LUNDS UNIVERSITET

Matematikcentrum
Matematik NF

Compilation Report for Foundations of Algebra, Spring 2021

Module leader: Kjell Elfström
Other teachers: Adem Limani
Number of students: 61 on MATA23 and 21 on ÄMAD03.
Grades in the ordinary examination: MATA23: 10 V, 20 G, 8 U, ÄMAD03: 9 G, 1 U.

Evaluation

Compilation of the evaluation: See the following pages.
Teacher's comments: Owing to the pandemic, seminars and lectures were given online on zoom. The students seem to be pleased with some exceptions. The communication with the teaching staff was not so good apparently. Hopefully that will change to what it used to be when things go back to normal. Nor was the feedback very good. I have seen this since the pandemic began, but I cannot remember having seen it before. I must ask again, feedback on what? I seldom get any questions from the students. The course did not seem to increase the students' abilities to communicate the subject orally, nor their abilities to cooperate. Can we blame the pandemic for that too?

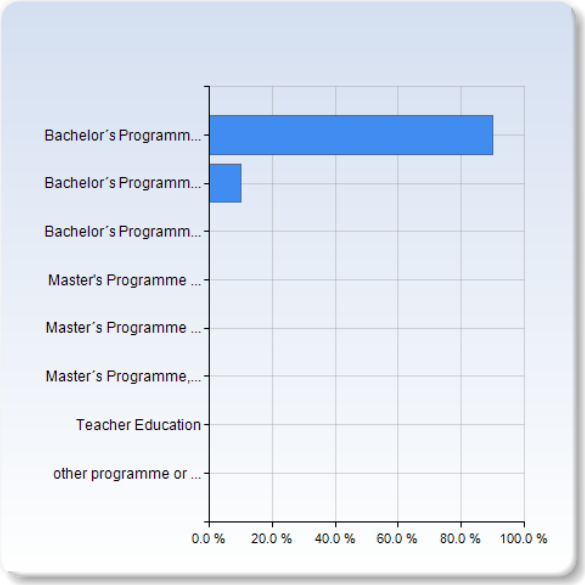
The course literature, written by me, seems to be appreciated. Adem's seminars were appreciated as usual. I was surprised by one comment: 'The trigonometric functions have not been rigorously defined in any course so far.' I cannot be held responsible for this, but I forward the message to those who read this report.
Evaluation of changes since the last time the module ran: The previous evaluation did not cause any changes.
Suggestions for changes prior to the next time the module will be offered: Because of the special circumstances this term, the result of the survey does not call for any change.
Compiler and date of compilation report: Kjell Elfström, 7 June 2021.

Foundations of Algebra, Spring 2021

Answer Count: 10

I have studied this course as part of

I have studied this course as part of	Number of Responses
Bachelor´s Programme in Mathematics	9 (90.0%)
Bachelor´s Programme in Physics, Theoretical Physics, Astronomy	1 (10.0%)
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	0 (0.0%)
Total	10 (100.0%)

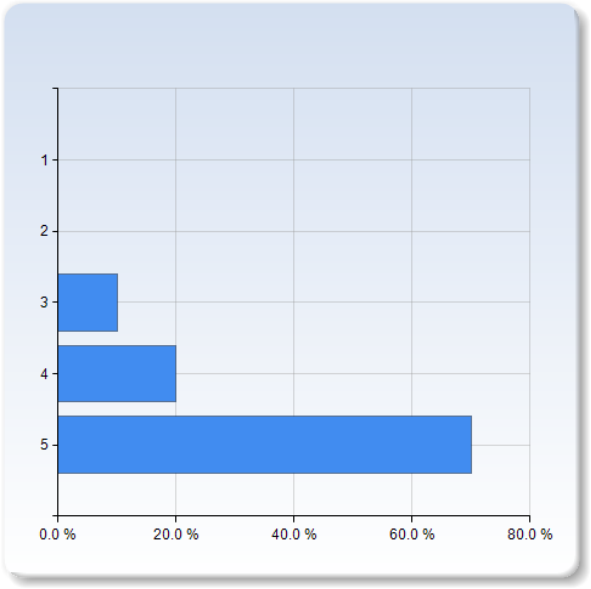


	Mean	Standard Deviation
I have studied this course as part of	1.1	0.3

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.

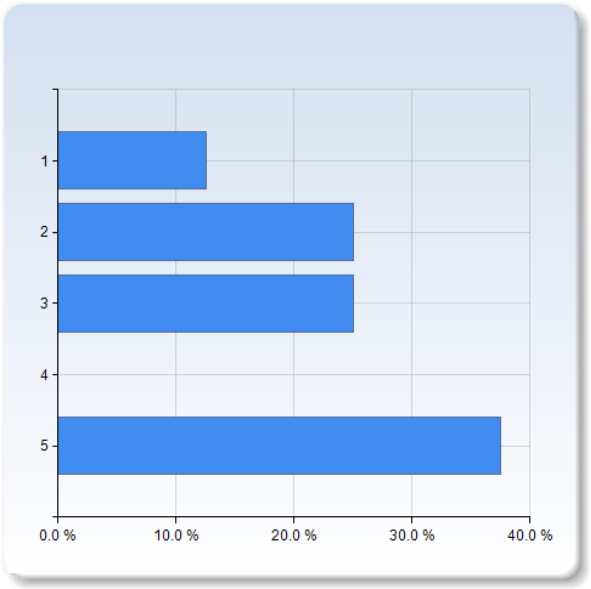
2. My prior knowledge has been sufficient to assimilate the contents of this course.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (10.0%)
4	2 (20.0%)
5	7 (70.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
2. My prior knowledge has been sufficient to assimilate the contents of this course.	4.6	0.7

