LL112V Technology for Teachers, grade F-6 7.5 credits

Teknik för lärare i årskurs 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

Course syllabus for LL112V valid from Spring 2017

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology

Specific prerequisites

General entry requirements.

Language of instruction

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

Intended learning outcomes

On completion of the course, the student should be able to

? - account for and problematise different ways of regarding the purpose of technology as a subject in primary and lower-secondary school, not least considering gender

- account for subject knowledge in technology in the fields Materials, Solid Mechanics, Mechanisms and Electrical Components, which are required for pupils' learning in the development of technology in school years K-6

- create sketches, manual and digital drawings, and models in one's own technical design and development work

- analyse everyday items and technical systems based on structure and function, how they have been developed over time as well as contribute to sustainable development

- plan, organise and evaluate technology instruction in school year K-6 in relation to policy documents, different student groups and research in technology didactics

- analyse and assess pupils' knowledge development in technology in relation to the policy documents of the school.

Course contents

The course is intended for active teachers in school year K-6 who lack education in technology and technology didactics. The course should give an overview of the fields of technology that the curriculum mentions explicitly and knowledge of technology didactics to be able to teach about them. The main contents are about everyday technical solutions, mechanisms, solid mechanics, materials, electric connections, computers and programming as well as technical systems and sustainable development. The course also concerns development work in technology as well as documentation by means of sketches as well as physical and digital models. The contents are treated through both reading of literature and practical exercises.

Disposition

The course consists of approximately 10 lectures (afternoons). In between, the students study alone or in groups supported by a web-based learning management system. The teaching consists of lectures, laboratory sessions, seminars and study visits.

Course literature

Anges senast tre veckor före kursstart.

Parts of the reading list are in English.

Equipment

Computer with internet connection

Examination

- INL1 - Written Assignments, 5.0 credits, grading scale: P, F
- LAB1 - Seminars and Laboratory Exercises, 2.5 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.