



LUNDS
UNIVERSITET

Matematikcentrum

Matematik NF

Course Analysis for Linear Algebra 1 (MATA22, ÄMAD01) Autumn 2022

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Number of students: The course Linear Algebra 1 is given with the course code MATA22 for students enrolled in the Bachelor's Programme at the Faculty of Science (mathematics and physics), as well as part of a course package comprising 30 credits for students aiming to pursue a future career as mathematics teachers and as a free-standing course. Moreover, Linear Algebra 1 is a subcourse of the course ÄMAD01, Mathematics and didactics 1, 30 credits, for students enrolled in the Teacher Education Programme.

There were 89 first-time registered students and 26 re-registered students on the course code MATA22 (94 Bachelor students, 17 students enrolled on the course package and 4 students taking the course as free-standing). In addition, there were 4 registered and 6 re-registered students on the course code ÄMAD01. A subset of the re-registered students on both course codes had already completed some of the examination parts but have not received a final grade during previous semesters.

Examination

The written examination (6 credits) is given jointly for all student categories mentioned above. A project consisting of several group and individual assignments is part of the examination on MATA22.

Examination results on the course MATA22:

- 86 students participated in the ordinary written examination (6 credits) and 72 of them passed.
- 14 students participated in the resit examination and 3 passed.
- 86 students completed all the assignments included in the project work, 1.5 credits.
- 76 of students (of which 10 re-registered) have passed all examination parts, 57 of them with the grade *pass with distinction*.

Examination results on the subcourse Linear algebra 1, ÄMAD01:

- 6 students participated in the ordinary written examination (6 credits) and 1 of them passed.
- 5 students participated in the resit examination and no one passed.

Course evaluation

Summary of students answers: 42 students answered the course evaluation questionnaire that was open during four weeks, from the ordinary written examination until the day after the resit exami-

nation. 36 of the respondents have been taking the course within the Bachelor's programme (22 in mathematics and 14 in physics), 5 of the respondents have been studying this course as free-standing, and 1 as part of the teacher education programme. A preliminary report of the results of the questionnaire was presented to the students in connection to the ordinary exam-viewing meeting. The students' answers are summarized in the following pages. The majority of the students seem to be satisfied with the course in general regarding contents, teaching, organisation and assessment. The students' answers are presented at the end of this document.

Teacher's comments: The group of students admitted to the Bachelor's programme in both mathematics and physics was comparable to the previous autumn semester. As mentioned above the course has also been given as part of a course package for students aiming to pursue a future career as mathematics teachers, and as free-standing course. The reason for this was to offer an alternative to the Teacher Education Programme in mathematics, which has not been open for applications for the autumn semester of 2022. The students enrolled on ÄMAD01 for the first time this semester have been admitted to the Teacher Education Programme during previous year and has chosen mathematics as their second subject.

The lectures have been held for the entire student group while the seminars and exercise classes have been conducted in parallel sessions for smaller groups of students. While attendance to the teaching sessions on campus is not mandatory, we have noticed an increased attendance and activity level compared to past semesters before the pandemic. The evaluation reports indicate that the students value the lectures and the seminars more than the exercise classes and SI-meetings when it comes to the impact of the various teaching activities on their learning.

The results of the first-time registered students on MATA22 on the written examination as well as the quality of the submitted project assignments have increased considerably in comparison with previous years. Especially the number of students who received the grade *pass with distinction* has been remarkably high. On the other hand, the results obtained by the students enrolled on ÄMAD01 have unfortunately been extremely low. We have identified several factors that might have caused this discrepancy. One of them is related to the students' background knowledge and participation on the preparatory course (see next section). Another factor is that the preparatory project assignments included in MATA22 are not compulsory for the students enrolled on ÄMAD01 who have corresponding assignments related to subject didactics.

Changes from the previous course realisation.

A change that has been implemented this semester was to schedule the course at a slower study pace during september-november rather than at 50% study pace during the first half of the semester, as it usually has been the case. The purpose of this change was to facilitate a better flow and interaction between the parallel courses MATA21 Analysis in One Variable, 15 credits, and NUMA01, Computational Programming with Python, 7.5 credits. However, we could not measure any clear positive effects of this change on the course Linear Algebra 1. In the discussion with the students it became clear that they perceived a certain lack of flow in the teaching activities in this course, as sometimes too long periods of time passed between two consecutive teaching sessions.

As in the previous autumn semesters, half of the mathematics students and all physics students enrolled have been admitted in the international admission round, and thus the students' background and previous knowledge of the subject is still quite heterogeneous. As before, many of the international students have studied parts of Linear algebra in high-school while only a few of the national students have a background in the subject since it is not included in the Swedish national curriculum. In the course evaluation from the last autumn semester it was suggested to address the discrepancy between the background of the different student groups - Bachelor students in mathematics and physics and teacher students - and their need of support and further stimulation. This has been discussed in a more general setting taking into account the structures of the programmes. The Teacher education programme has not been open for application this semester and a new course structure has been

proposed where these issues are addressed. The new course structure will be implemented starting in the autumn semester of 2024, and one of the main principles is that all subject related content, including preparatory assignments, should be common for all student categories.

A measure that has been taken before this semester in order to better prepare the students for the first courses in mathematics at university level, was to offer all admitted students the possibility of taking a newly developed preparatory course online. The course, entitled MNXA21 Refresher Course in Mathematics comprises 1.5 credits and was recommended at 50% study pace during two weeks before the start of the semester.

However, only 26 of the 42 students who filled in the course evaluation survey have taken (parts of) this course. We are currently investigating to which extent the participation on the preparatory course has influenced their results and we have identified some of the factors that contributed to the students not taking this course.

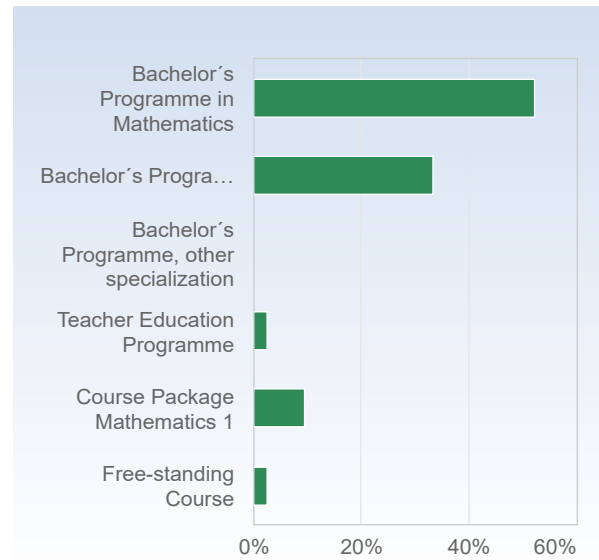
Suggestions for the next course realisation: Continue to offer the refresher course before the start of the semester but open the Canvas page at an earlier stage and provide a more flexible study pace by giving students access to all the course modules at once. Revisit the schedule of all three courses given in parallel during the first semester and give Linear Algebra 1 at 50% study pace during the first half of the semester again.

