Læreplankode: DTH01-01



# Curriculum for vg1 crafts, design and product

# development

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 crafts, design and product development focuses on the production of craft products that safeguard and develop craft traditions in Norway and Sameland. Through concept development, practical work, the use of materials, and tools and craft techniques, the pupils develop mastery and an understanding of creative work processes and the uniqueness of these subjects. The programme subjects shall prepare professionals to meet the demand for craft products from a wide range of customers, private and public procurers and creative industries.

All subjects are designed to help give pupils a strong foundation for learning. Vg1 crafts, design and product development shall help educate the craftpersons of tomorrow. With curiosity, creativity and the joy of innovation, the pupils gain the sense of mastery, which contributes to identity development and good self-esteem. The programme subjects shall also help promote innovation in the development and production of traditional and new craft products. Experience with craft traditions and intangible cultural heritage provides a foundation for managing and further developing cultural heritage, and taking care of the environment. Vg1 crafts, design and product development shall contribute to knowledge of how social partners cooperate to develop a better workplace.

#### **Core elements**

#### Crafts and materials

The core element crafts and materials involves using craft techniques with various materials. It involves making products in a workshop, by hand and with the aid of machines, tools and equipment in hard, soft or plastic materials. Further, it involves choosing and processing appropriate materials based on the product that will be made in compliance with applicable health, safety and environment regulations.

## Shape, function and product development

The core element shape, function and product development involves the incremental process of shaping craft products from the idea to the finished product. It involves practical testing through realistic assignments, experimentation with materials, and understanding of the connection between traditions, design, shapes, function, materials, tools and machines.

#### Cultural heritage and innovation

The core element cultural heritage and innovation involves understanding one's own culture, style and craft traditions, and those of other cultures. Further, it addresses how cultural heritage can inspire innovation and continuation into one's own crafts. The core element also involves critical reflection over dilemmas that arise at the intersection of tradition and innovation, and the use of inspirational sources and cultural heritage.

## **Interdisciplinary topics**

#### Health and life skills

In vg1 crafts, design and product development, health and life skills involve developing knowledge and skills to solve technical problems through practical creative work. It also involves developing identity through mastery and the joy of innovation, and by being part of a practical community in the craft subjects.

### Democracy and citizenship

In vg1 crafts, design and product development, democracy and citizenship addresses active craftspersons from a work perspective. It also involves looking at the connection between democratic processes in various religions and how it is expressed in craft traditions. This involves critical reflection on cultural heritage, traditions and design, and expressing one's own experiences, thoughts and opinions in a multicultural society.

## Sustainability

In vg1 crafts, design and product development, sustainable development involves critical reflection around production methods, processing and choosing materials, tools and machines when developing craft products. It also involves practical problem-solving, innovation and entrepreneurship whereby one, through local adaptation and resource management, bring attention to recycling, durable quality, ethical production, natural cultural heritage and locally produced products.

## Basic skills

#### Oral skills

Oral skills in vg1 crafts, design and product development involve using technical terminology, relaying one's own opinions, assessments and reflections, and participating in subject discussions. Further, it involves explaining and showing customers and commissioners one's own processes or work.

#### Writing

Writing in vg1 crafts, design and product development involves the ability to plan, assess, reflect on and document work processes through texts, images, illustrations and blueprints. It also involves using language for special purposes and technical terminology

#### Reading

Reading in vg1 crafts, design and product development involves understanding and using specialist literature, instructions, images, illustrations and blueprints when working with craft products. It also involves the ability to understand and read patterns and templates, and reflect on visual instruments and cultural references.

#### Numeracy

Numeracy in vg1 crafts, design and product development involves the ability to make calculations during craft processes and concept development, i.e., to use mathematical procedures when constructing shapes, volume, angles and sizes. It also involves the ability to calculate the cost of materials and product prices.

### Digital skills

Digital skills in vg1 crafts, design and product development involves the ability to use digital resources in a responsible and appropriate manner. It involves being creative and innovative with digital resources to solve craft and practical assignments. It also involves the ability to collaborate with others, critically assess information from digital sources, use netiquette and develop digital judgement in the process of producing craft products.

# **Competence aims and assessment**

# Competence aims and assessment product development and creative processes

Competence aims after product development and creative processes

The pupil is expected to be able to

 plan and document a design and product development process individually and in cooperation with others within a given time frame

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- create and prepare sketches and blueprints manually and with digital resources
- examine and use design, cultural expressions, style history and local traditions within traditional crafts as inspiration for their own product development
- use technical terminology and visual instruments during collaboration with others and to document their own work
- explore and use colours and symbol in the development of products with hard, soft and plastic materials
- apply composition principles to 2D and 3D shapes
- use traditional methods of measurement and adapt patterns and templates
- develop new craft products and assess durability, function and aesthetical expression
- present ideas and products to customers and others, and convey the history and uniqueness of the products
- explore and convey how demand, culture, tradition, trends and sustainability impact the craft subjects locally and regionally
- calculate costs and the price of materials and products
- explore dilemmas that arise at the intersection of tradition and innovation
- present different uses of colour, symbols and materials in craft products
- explore how craft traditions have been used for political and ideological statements in various cultures, and present their own work as an expression of personal emotions and opinions

#### Formative assessment

The formative assessment should help promote learning and the development of competence. The pupils demonstrate and develop competence in product development and creative processes 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 product development and creative processes. 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 product development and creative processes 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 business operations based on the competence the pupil has demonstrated by planning, completing, assessing and documenting their own academic work.

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# Competence aims and assessment materials and techniques

Competence aims after materials and techniques

The pupil is expected to be able to

- use various basic craft techniques when designing products made of hard, soft and plastic materials, and reflect on the characteristics of the different materials
- explore and make craft products accurately and with precision based on their own planning work and given deadlines
- explore and immerse themselves in techniques and materials in selfchosen areas of interest
- reflect on and use tradition techniques to recreate traditional craft products
- organise a workshop and use materials, techniques and equipment in accordance with health, safety and environment regulations
- acquire, gather, process and store materials in a sustainable and economical way according to access to local resources and traditions
- describe the characteristics and functional areas of different types of materials
- use and choose appropriate techniques, tools and materials for the product
- recycle, adapt, repair and maintain different craft products
- use blueprints, patterns and templates in their own work
- assess the quality of crafts in relation to their own work and the work of others based on durability, function and aesthetical expression
- carry out simple maintenance on machines, tools and equipment according to applicable safety provisions
- 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 materials and techniques when they use knowledge, skills and critical thinking to solve assignments in the programme subjects.

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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 materials and techniques. 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 materials and techniques 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 materials and techniques based on the competence the pupil has demonstrated by planning, completing, assessing and documenting their own academic work.

## Type of assessment

#### Assessment of coursework

Product development and creative processes: The pupils shall have one grade awarded for coursework.

Materials and techniques: The pupils shall have one grade awarded for coursework.

# **Examination for pupils**

Product development and creative processes: The pupils shall not sit for an examination.

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Materials and techniques: The pupils shall not sit for an examination.

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

Product development and creative processes: 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.

Materials and techniques: 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.

Product development and creative processes, and materials and techniques: 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.