3. I have participated actively in the course.

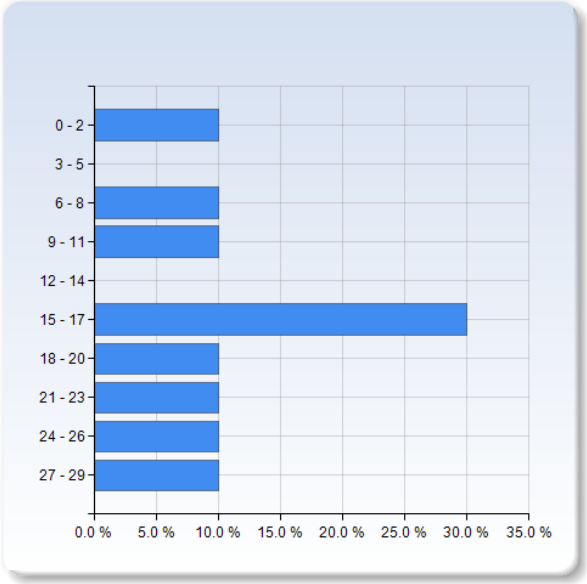
3. I have participated actively in the course.	Number of Responses
1	1 (12.5%)
2	2 (25.0%)
3	2 (25.0%)
4	0 (0.0%)
5	3 (37.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
3. I have participated actively in the course.	3.3	1.6

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 - 2	1 (10.0%)
3 - 5	0 (0.0%)
6 - 8	1 (10.0%)
9 - 11	1 (10.0%)
12 - 14	0 (0.0%)
15 - 17	3 (30.0%)
18 - 20	1 (10.0%)
21 - 23	1 (10.0%)
24 - 26	1 (10.0%)
27 - 29	1 (10.0%)
Total	10 (100.0%)



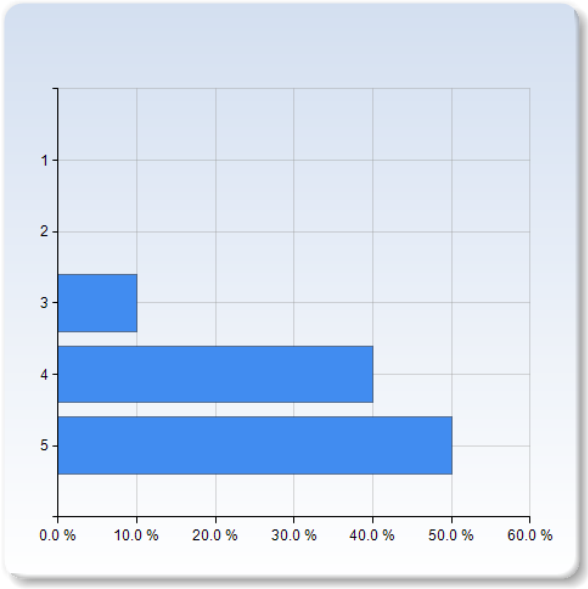
	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	15.5	7.8

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.

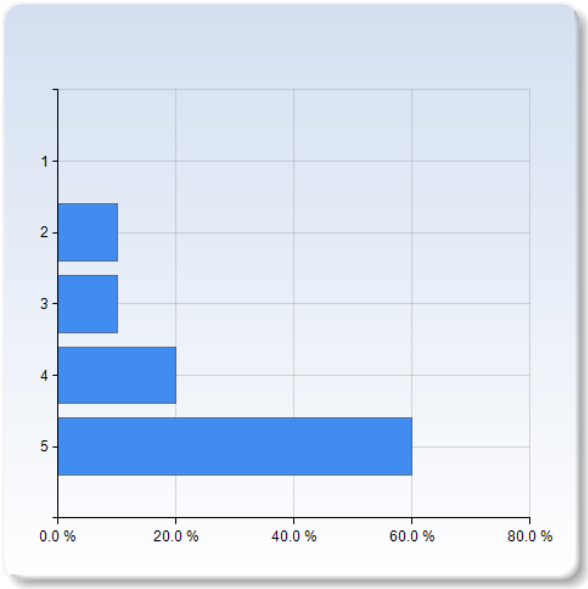
The way the course was taught and organised suited me.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (10.0%)
4	4 (40.0%)
5	5 (50.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The way the course was taught and organised suited me.	4.4	0.7

