

Curriculum for agriculture, fishing and forestry

This is a translation from Norwegian Bokmål of the official Norwegian subject curriculum text.

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About the subject

Relevance and central values

Vg1 agriculture, fishing and forestry focuses on the operation of commercial activities based on natural resources. The programme subjects involve traditional and new ways of working in Norwegian and Sami industries, including reindeer husbandry, and shall form the basis for safe food production, activities and experiences with animals and nature. The programme subjects shall develop the pupil's awareness of the interaction between nature, society and economics. They shall also develop the pupil's understanding of what it means to take care of and utilise natural resources in a sustainable way. Vg1 agriculture, fishing and forestry also addresses how natural resources can be used as an asset today and in the future for employment and the community.

All subjects are designed to help give a strong foundation for learning. Vg1 agriculture, fishing and forestry shall contribute to creating awareness around the fact that humans are part of nature, and have a responsibility to manage it from a long-term and sustainable perspective. Through critical thinking, participation and practical assignments, the pupils shall realise the possibilities and challenges within agriculture, fishing and forestry. In vg1 agriculture, fishing and forestry, the pupils shall explore, create and contribute to engagement and awareness of the importance of agriculture, fishing and forestry for culture and identity. Vg1 agriculture, fishing and forestry shall contribute to knowledge of how social partners cooperate to develop a better workplace.

Core elements

Sustainable use of nature

The core element sustainable use of nature involves utilising natural resources as a basis for food production and commercial activities. Sustainable use of nature covers types of nature, species, and cycles and correlations in nature. The core element also includes acting on the basis of knowledge on the biology of animals and plants, and the thresholds of nature. It also addresses how animal welfare, animal and public health, food safety and the environment can be safeguarded during different business operations.

Occupational practice

The core element occupational practice involves basis assignments and occupational functions in production, operations, the provision of services,

harvesting and hunting and fishing. The core element shall give the pupils experience with traditional and future-oriented working methods and technologies. It also involves responsibility, patience and proficiency in practical work.

Business development

The core element business development involves looking at opportunities for sustainable value creation and business development. It also involves awareness of the connection between effort factors and end results, and looking at how technology contributes to development in the industries. Further, business development involves diversity within agriculture, fishing and forestry, their dependency on local resources and markets, and competence in local industry and commerce.

Safety and quality

The core element safety and quality involves safeguarding one's own health and safety, and the health and safety of others. This includes the working environment, the quality of products and services, animal welfare and environmental considerations related to the execution of assignments. Further, the core element involves risk assessments, communication, cooperation and documentation requirements. It also includes safety training in accordance with applicable standards and regulations for each individual production or activity.

Interdisciplinary topics

Health and life skills

In vg1 agriculture, fishing and forestry, the interdisciplinary topic of health and life skills addresses how people encounter nature. It also addresses local industries, traditions and culture, and how these contribute to the development of identity. It also addresses making choices that safeguard health and safety in various work operations and contributing to good health through health-promoting products and services from the agriculture, fishing and forestry industries.

Democracy and citizenship

In vg1 agriculture, fishing and forestry, the interdisciplinary topic of democracy and citizenship addresses the ability to meet a workplace and occupational community, and understand and participate in social debates on nature, the use of resources and management. It also addresses training one's ability to think critically and handle other opinions, and showing respect and tolerance when encountering other people, cultures and practices.

Sustainability

In vg1 agriculture, fishing and forestry, the interdisciplinary topic addresses sustainable development, environmental awareness, climate change, pollution and loss of biological diversity, which future nature users shall help to counteract. Further, it concerns the assessment of environmental challenges in cooperation with various commercial actors. It also involves exploring and using appropriate technology to contribute to sustainable development.

Basic skills

Oral skills

Oral skills in vg1 agriculture, fishing and forestry involve explaining, justifying opinions and communicating with colleagues in a comprehensible manner. It also involves being able to listen, present matters to and instruct various target groups. In addition, oral skills involve using technical terminology, and talking about and discussing production and solutions.

Writing

Writing in vg 1 agriculture, fishing and forestry involves being able to adapt texts for different purposes, genres, audiences and media. It involves being able to describe products and services to colleagues, users and clients using technical terminology. That also means being able to document what one has done and has learned.

Reading

Reading in vg1 agriculture, fishing and forestry involves being able to acquire information from printed and digital resources, and use the information in practical work, when providing services or during production processes. Reading also involves being able to use technical terminology and to criticise sources.

Numeracy

Numeracy in vg 1 agriculture, fishing and forestry involves being able to choose methods, to set tools and devices, and to calculate input factors and the benefits of processes. It also involves finding, measuring and assessing financial, biological, physical and chemical parameters. Further, it involves setting up and interpreting tables and diagrams, and creating estimates and using figures in professional disputation.

Digital skills

Digital skills in vg1 agriculture, fishing and forestry involve being able to use digital resources and technical aids during production or an activity. It also involves being able to collect data, to criticise data, and to use various analogue and digital tools in discussions and during information exchange. Further, digital skills involve being able to use digital resources during navigation, the management of operational processes and in documentation.

