

Summary for Group and Ring Theory, Spring semester 2020

Course responsible: Arne Meurman

Other teachers: None

Number of students: 37

Grade at first exam: 4 V, 5 G, 7 U

Evaluation

Report on the course evaluation: See separate file.

Teachers comment: Due to covid-19 the course was taught on distance, which made it difficult for the students. Each lecture was complemented by the posting on the Canvas page of the course of an introduction that in broad terms indicated the main points of the material to be studied. One set of exercises was suggested to mailed in at the middle of the course and feed-back to the students was communicated. One Zoom-meeting was organized for general discussion.

Evaluation of changes since last time the course was given: There were no changes in the course content since 2018.

Suggestion of changes until next time the course is given: No change in the course content is suggested. If the course needs to be taught on distance, probably adequate technical equipment will be available so that live lectures can be streamed.

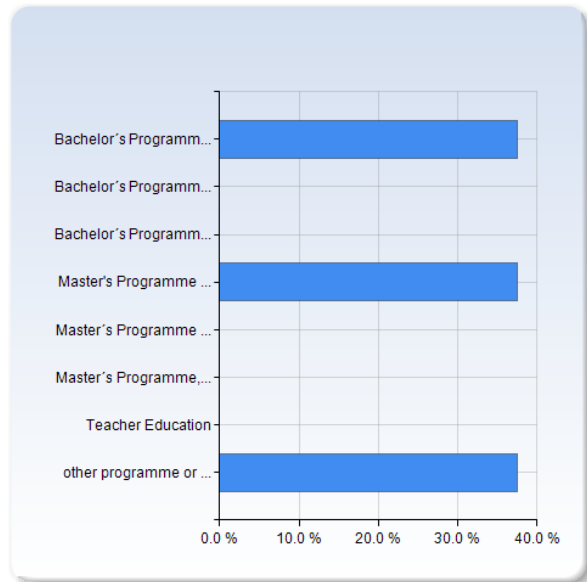
Responsible, and date for this summary: Arne Meurman, August 26, 2020.

GroupRing2020

Answer Count: 9

I have studied this course as part of

I have studied this course as part of	Number of Responses
Bachelor's Programme in Mathematics	3 (37.5%)
Bachelor's Programme in Physics, Theoretical Physics, Astronomy	0 (0.0%)
Bachelor's Programme, other specialization	0 (0.0%)
Master's Programme in Mathematics	3 (37.5%)
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 (37.5%)
Total	9 (112.5%)

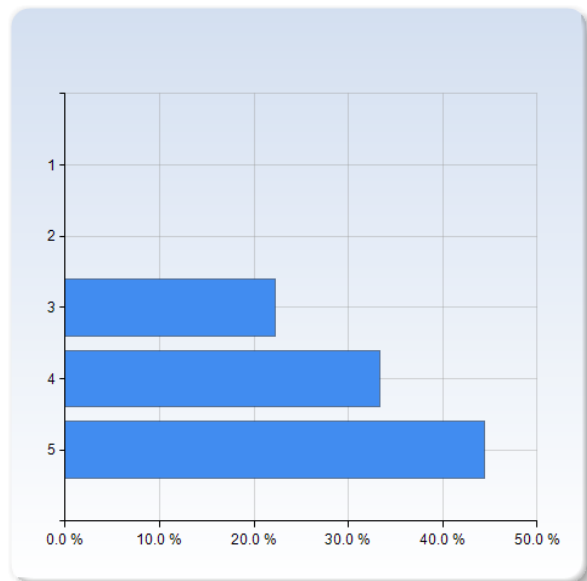


I have studied this course as part of	Mean	Standard Deviation
I have studied this course as part of	4.3	3.0

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.