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

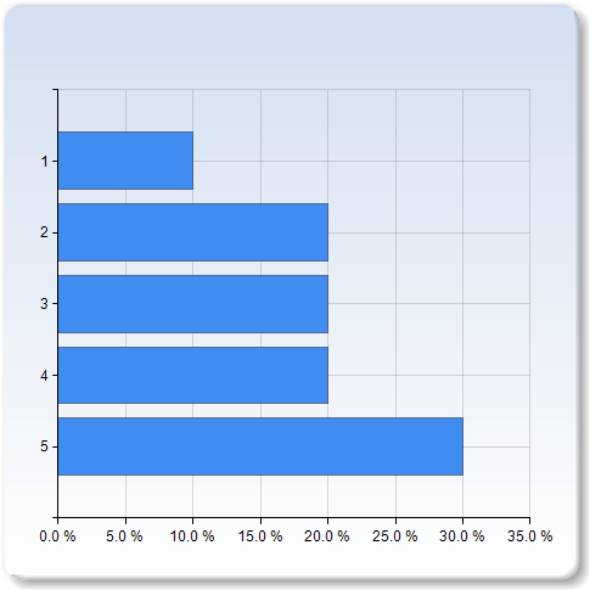
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	Number of Responses
1	0 (0.0%)
2	1 (10.0%)
3	1 (10.0%)
4	2 (20.0%)
5	6 (60.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	4.3	1.1

The lectures were valuable for my learning.

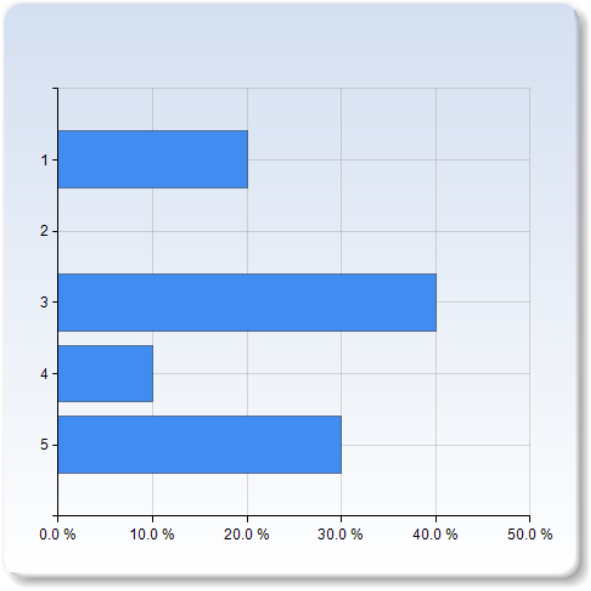
The lectures were valuable for my learning.	Number of Responses
1	1 (10.0%)
2	2 (20.0%)
3	2 (20.0%)
4	2 (20.0%)
5	3 (30.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The lectures were valuable for my learning.	3.4	1.4

The seminars were valuable for my learning.

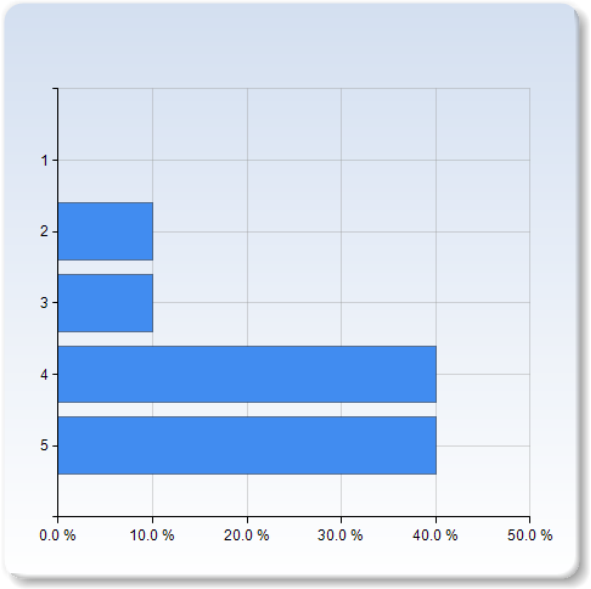
The seminars were valuable for my learning.	Number of Responses
1	2 (20.0%)
2	0 (0.0%)
3	4 (40.0%)
4	1 (10.0%)
5	3 (30.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The seminars were valuable for my learning.	3.3	1.5

The project was valuable for my learning.

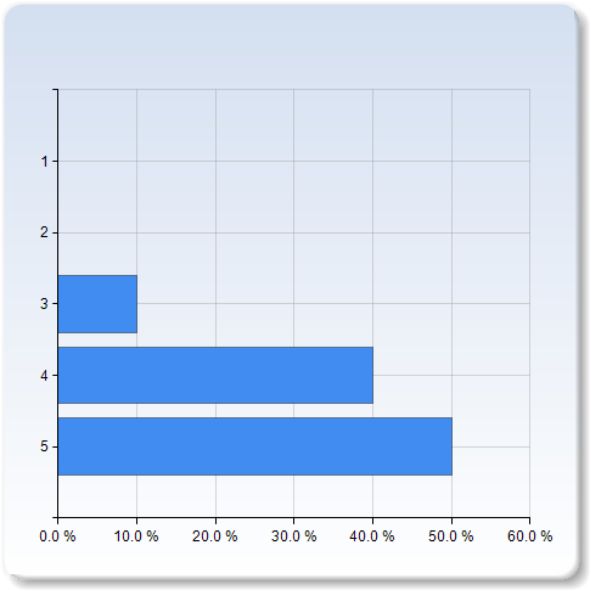
The project was valuable for my learning.	Number of Responses
1	0 (0.0%)
2	1 (10.0%)
3	1 (10.0%)
4	4 (40.0%)
5	4 (40.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The project was valuable for my learning.	4.1	1.0

Studying on my own was valuable for my learning.

