



LT1059 Being Passionate about Technology Education - Inspiration for Active Technology Teachers 7.5 credits

Att vara eldsjäl i teknikämnet - inspiration och påfyllnadskunskaper för verksamma tekniklärare

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

The official course syllabus is valid from the autumn semester 2023 in accordance with the decision by the Head of the ITM School: M-2023-0172. Date of decision: 30/01/2023

Grading scale

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

Education cycle

First cycle

Main field of study

Technology and Learning

Additional regulations

- In group projects, all members are responsible for group's work.
- In examinations, each student must honestly report any help that has been received and sources that have been used.
- In oral examinations, each student must be able to give an account of the whole assignment and the whole solution.

Specific prerequisites

Teacher's degree and at least one semester of experience in teaching technology in elementary school.

Teacher's degree in technology.

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:

1. Describe aspects of technology education
2. Reflect on different views on technology teaching
3. Plan for and analyse various tools/methods for planning, carrying out and evaluating technology teaching
4. Analyse and describe research in technology didactics.
5. Give examples of different teaching and cooperation strategies

Course contents

- The course starts with a summary of technology didactics. The participants study literature on technology didactics, reflect, and submit an assignment, INL1.
- Next, the course deals with views on technology teaching. We look at the current situation from an outside perspective with actors such as Teknikföretagen (the Association of Swedish Engineering Industries), CETIS (the Centre for School Technology Education), and Skolverket (the Swedish National Agency for Education). The participants submit a second assignment, INL2.
- The next step is to discuss and reflect on driving forces in technology instruction – paths to success, with examples of classroom practices. In this step the participants study current projects and meet active teachers and researchers who share their experience. Next, the participants create their own tools to plan, carry out, evaluate, and cooperate around technology teaching. The participants work on a project, PRO1.

- Throughout the course, research in technology didactics is used to support and develop the participants' technology teaching. This literature is used in written assignments and in the project.
- Lastly, the participants develop useful strategies for technology teachers, to use in their own teaching and in technology teacher networks. This is included in the project PRO1.
- The course also includes participation in relevant conferences, such as CETIS. This is included in the project PRO1.

Examination

- INL1 - Assignment, 2.0 credits, grading scale: P, F
- INL2 - Assignment, 1.0 credits, grading scale: P, F
- PRO1 - Project work, 4.5 credits, grading scale: A, B, C, D, E, FX, 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.

Based on the recommendation from the KTH office of support to students with disabilities, the examiner has the right to agree on adapted forms of examination for students with a documented, permanent disability. In re-examinations, the examiner has the right to allow other forms of examination of individual students.

Other requirements for final grade

Compulsory attendance at course meetings, and conference participation. In exceptional cases, attendance via Zoom can be organised.

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.