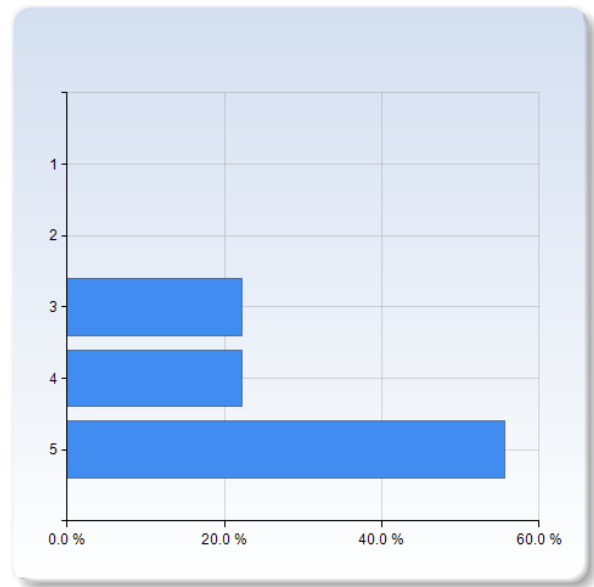
2. My prior knowledge has been sufficient to assimilate the contents of this course.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	2 (22.2%)
4	3 (33.3%)
5	4 (44.4%)
Total	9 (100.0%)



2. My prior knowledge has been sufficient to assimilate the contents of this course.	Mean	Standard Deviation
2. My prior knowledge has been sufficient to assimilate the contents of this course.	4.2	0.8

3. I have participated actively in the course.

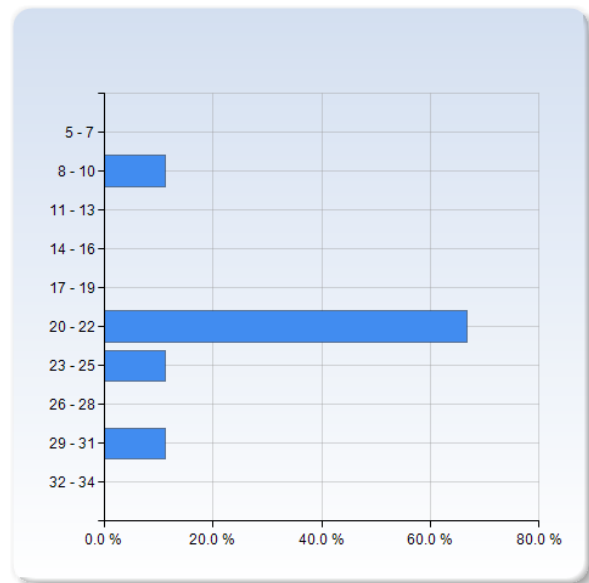
3. I have participated actively in the course.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	2 (22.2%)
4	2 (22.2%)
5	5 (55.6%)
Total	9 (100.0%)



3. I have participated actively in the course.	Mean	Standard Deviation
	4.3	0.9

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
5 - 7	0 (0.0%)
8 - 10	1 (11.1%)
11 - 13	0 (0.0%)
14 - 16	0 (0.0%)
17 - 19	0 (0.0%)
20 - 22	6 (66.7%)
23 - 25	1 (11.1%)
26 - 28	0 (0.0%)
29 - 31	1 (11.1%)
32 - 34	0 (0.0%)
Total	9 (100.0%)



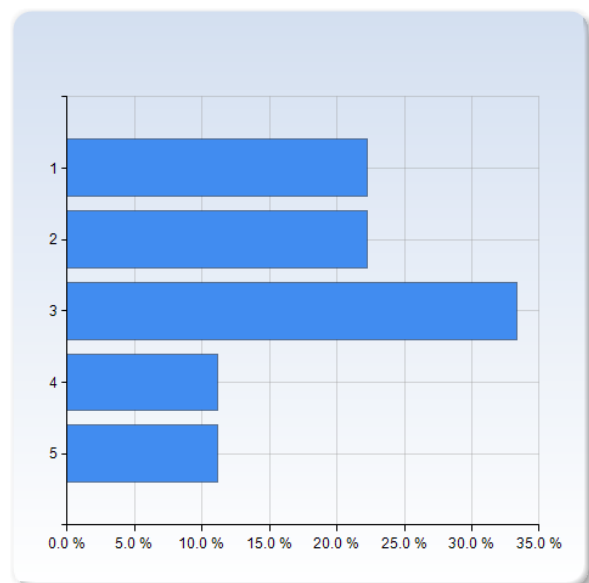
Average number of hours spent in total on the course per week (including scheduled activities):	Mean	Standard Deviation
	20.4	5.5

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.