Linear Algebra 1, Autumn 2022

Respondents: 130
 Answer Count: 42
 Answer Frequency: 32,31 %

I have studied this course as part of

I have studied this course as part of	Number of responses
Bachelor's Programme in Mathematics	22 (52,4%)
Bachelor's Programme in Physics, Theoretical Physics, Astronomy	14 (33,3%)
Bachelor's Programme, other specialization	0 (0,0%)
Teacher Education Programme	1 (2,4%)
Course Package Mathematics 1	4 (9,5%)
Free-standing Course	1 (2,4%)
Total	42 (100,0%)



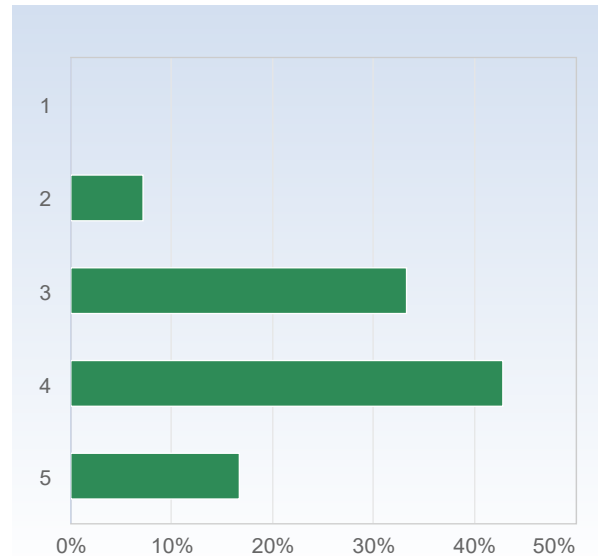
	Mean	Standard Deviation
I have studied this course as part of	2,4	2,6

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 has been satisfactory.

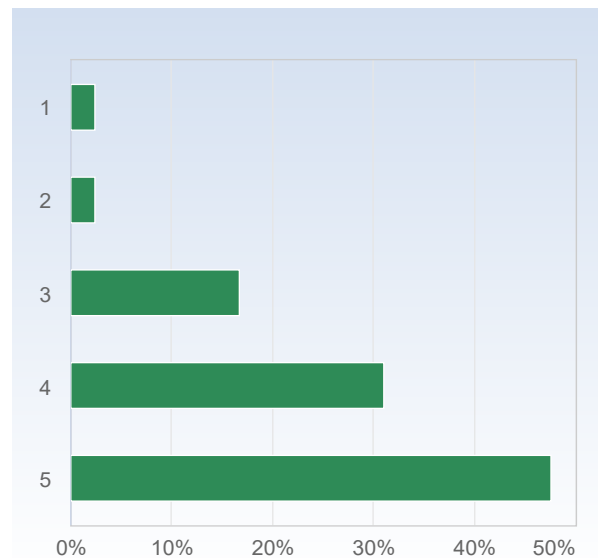
The way the course was taught and organised has been satisfactory.	Number of responses
1	0 (0,0%)
2	3 (7,1%)
3	14 (33,3%)
4	18 (42,9%)
5	7 (16,7%)
Total	42 (100,0%)



	Mean	Standard Deviation
The way the course was taught and organised has been satisfactory.	3,7	0,8

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

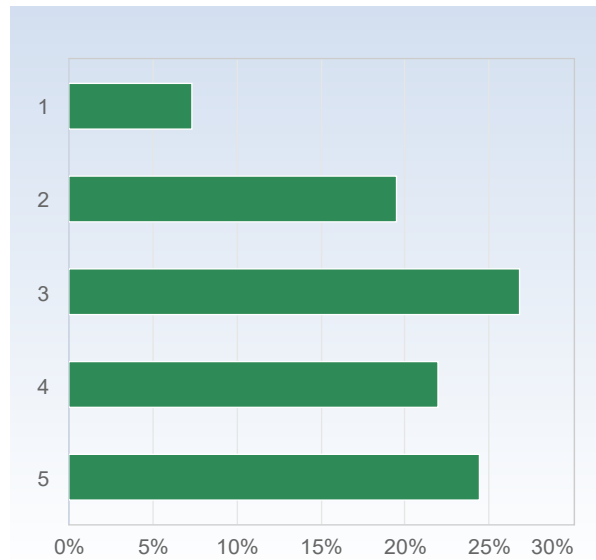
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	Number of responses
1	1 (2,4%)
2	1 (2,4%)
3	7 (16,7%)
4	13 (31,0%)
5	20 (47,6%)
Total	42 (100,0%)



	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	4,2	1,0

The lectures were valuable for my learning.

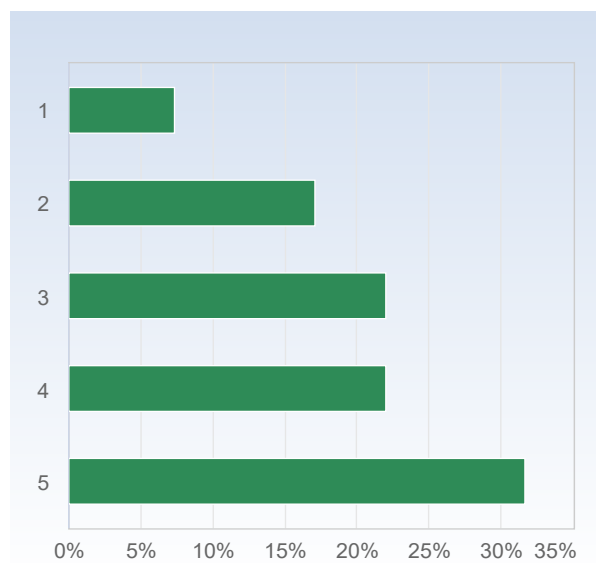
The lectures were valuable for my learning.	Number of responses
1	3 (7,3%)
2	8 (19,5%)
3	11 (26,8%)
4	9 (22,0%)
5	10 (24,4%)
Total	41 (100,0%)



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

The seminars were valuable for my learning.

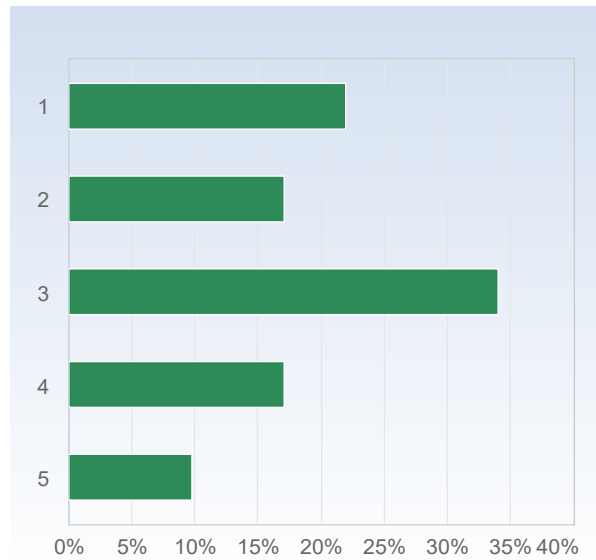
The seminars were valuable for my learning.	Number of responses
1	3 (7,3%)
2	7 (17,1%)
3	9 (22,0%)
4	9 (22,0%)
5	13 (31,7%)
Total	41 (100,0%)



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

The exercise classes were valuable for my learning.

