

Centre for Mathematical Sciences Division of Mathematics and Numerical Analysis

Centre for Mathematical Sciences
Faculty of Science

Course Analysis for MATA23/ÄMAD03 Foundations of Algebra, Spring Term 2022

Course Information

Lecturer: Kjell Elfström

Teaching assistants: Raul Hindov

Number of students:

MATA23: 44 newly registered and 7 re-registered. ÄMAD03: 4 newly registered and 5 re-registered.

11 students answered the course evaluation, 8 of them are enrolled on the Bachelor's Programme in Mathematics, 1 on a Physics programme and 2 on another programme or a free-standing course.

Examination

Project: 34 MATA23 students passed. Not applicable to ÄMAD03.

Written examination:

- Ordinary examination on 31 May 2022: 23 out of 30 MATA23 candidates passed and 2 out of 5 ÄMAD03 candidates passed.
- The resit examination will be in August and the results are therefore not accounted for here.

Final grades

In all, 23 MATA23 students, including some re-registered students, have got their final grade. 6 passed with distinction.

17 passed.

For ÄMAD03 students, I refer to Anna-Maria.

Course Evaluation

Summary of student's answers:

Contradictory opinions. Some seemed to like the textbook and the lectures and seminars a lot, some had quite an opposite opinion. One cannot please them all. A few students complained about the lecturer's attitude. I do not know if they had reason to do that, but I shall think about it in the future.

Teachers' comments:

The course consisted of lectures and seminars on campus. A project consisting of exercise assignments is also included in the course. The textbook 'Foundations of Algebra' is written by me (Kjell Elfström).

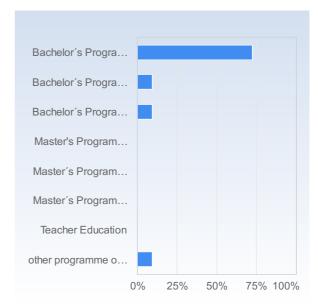
Changes from the previous course realisation: None.

Suggestions for the next course realisation: None.

Foundations of Algebra, Spring 2022

I have studied this course as part of

	Number of
I have studied this course as part of	responses
Bachelor's Programme in Mathematics	8 (72,7%)
Bachelor's Programme in Physics, Theoretical	
Physics, Astronomy	1 (9,1%)
Bachelor's Programme, other specialization	1 (9,1%)
Master's Programme in Mathematics	0 (0,0%)
Master's Programme in Mathematical Statistics	0 (0,0%)
Master's Programme, other specialization	0 (0,0%)
Teacher Education	0 (0,0%)
other programme or as stand alone course	1 (9,1%)
Total	11 (100,0%)

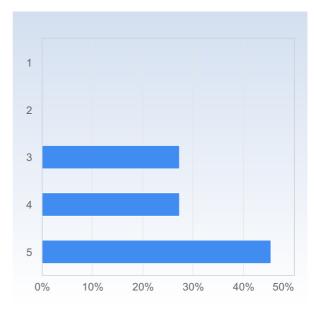


	Mean	Standard Deviation
I have studied this course as part of	1,9	2,1

On the scale 1-5 select the option that best matches your opinion: 1= disagree completely \to 3= partly agree \to 5= agree completely

2. IMy prior knowledge has been sufficient to assimilate the contents of this course.

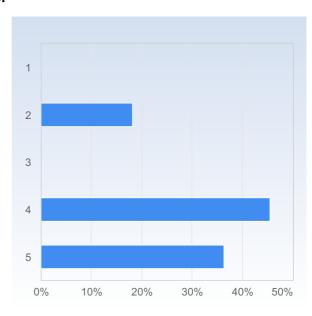
2.IMy prior knowledge has been sufficient to assimilate the contents of this course.	Number of responses
assimilate the contents of this course.	
1	0 (0,0%)
2	0 (0,0%)
3	3 (27,3%)
4	3 (27,3%)
5	5 (45,5%)
Total	11 (100 0%)