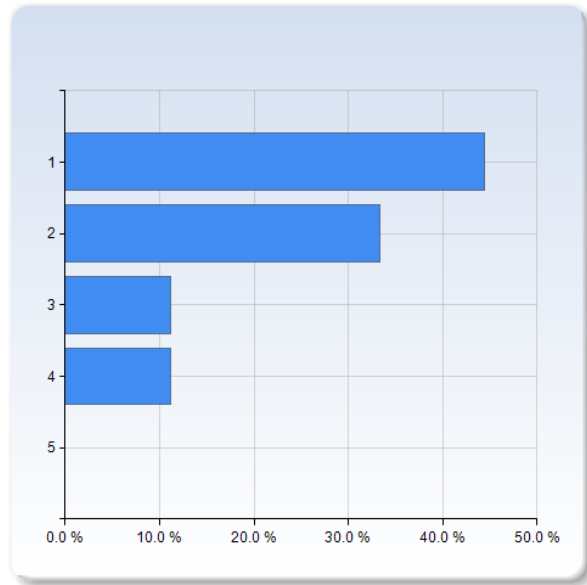
The way the course was taught and organised suited me.	Number of Responses
1	2 (22.2%)
2	2 (22.2%)
3	3 (33.3%)
4	1 (11.1%)
5	1 (11.1%)
Total	9 (100.0%)



The way the course was taught and organised suited me.	Mean	Standard Deviation
	2.7	1.3

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

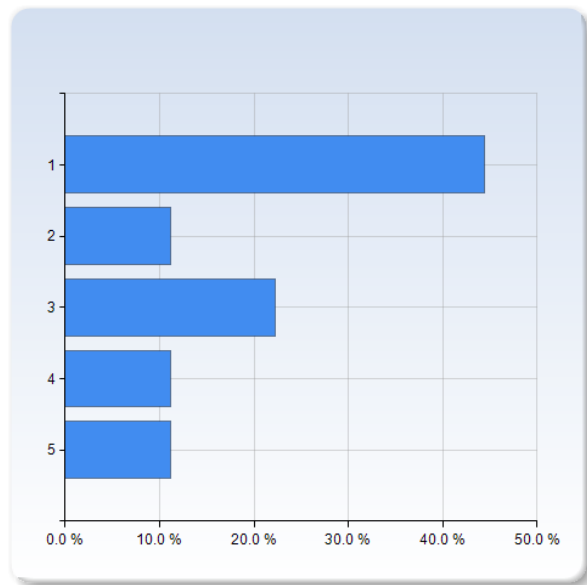
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	Number of Responses
1	4 (44.4%)
2	3 (33.3%)
3	1 (11.1%)
4	1 (11.1%)
5	0 (0.0%)
Total	9 (100.0%)



The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	Mean	Standard Deviation
	1.9	1.1

The lectures were valuable for my learning.

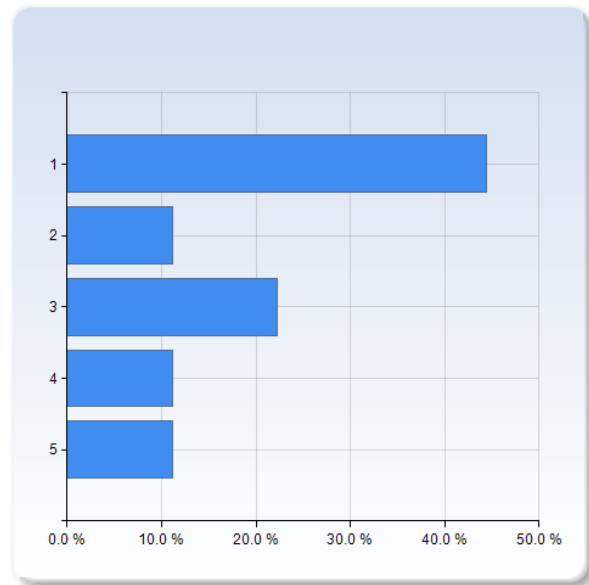
The lectures were valuable for my learning.	Number of Responses
1	4 (44.4%)
2	1 (11.1%)
3	2 (22.2%)
4	1 (11.1%)
5	1 (11.1%)
Total	9 (100.0%)