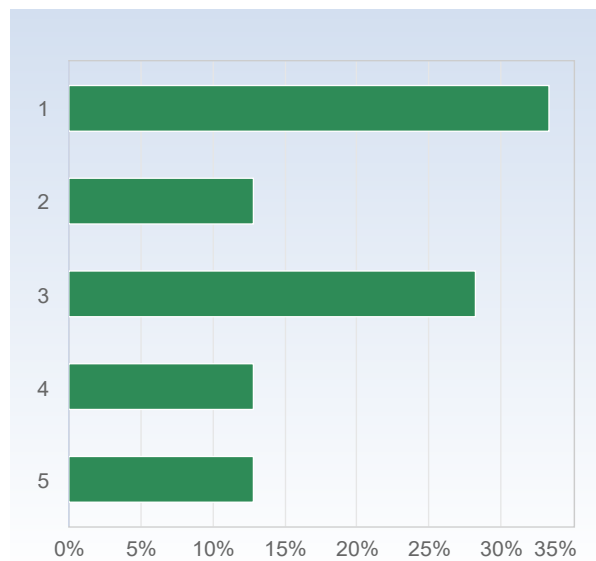
The exercise classes were valuable for my learning.	Number of responses
1	9 (22,0%)
2	7 (17,1%)
3	14 (34,1%)
4	7 (17,1%)
5	4 (9,8%)
Total	41 (100,0%)



	Mean	Standard Deviation
The exercise classes were valuable for my learning.	2,8	1,3

The SI-meetings were valuable for my learning.

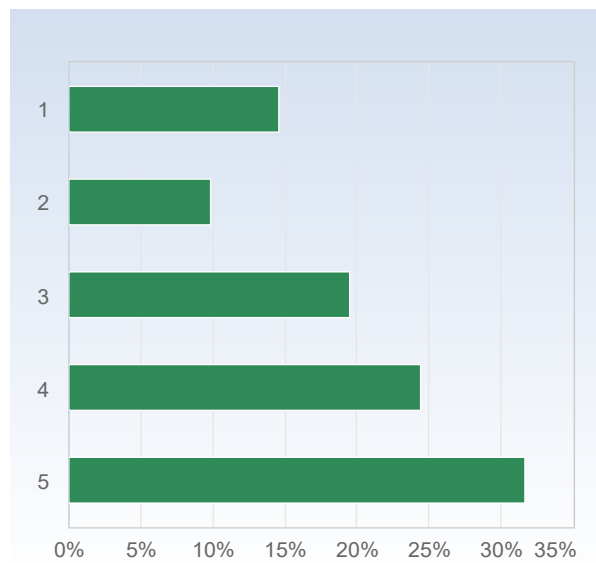
The SI-meetings were valuable for my learning.	Number of responses
1	13 (33,3%)
2	5 (12,8%)
3	11 (28,2%)
4	5 (12,8%)
5	5 (12,8%)
Total	39 (100,0%)



	Mean	Standard Deviation
The SI-meetings were valuable for my learning.	2,6	1,4

The mentor meetings were valuable for my learning.

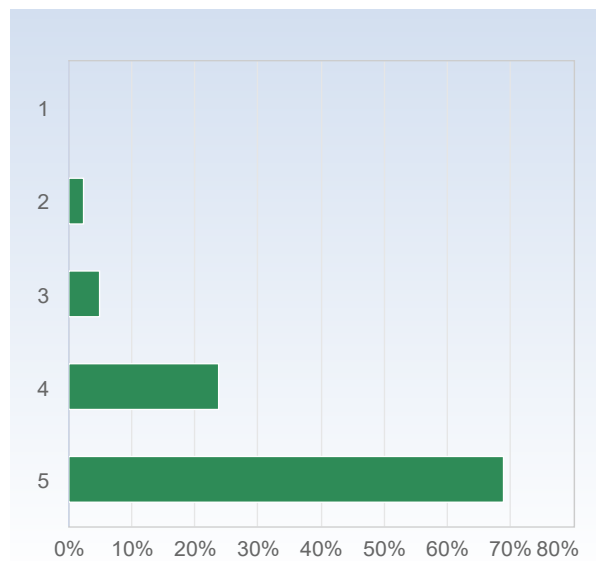
The mentor meetings were valuable for my learning.	Number of responses
1	6 (14,6%)
2	4 (9,8%)
3	8 (19,5%)
4	10 (24,4%)
5	13 (31,7%)
Total	41 (100,0%)



The mentor meetings were valuable for my learning.	Mean	Standard Deviation
	3,5	1,4

Studying on my own was valuable for my learning.

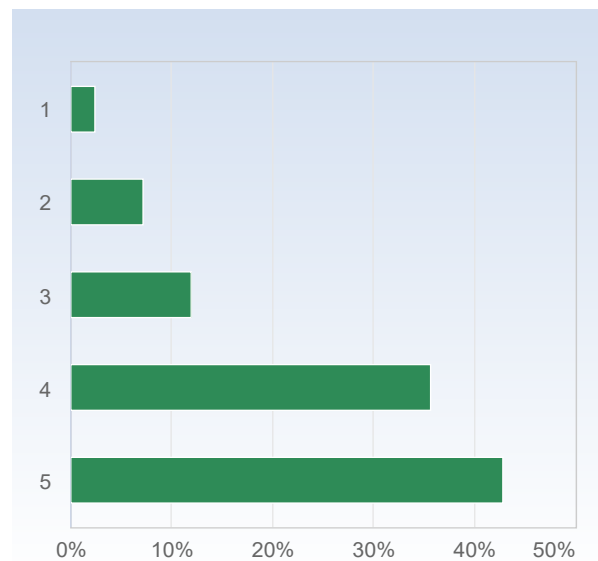
Studying on my own was valuable for my learning.	Number of responses
1	0 (0,0%)
2	1 (2,4%)
3	2 (4,8%)
4	10 (23,8%)
5	29 (69,0%)
Total	42 (100,0%)



Studying on my own was valuable for my learning.	Mean	Standard Deviation
	4,6	0,7

The course literature/material was a valuable learning resource.

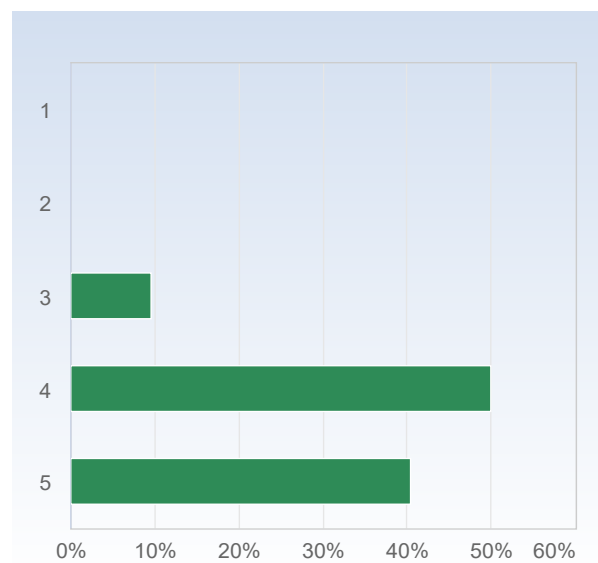
The course literature/material was a valuable learning resource.	Number of responses
1	1 (2,4%)
2	3 (7,1%)
3	5 (11,9%)
4	15 (35,7%)
5	18 (42,9%)
Total	42 (100,0%)



The course literature/material was a valuable learning resource.	Mean	Standard Deviation
	4,1	1,0

The course website in Canvas worked well as a learning platform.

