



LUNDS  
UNIVERSITET

Matematikcentrum  
Matematik och Numerisk analys

Matematikcentrum  
Naturvetenskapliga fakulteten

## Sammanställning för MATA23 Algebrans grunder, höstterminen 2021

### Kursinformation

**Kursansvarig:** Kjell Elfström

**Övriga lärare:** Adem Limani

**Antal studenter:**

18 nyregistrerade samt 6 omregistrerade.

4 studenter har svarat på utvärderingen av vilka 1 har läst denna kurs inom Naturvetenskapligt kandidatprogram, Matematik.

### Resultat på examinerade moment

**Projektuppgifter:** 20 godkända studenter.

**Muntlig redovisning:** Ej tillämpligt.

**Muntlig tentamen:** 5 godkända studenter.

**Skriftlig tentamen:** 14 godkända studenter.

- Ordinarie tentamen 13/1 2022: 19 deltagande studenter, varav 13 godkända.
- Omtentamen 29/1 2022: 5 deltagande studenter, varav 1 godkänd.

### Betyg på hel kurs:

Sammanlagt 14 studenter, varav inga omregistrerade, har fått slutbetyg på kursen.

5 studenter har fått betyget VG.

9 har fått betyget G.

### Utvärdering

#### Sammanfattning av kursvärderingen:

På varje delfråga i undersökningen gav minst tre av de fyra svarande positiv respons

#### Lärarnas kommentarer:

- Undervisningen bestod av föreläsningar och lektioner i sal. Ingen distansundervisning ägde rum.
- Inför varje lektion förväntades det av studenterna att de hade gjort de läxuppgifter som gavs.

Ganska få deltagare.

#### Utvärderingar av förändringar sedan förra kurstillfället:

Inga förändringar har genomförts.

#### Förslag till förändringar inför nästa kurstillfälle:

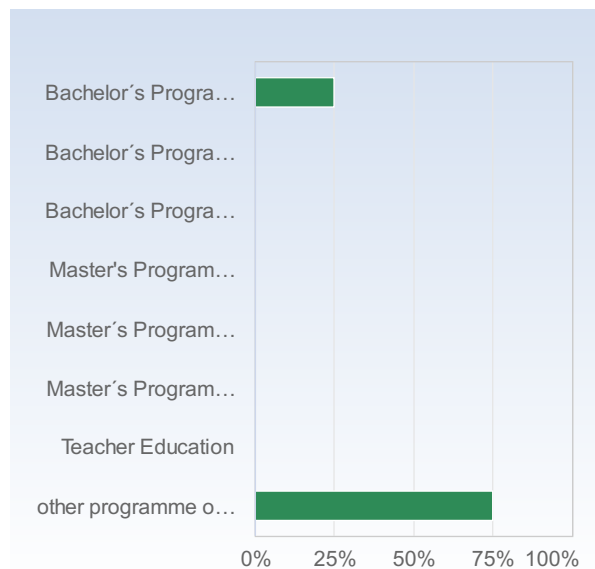
Resultatet av denna utvärdering föranleder inga förändringar.

# Algebras grunder, hösten 2021

Answer Count: 4

## I have studied this course as part of

I have studied this course as part of	Number of responses
Bachelor's Programme in Mathematics	1 (25,0%)
Bachelor's Programme in Physics, Theoretical Physics, Astronomy	0 (0,0%)
Bachelor's Programme, other specialization	0 (0,0%)
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	3 (75,0%)
Total	4 (100,0%)