The lectures were valuable for my learning.	Mean	Standard Deviation
	2.3	1.5

The seminars were valuable for my learning.

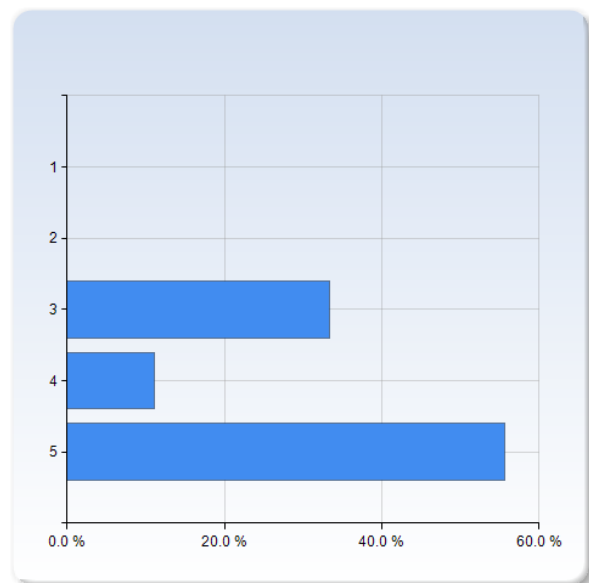
The seminars were valuable for my learning.	Number of Responses
1	4 (44.4%)
2	1 (11.1%)
3	2 (22.2%)
4	1 (11.1%)
5	1 (11.1%)
Total	9 (100.0%)



The seminars were valuable for my learning.	Mean	Standard Deviation
	2.3	1.5

Studying on my own was valuable for my learning.

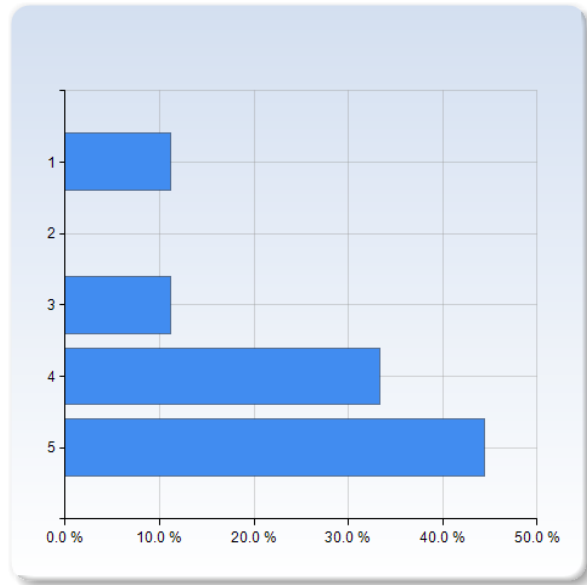
Studying on my own was valuable for my learning.	Number of Responses
1	0 (0.0%)
2	0 (0.0%)
3	3 (33.3%)
4	1 (11.1%)
5	5 (55.6%)
Total	9 (100.0%)



Studying on my own was valuable for my learning.	Mean	Standard Deviation
	4.2	1.0

The course literature/material was a valuable learning resource.