	Mean	Standard Deviation
2. IMy prior knowledge has been sufficient to assimilate the contents of this course.	4,2	0,9

3. Il have participated actively in the course.

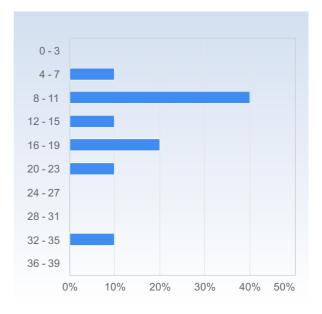
3.II have participated actively in the course.	Number of responses
1	0 (0,0%)
2	2 (18,2%)
3	0 (0,0%)
4	5 (45,5%)
5	4 (36,4%)
Total	11 (100,0%)



	Mean	Standard Deviation
3. Il have participated actively in the course.	4,0	1,1

Average number of hours spent in total on the course per week (including scheduled activities):

Average number of hours spent in total on the	Number of
course per week (including scheduled activities):	responses
0 - 3	0 (0,0%)
4 - 7	1 (10,0%)
8 - 11	4 (40,0%)
12 - 15	1 (10,0%)
16 - 19	2 (20,0%)
20 - 23	1 (10,0%)
24 - 27	0 (0,0%)
28 - 31	0 (0,0%)
32 - 35	1 (10,0%)
36 - 39	0 (0,0%)
Total	10 (100,0%)



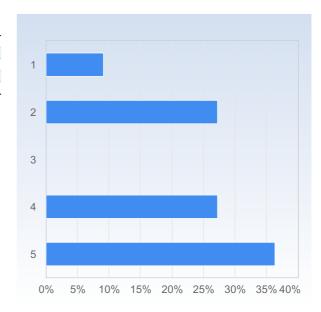
	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	14,8	8,7

The course in general

On the scale 1-5 select the option that best matches your opinion: 1= disagree completely \to 3= partly agree \to 5= agree completely

The way the course was taught and organised suited me.

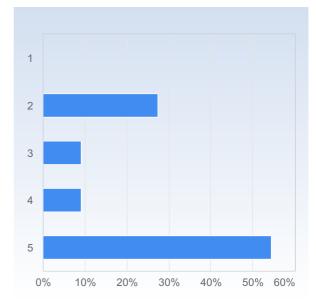
The way the course was taught and organised	Number of
suited me.	responses
1	1 (9,1%)
2	3 (27,3%)
3	0 (0,0%)
4	3 (27,3%)
5	4 (36,4%)
Total	11 (100,0%)



	Mean	Standard Deviation
The way the course was taught and organised suited me.	3,5	1,5

The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.

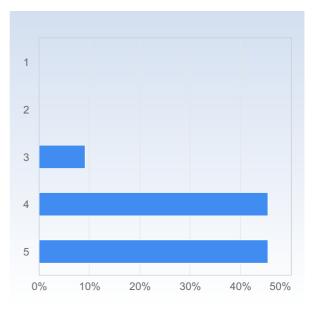
The number of teacher lead activities (lectures,	Number of
seminars etc.) has been satisfactory.	responses
1	0 (0,0%)
2	3 (27,3%)
3	1 (9,1%)
4	1 (9,1%)
5	6 (54,5%)
Total	11 (100,0%)



	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	3,9	1,4

The lectures were valuable for my learning.

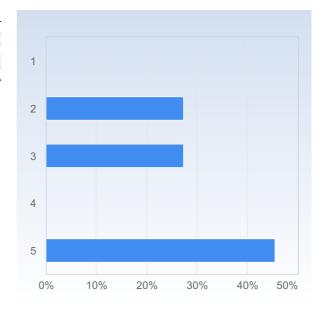
The lectures were valuable for my learning.	Number of responses	
1	0 (0,0%)	
2	0 (0,0%)	
3	1 (9,1%)	
4	5 (45,5%)	
5	5 (45,5%)	
Total	11 (100.0%)	



	Mean	Standard Deviation
The lectures were valuable for my learning.	4,4	0,7

The seminars were valuable for my learning.

