LUND
UNIVERSITY

Centre for Mathematical Sciences
Faculty of Science

Course Analysis for MATA23/ÄMAD03 Foundations of Algebra, Spring Term 2023

Course Information

Lecturer: Kjell Elfström
Teaching assistants: Jorge Fariña Asategui, Jan Henrik Thomm
Number of students:
MATA23: 60 newly registered and 11 re-registered.
ÄMAD03: 11 newly registered and 4 re-registered.
12 students answered the course evaluation, 9 of them are enrolled on the Bachelor's Programme in Mathematics, 1 is a teacher student and 1 is enrolled on another programme or a free-standing course.

Examination

Project: 56 MATA23 students passed. Not applicable to ÄMAD03.
Written examination:

- Ordinary examination on 31 May 2022: 43 out of 51 MATA23 candidates passed and 4 out of 9 ÄMAD03 candidates passed.
- The resit examination will be in August and the results are therefore not accounted for here.

Final grades
In all, 44 MATA23 students, including some re-registered students, have got their final grade.
13 passed with distinction.
31 passed.
For ÄMAD03 students, I refer to Anna-Maria.

Course Evaluation

Summary of student's answers:
The students who answered the survey seem to very satisfied with the course.
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 2023

Answer Count: 12

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 (75,0%)
Bachelor´s Programme in Physics, Theoretical Physics, Astronomy	0 (0,0%)
Bachelor´s Programme, other specialization	1 (8,3%)
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	1 (8,3%)
other programme or as stand alone course	1 (8,3%)
Total	12 (100,0%)
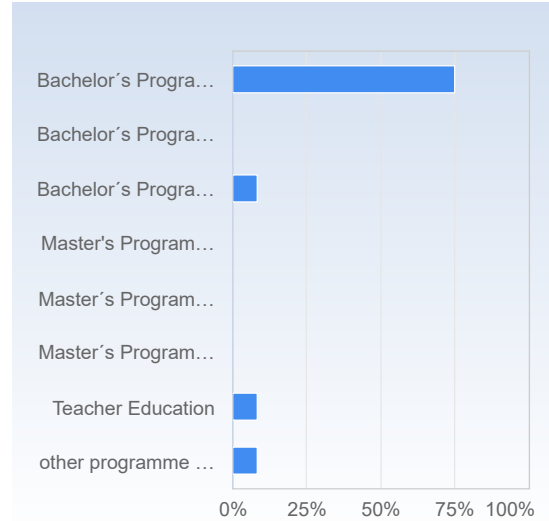
	Mean	Standard Deviation
I have studied this course as part of	2,2	2,5

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. 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	0 (0,0%)
4	1 (8,3%)
5	11 (91,7%)
Total	12 (100,0%)
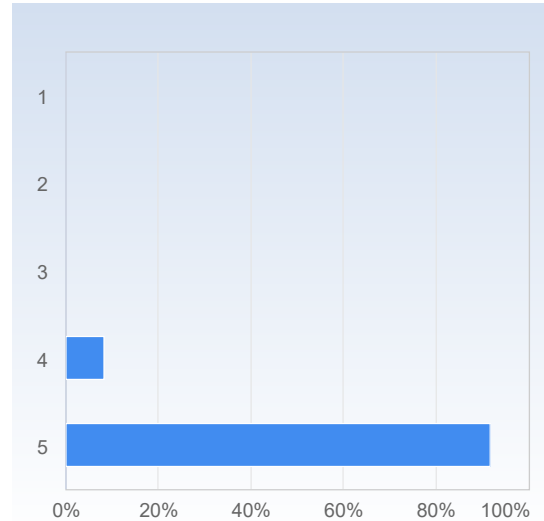
	Mean	Standard Deviation
2. My prior knowledge has been sufficient to assimilate the contents of this course.	4,9	0,3

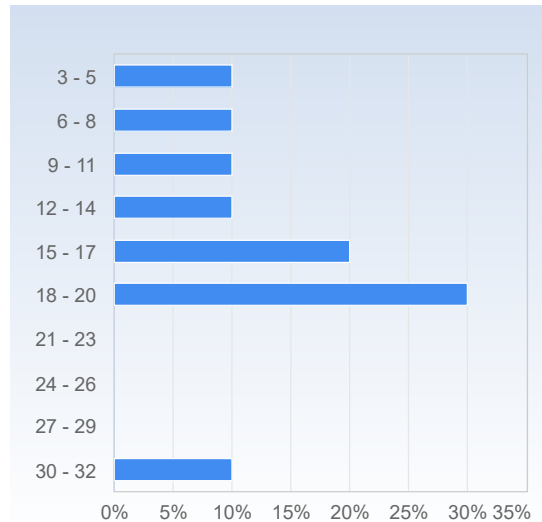## 3. I have participated actively in the course.