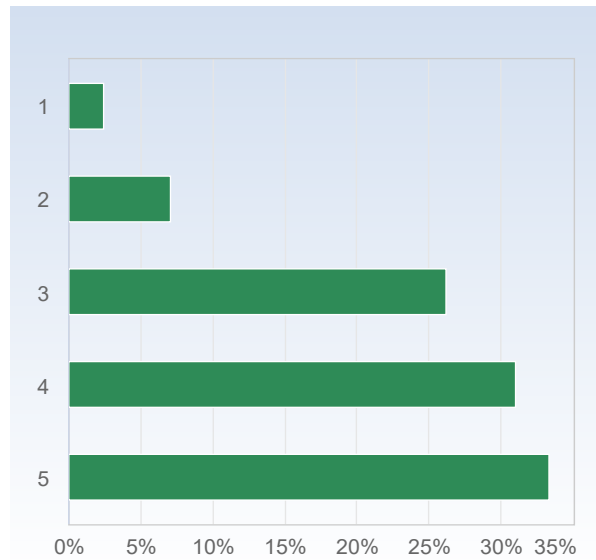
The course website in Canvas worked well as a learning platform.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	4 (9,5%)
4	21 (50,0%)
5	17 (40,5%)
Total	42 (100,0%)



The course website in Canvas worked well as a learning platform.	Mean	Standard Deviation
	4,3	0,6

The information I received before the course start was satisfactory.

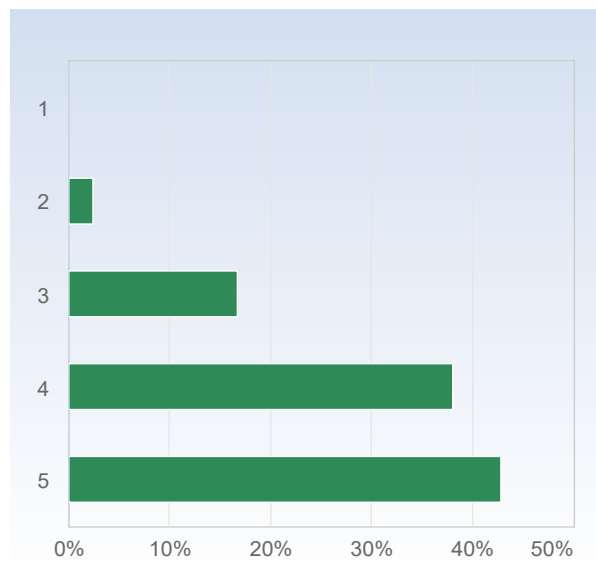
The information I received before the course start was satisfactory.	Number of responses
1	1 (2,4%)
2	3 (7,1%)
3	11 (26,2%)
4	13 (31,0%)
5	14 (33,3%)
Total	42 (100,0%)



	Mean	Standard Deviation
The information I received before the course start was satisfactory.	3,9	1,0

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

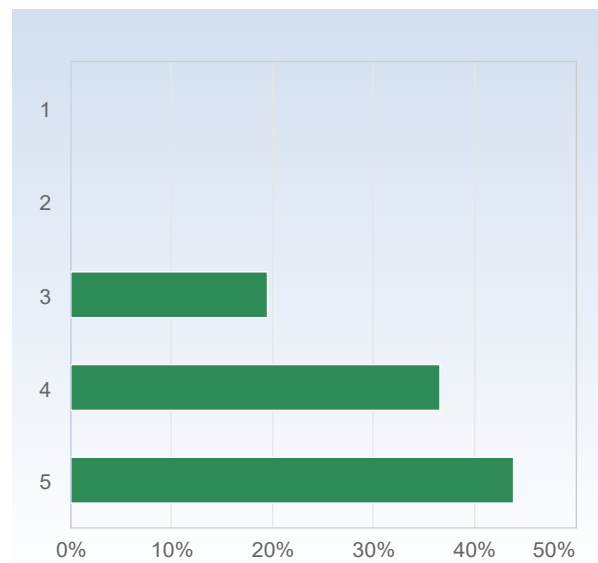
The communication with the teaching staff during the course was satisfactory.	Number of responses
1	0 (0,0%)
2	1 (2,4%)
3	7 (16,7%)
4	16 (38,1%)
5	18 (42,9%)
Total	42 (100,0%)



	Mean	Standard Deviation
The communication with the teaching staff during the course was satisfactory.	4,2	0,8

The assignments have been valuable for my learning.

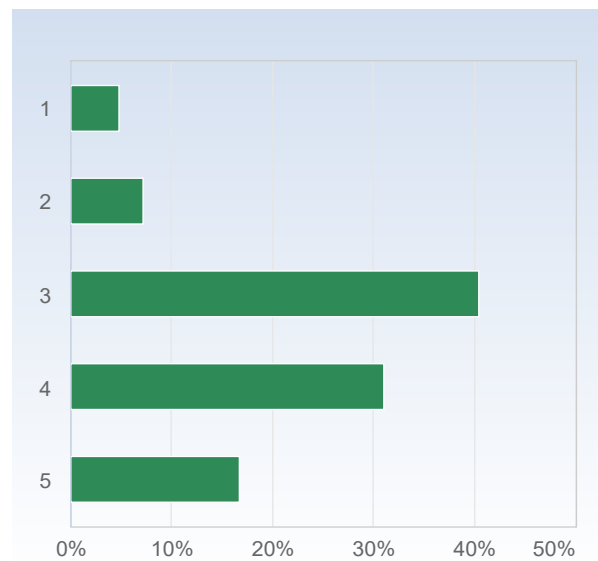
The assignments have been valuable for my learning.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	8 (19,5%)
4	15 (36,6%)
5	18 (43,9%)
Total	41 (100,0%)



The assignments have been valuable for my learning.	Mean	Standard Deviation
	4,2	0,8

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

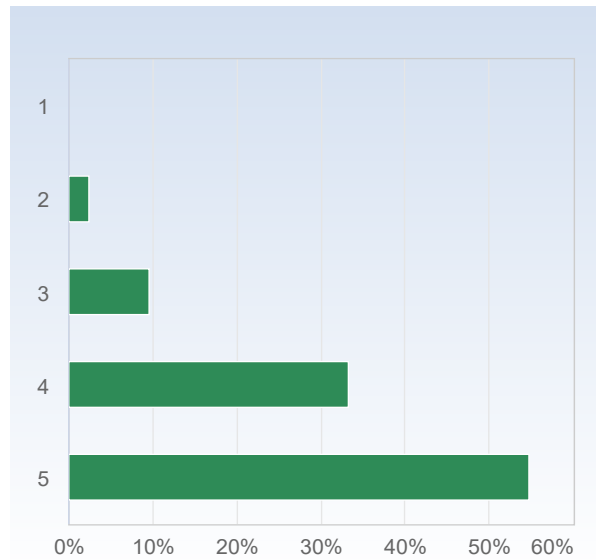
I have received valuable feedback from my teachers during the course.	Number of responses
1	2 (4,8%)
2	3 (7,1%)
3	17 (40,5%)
4	13 (31,0%)
5	7 (16,7%)
Total	42 (100,0%)



I have received valuable feedback from my teachers during the course.	Mean	Standard Deviation
	3,5	1,0

The course had a reasonable workload.