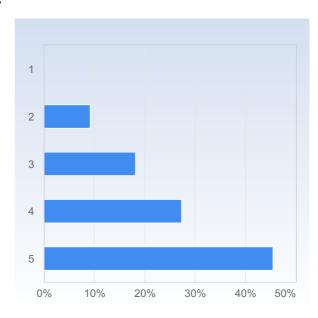
The seminars were valuable for my learning.	Number of responses
1	0 (0,0%)
2	3 (27,3%)
3	3 (27,3%)
4	0 (0,0%)
5	5 (45,5%)
Total	11 (100 0%)



	Mean	Standard Deviation
The seminars were valuable for my learning.	3,6	1,4

The project was valuable for my learning.

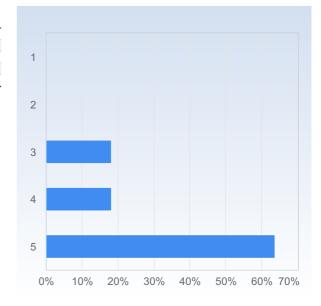
The project was valuable for my learning.	Number of responses
1	0 (0,0%)
2	1 (9,1%)
3	2 (18,2%)
4	3 (27,3%)
5	5 (45,5%)
Total	11 (100,0%)



	Mean	Standard Deviation
The project was valuable for my learning.	4,1	1,0

Studying on my own was valuable for my learning.

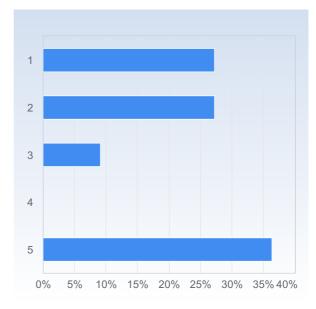
Studying on my own was valuable for my	Number of
learning.	responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (18,2%)
4	2 (18,2%)
5	7 (63,6%)
Total	11 (100 0%)



	Mean	Standard Deviation
Studying on my own was valuable for my learning.	4,5	0,8

The course literature/material was a valuable learning resource.

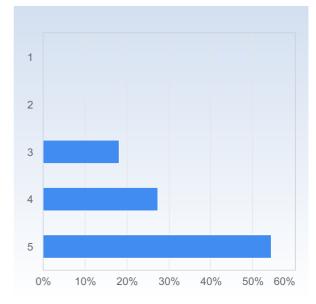
The course literature/material was a valuable learning resource.	Number of responses
1	3 (27,3%)
2	3 (27,3%)
3	1 (9,1%)
4	0 (0,0%)
5	4 (36,4%)
Total	11 (100,0%)



	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	2,9	1,8

The information I received before the course start was satisfactory.

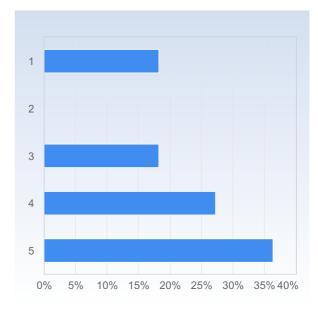
The information I received before the course start	Number of
was satisfactory.	responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (18,2%)
4	3 (27,3%)
5	6 (54,5%)
Total	11 (100 0%)



	Mean	Standard Deviation
The information I received before the course start was satisfactory.	4,4	0,8

The communication with the teaching staff during the course was good.

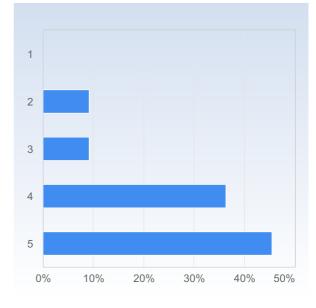
The communication with the teaching staff during	Number of
the course was good.	responses
1	2 (18,2%)
2	0 (0,0%)
3	2 (18,2%)
4	3 (27,3%)
5	4 (36,4%)
Total	11 (100.0%)



	Mean	Standard Deviation
The communication with the teaching staff during the course was good.	3,6	1,5

It was clear throughout the course what was expected of me.