3. I have participated actively in the course.	Number of responses
1	0 (0,0%)
2	2 (16,7%)
3	1 (8,3%)
4	4 (33,3%)
5	5 (41,7%)
Total	12 (100,0%)
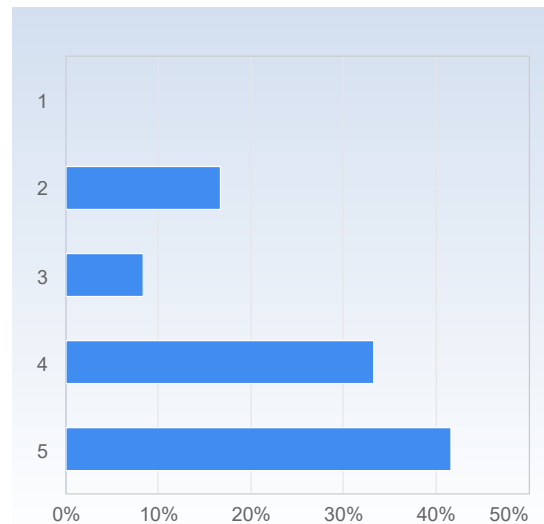
	Mean	Standard Deviation
3. I have participated actively in the course.	4,0	1,1

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

Average number of hours spent in total on the course per week (including scheduled activities):	Number of responses
3 - 5	1 (10,0%)
6 - 8	1 (10,0%)
9 - 11	1 (10,0%)
12 - 14	1 (10,0%)
15 - 17	2 (20,0%)
18 - 20	3 (30,0%)
21 - 23	0 (0,0%)
24 - 26	0 (0,0%)
27 - 29	0 (0,0%)
30 - 32	1 (10,0%)
Total	10 (100,0%)

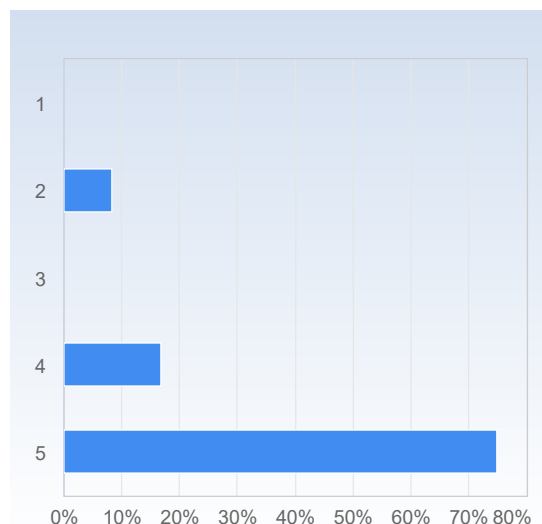|	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	15,4	7,3

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

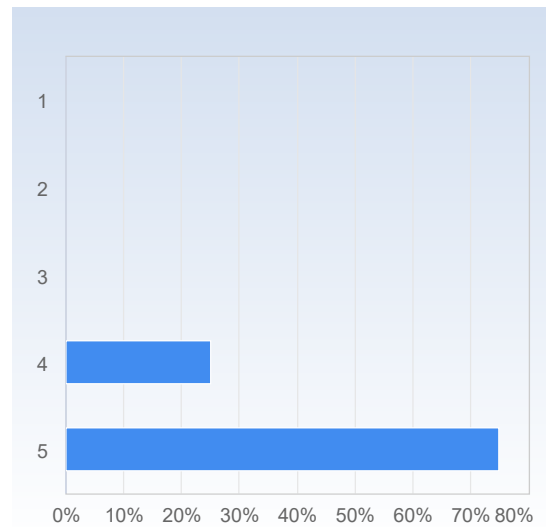**The way the course was taught and organised suited me.**

The way the course was taught and organised suited me.	Number of responses
1	0 (0,0%)
2	1 (8,3%)
3	0 (0,0%)
4	2 (16,7%)
5	9 (75,0%)
Total	12 (100,0%)

	Mean	Standard Deviation
The way the course was taught and organised suited me.	4,6	0,9