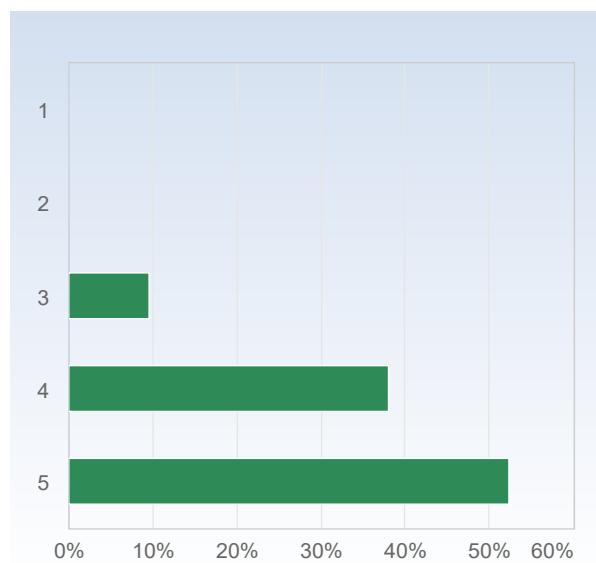
The course had a reasonable workload.	Number of responses
1	0 (0,0%)
2	1 (2,4%)
3	4 (9,5%)
4	14 (33,3%)
5	23 (54,8%)
Total	42 (100,0%)



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

The workload was evenly distributed throughout the course.

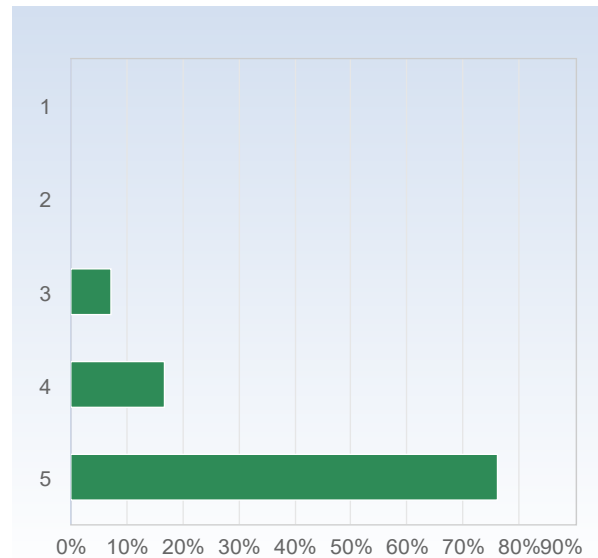
The workload was evenly distributed throughout the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	4 (9,5%)
4	16 (38,1%)
5	22 (52,4%)
Total	42 (100,0%)



	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.

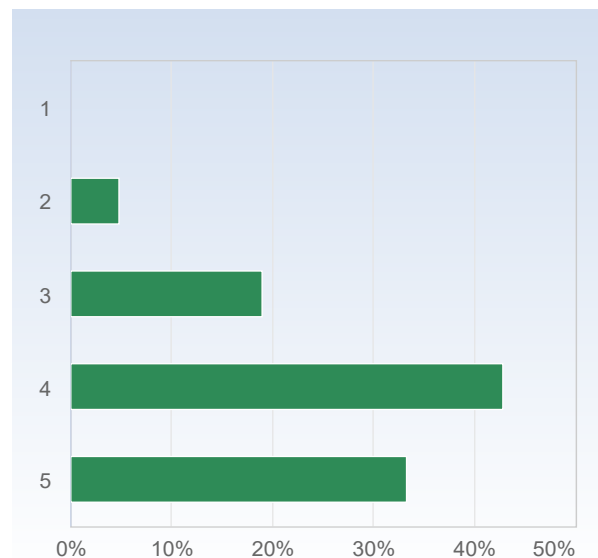
The examination matched the contents and level of the course.	Number of responses
1	0 (0,0%)
2	0 (0,0%)
3	3 (7,1%)
4	7 (16,7%)
5	32 (76,2%)
Total	42 (100,0%)



The examination matched the contents and level of the course.	Mean	Standard Deviation
	4,7	0,6

Overall, I am satisfied with the course.

Overall, I am satisfied with the course.	Number of responses
1	0 (0,0%)
2	2 (4,8%)
3	8 (19,0%)
4	18 (42,9%)
5	14 (33,3%)
Total	42 (100,0%)



Overall, I am satisfied with the course.	Mean	Standard Deviation
	4,0	0,9

Kommentar

The lectures are not helpful. The way the seminars are done is less productive than the mata21 seminars. Anna-Maria is very nice but her methods are complicated. We don't all understand what it means when she says ex: Linear map. We can't all visualise this. Overall some of her comments were helpful and if you ever went and asked her 1 to 1 she would explain but that isn't possible to do with everyone.

It's too little material. I think that one could easily come add some parts and as well cut back on many unnecessary things such as the proofs. Also try to make it less computational by instead having one/multiple Python projects to test how one (for example) would go about calculating the determinant, but then instead have questions more focused on understanding what a determinant is and why it is useful.

I didn't know about the existence of the old exams before I was told they did. Even after that I couldn't find them for a while. Making the link to them more explicit would be helpful.

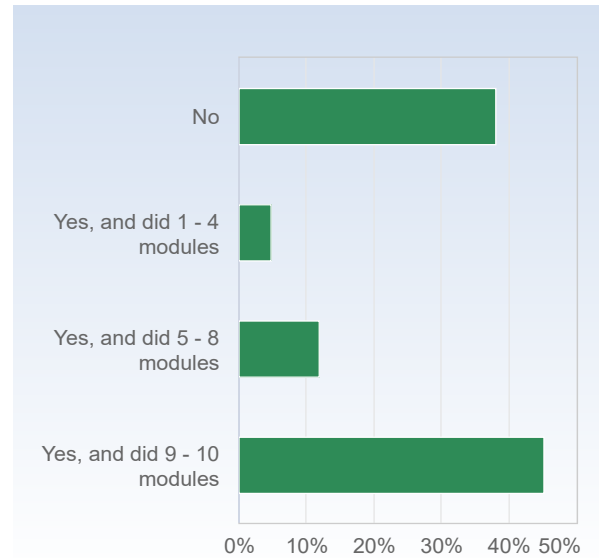
Less time could be spent on the long, notation-heavy matrix proofs. Or it could be communicated more clearly that they are for the more interested students, and not necessary to pass the exam. I think they were daunting for many people, and might've served to make some more scared of the subject.