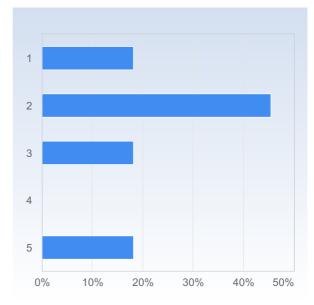
It was clear throughout the course what was	Number of
expected of me.	responses
1	0 (0,0%)
2	1 (9,1%)
3	1 (9,1%)
4	4 (36,4%)
5	5 (45,5%)
Total	11 (100.0%)



	Mean	Standard Deviation
It was clear throughout the course what was expected of me.	4,2	1,0

I have received valuable feedback from my teacher/teachers during the course.

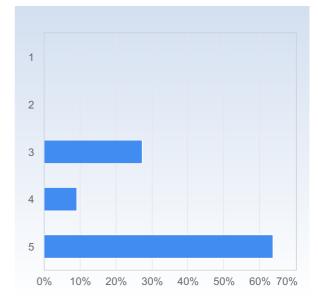
I have received valuable feedback from my	Number of
teacher/teachers during the course.	responses
1	2 (18,2%)
2	5 (45,5%)
3	2 (18,2%)
4	0 (0,0%)
5	2 (18,2%)
Total	11 (100,0%)



	Mean	Standard Deviation
I have received valuable feedback from my teacher/teachers during the course.	2,5	1,4

The course had a reasonable workload.

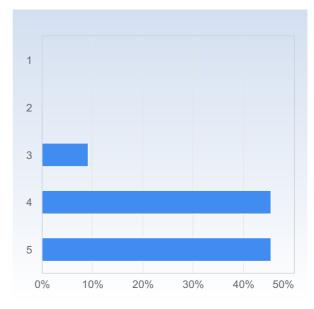
The course had a reasonable workload.	Number of responses	
1	0 (0,0%)	
2	0 (0,0%)	
3	3 (27,3%)	
4	1 (9,1%)	
5	7 (63,6%)	
Total	11 (100 0%)	



	Mean	Standard Deviation
The course had a reasonable workload.	4,4	0,9

The workload was evenly distributed throughout the course.

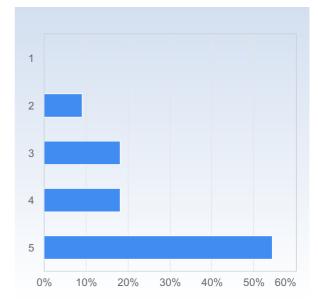
The workload was evenly distributed throughout the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (9,1%)
4	5 (45,5%)
5	5 (45,5%)
Total	11 (100,0%)



	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	4,4	0,7

The examination matched the contents and level of the course.

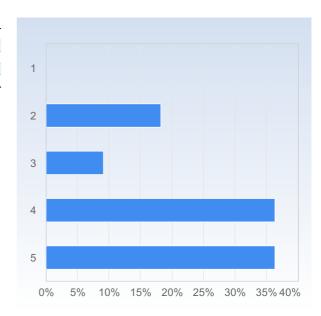
The examination matched the contents and level	Number of
of the course.	responses
1	0 (0,0%)
2	1 (9,1%)
3	2 (18,2%)
4	2 (18,2%)
5	6 (54,5%)
Total	11 (100,0%)



	Mean	Standard Deviation
The examination matched the contents and level of the course.	4,2	1,1

Overall, I am satisfied with the course.