# 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	0 (0,0%)
4	3 (25,0%)
5	9 (75,0%)
Total	12 (100,0%)

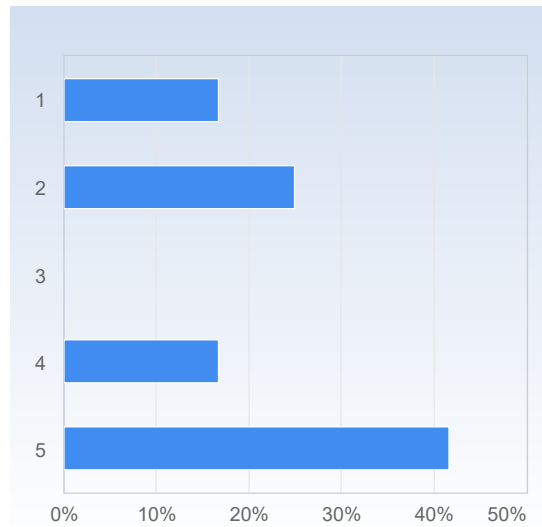|	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	4,8	0,5

The lectures were valuable for my learning.

The lectures were valuable for my learning.	Number of responses
1	0 (0,0%)
2	1 (8,3%)
3	0 (0,0%)
4	3 (25,0%)
5	8 (66,7%)
Total	12 (100,0%)
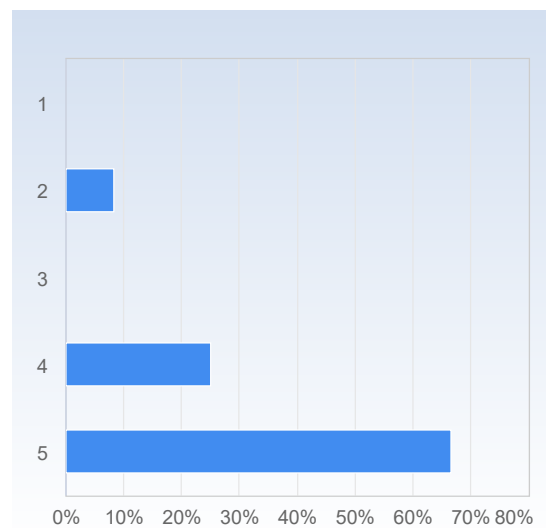
	Mean	Standard Deviation
The lectures were valuable for my learning.	4,5	0,9

The seminars were valuable for my learning.

The seminars were valuable for my learning.	Number of responses
1	2 (16,7%)
2	3 (25,0%)
3	0 (0,0%)
4	2 (16,7%)
5	5 (41,7%)
Total	12 (100,0%)

	Mean	Standard Deviation
The seminars were valuable for my learning.	3,4	1,7

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	2 (18,2%)
4	2 (18,2%)
5	7 (63,6%)
Total	11 (100,0%)
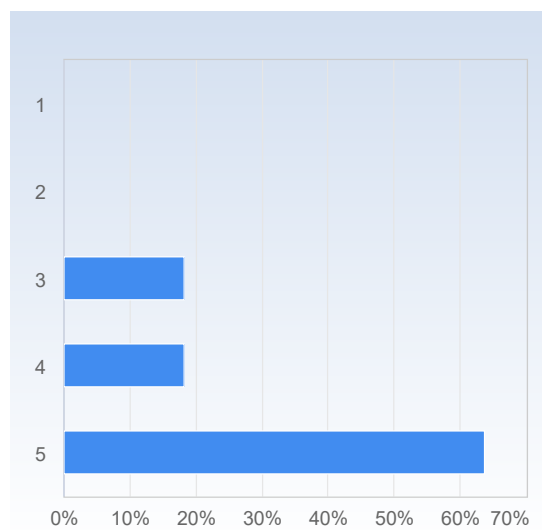
	Mean	Standard Deviation
The project was valuable for my learning.	4,5	0,8

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	3 (25,0%)
5	9 (75,0%)
Total	12 (100,0%)
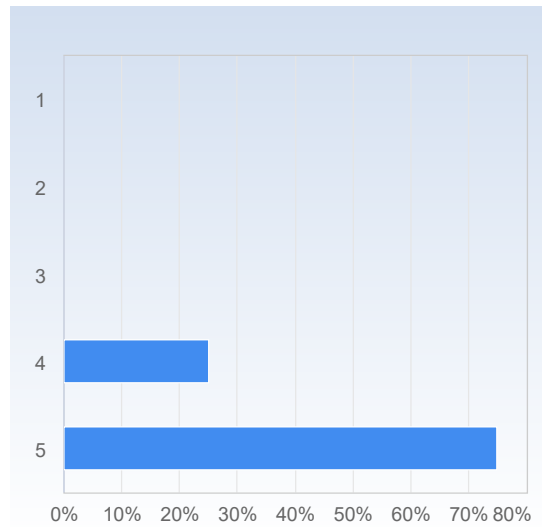
	Mean	Standard Deviation
Studying on my own was valuable for my learning.	4,8	0,5

The course literature/material was a valuable learning resource.

