

Course syllabus for third-cycle level course

Quantitative Methods, 7.5 ECTS credits

Course code: UM046FN

Valid from: Autumn semester 2026

Department: Department of Teaching and Learning

Subject: Mathematics Education

Level: Third-cycle level

Decision

This syllabus is adopted by the assistant head of department 2026-05-11 (Dnr SU-130-0085-26).

Entry requirements

Admitted to a third-cycle program in Mathematics Education, Science Education, Language education, Subject Matter Education or other applicable subject.

Course structure

Module code	Module name	ECTS credits
KVANT	Quantitative Methods	7.5 ECTS

Content

The course covers both various statistical methods and survey and test construction. It includes critically analyzing research as well as national and international studies that use quantitative methods. The course also addresses how register data can be used in educational research. In addition, the course introduces classical and modern measurement theory.

Learning outcomes

Upon successful completion of the course students should be able to:

- Provide an overview of the areas of application of different quantitative methods.
- Provide an overview of the advantages and disadvantages of different quantitative methods in relation to various research problems

- Demonstrate the ability to critically analyze conclusions based on quantitative methods

Forms of examination

The course is assessed through individual written reports and an oral group examination.

Grading is done according to a two-grade scale:

G = (Godkânt) Pass

U = (Underkânt) Fail

Forms of teaching

The teaching consists of self-study, lectures, and seminars.

Transitional provisions

When the course is discontinued, or the course content is substantially changed, students have the right to be examined according to this syllabus once a term during a three term period.

Limitations

The course may not be part of a degree together with a course with identical or similar content.

Course literature

The course literature is specified in a separate document.