Overall, I am satisfied with the course.	Number of responses	
1	0 (0,0%)	
2	2 (18,2%)	
3	1 (9,1%)	
4	4 (36,4%)	
5	4 (36,4%)	
Total	11 (100,0%)	



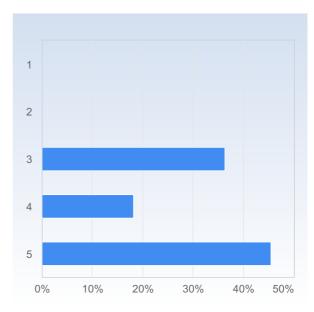
	Mean	Standard Deviation
Overall, I am satisfied with the course.	3,9	1,1

On the development of generic skills

On a scale 1-5 select the option that best matches your opinion: 1= disagree completely \to 3= partly agree \to 5= agree completely

The course has increased my ability to read a mathematical text.

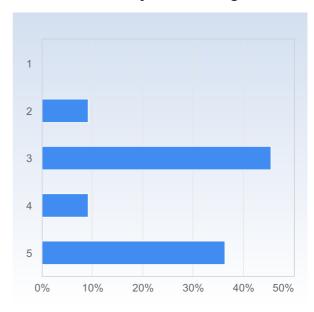
The course has increased my ability to read a mathematical text.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	4 (36,4%)
4	2 (18,2%)
5	5 (45,5%)
Total	11 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to read a mathematical text.	4.1	0.9

The course has increased my ability to communicate the subject in writing.

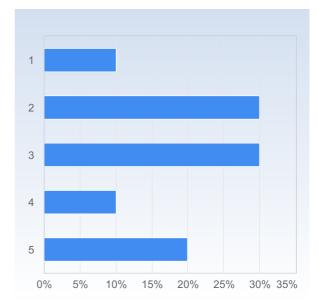
The course has increased my ability to communicate the subject in writing.	Number of responses
1	0 (0,0%)
2	1 (9,1%)
3	5 (45,5%)
4	1 (9,1%)
5	4 (36,4%)
Total	11 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	3,7	1,1

The course has increased my ability to communicate the subject orally.

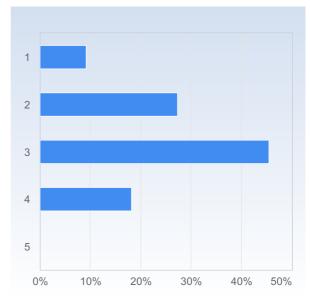
The course has increased my ability to	Number of
communicate the subject orally.	responses
1	1 (10,0%)
2	3 (30,0%)
3	3 (30,0%)
4	1 (10,0%)
5	2 (20,0%)
Total	10 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject orally.	3,0	1,3

The course has increased my ability to cooperate.

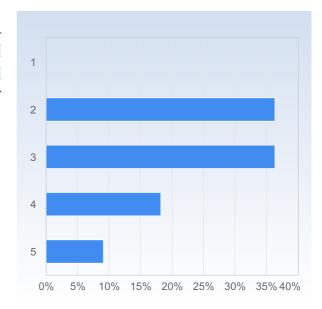
The course has increased my ability to	Number of
cooperate.	responses
1	1 (9,1%)
2	3 (27,3%)
3	5 (45,5%)
4	2 (18,2%)
5	0 (0,0%)
Total	11 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to cooperate.	2,7	0,9

The course has increased my ability to search and process information.

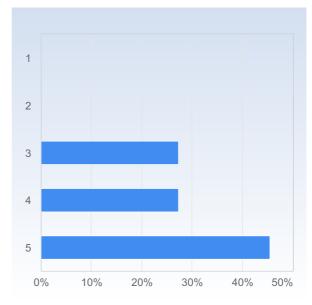
The course has increased my ability to search	Number of
and process information.	responses
1	0 (0,0%)
2	4 (36,4%)
3	4 (36,4%)
4	2 (18,2%)
5	1 (9,1%)
Total	11 (100 0%)



	Mean	Standard Deviation
The course has increased my ability to search and process information.	3,0	1,0

The course has increased my ability to analyze and solve problems.