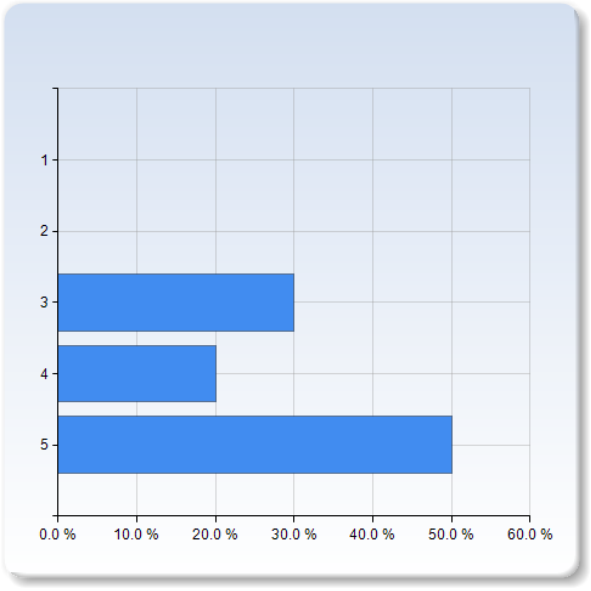
Studying on my own was valuable for my learning.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (10.0%)
4	4 (40.0%)
5	5 (50.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
Studying on my own was valuable for my learning.	4.4	0.7

The course literature/material was a valuable learning resource.

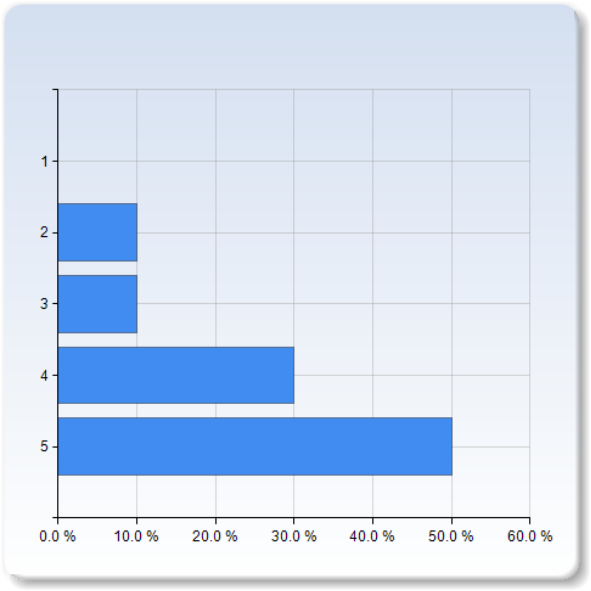
The course literature/material was a valuable learning resource.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	3 (30.0%)
4	2 (20.0%)
5	5 (50.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	4.2	0.9

The information I received before the course start was satisfactory.

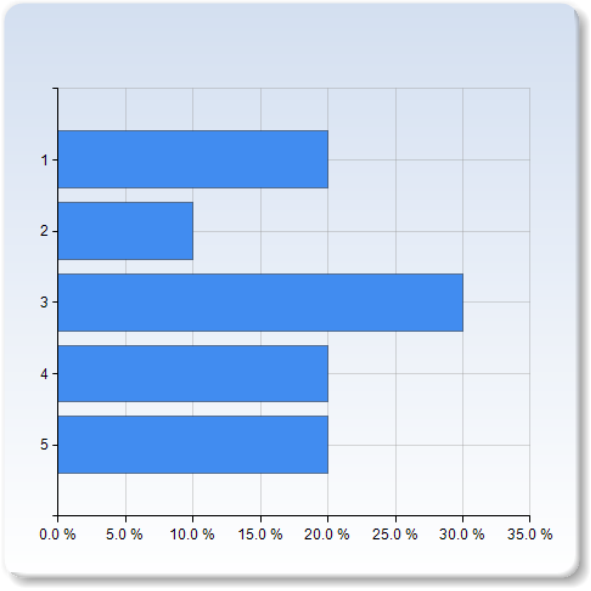
The information I received before the course start was satisfactory.	Number of Responses
1	0 (0.0%)
2	1 (10.0%)
3	1 (10.0%)
4	3 (30.0%)
5	5 (50.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The information I received before the course start was satisfactory.	4.2	1.0

