mentioned under "G2 - Agriculture" During the G2 you will be evaluated.

There are alternatives between spoken and written evaluation, as well as different test forms. Biology and Natural Sciences: There is a standpoint character after 7-step scale. The grades are given on the basis of a continuous evaluation of the daily effort, as well as an evaluation of the submitted documentation. In addition to this one of the subjects extracts as an examination subject - oral exam. The oral exam must be passed with min. the grade 02. Practical Agriculture, Working Environment and Planting: There are marks in these subjects, but your efforts will be included in the overall assessment of your basic course, which will be presented in a G2-grade mark and a grade in the final exam. G2 - Agriculture There is a standpoint character after 7-step scale. The degree is given on the basis of an assessment of the student's involvement in and proceeding from the educational subjects. First Aid and Fire Fighting: Assessment is given in the subjects. This assessment gives as: Passed or Not passed. For passing you must have been present for all hours. Final test: The final exam must be assessed BE (passed) / IB (not passed)

Learning outcome

1.1 The purpose of the subject

The purpose of the course is that the student develops competence to choose and apply the program's recognized methods for solving work tasks in concrete and manageable practical contexts. Furthermore, the purpose is for the student to develop competence to enter into and document work processes that are typical of the program. The student learns to use existing professional documentation.

The student learns through practical methodology to understand and apply relevant working methods. Acquisition of education-specific methods is the subject of teaching. The student must be able to use different work processes and working methods and be able to choose appropriate methods. Pupils can use generally accepted tools within the program.

Pupils learn to describe and evaluate their own work processes through solving basic practical issues in relation to the education. Pupils learn to understand and apply professional documentation and professional communication to clarify, recognize and evaluate their own academic learning. The pupil develops competence to be able to apply subject terms and understand commonly used

academic concepts. Acquiring academic expressions and concepts provides the student with the basis for communicating with other professionals about solving academic issues.

Pupils develop competence to work innovatively in basic and relevant work processes.

The student learns about innovation processes through practical projects. The subject must provide the student with the basis for considering and evaluating new ideas and alternative possibilities for problem solving in relevant teaching projects.

Pupils develop competence to organize and follow a work plan and learn to cooperate with others on solving practical tasks. The student learns to perform the necessary coordination of the individual elements in a work process.

1.2 The subject's profile

The teaching is organized in such a way that the students work closely with relevant topics supported by theory.

2. Academic goals and academic content

2.1. Academic goals

The school inserts from the transitional requirements the areas where the pupil must acquire basic knowledge, the methods and tools in relation to which the pupil must acquire skills and the competency goals that have been set:

Pupils have basic knowledge in the following selected areas within the agricultural education:

Feeding materials and feeding methods.

Anatomy, physiology, characteristics and care requirements of different livestock species.

Signs of disease, welfare and behavior as well as reproduction conditions in livestock.

Technical installations and machines used in animal husbandry.

Technical installations and machines used in cultivation of cultural crops.

Soil conditions and soil treatment methods.

The growth course of cultural crops, nature's cycles, nature care, growth conditions and ecology.

Fabric and substance structure, including the effects of nutrients on animals and plants.

Business cultures in agriculture.

Common working functions in agriculture, including milking.

Working environment in an agricultural business.

Ecology and sustainability.

Pupils have the skills to apply the following basic methods and tools to solve simple tasks while complying with relevant regulations:

Care and feeding methods for livestock.

Methods for monitoring animal welfare and disease.

Cultivation methods for cultural crops.

Methods for operating, adjusting and maintaining technical equipment and machines.

Mathematical methods for calculations in animal husbandry and plant production, including the use of calculation rules and arithmetic aids, geometry, percent and interest rate calculations and graphical depictions.

Working environment methods for performing practical work tasks.

Information retrieval methods.

Pupils have the skills to correct for the following errors or deviations from a plan or standard:

Obvious deviations from the normal behavior of animals and observing signs of disease in animal husbandry.