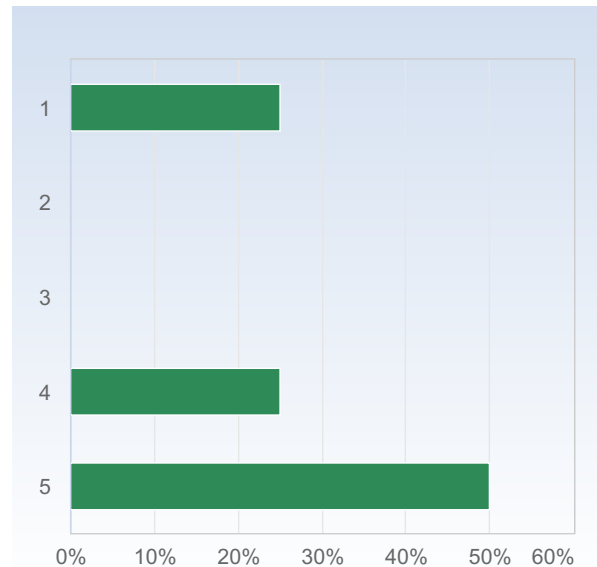


	Mean	Standard Deviation
I have studied this course as part of	6,3	3,5

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

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

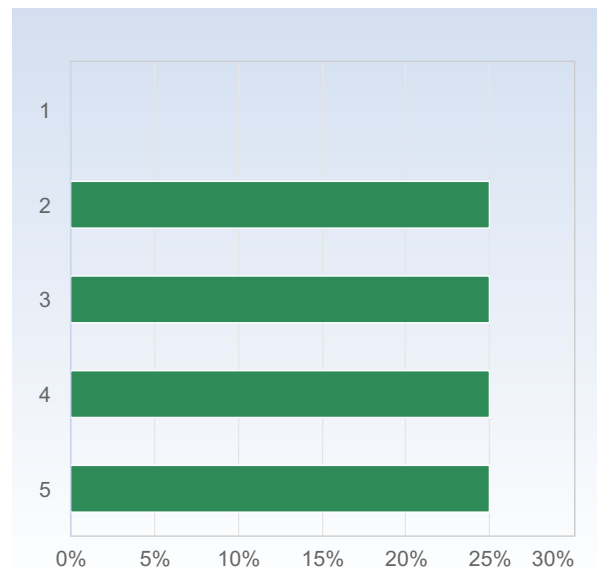
2. <input type="checkbox"/> My prior knowledge has been sufficient to assimilate the contents of this course.	Number of responses
1	1 (25,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (25,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
2. <input type="checkbox"/> My prior knowledge has been sufficient to assimilate the contents of this course.	3,8	1,9

**3.  I have participated actively in the course.**

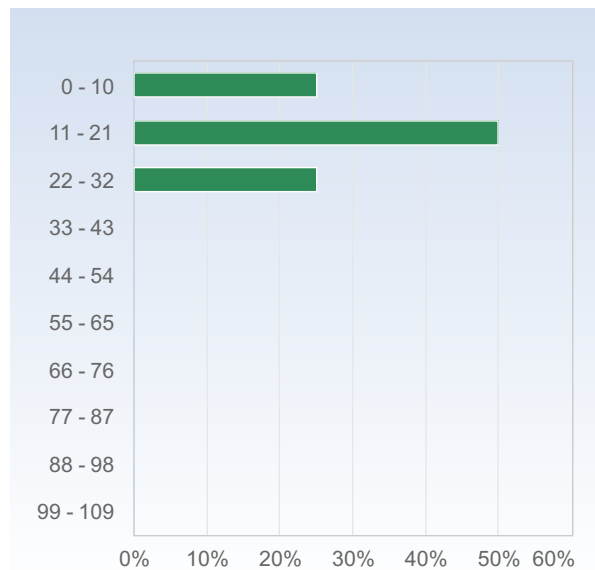
3. <input type="checkbox"/> I have participated actively in the course.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	1 (25,0%)
4	1 (25,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
3. <input type="checkbox"/> I have participated actively in the course.	3,5	1,3

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

Average number of hours spent in total on the course per week (including scheduled activities):	Number of responses
0 - 10	1 (25,0%)
11 - 21	2 (50,0%)
22 - 32	1 (25,0%)
33 - 43	0 (0,0%)
44 - 54	0 (0,0%)
55 - 65	0 (0,0%)
66 - 76	0 (0,0%)
77 - 87	0 (0,0%)
88 - 98	0 (0,0%)
99 - 109	0 (0,0%)
Total	4 (100,0%)



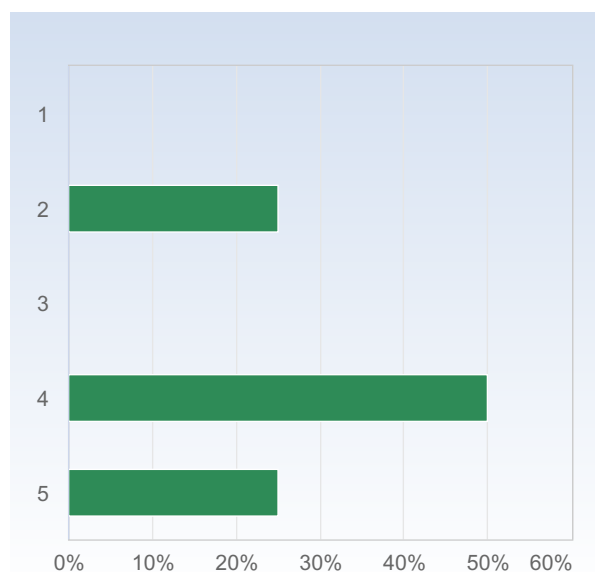
	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	15,8	7,1

## The course in general

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

The way the course was taught and organised suited me.