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

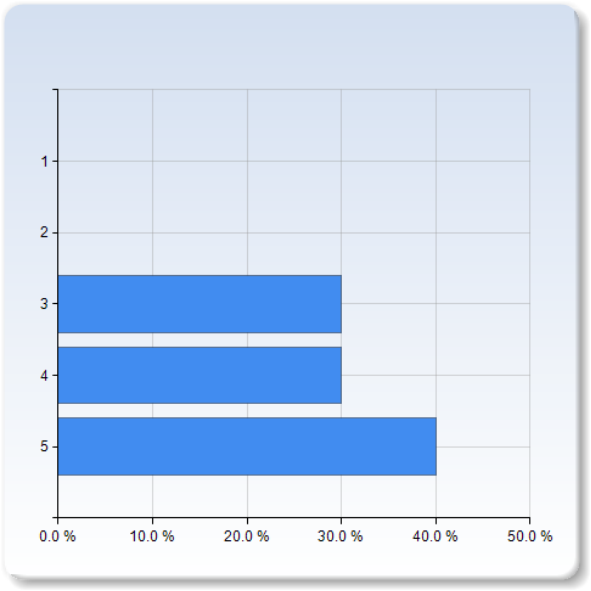
The communication with the teaching staff during the course was good.	Number of Responses
1	2 (20.0%)
2	1 (10.0%)
3	3 (30.0%)
4	2 (20.0%)
5	2 (20.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The communication with the teaching staff during the course was good.	3.1	1.4

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

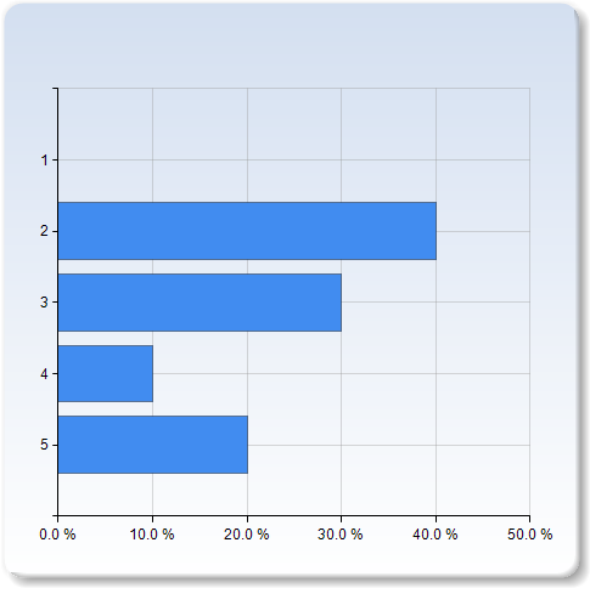
It was clear throughout the course what was expected of me.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	3 (30.0%)
4	3 (30.0%)
5	4 (40.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
It was clear throughout the course what was expected of me.	4.1	0.9

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

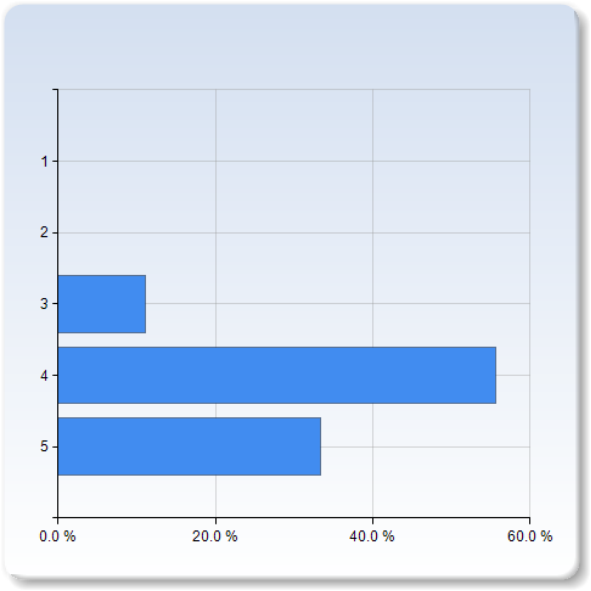
I have received valuable feedback from my teacher /teachers during the course.	Number of Responses
1	0 (0.0%)
2	4 (40.0%)
3	3 (30.0%)
4	1 (10.0%)
5	2 (20.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
I have received valuable feedback from my teacher/teachers during the course.	3.1	1.2

The course had a reasonable workload.

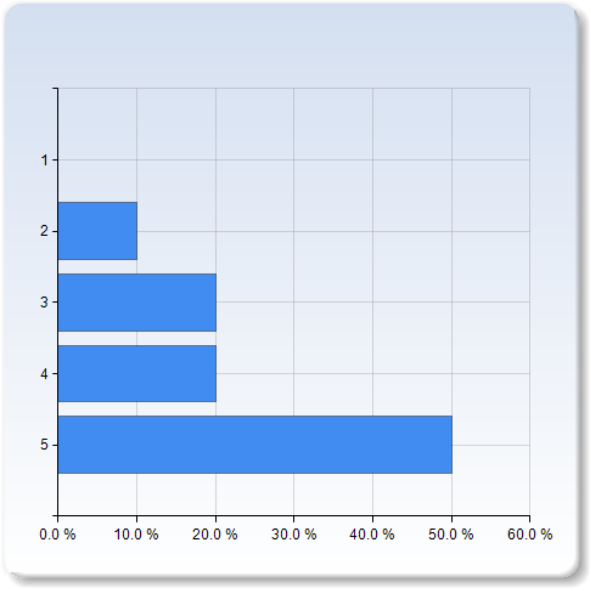
The course had a reasonable workload.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (11.1%)
4	5 (55.6%)
5	3 (33.3%)
Total	9 (100.0%)



	Mean	Standard Deviation
The course had a reasonable workload.	4.2	0.7

The workload was evenly distributed throughout the course.

