

Dette er en oversettelse av den fastsatte læreplanteksten. Læreplanen er fastsatt på Bokmål

Laid down as a regulation by the Norwegian Directorate for Education and Training on 9 January 2007 as delegated in a letter of 26 September 2005 from the Ministry of Education and Research pursuant to the Act of 17 July 1998 no. 61 relating to primary and secondary education (Education Act) Section 3-4 first paragraph.

Valid from 01.08.2018

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Utgått

## Purpose

The agriculture and horticulture industries play important roles as producers of food, goods and services to a market where demand and framework conditions are constantly changing. Vocational practitioners in agriculture and horticulture face ever-increasing demands for sustainable resource management and environmental-friendly production. This sets requirements for awareness of food quality and certification relating to food and environment. The programme subjects shall provide the basis for professional vocational practice based on a common educational basis for agronomists and market gardeners. The programme subjects shall also help develop skills that are useful in conventional and organic forms of farming/market gardening.

The programme subjects shall arrange for vocational training with particular emphasis on development and restructuring in view of ongoing, both nationally and internationally. The programme subjects shall help develop broad-based competence as a basis for specialisation, as the development of new vocations, branches and methods of production demands. Teaching shall help enable the pupil to develop practical skills and acquire insight into production processes. Teaching shall stimulate creativity and interdisciplinary thinking, and provide the basis for enquiry and reflection.

Teaching shall help develop the pupil's ability to work independently with practical tasks and to perform under varying natural and climatic conditions. Teaching shall emphasize the significance of cooperation and care for people and the environment. It shall also help to develop an understanding of the connection between one's own work performance and financial return. Furthermore, teaching shall provide the individual with opportunities to experience excellence and to realise strengths and limitations in connection with vocational practice. Teaching shall therefore cover a variety of productions and activities that represent diversity in the industries, in cooperation with local enterprise. The programme subjects shall provide the basis for further education and training in agriculture and horticulture, or general studies in agriculture, fishing and forestry.

## Structure

The programme area for Agriculture and Horticulture consists of two programme subjects. The programme subjects complement each other, and should be viewed in relation to one another.

### Overview of the programme subjects:

Year level	Programme subject	
Vg2	Production and service	Management and operations

## Description of the programme subjects

The programme subject deals with basic tasks in agriculture and horticulture linked to both conventional and organic operations. The programme subject involves vocational and commercial activity in varying types of nature and under varying conditions. It also deals with the connection between the industry and impacts on nature and the environment. The programme subject covers soils, plants, animals and technology in traditional or modern productions and activities. This includes life processes in animals and plants and interplay in nature. It further deals with connections between input factors, human activity and product quality. Use and maintenance of buildings and equipment are also included. The programme subject covers regulations relevant to the agriculture and horticulture industries, Environment, health and safety measures, and quality assurance and certification systems.

The programme subject involves the management of natural resources in a long-term perspective and within ecologically sustainable frameworks. Commercial enterprises based on local natural resources, development of new products and the establishment of new business enterprises are all included in the programme subject. It also deals with possible conflicts between industry and the environment. The

programme subject involves financial terminology, simple accounts and financial analyses. The programme subject also deals with the relationship between the employer and employee in the agriculture and horticulture industries.

## Teaching hours

Teaching hours are given in 60-minute units.

Vg2

Production and service 280 teaching hours per year

Management and operations 197 teaching hours per year

## Basic skills

Basic skills are integrated into the competence aims for this course in areas where they contribute to the development of and are part of the subject competence. In Agriculture and Horticulture, basic skills are understood as follows:

*Being able to express oneself orally* in Agriculture and Horticulture involves explaining and presenting production processes and products for customers, the authorities and others. It also involves participating in discussions about production methods.

*Being able to express oneself in writing* in Agriculture and Horticulture involves reporting and preparing documentation required in actual productions, as well as presenting processes and products. It means documenting one's activity linked to production and training of others in use of work-related equipment.

*Being able to read* in Agriculture and Horticulture involves using instruction manuals, EHS data sheets and trade literature. It means keeping abreast of relevant regulations and following debates about the industry and related interests in the daily press and media.

*Numeracy* in Agriculture and Horticulture involves using figures and calculations in the implementation and documentation of an actual production. It means calculating area and converting mass to volume and vice versa. It also involves making estimates and calculating percentages. It further involves preparing and understanding tables, diagrams and statistics.

*Digital literacy* in Agriculture and Horticulture involves promoting and presenting products and product processes. It means carry out calculations related to the planning and implementation of production and simple arrangements for accounting. It also involves participating in digital communication, debate and information exchange, as well as being able to use digital maps and digital instruments.

## Competence aims

*The aims of the studies are to enable pupils to*

- plan, implement and document assignments in nature-based productions and activities and evaluating performance, quality and profitability
- carry out tasks in agriculture and horticulture based on the nature of the production, biology of the organism and requirements for care

- document the quality of processes and products in accordance with the quality of processes and products in accordance with certification systems for food quality and environment
- elaborate on principle differences between ecological and conventional forms of operation
- implement a production in accordance with the principles for ecological production and relevant regulations
- use digital tools in planning, implementation and documentation of a nature-based production
- collect and use information from trade literature, media and public administration about an actual activity or production in agriculture and horticulture
- carry out industry-related activities in nature and under varying conditions, assess risk and take care of own safety
- assess risk linked to nature-based tasks and activities and work in accordance with relevant Environment, health and safety regulations
- prepare an Environment, health and safety system related to a nature-based activity or production
- use and maintain vehicles, machines, buildings and technical equipment according to relevant regulations and standards
- propose schemes for recycling and multiple use of resources in nature-based productions
- propose environmental and energy saving measures and evaluate alternative energy sources in agriculture and horticulture

*The aims of the studies are to enable pupils to*

- chart nature and assess commercial opportunities based on local natural resources, and give examples of how commercial practice affects the local community, environment and biological diversity
- propose new products based on local natural resources and assess possibilities for establishing a new business in accordance with relevant regulations, ethics and ecological principles
- give examples of requirements set by customers for product selection and quality in agriculture and horticulture, and elaborate on what professional customer service means
- assess land use in a particular area based on principles for sustainable resource management
- elaborate on the process of establishing a company and explain the purpose and content of a business plan
- elaborate on ownership and forms of ownership and describe traditions related to the administration of properties with natural resources
- prepare a selected product for sale and elaborate on various forms of sales and trading in agriculture and horticulture
- describe central elements in good economic steering and use computer tools to prepare a simple financial overview for a nature-based production

- prepare invoices and the like for accounting purposes, interpret key figures, and explain the significance of correct accounting in an agriculture and horticulture business
- elaborate on requirements for professional labour management, plan a nature-based assignment for several individuals, manage its implementation and evaluate the results

## Assessment

### Vg2 Agriculture and Horticulture

Provisions for final assessment:

#### **Overall achievement marks**

Programme subject	Provisions
Production and service Management and operations	The pupil shall have an overall achievement mark in each programme subject.

#### **Examination for pupils**

Programme subject	Provisions
Production and service	The pupil shall take an interdisciplinary practical examination covering the common programme subjects.
Management and operations	The examination is prepared and graded locally.

#### **Examination for external candidates**

Programme subject	Provisions
Production and service	The external candidate shall take a written examination in each programme subject. The external candidate shall also take an interdisciplinary practical examination covering the common programme subjects.
Management and operations	The examination is prepared and graded locally.

The provisions for assessment are stipulated in the regulations of the Norwegian Education Act.