Clear errors and safety deviations on machines, tools and technical installations

Pupils have the competence to:

explain and evaluate different basic subject methods in relation to parameters such as environment, safety and quality,

choose, justify and practically apply the basic professional working methods that are most appropriate in a given situation;

plan and execute a simple, manageable workflow,

collaborate with others on solving simple tasks,

search and use relevant information, procedural descriptions or guides

prepare commonly used professional documentation such as worksheets, registrations etc.

document and convey their own work processes,

apply and demonstrate understanding of commonly used professional expressions and concepts,

choose the means of communication and methods appropriate to the recipient,

function properly in changing work situations with demonstration of interest, flexibility, understanding and accountability in relation to the practical work and participate actively in their own training processes

2. Academic goals and academic content

2.1. Academic goals

The school inserts from the transitional requirements the areas where the pupil must acquire basic knowledge, the methods and tools in relation to which the pupil must acquire skills and the competency goals that have been set:

Pupils have basic knowledge in the following selected areas within the agricultural education:

Feeding materials and feeding methods.

Anatomy, physiology, characteristics and care requirements of different livestock species.

Signs of disease, welfare and behavior as well as reproduction conditions in livestock.

Technical installations and machines used in animal husbandry.

Technical installations and machines used in cultivation of cultural crops.

Soil conditions and soil treatment methods.

The growth course of cultural crops, nature's cycles, nature care, growth conditions and ecology.

Fabric and substance structure, including the effects of nutrients on animals and plants.

Business cultures in agriculture.

Common working functions in agriculture, including milking.

Working environment in an agricultural business.

Ecology and sustainability.

Pupils have the skills to apply the following basic methods and tools to solve simple tasks while complying with relevant regulations:

Care and feeding methods for livestock.

Methods for monitoring animal welfare and disease.

Cultivation methods for cultural crops.

Methods for operating, adjusting and maintaining technical equipment and machines.

Mathematical methods for calculations in animal husbandry and plant production, including the use of calculation rules and arithmetic aids, geometry, percent and interest rate calculations and graphical depictions.

Working environment methods for performing practical work tasks.

Information retrieval methods.

Pupils have the skills to correct for the following errors or deviations from a plan or standard:

Obvious deviations from the normal behavior of animals and observing signs of disease in animal husbandry.

Clear errors and safety deviations on machines, tools and technical installations

Pupils have the competence to:

explain and evaluate different basic subject methods in relation to parameters such as environment, safety and quality,

choose, justify and practically apply the basic professional working methods that are most appropriate in a given situation;

plan and execute a simple, manageable workflow,

collaborate with others on solving simple tasks,

search and use relevant information, procedural descriptions or guides

prepare commonly used professional documentation such as worksheets, registrations etc.

document and convey their own work processes,

apply and demonstrate understanding of commonly used professional expressions and concepts,

choose the means of communication and methods appropriate to the recipient,

function properly in changing work situations with demonstration of interest, flexibility, understanding and accountability in relation to the practical work and

participate actively in their own training processes.

2.2 Certificates, the student must have obtained through teaching in this subject (possibly having obtained competence corresponding to):

Driving license for minimum tractor,

Competences corresponding to traffic-related first aid according to the Danish First Aid Council's education plans per. September 1, 2014.

Competences corresponding to elementary fire fighting according to the Danish Fire and Safety Technology Institute's guidelines per. September 1, 2014.

Working environment and safety in welding and thermal cutting and grinding related thereto, cf. the current rules on measures to prevent cancer risk when working with substances and materials.

Handling of medications and administration of medicines for production animals, cf. the current rules on the use of pharmaceuticals by animal owners.

2.3 Professional content

The education-specific subject is divided into several schemes. The subjects are: Practical Agriculture, Plant Growth, Working Environment, Tractor, First Aid and Elementary Fire Fighting.

Practical Agriculture

Teaching the schematic course Practical Agriculture goes into our practical facilities. The pupils participate in the daily care and handling of the school's animal husbandry, field operation and machinery. Furthermore, daily tasks are being carried out in connection with the operation and maintenance of stables and machines. In the teaching there will be focus on the practical goals as well as the inclusion of relevant theory.

plant Cultivation

In the timber-based plant cultivation, the students become acquainted with and know about different cultural crops, their growth processes and relevant cultivation methods.