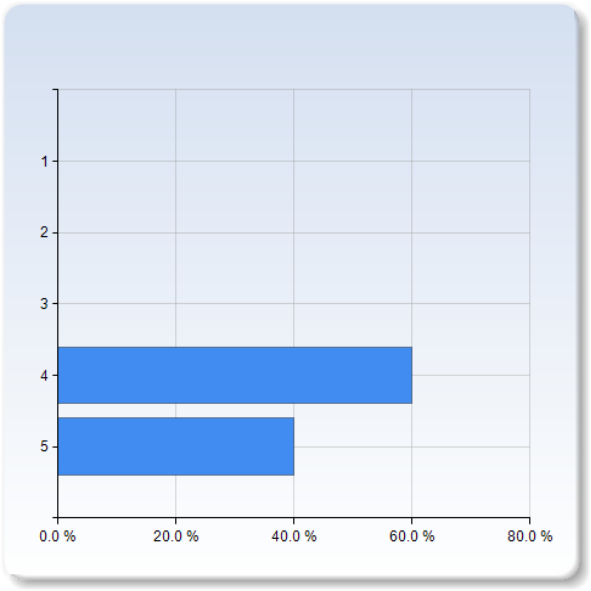
The workload was evenly distributed throughout the course.	Number of Responses
1	0 (0.0%)
2	1 (10.0%)
3	2 (20.0%)
4	2 (20.0%)
5	5 (50.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	4.1	1.1

The examination matched the contents and level of the course.

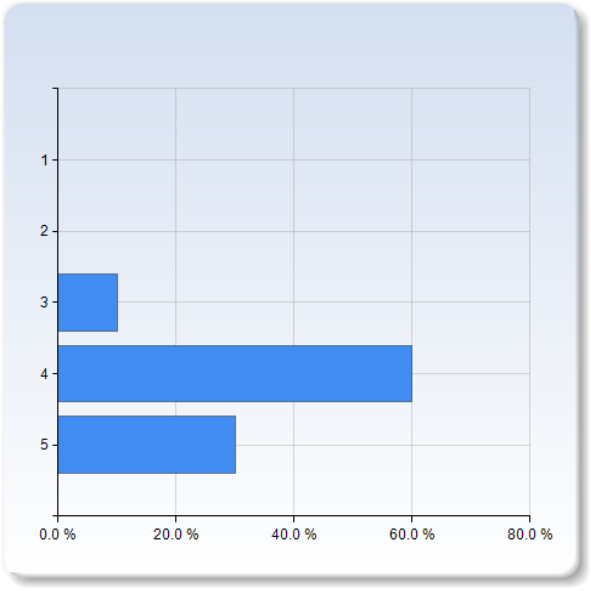
The examination matched the contents and level of the course.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	6 (60.0%)
5	4 (40.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The examination matched the contents and level of the course.	4.4	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 (10.0%)
4	6 (60.0%)
5	3 (30.0%)
Total	10 (100.0%)



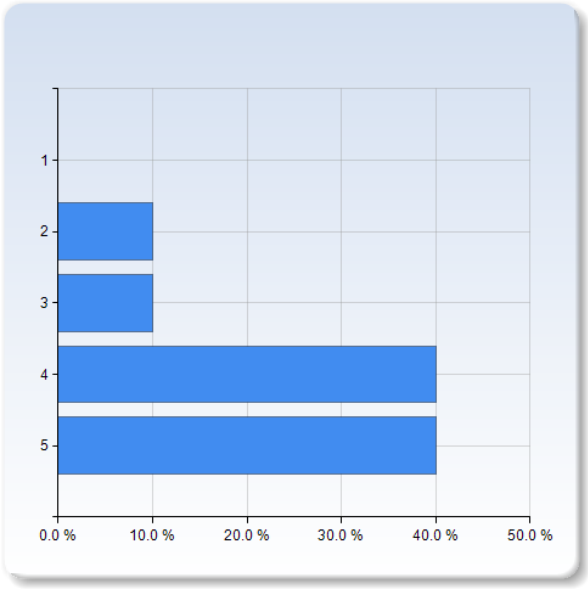
	Mean	Standard Deviation
Overall, I am satisfied with the course.	4.2	0.6

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.