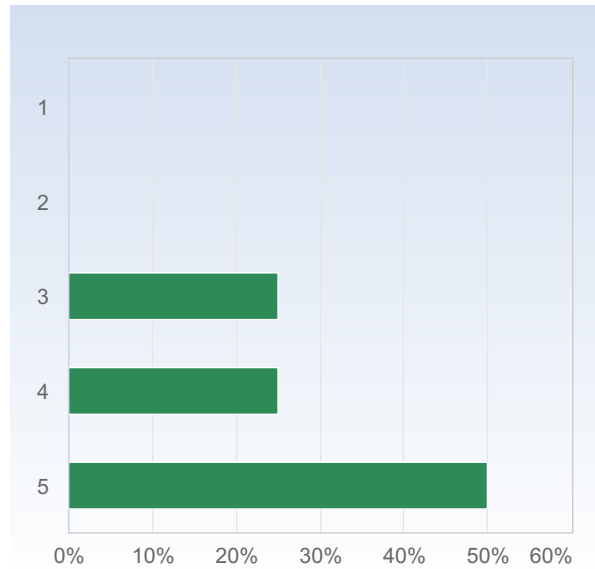
The way the course was taught and organised suited me.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	0 (0,0%)
4	2 (50,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The way the course was taught and organised suited me.	3,8	1,3

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

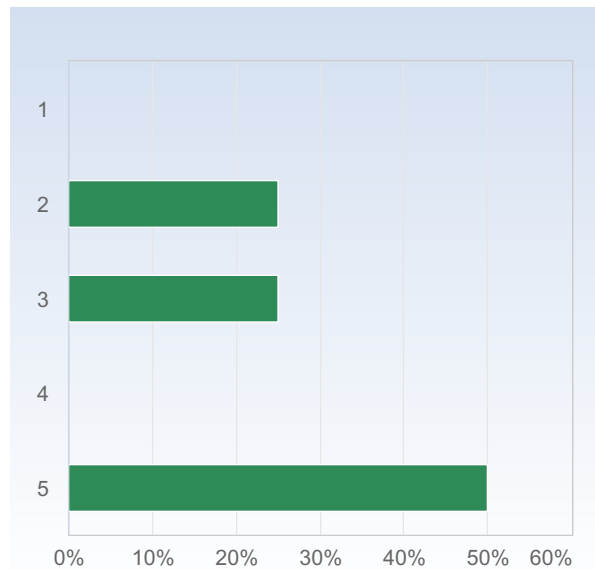
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (25,0%)
4	1 (25,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	4,3	1,0

## The lectures were valuable for my learning.

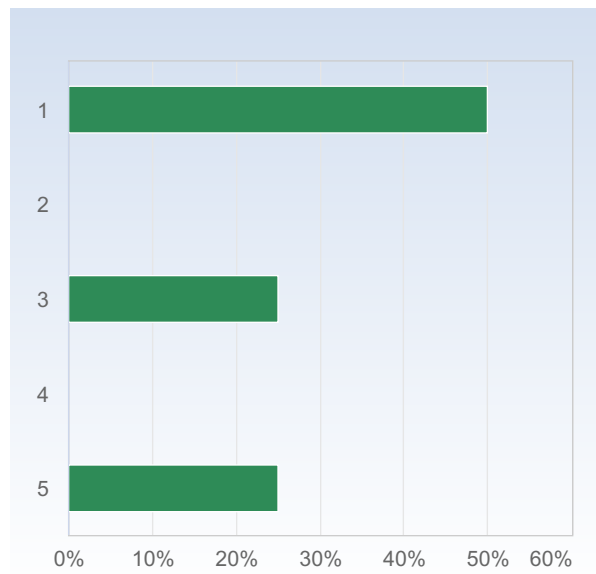
The lectures were valuable for my learning.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	1 (25,0%)
4	0 (0,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The lectures were valuable for my learning.	3,8	1,5

## The seminars were valuable for my learning.

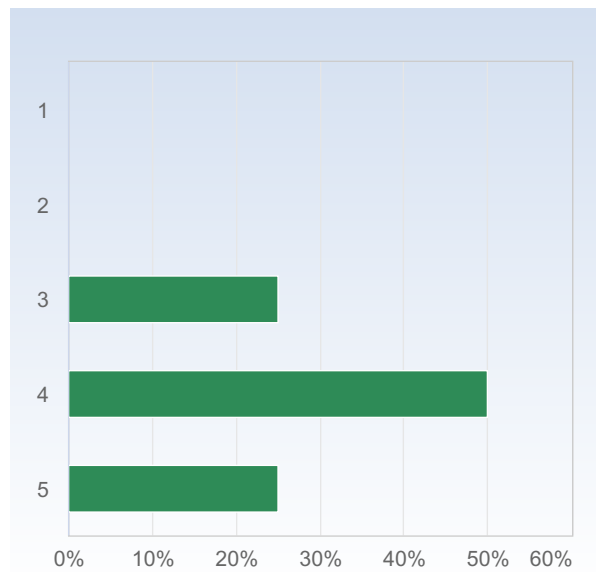
The seminars were valuable for my learning.	Number of responses
1	2 (50,0%)
2	0 (0,0%)
3	1 (25,0%)
4	0 (0,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The seminars were valuable for my learning.	2,5	1,9

