

# 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.

#### **Establishment**

Official course syllabus of FMG3210 applies from spring semester 2019

#### **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 aim of the course is to give the doctoral student an overview of knowledge of common research methods in technology and learning. The course also gives the doctoral students the possibility to train their ability to carry out data collection and analysis and his ability to make research-ethical assessments.

After passing the course, the student should:

- Be able to describe common research methods in technology and learning at a general level.
- Be able to use common quantitative and qualitative research methods.
- Reflect on and discuss study design, 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

The course gives an overview of common research methods in technology and learning. Quantitative and qualitative methods and different ways to combine these methods will be discussed. During the course, study design is discussed, for example cross-section, longitudinal, comparative and case studies, choice of research methods and its possibilities and limitations in relation to different research questions. Furthermore, scientific integrity, ethics and quality aspects in research are discussed. The course also concerns different traditions of science and their basis in ontology and epistemology and the relation to methodology and research methods.

#### **Examination**

• SEM1 - Seminar, 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.

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

## 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.