Work environment

In the schematic work environment, work is done on factors that affect the physical and mental working environment in a workplace. There will be a focus on ergonomics in order to prevent stress injuries and accidents in the field.

Tractor

Pupils who do not, as a minimum, have a tractor license must have instruction in tractor driving and acquire a tractor license.

Pupils with a car license will get an introduction to tractor driving.

First aid

The scheme includes teaching first aid and traffic-related first aid according to the Danish First Aid Council's education plans.

Elemental fire fighting

In the Elementary Fire Fighting scheme, according to the Danish Fire and Safety Technology Institute's guidelines for teaching elementary fire fighting, this takes place.

3. Organization

3.1. Didactic principles

The teaching is based on vocational subjects and issues, so that the student is challenged academically in topics related to the chosen education. The basic element of the teaching is professional experiments, cases and workshop work. Digital media must be involved, where relevant, and where it supports the student's goal achievement.

The teaching is organized on the basis of application-oriented academic issues.

The problem-oriented, inductive and collaborative teaching principle has a central place in the organization of the teaching. The teaching must be organized with a focus on the student's investigative, experimental and reflective practice. The teaching must support the student's learning across disciplines, support the student's academic curiosity.

The teaching is organized so that it supports the student's academic progression and helps to develop the student's academic and personal identity.

3.2. Work methods

The teaching is organized holistically and practice-based with the use of varied forms of work that strengthen the student's learning. Digital media and tools are systematically involved.

The teaching is organized on cases and projects that promote innovative reflection and problem solving. The teaching uses different types of work that are chosen in relation to the vocational vocational characteristics of the program, interaction between subjects and strengthening of the student's learning.

3.3. Interaction with other subjects

The teaching in the subject specific subject is organized in the context of the teaching in the other subjects in the second part of the basic course.

3.4. The concrete organization of the teaching in the subject

The education-specific subjects are modularly structured so that they appear interdisciplinary and holistic. The modules must be able to accommodate the students working differently in the teaching, both practical and theoretical. IT is an integral part of the teaching. There is a focus on IT as a professional tool.

4. Documentation

Pupils prepare documentation of different and relevant processes and products, for example. theme tasks, synopsis, port folio, or other professional documentation. The documentation may include a professional product.

4.1. Requirements for student documentation

Depending on the work assignment, the student must be able to document his / her work through oral, written or practical presentation. Students documents and reflect on their own practice on an ongoing basis and complete each module with a portfolio presentation. Students can document in different ways in their portfolio and there is focus on IT as a tool.

5. Evaluation and assessment

5.1. Ongoing evaluation

During the course, the student must obtain a clear understanding of the subject's objectives, as well as of his / her own challenges and opportunities for action in order to achieve the goals. This must be done through individual guidance and feedback in relation to the learning processes and

products that are part of the teaching activities. In addition, activities are included that stimulate the individual and common reflection on the benefits of the teaching. The basis for the evaluation is the academic goals.

5.2. Final standpoint assessment A final standpoint is given after the 7-step scale. The standpoint character expresses the student's fulfillment of the subject's goals.

5.3. Final test

At the end of the course, a test is held, the basic course test. The purpose of the examination is to assess the student's fulfillment of the requirements laid down for the education.

The task must be practical, but need not consist of a practical assignment. The exam is passed / not passed.

Pupils bring books and other material provided in the teaching as well as their own notes. The school determines which digital learning materials the student has access to during the exam.

The basic course test is an oral presentation that may contain practical elements. The duration of the test is 30 minutes incl. voting and giving of a character. An external examiner participates in the examination.

5.3.1 Examination basis:

The basic course test must deal with a self-approved approved topic in animal husbandry, field operation or use, operation and maintenance of agricultural machinery. The assignment may point to one of the specialties Landmand Husdyr, Landmand Planter or Agricultural machinery driver. The task must be based on the self-chosen topic, but it is expected that the student can relate to relevant theory from Biology, Science, Plant cultivation and the working environment, and can relate to and reflect on the practice teaching in relation to the topic.

