

FLF3011 Introduction to Research Methods in Technology and Learning 10.0 credits

Introduktion till forskningsmetoder inom teknik och lärande

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

Official course syllabus of FMG3210 applies from Autumn semester 2021 (M-2021-0371)

Grading scale

P, F

Education cycle

Third cycle

Specific prerequisites

General entry requirements to participate have the one that is admitted to third-cycle courses and study programmes at Swedish university or the equivalent education abroad.

Selection

Priority is given to doctoral students admitted to the third-cycle education in the subject technology and learning at the ITM school, KTH. Secondarily, other doctoral students at KTH may participate. In case of vacancy, doctoral students from other universities and researchers can participate.

Language of instruction

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

Intended learning outcomes

The course aims to strengthen the doctoral student's ability to choose methods for data collection and analysis and to consider questions regarding research ethics. The purpose is also to contribute to the doctoral student's ability to interpret and critically evaluate studies in technology and learning regarding method choices. After completion of this course, the doctoral student will have the ability to:

- Compare different research methods in technology and learning and discuss the connection between method and basic methodological assumptions.
- Reason about the basic choices regarding studies with quantitative and qualitative approaches.
- Reflect on and discuss study design, including choice of research methods and its possibilities and limitations in relation to different research questions.
- Reflect on and discuss ethics and quality aspects that concern data collection and analysis.

Course contents

During this course the doctoral student become acquainted with different research methods that are applied in technology and learning. The overview of different methods is intended to support the ability to make adequate choices in the design of scientific studies. The course includes research methods based on qualitative and quantitative approaches in data collection, analysis and interpretation. During the course, different types of study design and its possibilities and limitations in relation to different research questions are discussed. Furthermore, scientific integrity, ethics and quality aspects in research are discussed. The course also concerns different scientific traditions and how underpinning methodological assumptions relate to methods for data collection, analysis and interpretation of results.

Examination

• INL1 - Written assignment, 10.0 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.

Other requirements for final grade

To receive a final grade, apart from passed assessed seminar, also active participation in the other seminars of the course is required.

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.