I took an extra course in linear algebra in high school so I already knew the content, which made the course fairly easy.

The lecturers were quite confusing/messy so it was hard to follow like half of the time

Did you take the refresher course MNXA21 before starting this course?

Did you take the refresher course MNXA21 before starting this course?	Number of responses
No	16 (38,1%)
Yes, and did 1 - 4 modules	2 (4,8%)
Yes, and did 5 - 8 modules	5 (11,9%)
Yes, and did 9 - 10 modules	19 (45,2%)
Total	42 (100,0%)

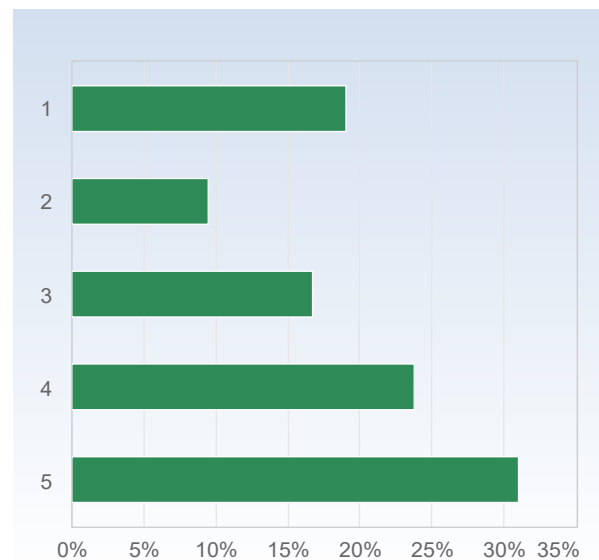


	Mean	Standard Deviation
Did you take the refresher course MNXA21 before starting this course?	2,6	1,4

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

I had studied Linear Algebra and Geometry prior to this course.

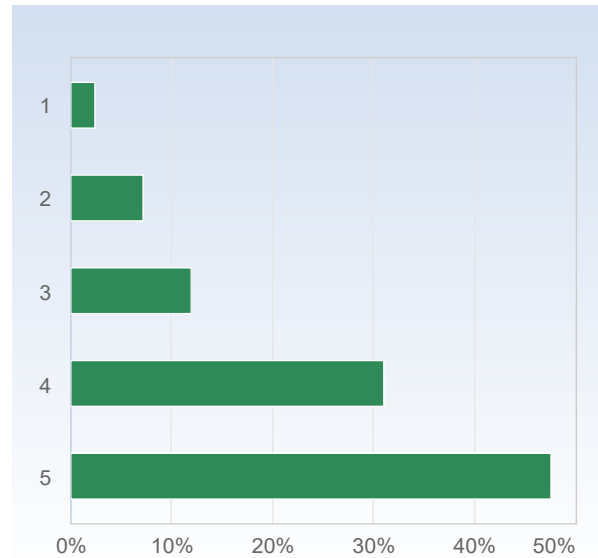
I had studied Linear Algebra and Geometry prior to this course.	Number of responses
1	8 (19,0%)
2	4 (9,5%)
3	7 (16,7%)
4	10 (23,8%)
5	13 (31,0%)
Total	42 (100,0%)



	Mean	Standard Deviation
I had studied Linear Algebra and Geometry prior to this course.	3,4	1,5

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

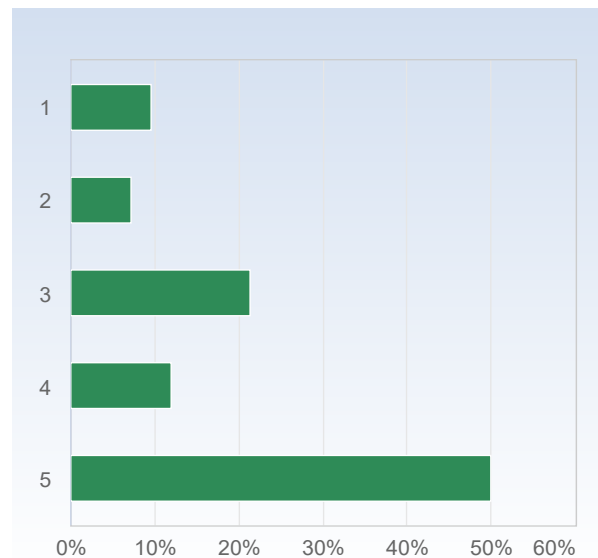
My prior knowledge has been sufficient to assimilate the contents of this course.	Number of responses
1	1 (2,4%)
2	3 (7,1%)
3	5 (11,9%)
4	13 (31,0%)
5	20 (47,6%)
Total	42 (100,0%)



	Mean	Standard Deviation
My prior knowledge has been sufficient to assimilate the contents of this course.	4,1	1,0

I have participated actively in the course.

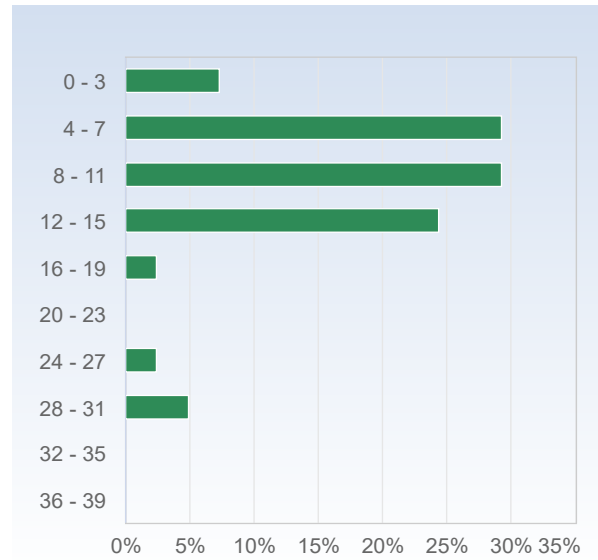
I have participated actively in the course.	Number of responses
1	4 (9,5%)
2	3 (7,1%)
3	9 (21,4%)
4	5 (11,9%)
5	21 (50,0%)
Total	42 (100,0%)



	Mean	Standard Deviation
I have participated actively in the course.	3,9	1,4

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 - 3	3 (7,3%)
4 - 7	12 (29,3%)
8 - 11	12 (29,3%)
12 - 15	10 (24,4%)
16 - 19	1 (2,4%)
20 - 23	0 (0,0%)
24 - 27	1 (2,4%)
28 - 31	2 (4,9%)
32 - 35	0 (0,0%)
36 - 39	0 (0,0%)
Total	41 (100,0%)



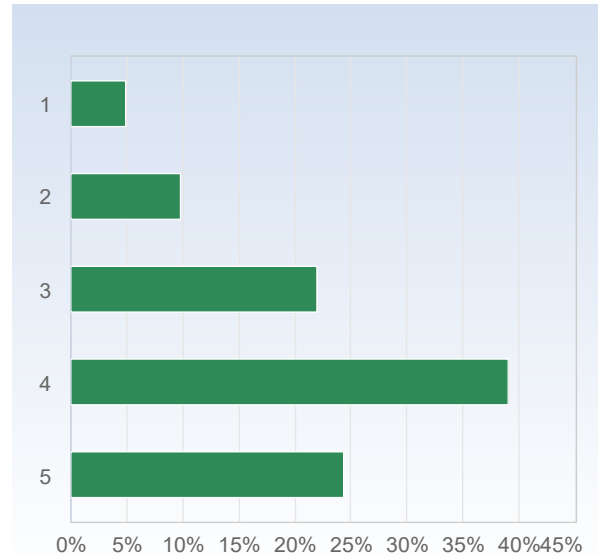
	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	10,3	6,6

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.

