



Course syllabus

Board of Education Science

School of Computer Science, Physics and Mathematics

1MD371 Matematikdidaktik fördjupning - elever i matematiksvårigheter, 7,5 högskolepoäng

1MD371 Advanced Didactics of mathematics - Children in Difficulties in Mathematics, 7.5 credits

Main field of study

Mathematics

Subject Group

Mathematics

Level of classification

First Level

Progression

G1F

Date of Ratification

Approved 2009-08-11

Revised 2010-08-20 by School of Computer Science, Physics and Mathematics.

Revision of prerequisites and course evaluation.

The course syllabus is valid from spring semester 2011

Prerequisites

15 credits in Mathematical Didactics or equivalent.

Objectives

Having completed the course the student is expected to:

- identify, with the help of a diagnosis, a pupil's difficulties in mathematics.
- be able, after diagnosing a pupil's ability in mathematics, to plan, carry out and evaluate teaching for a pupil experiencing difficulties in mathematics.
- be able to analyse as well as present both in speech and writing the content of current research into mathematical difficulties.

Content

The course covers the following areas:

- field studies in the form of identifying, teaching and evaluating pupils experiencing difficulties in mathematics

- the influence of the ways and means of working on the pupils' learning situation.
- pupils experiencing difficulties in mathematics
- reading and writing difficulties and learning mathematics.
- educational aids in teaching mathematics.
- orientation in the current research into difficulties in mathematics.

Type of Instruction

Teaching may consist of lectures, seminars and field studies. Attendance at all forms of teaching is obligatory. Parts of the course content is treated in close connection with field studies.

The course can be offered as distance course. When the course is offered as a distance course specific distribution form is used suitable forms of education.

Examination

The course is assessed with the grades Fail (U) or Pass (G).

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

The course is examined through active participation at seminars, methodology sessions and presentations, as well as through a written exam and written and verbal presentations of individual tasks and group assignments.

Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Required Reading and Additional Study Material

Required reading

Butterworth, B & Yeo, D, *Dyskalkyli - att hjälpa elever med specifika matematiksvårigheter*, Natur och kultur, 2009. 124 pages

McIntosh, A, *Förstå och använd tal - en handbok*, NCM, Göteborgs universitet, 2008, 200 pages.

Malmer, G, *Bra matematik för alla, nödvändig för elever med inläringsvårigheter*, Studentlitteratur, 1999. 240 pages.

Sterner, G & Lundberg, I, *Dyskalkyli - finns det?*, NCM, Göteborgs universitet, 2009 96 pages.

Sterner, G & Lundberg, I, *Läs- och skrivsvårigheter och lärande i matematik*, NCM-rapport 2002:2. 201 pages.

DFM, *Compendium*, Linnæus University, current year. 100 pages.