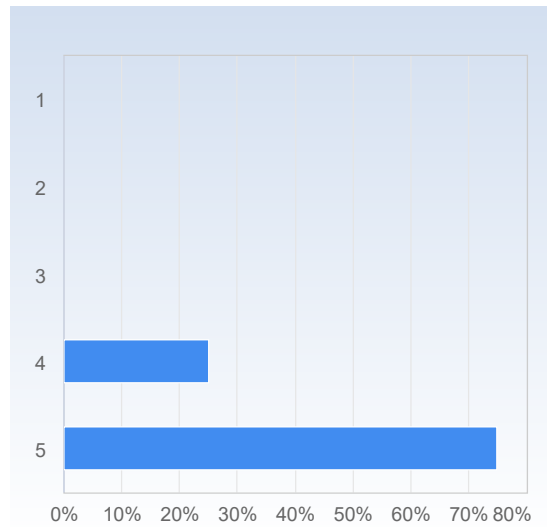| The course literature/material was a valuable learning resource.	Number of responses
1	0 (0,0%)
2	1 (8,3%)
3	1 (8,3%)
4	2 (16,7%)
5	8 (66,7%)
Total	12 (100,0%)
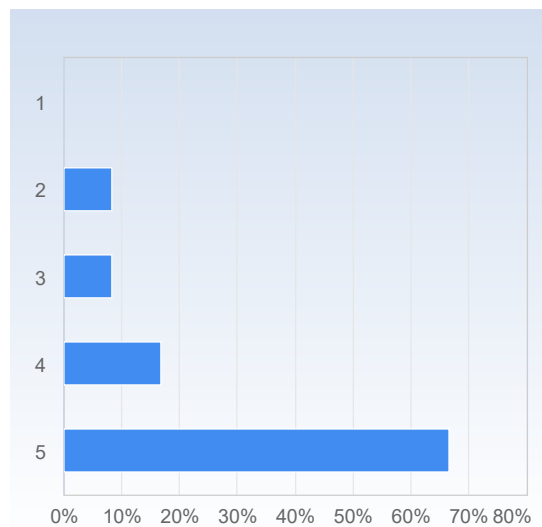
	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	4,4	1,0

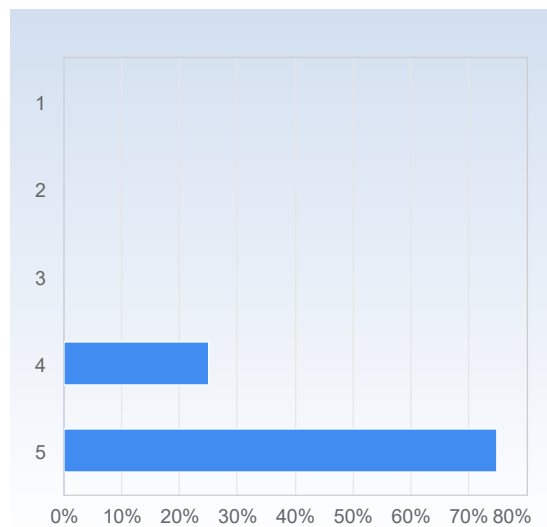## The information I received before the course start was satisfactory.

The information I received before the course start was satisfactory.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	3 (25,0%)
5	9 (75,0%)
Total	12 (100,0%)

	Mean	Standard Deviation
The information I received before the course start was satisfactory.	4,8	0,5

## 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	0 (0,0%)
4	3 (25,0%)
5	9 (75,0%)
Total	12 (100,0%)

	Mean	Standard Deviation
The communication with the teaching staff during the course was good.	4,8	0,5

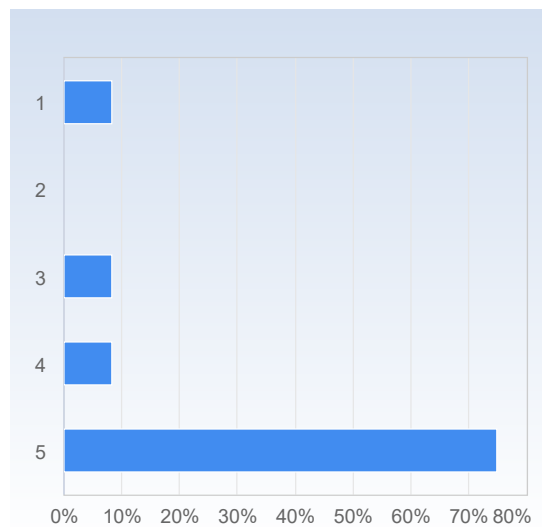## It was clear throughout the course what was expected of me.