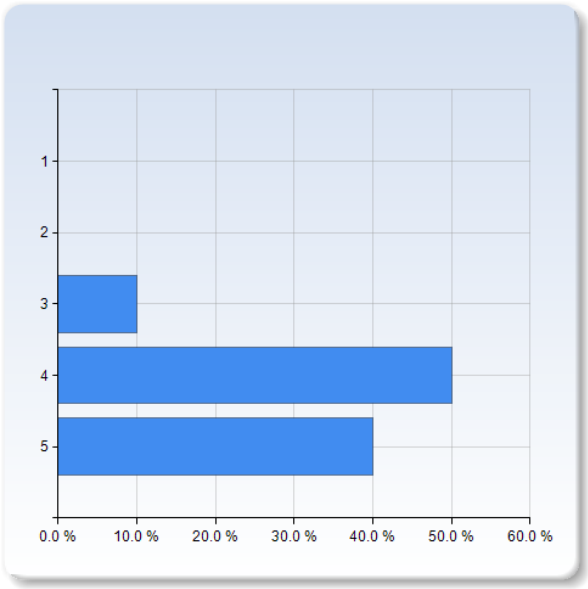
The course has increased my ability to read a mathematical text.	Number of Responses
1	0 (0.0%)
2	1 (10.0%)
3	1 (10.0%)
4	4 (40.0%)
5	4 (40.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to read a mathematical text.	4.1	1.0

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

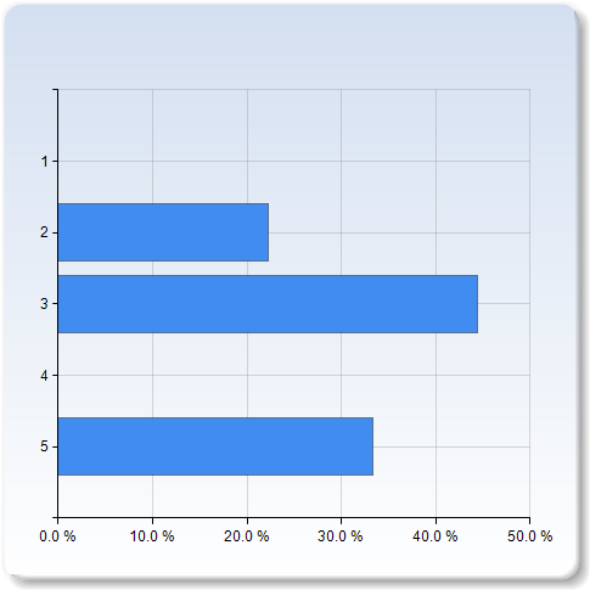
The course has increased my ability to communicate the subject in writing.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (10.0%)
4	5 (50.0%)
5	4 (40.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	4.3	0.7

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

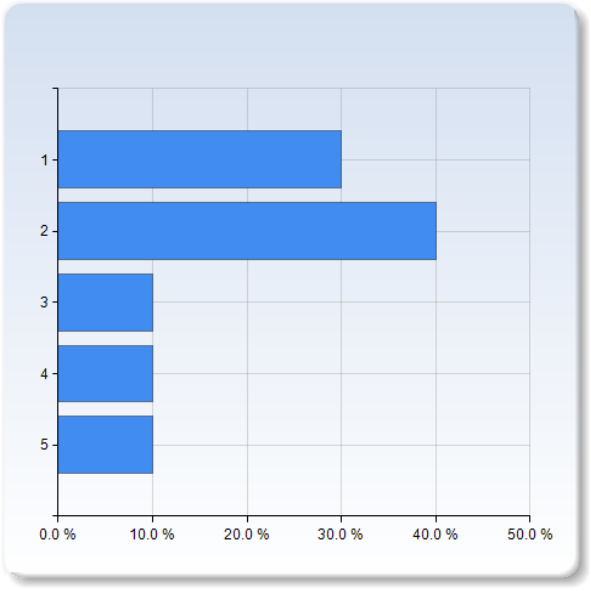
The course has increased my ability to communicate the subject orally.	Number of Responses
1	0 (0.0%)
2	2 (22.2%)
3	4 (44.4%)
4	0 (0.0%)
5	3 (33.3%)
Total	9 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject orally.	3.4	1.2

The course has increased my ability to cooperate.

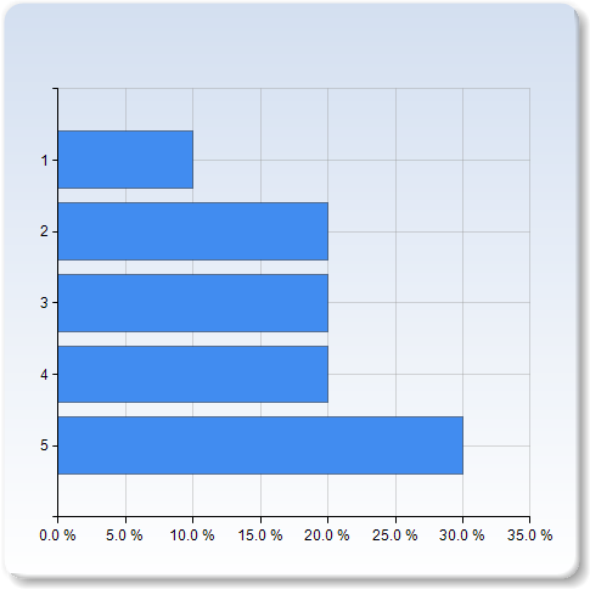
The course has increased my ability to cooperate.	Number of Responses
1	3 (30.0%)
2	4 (40.0%)
3	1 (10.0%)
4	1 (10.0%)
5	1 (10.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to cooperate.	2.3	1.3