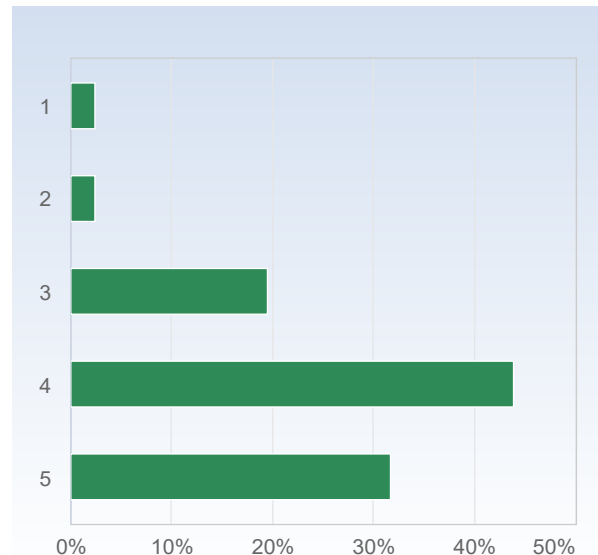
The course has increased my ability to read a mathematical text.	Number of responses
1	2 (4,9%)
2	4 (9,8%)
3	9 (22,0%)
4	16 (39,0%)
5	10 (24,4%)
Total	41 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to read a mathematical text.	3,7	1,1

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

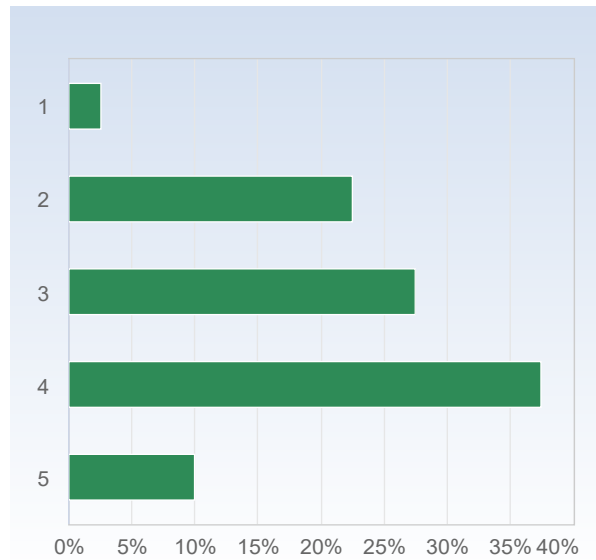
The course has increased my ability to communicate the subject in writing.	Number of responses
1	1 (2,4%)
2	1 (2,4%)
3	8 (19,5%)
4	18 (43,9%)
5	13 (31,7%)
Total	41 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	4,0	0,9

The course has increased my ability to cooperate.

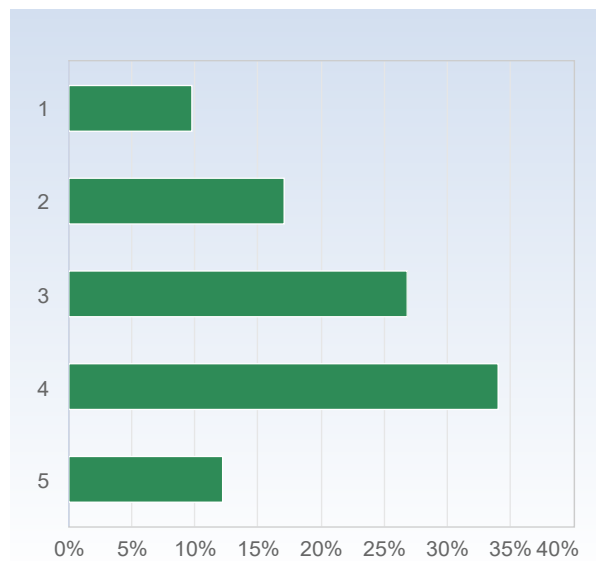
The course has increased my ability to cooperate.	Number of responses
1	1 (2,5%)
2	9 (22,5%)
3	11 (27,5%)
4	15 (37,5%)
5	4 (10,0%)
Total	40 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to cooperate.	3,3	1,0

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

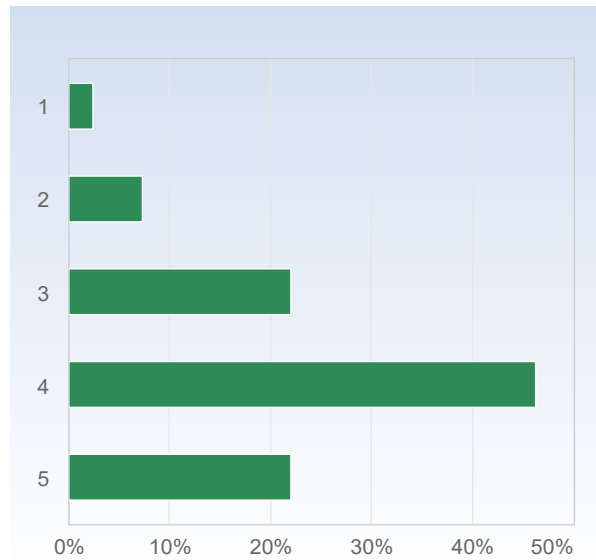
The course has increased my ability to search and process information.	Number of responses
1	4 (9,8%)
2	7 (17,1%)
3	11 (26,8%)
4	14 (34,1%)
5	5 (12,2%)
Total	41 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to search and process information.	3,2	1,2

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

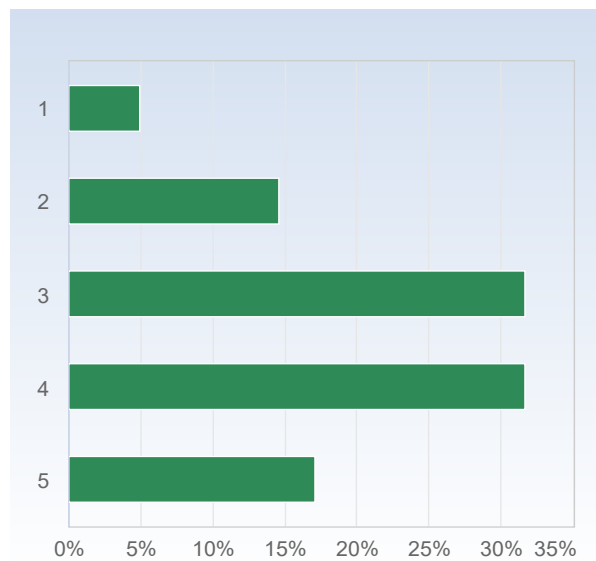
The course has increased my ability to analyze and solve problems.	Number of responses
1	1 (2,4%)
2	3 (7,3%)
3	9 (22,0%)
4	19 (46,3%)
5	9 (22,0%)
Total	41 (100,0%)



	Mean	Standard Deviation
The course has increased my ability to analyze and solve problems.	3,8	1,0

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	2 (4,9%)
2	6 (14,6%)
3	13 (31,7%)
4	13 (31,7%)
5	7 (17,1%)
Total	41 (100,0%)



	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	3,4	1,1

What did you appreciate most with the course?