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	2 (16,7%)
5	10 (83,3%)
Total	12 (100,0%)
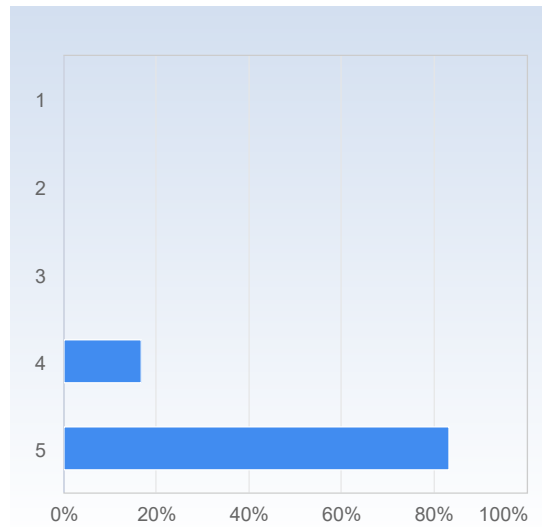
	Mean	Standard Deviation
It was clear throughout the course what was expected of me.	4,8	0,4

## 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	1 (8,3%)
2	0 (0,0%)
3	1 (8,3%)
4	1 (8,3%)
5	9 (75,0%)
Total	12 (100,0%)

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

The course had a reasonable workload.

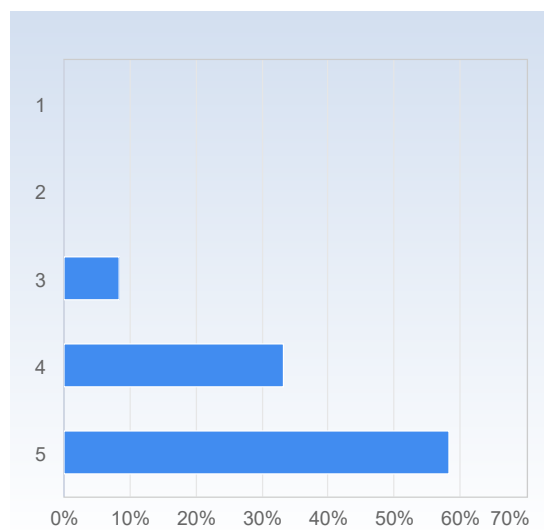| The course had a reasonable workload.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	1 (8,3%)
5	11 (91,7%)
Total	12 (100,0%)
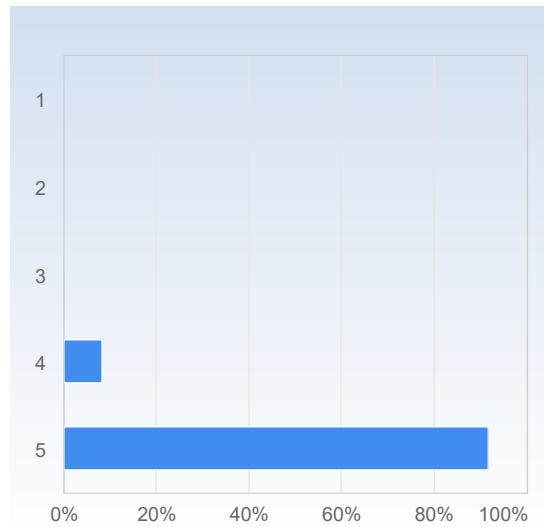
	Mean	Standard Deviation
The course had a reasonable workload.	4,9	0,3

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 (8,3%)
4	4 (33,3%)
5	7 (58,3%)
Total	12 (100,0%)

	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	4,5	0,7

The examination matched the contents and level of the course.