## The project was valuable for my learning.

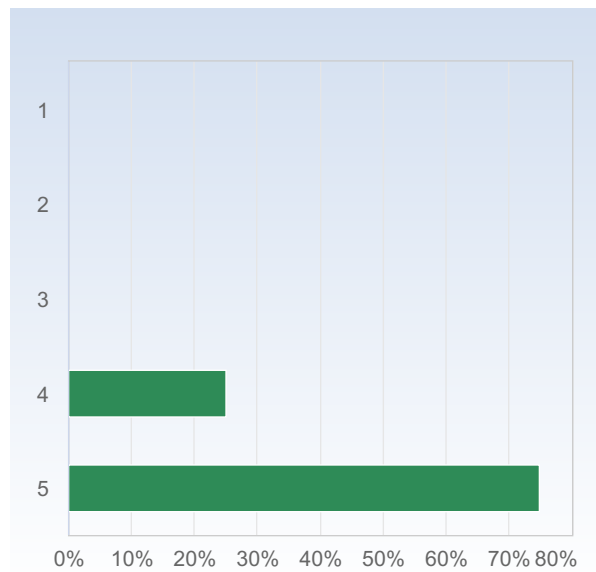
The project was valuable for my learning.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (25,0%)
4	2 (50,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The project was valuable for my learning.	4,0	0,8

## Studying on my own was valuable for my learning.

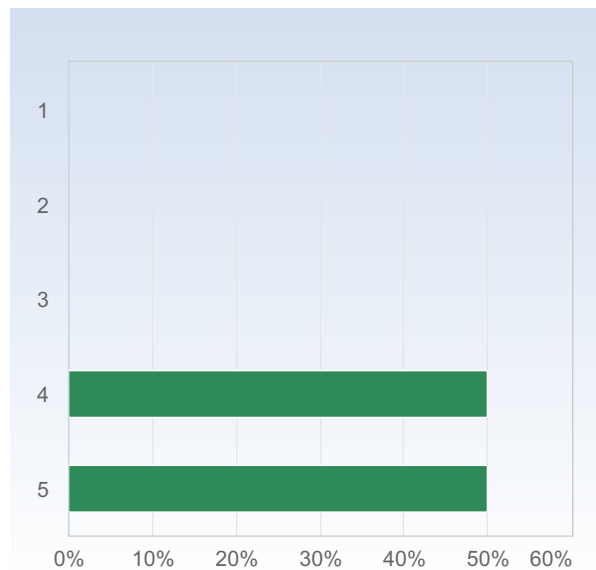
Studying on my own was valuable for my learning.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (25,0%)
5	3 (75,0%)
Total	4 (100,0%)



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

## The course literature/material was a valuable learning resource.

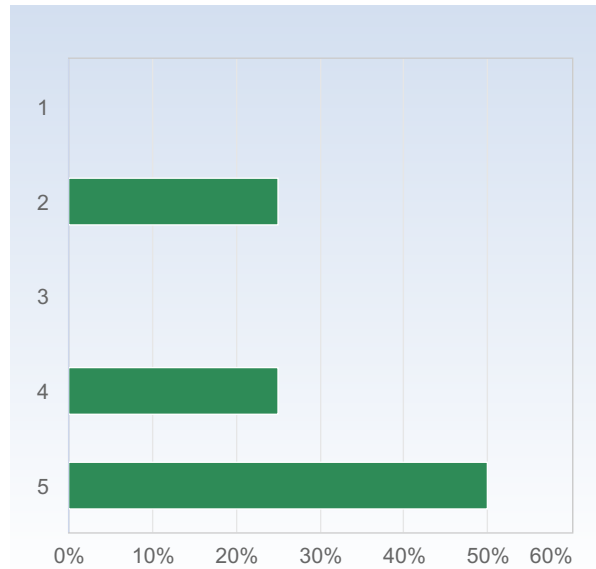
The course literature/material was a valuable learning resource.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	2 (50,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	4,5	0,6

## The information I received before the course start was satisfactory.

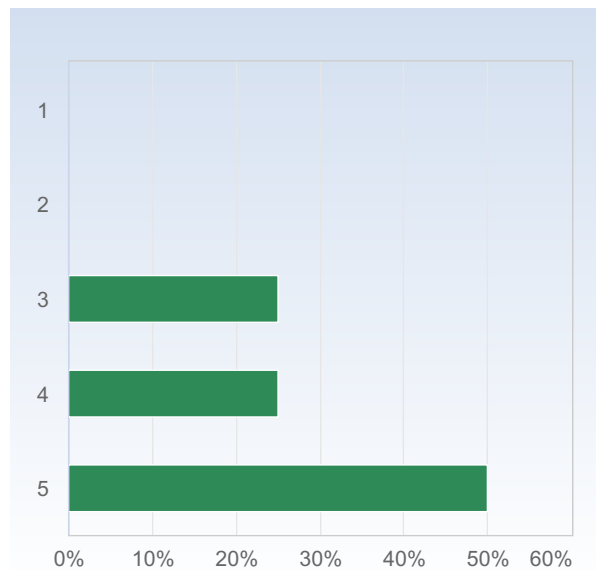
The information I received before the course start was satisfactory.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	0 (0,0%)
4	1 (25,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The information I received before the course start was satisfactory.	4,0	1,4