Competence aims and assessment

Competence aims and assessment nature-based production and services

Competence aims after nature-based production and services

The pupil is expected to be able to

- take care of plants based on knowledge of the biology of the species and cycles in nature
- take care of animals or fish in respect of ethical guidelines and knowledge of animal welfare and health, and biology of the species
- carry out assignments along various parts of the value chain based on applicable rules and standards
- classify and present a selection of species and materials, and choose materials based on work assignments and properties of the materials
- follow instructions and use manuals for production equipment, and carry out simple inspections, maintenance and repairs
- test methods of operation and assess them against traditions, ethics, quality requirements and environmental impact
- carry out and document work in compliance with applicable provisions on health, safety and environment, and also assess risks
- choose and use analogue and digital tools to plan and carry out assignments
- make simple estimates for raw materials and material consumption, input factors and benefits
- collect, interpret and use data related to agriculture, fishing and forestry assignments, and critically interpret sources and observations
- carry out simple raw material processing methods
- explain and assess how social partners cooperate to develop a better workplace

Formative assessment

The formative assessment should help promote learning and the development of competence. The pupils demonstrate and develop competence in nature-based production and services when they use knowledge, skills and critical thinking to solve assignments in the programme subjects.

The teacher facilitates pupil participation and encourages the desire to learn through a variety of assignments. The teacher can give assignments that cover multiple or all the programme subjects. The teacher shall have conversations with the pupil regarding their development within nature-based production and services. The pupils shall have the opportunity to express what they believe they can accomplish and reflect on their own academic development. The teacher provides guidance on further learning and adapts the education to enable the pupils to use the guidance provided to develop their competence in the programme subject.

Assessment of coursework

The grades awarded for coursework reflect the overall competence of the pupil in nature-based production and services at the end of the education in the programme subject. The teacher plans and facilitates the pupils in demonstrating their competence in various ways. Using the competence aims as a starting point, the teacher shall assess how the pupil demonstrates understanding, reflection and critical thinking, and how the pupil masters challenges and solves assignments in various contexts. The teacher awards grades in nature-based production and services based on the competence the pupil has demonstrated by planning, completing, assessing and documenting their own academic work.

Competence aims and assessment nature-based business activities

Competence aims and assessment nature-based business activities

The pupil is expected to be able to

- reflect on the requirements and expectations that a professional must have in relation to collaboration and participation in the social debate on nature, the use of resources and management
- plan, complete and assess nature-based business activities and describe an associated value chain

- explore examples of local products and business development based on technological developments, local resources, culture and tradition
- present commercial activities, products or services for various target groups
- discuss how nature-based products and services can be developed within the framework of sustainable development and resource management
- describe and assess similarities and differences in the practice of occupation in various forms of agriculture, fishing and forestry
- orient him or herself in nature with the use of traditional and modern methods and technical aids
- choose and use equipment and clothing according to the situation, conditions in nature and the climate, and carry out simple maintenance on equipment
- assess risks and carry out nature-based activities taking into account their own safety and the safety of others
- carry out basic first aid

Formative assessment

The formative assessment should help promote learning and the development of competence. The pupils demonstrate and develop competence in nature-based business activities when they use knowledge, skills and critical thinking to solve assignments in the programme subjects.

The teacher facilitates pupil participation and encourages the desire to learn through a variety of assignments. The teacher can give assignments that cover multiple or all the programme subjects. The teacher shall have conversations with the pupil regarding their development within nature-based business activities. The pupils shall have the opportunity to express what they believe they can accomplish and reflect on their own academic development. The teacher provides guidance on further learning and adapts the education to enable the pupils to use the guidance provided to develop their competence in the programme subject.

Assessment of coursework

The grades awarded for coursework reflect the overall competence of the pupil in nature-based business activities at the end of the education in the programme subject. The teacher plans and facilitates the pupils in demonstrating their competence in various ways. Using the competence aims as a starting point, the teacher shall assess how the pupil demonstrates understanding, reflection and critical thinking, and how the pupil masters challenges and solves assignments in various contexts. The teacher awards grades in nature-based business activities based on the competence the pupil has demonstrated by planning, completing, assessing and documenting their own academic work.

Type of assessment

Assessment of coursework

Nature-based production and services: The pupils shall have one grade awarded for coursework.

Nature-based business activities: The pupils shall have one grade awarded for coursework.

Examination for pupils

Nature-based production and services: The pupils shall not sit for an examination.

Nature-based business activities: The pupils shall not sit for an examination.

Examination for external candidates

Nature-based production and services: External candidates shall sit for a written examination in the programme subject. The examination will be prepared and graded locally. The county council decides whether the local examination for external candidates will have a preparatory part.

Nature-based business activities: External candidates shall sit for a written examination in the programme subject. The examination will be prepared and graded locally. The county council decides whether the local examination for external candidates will have a preparatory part.

Production and services, and nature-based business activities: External candidates shall take an interdisciplinary practical examination in these programme subjects. The examination will be prepared and graded locally. The county council decides whether the local examination for external candidates will include a preparatory part.