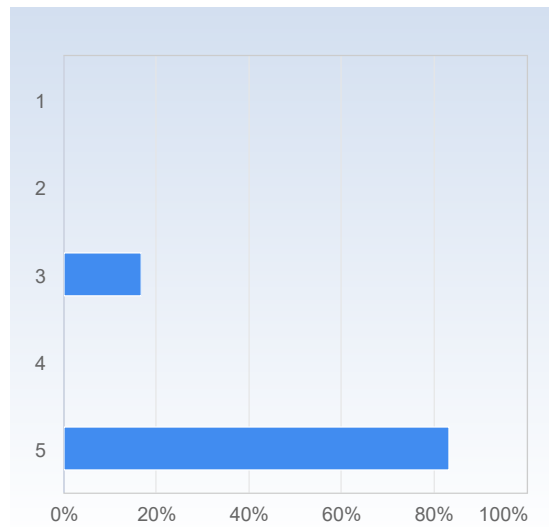| The examination matched the contents and level of the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	0 (0,0%)
4	4 (33,3%)
5	8 (66,7%)
Total	12 (100,0%)
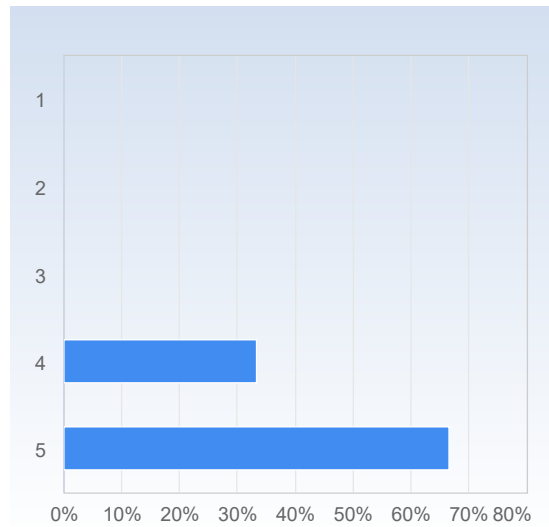
	Mean	Standard Deviation
The examination matched the contents and level of the course.	4,7	0,5

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	2 (16,7%)
4	0 (0,0%)
5	10 (83,3%)
Total	12 (100,0%)

	Mean	Standard Deviation
Overall, I am satisfied with the course.	4,7	0,8

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

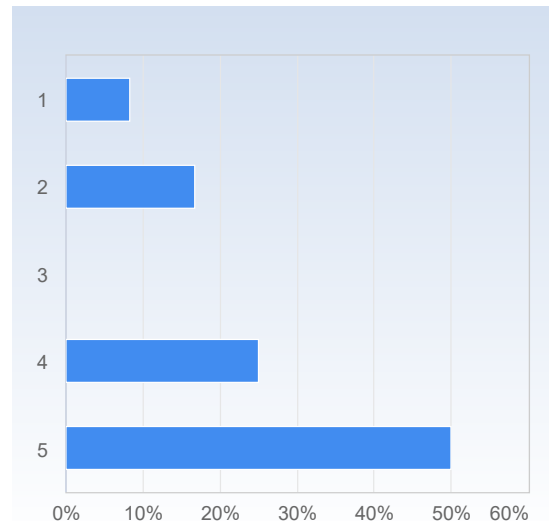### The course has increased my ability to read a mathematical text.

The course has increased my ability to read a mathematical text.	Number of responses
1	1 (8,3%)
2	1 (8,3%)
3	2 (16,7%)
4	5 (41,7%)
5	3 (25,0%)
Total	12 (100,0%)
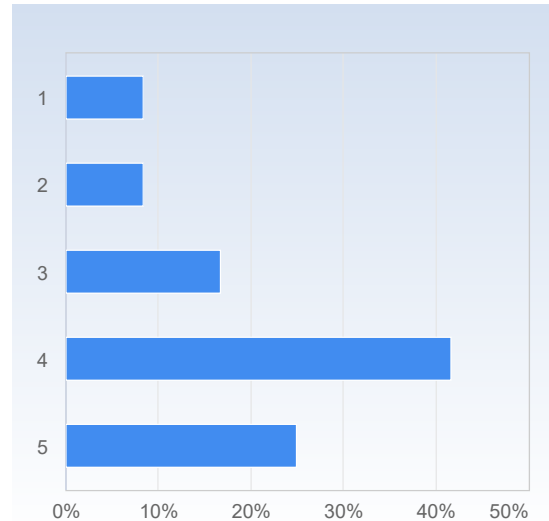
	Mean	Standard Deviation
The course has increased my ability to read a mathematical text.	3,7	1,2

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	1 (8,3%)
2	2 (16,7%)
3	0 (0,0%)
4	3 (25,0%)
5	6 (50,0%)
Total	12 (100,0%)

	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	3,9	1,4

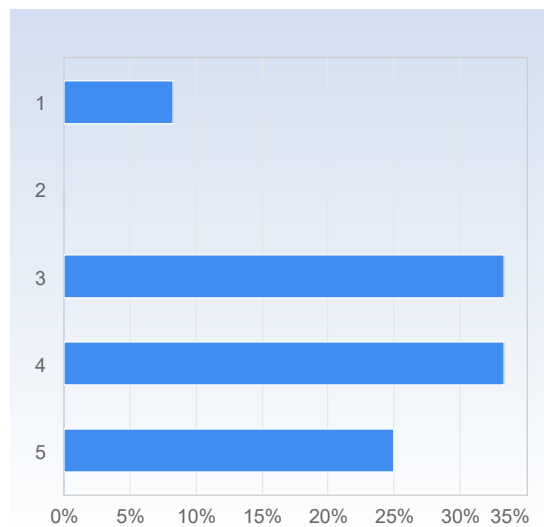# The course has increased my ability to communicate the subject orally.