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

The communication with the teaching staff during the course was good.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (25,0%)
4	1 (25,0%)
5	2 (50,0%)
Total	4 (100,0%)

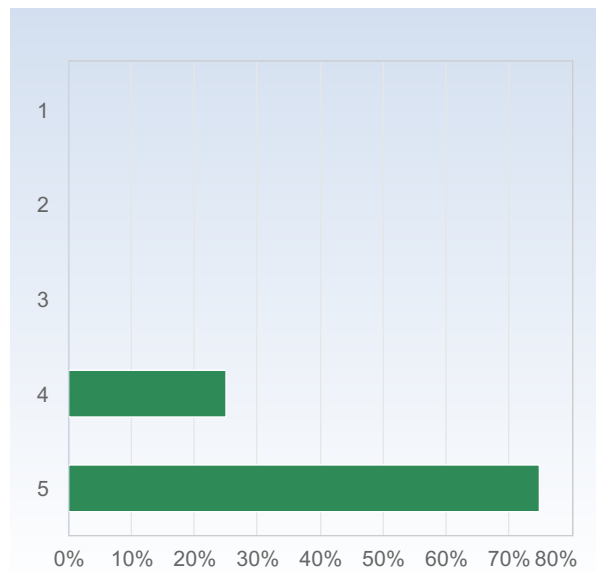


	Mean	Standard Deviation
The communication with the teaching staff during the course was good.	4,3	1,0



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

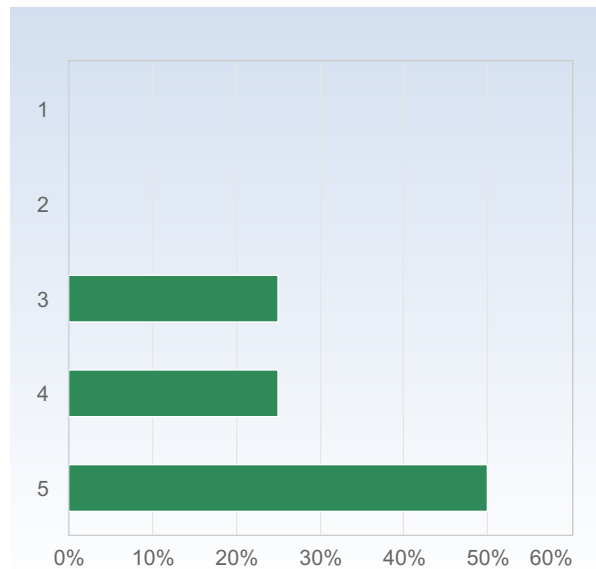
It was clear throughout the course what was expected of me.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (25,0%)
5	3 (75,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
It was clear throughout the course what was expected of me.	4,8	0,5

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

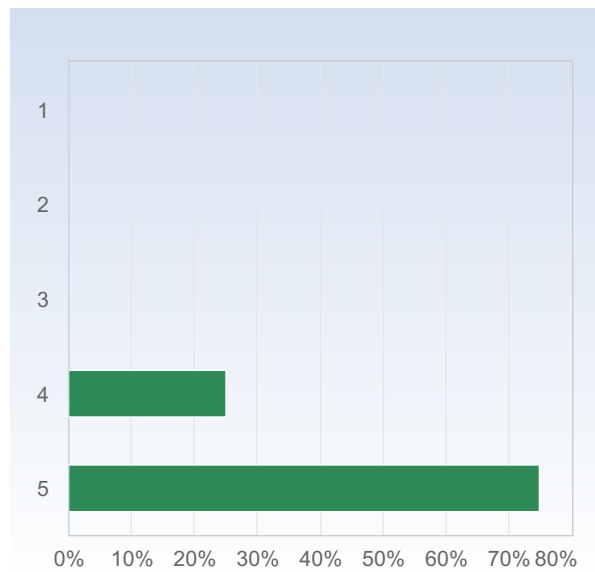
I have received valuable feedback from my teacher/teachers during the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (25,0%)
4	1 (25,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
I have received valuable feedback from my teacher/teachers during the course.	4,3	1,0

