

## **Conditions for students' Mathematical Development**

Villkor för elevers matematikutveckling  
15 credits

Programme course

948A20

Valid from: 2022 Spring semester

|                                                              |                                           |                                   |
|--------------------------------------------------------------|-------------------------------------------|-----------------------------------|
| <b>Determined by</b>                                         | <b>Main field of study</b>                |                                   |
| The Board of Educational Science                             | Special Education                         |                                   |
| <b>Date determined</b>                                       | <b>Course level</b>                       | <b>Progressive specialisation</b> |
| 2020-05-07                                                   | Second cycle                              | A1X                               |
| <b>Revised by</b>                                            | <b>Disciplinary domain</b>                |                                   |
| Course Syllabus Board at the Faculty of Educational Sciences | Education                                 |                                   |
| <b>Revision date</b>                                         | <b>Subject group</b>                      |                                   |
| 2021-03-08                                                   | Educational Sciences/Theoretical Subjects |                                   |
| <b>Offered first time</b>                                    | <b>Offered for the last time</b>          |                                   |
| Autumn semester 2009                                         |                                           |                                   |
| <b>Department</b>                                            | <b>Replaced by</b>                        |                                   |
| Institutionen för beteendevetenskap och lärande              |                                           |                                   |

## Course offered for

- Special Needs Training Programme
- Special Needs Training Programme - Included in "Lärarlyftet"

## Entry requirements

15 HE credits passed on the Special Teacher Education Programme or equivalent.

## Intended learning outcomes

On completion of the course, the student should be able to

- present different theoretical perspectives on school mathematics,
- demonstrate high awareness of different didactic approaches to learning and teaching of mathematics
- analyse and problematise different aspects of pupils' development within the field of mathematics,
- identify different factors that influence learning in mathematics.

## Course content

Theories of learning and different didactic models are covered in the course. Conceptual and mathematical development in pre-school and primary and lower-secondary school is also studied in the course. An additional field covered in the course is factors influencing learning in mathematics, for example cognitive, emotional, social and cultural factors.

## Teaching and working methods

Lectures, seminars and field studies are included in the course. Studies of literature, preparations prior to seminars and group assignments as well as completion of course assignments are also part of the course. In addition to scheduled time, students are expected to work with independent studies, individually and/or in groups.

## Examination

The course is examined through a written presentation.

Applies to all courses regardless of grading scale.

- Students failing an exam covering either the entire course or part of the course two times are entitled to have a new examiner appointed for the reexamination.

If the course has a three-graded grading scale (U - VG), following applies:

- Students who have passed an examination may not retake it in order to improve their grades.

The following applies to courses that include a compulsory component:

- If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

## Grades

Two-grade scale, U, G

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.

### About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is Swedish, the course as a whole or in large parts, is taught in Swedish. Please note that although teaching language is Swedish, parts of the course could be given in English. Examination language is Swedish.
- If teaching language is Swedish/English, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English (depending on teaching language).
- If teaching language is English, the course as a whole is taught in English. Examination language is English.