The course has increased my ability to communicate the subject orally.	Number of responses
1	1 (9,1%)
2	1 (9,1%)
3	4 (36,4%)
4	4 (36,4%)
5	1 (9,1%)
Total	11 (100,0%)
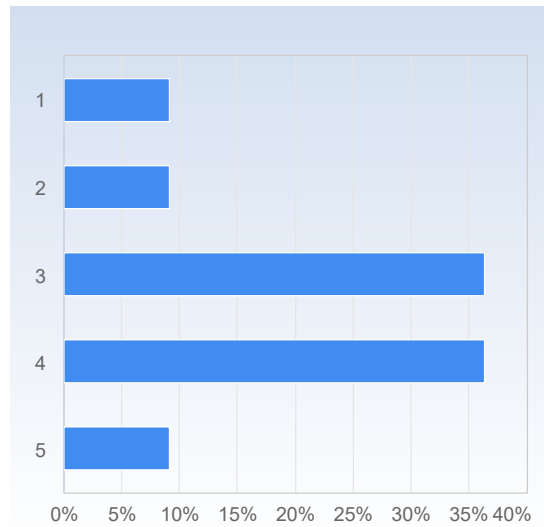
	Mean	Standard Deviation
The course has increased my ability to communicate the subject orally.	3,3	1,1

The course has increased my ability to cooperate.

The course has increased my ability to cooperate.	Number of responses
1	1 (8,3%)
2	0 (0,0%)
3	4 (33,3%)
4	4 (33,3%)
5	3 (25,0%)
Total	12 (100,0%)

	Mean	Standard Deviation
The course has increased my ability to cooperate.	3,7	1,2

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

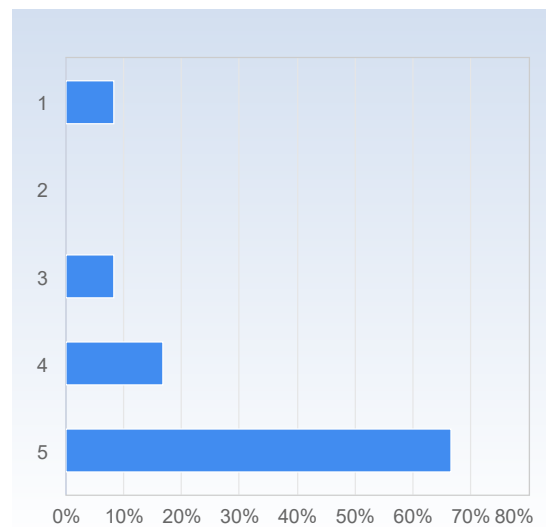| The course has increased my ability to search and process information.	Number of responses
1	2 (16,7%)
2	0 (0,0%)
3	2 (16,7%)
4	7 (58,3%)
5	1 (8,3%)
Total	12 (100,0%)
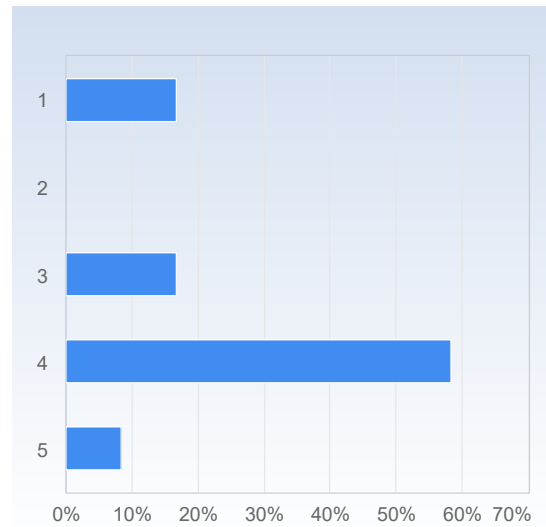
	Mean	Standard Deviation
The course has increased my ability to search and process information.	3,4	1,2

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	1 (8,3%)
2	0 (0,0%)
3	1 (8,3%)
4	2 (16,7%)
5	8 (66,7%)
Total	12 (100,0%)

	Mean	Standard Deviation
The course has increased my ability to analyze and solve problems.	4,3	1,2