## The course had a reasonable workload.

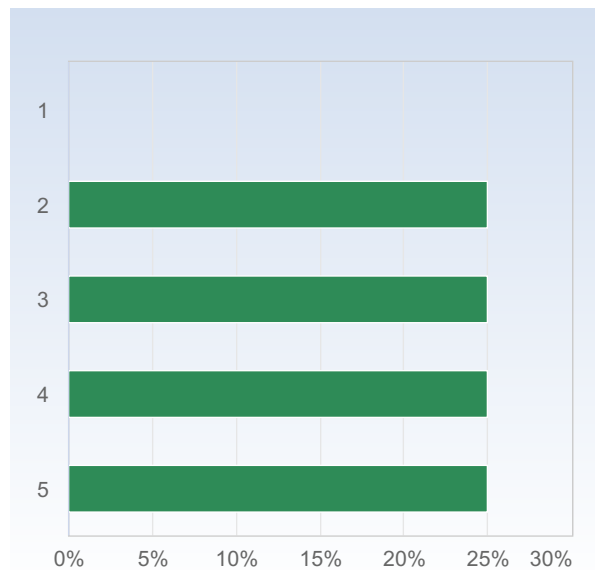
The course had a reasonable workload.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (25,0%)
5	3 (75,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course had a reasonable workload.	4,8	0,5

## The workload was evenly distributed throughout the course.

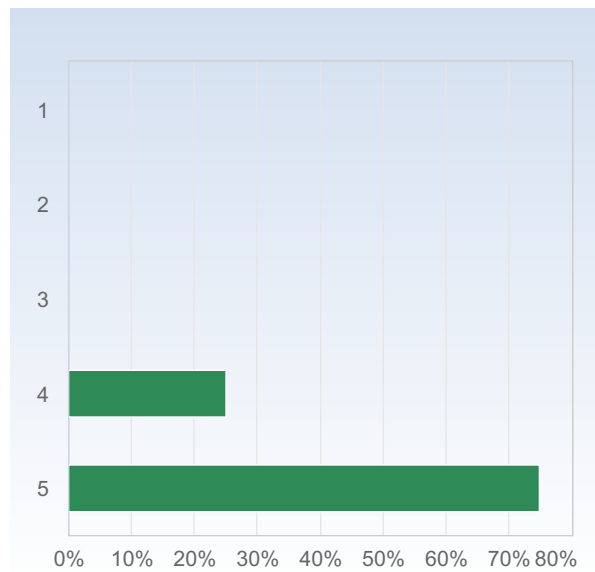
The workload was evenly distributed throughout the course.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	1 (25,0%)
4	1 (25,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	3,5	1,3

## The examination matched the contents and level of the course.

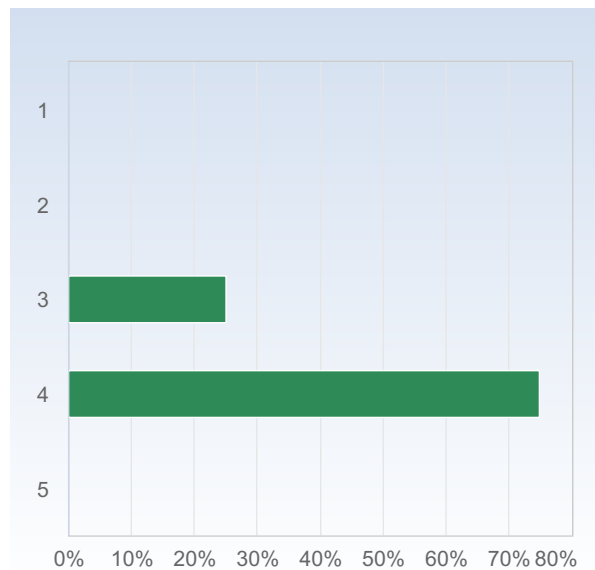
The examination matched the contents and level of the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (25,0%)
5	3 (75,0%)
<b>Total</b>	<b>4 (100,0%)</b>



	Mean	Standard Deviation
The examination matched the contents and level of the course.	4,8	0,5

## Overall, I am satisfied with the course.

Overall, I am satisfied with the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	1 (25,0%)
4	3 (75,0%)
5	0 (0,0%)
<b>Total</b>	<b>4 (100,0%)</b>



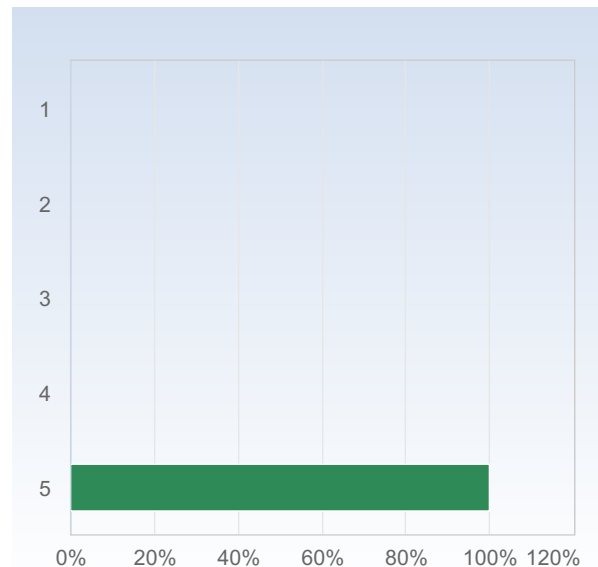
	Mean	Standard Deviation
Overall, I am satisfied with the course.	3,8	0,5