Terms:

At the end of the basic course, the students have the opportunity to spend approx. 16 lessons on the practical days, eg. 4 lessons x 4 days to work on their assignment. Here, a teacher will act as a consultant.

5.3.2 Assessment basis

Evaluation:

It is the oral presentation at the exam that forms the basis for the grade. The grade is given according to the 7-step scale.

In the assessment of the student's performance, the student's basic knowledge is weighted in the following areas

Feed materials, feeding and care methods in relation to livestock.

Anatomy, physiology, characteristics and care requirements of different livestock species.

Signs of disease, welfare and behavior as well as reproduction conditions in livestock.

Technical installations and machines used in animal husbandry.

Technical installations and machines used in cultivation of cultural crops.

Soil conditions and soil treatment methods.

The growth course of cultural crops, nature's cycles, nature care, growth conditions and ecology.

Fabric and substance structure, including the effects of nutrients on animals and plants.

Business cultures in agriculture.

Common working functions in agriculture or machine station.

Work environment in an agricultural business or at a machine station.

Knowledge of methods for monitoring animal welfare and disease.

Knowledge of cultivation methods for cultural crops.

Knowledge of methods for operating, adjusting and maintaining technical equipment and machines.

Knowledge of working environment methods for performing practical work tasks.

In addition, the student is assessed in relation to:

Competence to explain and evaluate different basic subject methods in relation to parameters such as environment, safety and quality.

Competence to choose, justify and practically apply the basic professional working methods that are most appropriate in a given situation.

To search and use relevant information, procedure descriptions or guides.

Understand and apply commonly used professional expressions and concepts.

Choose the communication modes and methods that are appropriate to the recipient.

5.3.3 Evaluation criteria

The student must acquire practical and theoretical knowledge, skills and competences. In the methodology disciplines, the criterion for passing on is that the student can perform the tasks in a safety, ergonomic and work environmentally correct manner and has basic knowledge of the function and use of machines and tools, again with a special focus on working environment and safety.

The assessment is holistic, and theory and practice are weighted equally.

Fire fighting, elementary

Basic course Food, agriculture and experiences, version 01

Target

Firefighting 1:

Elementary firefighting. corresponding to DK fire and safety engineering inst. rules 01-08-15 -

First aid

Basic course Food, agriculture and experiences, version 01

Target:

First Aid on 1 First Aid on Vocational Training, incl. traffic-related first aid, corresponding to the Danish First Aid Council's education plans 01-08-16

Biology F

Basic course Food, agriculture and experiences, version 01

Duration 2 weeks.

Biology level F

Description

In basic subject biology you will work with biological topics that are important in your education. Depending on the direction of education, it may be anatomy and physiology of plants or animals, harmful and useful insects or ecological connections.

Target.

- 1 The student can account for and apply biological knowledge in connection with practical work in relation to the student's educational area and everyday life.
- 2 The student can perform biological examinations or experiments and justify this work based on biological knowledge or thinking.
- 3 The student can present and discuss the results of his work on biological topics.
- 4 The student can refer to basic knowledge of various technological development opportunities and their significance for the profession, society and nature.

Science F

Basic course Food, agriculture and experiences, version 01

Duration 2 weeks

Description

The undergraduate subject Natural Sciences consists of elements from the subjects physics, chemistry, biology and mathematics. The subject comprises practical and theoretical work with current social and vocational issues with scientific content.

Target.

Science level F

- 1 The student has knowledge of science concepts and simple models, so that the student can explain vocational issues with natural science content. 01-10-14 -
- 2 The student can make simple calculations in connection with the natural science work. 01-10-14
- 3 Under supervision, the student can work experimentally with the subject. 01-10-14
- 4 Under supervision, the student can work correctly with equipment and chemicals. 01-10-14
- 5 Under supervision, the student can use relevant science information from various sources of information, including IT-based information. 01-10-14
- 6 The student can, under supervision, document and disseminate results of his work on science subjects. 01-10-14