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	1 (8,3%)
2	0 (0,0%)
3	1 (8,3%)
4	6 (50,0%)
5	4 (33,3%)
Total	12 (100,0%)
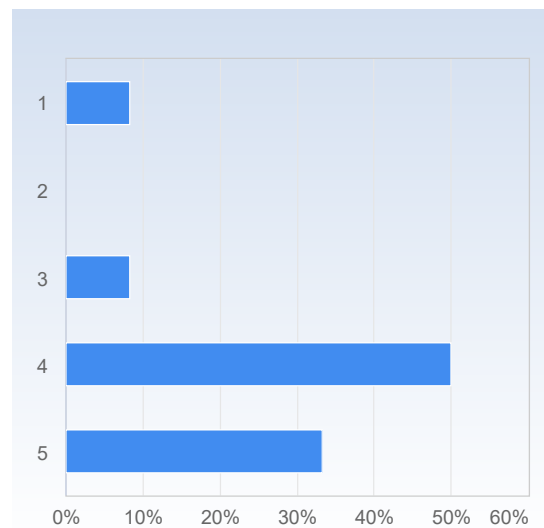
	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	4,0	1,1

What did you appreciate most with the course?

What did you appreciate most with the course?
The structure. The lectures and the course material was structured extremely well and intuitively, and the lectures always ended on time. Everything had a clear explanation that wasn't unnecessarily long, and proofs were written such that they made sense in retrospect, even if you only copied them without thinking. Overall a fantastic course. The fact that the exams had the same structure every year was great, I knew exactly what was expected of me.
I like some parts of the material especially the parts which were supposed to be read cursively. The material was also a good background and easy to comprehend.
Very good lectures and lecture notes
Well made course.
The course literature was very good. It is clear and concise and makes the theory easy to understand.It also includes many great examples that help you to understand how theorems can be used to solve problems.
The Malone story line. However, I would like to know more about what happened to Molly and how Sally's online business is going. Jokes aside, I really appreciated how well organized the course was. I think it was also fun to be exposed to some math that hasn't been a part of the previous courses. Especially during the seminars with Jan. I liked how he got us thinking more or deeper about the math we were doing. He inspired me a lot and helped me develop better intuition.
I enjoyed the course and it was a privilege to have this lecturer.
Molly, Milly ans Sally story was good. Also well structured course and fun lectures!
I hope this message finds you well. As one of your former students, I wanted to take a moment to express my heartfelt appreciation for your exceptional dedication and guidance throughout my time studying mathematics at the university. It is with great respect and admiration that I have learned about your recent retirement. Your passion for mathematics and your commitment to fostering a deep understanding of the subject among your students have left an indelible mark on my academic journey. Your insightful lectures, challenging problem sets, and unwavering support have truly shaped my approach to learning and problem-solving. I fondly remember the countless hours spent in your classroom, where you effortlessly conveyed complex mathematical concepts with clarity and enthusiasm. Your ability to make abstract theories tangible and applicable is a testament to your exceptional teaching skills. You instilled in me a genuine love for mathematics, pushing me to strive for excellence and encouraging me to explore the beauty of this field. Beyond the classroom, your willingness to go above and beyond for your students has been truly inspiring. Whether it was providing extra help during office hours, offering valuable advice for further studies, or simply lending a sympathetic ear, you consistently demonstrated your genuine care and dedication to our success. Your mentorship extended far beyond the realm of academia, shaping not only my mathematical abilities but also my personal growth and development. Your retirement marks the end of an era, and while I am happy for you as you embark on this new chapter of your life, I cannot help but feel a tinge of sadness knowing that future students will not have the privilege of learning from you directly. However, your legacy will undoubtedly live on in the hearts and minds of those fortunate enough to have been taught by you. On behalf of all your students, past and present, I would like to extend my deepest gratitude for your years of service and dedication to the field of mathematics. You have left an indelible impact on countless lives, and your unwavering commitment to nurturing young minds will continue to inspire and guide us in our future endeavors. As I look back on my academic journey, I am immensely grateful to have had the privilege of being your student. Thank you for being an exceptional educator, mentor, and role model. Your retirement is well-deserved, and I wish you a joyful and fulfilling next chapter filled with happiness and new adventures. With sincerest appreciation,

What do you think should be improved?

What do you think should be improved?
The lecturer's back pain. Hopefully retirement will treat him well :)
The material is way to easy (an opinion shared by a lot of people).
Might be a personal thing, but due to the course being relatively simple compared to previous courses, I didn't really feel like the seminars were very useful.
Nothing much really

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.)?
Never.
Nope.
No
Nope
nothing