

# LT1008 The Innovative Human Being - Technology for teachers, grade F-6 7.5 credits

Den uppfinningsrika människan - Teknik i åk F-6

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

#### **Establishment**

On 25 August 2021, the Dean of the ABE school has decided establish this official course syllabus to apply from spring term 2022, registration number: M-2021-1384.

## **Grading scale**

A, B, C, D, E, FX, F

## **Education cycle**

First cycle

#### Main field of study

Technology and Learning

## Specific prerequisites

General entry requirements only

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

#### Intended learning outcomes

The course intends to develop skills to teach technology in the academic years F-6.

After passing the course, the student should be able to:

- Explain purpose and function of different technical solutions such as mechanisms, strong structures, electric connections and technical systems.
- Show technology education expertise by choosing appropriate teaching strategies to give a basis for pupils to develop their technical ability.
- Give an account of the importance that gender has and has had for the historical development of technology and science
- Prepare and present teaching components in technology for years F-3 and 4-6, related to the fields that the course deals with, based on technology teaching research and regulations for school years F-6.
- Give an account of working methods and different digital aids that can be used in teaching of technology.
- Give an account of different forms of assessment of technology instruction and pupils' learning in technology.

#### Course contents

This course aims at professional teachers and teacher students against the years F-6 that lacks technology in his higher education qualification and people who think on to educate itself to teachers. The course covers a number of fields of technology and technology education knowledge that is needed to be able to teach technology to pupils in years F-3 and 4-6, and can later be validated against equivalent course in the teacher programme.

The course deals with:

- Technical solutions such as mechanisms, robust structures, electric connections and computers and programming
- The teaching strategies of teachers, and pupils' comprehension of concepts in a specific technology field
- Knowledge development in technical, natural and social sciences and their mutual relations
- The working procedures and methods of technology
- Technology and gender
- Technology, man and society in interplay for systems thinking and sustainable development.

#### **Examination**

- INL1 Assignment, 2.0 credits, grading scale: A, B, C, D, E, FX, F
- PRA1 Projekt work, 3.5 credits, grading scale: A, B, C, D, E, FX, F
- SEM1 Seminars, 2.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

# Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.