## On the development of generic skills

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

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

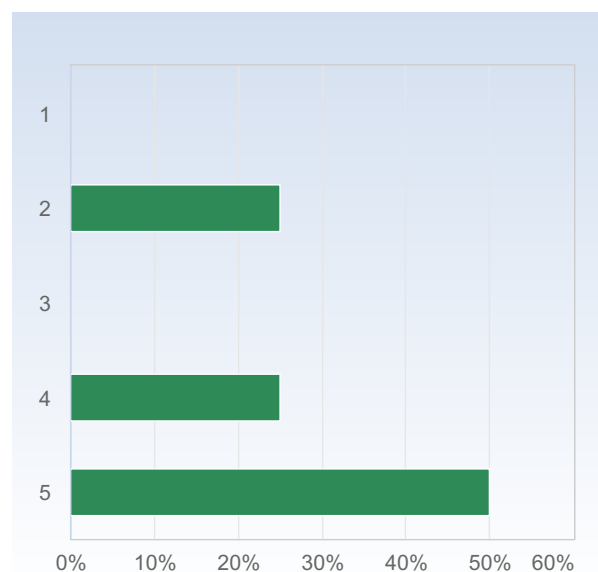
The course has increased my ability to read a mathematical text.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	0 (0,0%)
5	4 (100,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to read a mathematical text.	5,0	0,0

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

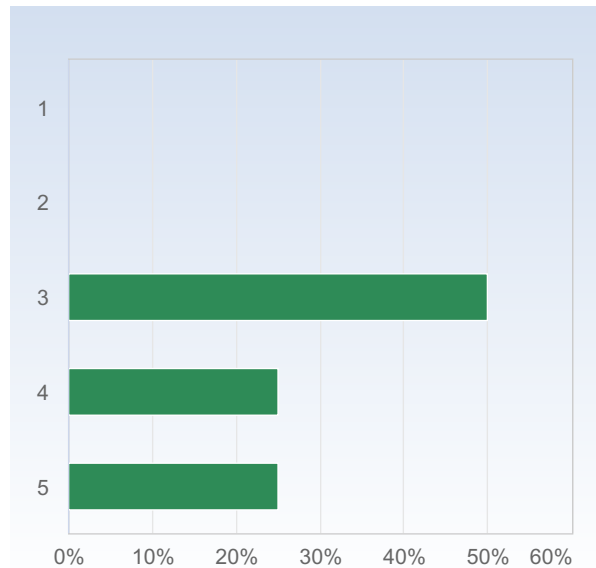
The course has increased my ability to communicate the subject in writing.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	0 (0,0%)
4	1 (25,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	4,0	1,4

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

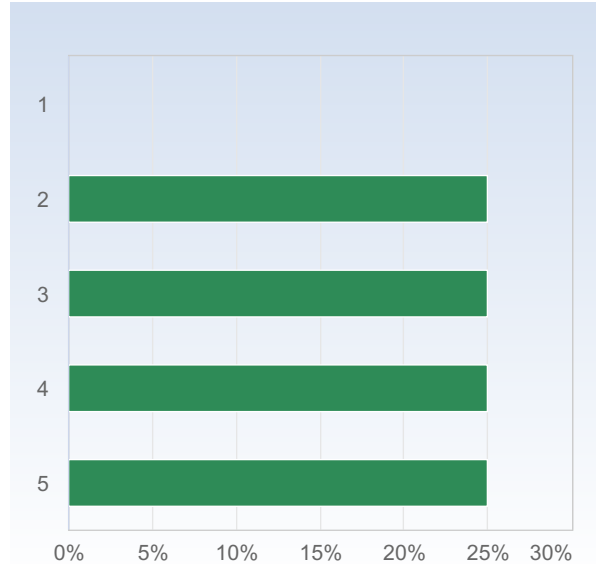
The course has increased my ability to communicate the subject orally.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	2 (50,0%)
4	1 (25,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject orally.	3,8	1,0

## The course has increased my ability to cooperate.

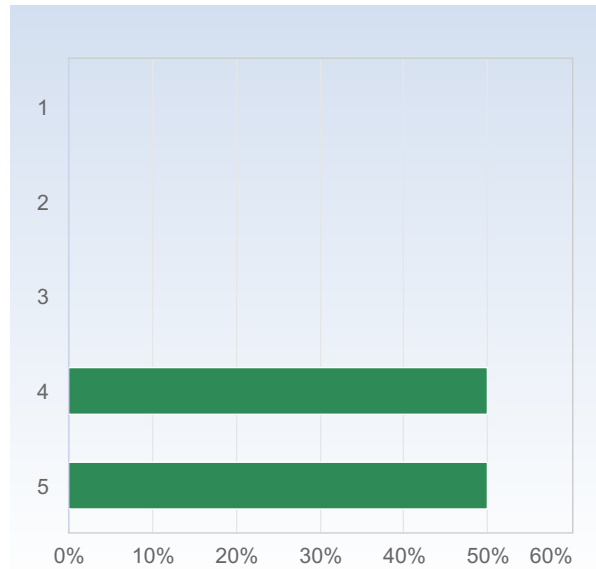
The course has increased my ability to cooperate.	Number of responses
1	0 (0,0%)
2	1 (25,0%)
3	1 (25,0%)
4	1 (25,0%)
5	1 (25,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to cooperate.	3,5	1,3

