



LT2034 Curriculum Theory and Subject Didactics 6.0 credits

Läroplansteori och ämnesdidaktik

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 2023-04-17, the Head of the ITM School has decided to establish this official course syllabus to apply from autumn semester 2023, registration number: M-2023-0885.

Grading scale

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

Education cycle

Second cycle

Main field of study

Technology and Learning

Specific prerequisites

LT2033 School Placement III with Subject Didactics

Language of instruction

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

Intended learning outcomes

After passing the course, the student should be able to

1. summarise and explain what characterises mathematics, chemistry, physics and technology as school subjects from a historical and present-day perspective, in their relation to the disciplines as well as to the professional practice.
2. from the perspective of curriculum theory, discuss and problematise the relation between policy documents, school practice and the subject disciplines mathematics, chemistry, physics and technology
3. contrast and evaluate various research findings in subject didactics concerning teaching and learning in mathematics, chemistry, physics and technology,
4. critically analyse and evaluate teaching and learning in different environments by means of relevant subject-didactic concepts and theories.

Course contents

The course gives an overview of research in the subject didactics of mathematics, chemistry, physics, and technology.

The course covers curriculum theory with a focus on the emergence, contents and nature of the school subjects, how Swedish curricula and other policy documents have developed, and how the policy documents relate to school practice and teaching practice.

The course problematises and discusses the relation between the subject disciplines mathematics, chemistry, physics, and technology, and their corresponding school subject

Based on scientific methods and principles, the course critically discusses subject-specific didactics research: its relevance and relation to the school's activities and the student's future professional practice.

Furthermore, the course treats, and the students practice, analytical methods of educational science in order to systematise empirical material and to draw conclusions about teaching and learning in different environments.

It is included in the course that the student practices their ability to scientifically analyse and methodically reflect on their future professional practice.

Examination

- LAB1 - Workshop curriculum theory, 1.5 credits, grading scale: P, F
- LAB2 - Data analysis, 0.5 credits, grading scale: P, F

- SEM1 - Seminars, 0.5 credits, grading scale: P, F
- TENA - Written exam, 3.5 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.

Other requirements for final grade

Participation in compulsory seminars

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.