



## Learning in Mathematics for Schoolyears 4-6, Arithmetic 7.5 cr

*Matematikinläring med inriktning mot årskurs 4-6, aritmetik 7,5 hp*

Set by Faculty of Engineering and Sustainable Development

### Version

Set at	Valid from
3/10/14	HT2014
3/11/16	HT2016
2/27/19	HT2019

<b>Level</b>	G1F
<b>Education level</b>	First cycle
<b>Course identifier</b>	MAG340
<b>Credits</b>	7.5 cr
<b>Main field of study</b>	Mathematics
<b>Subject group</b>	Mathematics
<b>Disciplinary domain</b>	Natural sciences 100.0 %

**Learning outcomes** After completion of the course, the student shall be able to

1. give an account of the meaning of, and didactical aspects of, concepts relevant to the course
2. use pedagogical tools and problem solving strategies to illustrate mathematical concepts and relations and to solve mathematical problems
3. give examples of how to teach about basic mathematical concepts, relations and problems
4. demonstrate knowledge in basic arithmetic.

**Course content** Children's mathematical thinking  
Historical overview  
Number systems, positional notation  
Concept and conception of number  
Arithmetic  
Mental and algorithmic arithmetic  
Laborative materials  
Problem solving strategies

<b>Teaching</b>	Lectures, problem solving sessions, lab work, and seminars.		
<b>Prerequisites</b>	Utbildningsvetenskaplig kärna 1, 30 hp i grundlärarprogrammet eller avslutad/påbörjad lärutbildning och Matematik 2a/2b/2c alternativt Matematik B		
<b>Examination</b>	Written exam, written and oral presentation, written test of basic skills and active participation in educational activities. Module 0030 Written examination examines learning outcomes 1-4, module 0040 Written and oral examination examines learning outcomes 1-4 and module 0050 Written Test of Basic Skills examines learning outcome 4.		
<b>Grade</b>	A, B, C, D, E, Fx, F		
<b>Other regulations</b>	Grading criteria are provided by the examiner or course coordinator in connection with the course introduction.		
<b>Sustainable environment</b>	A minor part of the course content deals with sustainable development.		
<b>Module</b>			
	0030	Written examination	5 cr      Grade: AF
	0040	Written and oral examination	2 cr      Grade: UV
	0050	Written Test of Basic Skills	0.5 cr      Grade: UG