What did you appreciate most with the course?

Workload matched the 7.5 ECTS, wasn't more, wasn't less

The course book and the Anna-Maria.

Step from my high school level to university studies was quite okay. The week before the exam with time to focus on the exam was really good! Answers for exercises from lecture notes.

Learning about vectors and matrices and their implications. Also the revision week before the exam was great.

The lectures. The lecturer has done a great job in explaining the theory behind the subject and why every definition makes sense. I rarely left the lectures with any questions about the content.

The lecture notes were very helpful as well as the seminars.

I appreciate that students are given a lot of freedom in choosing how they study and work, and that the number of assignments isn't overwhelming. I think it's good to let people make what they want out of the course (to some extent), and that this lets interested students spend their time exploring the things that interest them, rather than burning up their energy on lots of potentially unnecessary work. I think the workload in this course was a good balance between structure and independent study.

The structure with seminars and assignments was perfect. Couldn't have done it any better to be honest.

Finally learning some linear algebra.

Learning the material. Other than that I really enjoyed the seminars. In the beginning when things were a bit overwhelming they were invaluable. A lot of times I couldn't complete all the exercises. After the seminars I could usually do them myself and understand them a lot better. Overall I am very happy with everything.

The course literature was pretty nice, especially the immersive book!

I appreciated the seminars and other classes outside of the lectures most, since they gave me an opportunity to discuss with and learn from other people.

The seminars in the mornings, very good and also good time.

Good with assignments, then you have to follow the course, you get feedback of how to solve problems and you really learn latex.

going over the homework problems on seminars

The lecture notes, all of the content felt highly relevant

The lecture notes are very structured.

Can't really say as I couldn't participate for most of it

The use of the blackboards. Nothing makes me feel like I'm studying at university quite like the sound of chalk on blackboards. Oh, and Anna-Maria cleaning the blackboards before the start of the lectures was sometimes the best part of my day.

Clear structure throughout the course

The homework assignments really helped with feeling confident in fully absorbing the information we were learning, and I think had a direct impact on my confidence for the exam.

The assignments we did in groups (but doing it individually would have been just as good).

The structure of the seminars has supported my learning very well.

I think the seminars were well structured, and kept most students engaged.

Seminars and SI-exercises leading up to the exam

What do you think should be improved?

What do you think should be improved?

The explanations of topics were sometimes overcomplicated, I would have enjoyed it more if there was a introduction to certain things with a highschool level explanation and then after that, you can go more in depth.

The way the course is taught. More examples, no proofs, if someone is interested in them they can definitely find them online. The seminar hours should be moved to later hours and we should get more feedback on the assignment solutions. An OK is not helping me understand if my method is sufficient to but on an exam.

I think there should be more emphasis on exercises and examples rather than theory/proofs.

The seminars. Solely presenting solutions to problems we have worked on beforehand means that there really is no point in attending the seminars if you have already solved the problems on your own. But this format also means that there are a lot of problems to do before the seminar and sometimes they are difficult, meaning that a lot of time will be spent on preparation. I like the format of the seminars in MATA21 more (a few "easier" problems to prepare, and harder problems to work on during the seminar).

The lectures could focus less on proofs of theorems and more on applications.

The seminars were too early for me to regularly attend, given that I live far away.

Nothing.

What I said above:

- More material.
- Less focus on computation and more on understanding.
- More joint exercises with the Python-Class.

More explicit geometry in the course literature for better intuitive understanding. The interactive course literature was maybe more focused on this, but it was overall easier to use one source. Since this is the case, and since my understanding is that most people mainly used the compendium, a few more pictures might be valuable (such as showing why vector transformations are non commutative).

I would like to see more concrete examples, specially during lectures. There's a lot of theories and things to remember but it was never really clear to me how to apply the theory I "learned" and so the theory never really meant much to me.

I think during lectures it would be great if we could focus more on solving problems, and encouraging a more active environment, instead of going through a couple of endless proofs that are sometimes really hard to follow.

I think that the general layout for the course was very polished, but one aspect that could be improved is to add an anonymous forum where students can post and discuss different questions!

The literature. Need more examples and suggestions of how solving exercises. Sometimes it was hard to know during a lecture if what we were talking was to the next course or this course.

not going over time at the lectures :(

Materials can be hard to find on the Canvas page, for example, the past exams were located at a very hidden place.

Again, my feedback won't have everything in mind so I can't say.

Communication about what is important. Quaternions were mentioned once and never again, and as I said earlier I think too much time was spent on some very abstract proofs.

Some lectures were just writing out basically everything that is in the lecture notes, so it was a bit useless. Would have preferred more examples etc.

I don't think three courses should be taught at one time, and whenever possible, seminar should be later in the day or given at multiple times for the same material (in terms of synthesizing information, seminar felt far more valuable than lectures)

I think some introductions should have been simplified. I already knew the material but I thought some of the explanations were over complicated, for example the introduction of matrix multiplication where the lecture talked about mapping, which is not in the course. Mapping was also talked later, the week before the exam but we did not need to know it and it was never explained and I think the students who do know it did not need the extra explanation, so this was just confusing and I do not think it is a good idea to mention it so much if it is not important.

The seminars at 08.00 in the morning I could not attend as I live too far away.

In general, I think the content of the course felt slightly awkwardly chosen. Compared to the course taught at LTH, it covers less material, without going more in depth on the subjects it does cover, and the difficulty level also felt slightly lower. From a mathematics student's perspective, I feel like it would be beneficial, to e.g. discuss further on the relation between matrices and operators on vector spaces, even if it's only in the setting of the three-dimensional space.

The lecturers should be more clear about what they are trying to teach us, it hard to learn when you feel lost about what the point is and therefore don't know what you should focus on

I enjoy the day starting at 10:00 more than at 8:00

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.)?

Not at all.

No

No.

Nope. Can only talk about sexuality and gender, but no problems there.

No

No.

No.

no

No

No

No.

No

No

No

No

No

No, but some comments on the assignments were unnecessarily rude. Like instead of putting "you have to explain this more because..." they put sort of just "you should explain this more because... this is just bad"

No