

Course Syllabus

Mathematical Problem-Solving for Secondary School Teachers **7.5 Credits*, First Cycle Level 1**

Learning Outcomes

After completing the course, students will be able to:

- explain various academic theories and research findings, both national and international, that deal with mathematical problem-solving in schools,
- communicate mathematics in speech, writing and images,
- use different mathematical ideas, forms of expression and forms of representation in problem-solving,
- demonstrate the ability to be creative in the creation, formulation and solving of problems that do not have a given solution,
- interpret and critically examine pupils' solutions and demonstrate an understanding of the mathematical progression of pupils' learning,
- analyse the teaching of mathematical problem-solving in an academic manner.

Course Content **Assessment**

Forms of Study

Grades

The Swedish grades U–VG.

Prerequisites

General entry requirements and Mathematics 3c or Mathematics D

Other Information

For students participation in the online course requires internet access and appropriate equipment such as microphone and webcam.

The course corresponds to MD1055.

Subject:

Mathematics Education

Group of Subjects:

Educational Sciences/Theoretical Subjects

Disciplinary Domain:

Natural Science, 100%

This course can be included in the following main field(s) of study:

1. No main field of study

Progression Indicator within (each) main field of study:

1. G1N

Approved:

Approved 1 October 2015

Valid from 18 January 2016

Revised:

Revised, 3 December 2021

Revision is valid from 3 December 2021