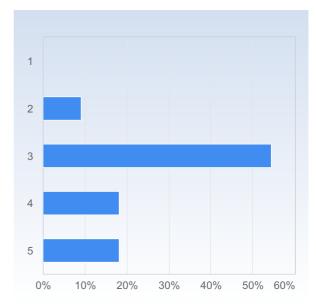
The course has increased my ability to analyze and solve problems.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	3 (27,3%)
4	3 (27,3%)
5	5 (45,5%)
Total	11 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to analyze and solve problems.	4,2	0,9

As a result of this course, I feel confident about tackling unfamiliar problems.

As a result of this course, I feel confident about tackling unfamiliar problems.	Number of responses
1	0 (0,0%)
2	1 (9,1%)
3	6 (54,5%)
4	2 (18,2%)
5	2 (18,2%)
Total	11 (100 0%)



	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	3,5	0,9

What did you appreciate most with the course?

What did you appreciate most with the course?

Jämn fördelning av arbetsmängd och att man får kurslitteratur, väldigt uppskattat!

Jämn fördelning i arbetsbelastning.

The lectures were very helpful because the material was explained very well and in easy to understand language. I liked the seminars as well and it was fun to listen to other students present, and to get some practice myself. I think the course book was very clear and concise with good examples and good exercises that improved my problem solving skills.

Problem solving

The contents, really, I had lots of fun! Love this kind of math.

It was extremely well-organized and clearly structured, so you could find anything you wanted to know about both the content and the structure of the course on canvas.

Many of the problems in the book were challenging and interesting. Working on them alone and in a group taught me a lot.

Good course

I liked the mathematical rigour in the literature

What do you think should be improved?

What do you think should be improved?

Hade gärna velat se en bättre attityd mot studenter på föreläsningarna då man vid frågor har dumförklararats. Detta känns tråkigt då man är på föreläsningar för att lära sig och detta blir svårt då man inte vågar ställa frågor.

Föreläsning: otroligt dålig inställning till frågor från Kjell. Detta är mycket tråkigt med tanke på att man inte känner frihet till att ställa frågor under föreläsningar på grund av att man riskerar att bli dumförklarad, exempelvis att få svaret "det står i häftet", vilket inte hjälper den som frågar. Det måste finnas en mycket större vilja att hjälpa studenter från Kjells sida.

Maybe to divide people into groups. I found that working on the hand-ins alone was challenging and I would have liked to discuss the problems with someone else.

Comprehending the book

Nothing really comes to mind

The only downside for me was that it was a lot of repetition from high school, but I don't know what could be done to change that.

The seminars were not very helpful. They showed a correct way to solve each problem but did not focus on how to find or discover that way. It would have been more interesting to dicuss different ways of solving problems. Some kind of problem-solving method was also missing. I tried to use Polya's "How to Solve It" to fill the gap but there was no time in the seminars to discuss such matters.

Not sure

I think it would be nice if the course went more in depth and contained fewer topics overall

Have you during this course experienced course literature, staff or teaching methods to be discriminatory in any way (gender, ethnicity, etc.)?

	Have you during this course experienced course literature, staff or teaching methods to be discriminatory in any way (gender, ethnicity, etc.)?
	Ingen diskriminering, men absolut en känsla av att man ser ner på de som inte riktigt förstår, då som sagt inte frågor mottagits på något snygg sätt. Vilket är konstigt då jag antar att universitetets mål är studenter ska lära sig under sitt program, inte komma dit och redan kunna?
	Ovanstående leder till diskriminering av studenter som inte förstår materialet direkt. Något som verkligen inte är okej med tanke på att samtliga studenter är där för att lära, där ingen ska behandlas annorlunda för att man lär i olika takt!
	No
	Personally no
	No
Ī	Don't think so
ľ	No.
	no
ľ	No
	No