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

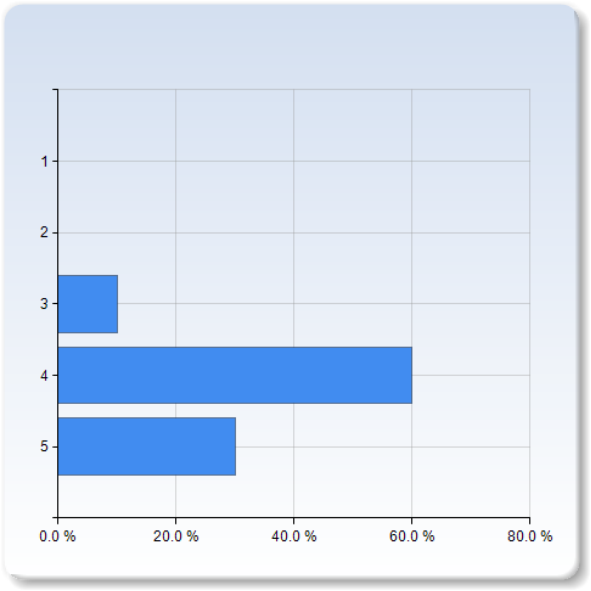
The course has increased my ability to search and process information.	Number of Responses
1	1 (10.0%)
2	2 (20.0%)
3	2 (20.0%)
4	2 (20.0%)
5	3 (30.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to search and process information.	3.4	1.4

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

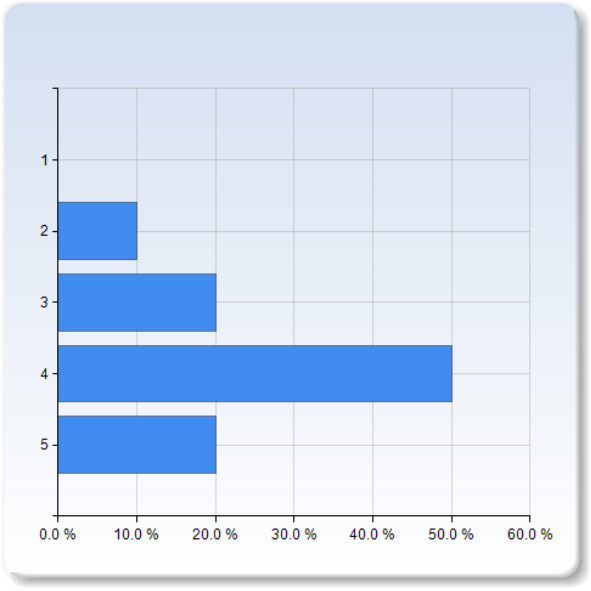
The course has increased my ability to analyze and solve problems.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (10.0%)
4	6 (60.0%)
5	3 (30.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to analyze and solve problems.	4.2	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	1 (10.0%)
3	2 (20.0%)
4	5 (50.0%)
5	2 (20.0%)
Total	10 (100.0%)



	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	3.8	0.9

What did you appreciate most with the course?

What did you appreciate most with the course?
Interesting topics such as Number Theory or Complex numbers among others.
Concise and well written course notes
book
I appreciated the seminars, I feel I got a lot of insight on how to approach and solve problems of varying difficulties.
It covers a bit of everything. The lecture gives out the essential while the PDF goes a bit more in depth with the core mathematical concept which I think is great because if I'm interested in something a bit more I can go to the PDF. Also making the PDF / Book free of charge and by the lecturer is perfect.
The structure. There was a plan for what would be covered each week that was shared with the students already at the beginning of the course. We were informed which sections of the book we were expected to read/know. Kjell's solutions that are made available online. It is very useful to be able to compare ones own solutions to these solutions. However, I was typically done with the exercises before Kjell's solutions were published, so I couldn't compare my solutions when I was done with them, and the week after when they were published I was typically already on the next chapter and no longer curious to see them. As a result, I looked at quite few of Kjell's solutions even though I think they are good. I thought Adem did an excellent job at explaining the solutions and emphasising what is special/important at the seminars I attended. He is clear and pedagogical.
The seminars with Adem. He is a great teacher.

What do you think should be improved?

What do you think should be improved?
More participation from the students at lectures, seminars, discussions and so on.
I am satisfied with the way everything was taught.
A lot of the lectures ended a bit before all the time was used so it may be a a good idea to pad it up a bit with some more examples, or going a bit more in depth.
The trigonometric functions have not been rigorously defined in any course so far and it was thus unsatisfying to work with them in the section with the complex plane. Some proofs in the chapter with cardinality (in particular how some bijections were defined "visually" rather than by providing a formula for them) did not seem quite rigorous. When we had exercises on the complex plane and exercises on cardinality I wasn't sure how rigorous the solutions were expected to be and had to wait for Kjell's solutions to be able to see this. I noticed that Adem gets many more questions during the seminars than Kjell gets during the lectures. I think a reason for this is that Adem seems to have more patience with questions. Not all students are able to formulate their questions in precise mathematical language and understand short answers, which Adem seems to take into account more than Kjell when answering questions. I think Kjell could afford to involve the students a little bit more in the lectures by asking questions such as "are you following?" or "is this clear to you?" now and then.
I would appreciate if the material covered during the lectures differed slightly more from the course literature.

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.
No
no
No
No.
No
No