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

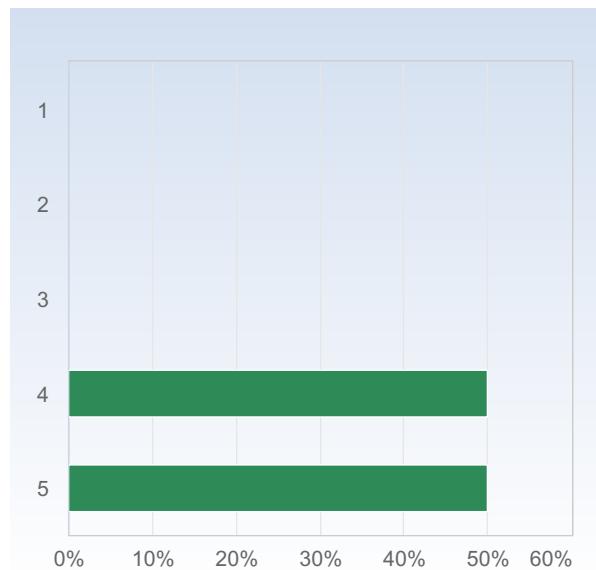
The course has increased my ability to search and process information.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	2 (50,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to search and process information.	4,5	0,6

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

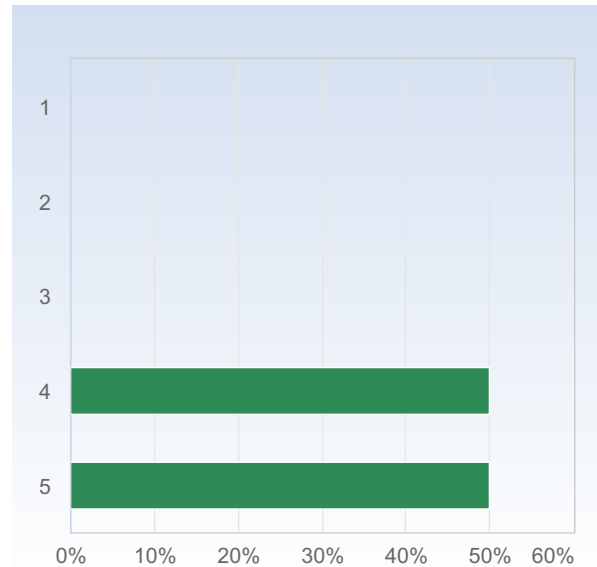
The course has increased my ability to analyze and solve problems.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	2 (50,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to analyze and solve problems.	4,5	0,6

## 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	0 (0,0%)
3	0 (0,0%)
4	2 (50,0%)
5	2 (50,0%)
Total	4 (100,0%)



	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	4,5	0,6

## What did you appreciate most with the course?

What did you appreciate most with the course?

The expectations were clear and the exam was in line with what we learnt

Interesting problems and a knowledgeable lecturer who was great to discuss with.

The course literature was easy to follow and the overall structure of the course was nice. I had already taken quite a few maths courses as a result of my physics degree so I felt that the course was a bit easy to follow but for a new student I can imagine that it would be a very nice course.

## What do you think should be improved?

What do you think should be improved?

Mathematical books and texts should focus on readability and ease of understanding instead of deep delving. Learning the basics of what is asked and how to identify both the problem and solution should be #1, actually solving it should be #2.

Perhaps introduce some basic ideas from abstract algebra. I feel like a lot of the material became extremely close to being straight up cases of rings and fields, and that those properties were used. For example, both when introducing  $R$  and when introducing  $C$ , they were straight up proven to be fields (without explicitly stating it) and the mapping  $\phi: R \rightarrow R \times \{0\}$  was (almost) proven to be a field isomorphism. To add to this, there was even mention of polynomial rings without defining what a ring is, and in the polynomial chapter, there were mentions of polynomials over  $Z$  having slightly different properties than those over  $Q$ ,  $R$ , and  $C$ ; this again being a consequence of the last three being fields while  $Z$  is not. I feel like including something about this could further help motivate why a lot of these things are the way they are and why these notions are useful. If not much, at least in an appendix.

The scheduling has to be thought through more. If we are expected to spend 4 hours per day on this course then every other week when we had a lecture on Wednesdays it was impossible to work on exercises without working overtime or skipping lectures/seminars.

**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.)?

No, my teacher was very inclusive and answered all questions possible.

No.

Nope