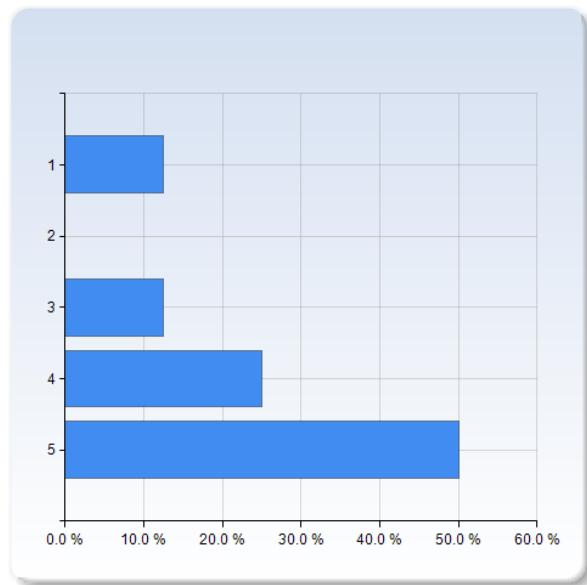
The course literature/material was a valuable learning resource.	Number of Responses
1	1 (11.1%)
2	0 (0.0%)
3	1 (11.1%)
4	3 (33.3%)
5	4 (44.4%)
Total	9 (100.0%)



	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	4.0	1.3

The information I received before the course start was satisfactory.

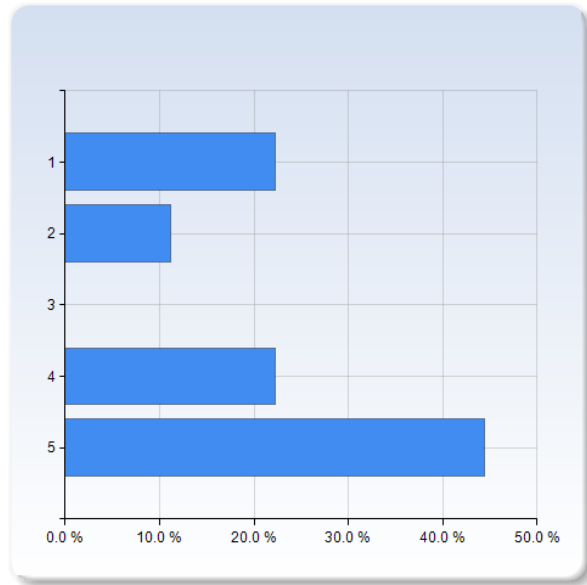
The information I received before the course start was satisfactory.	Number of Responses
1	1 (12.5%)
2	0 (0.0%)
3	1 (12.5%)
4	2 (25.0%)
5	4 (50.0%)
Total	8 (100.0%)



	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.

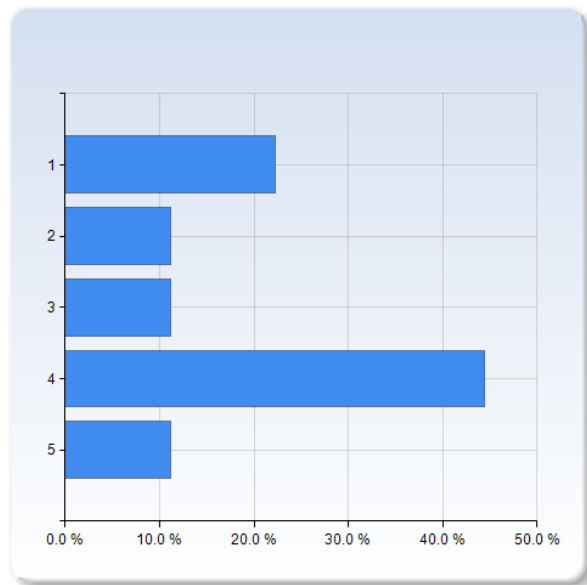
The communication with the teaching staff during the course was good.	Number of Responses
1	2 (22.2%)
2	1 (11.1%)
3	0 (0.0%)
4	2 (22.2%)
5	4 (44.4%)
Total	9 (100.0%)



The communication with the teaching staff during the course was good.	Mean	Standard Deviation
	3.6	1.7

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

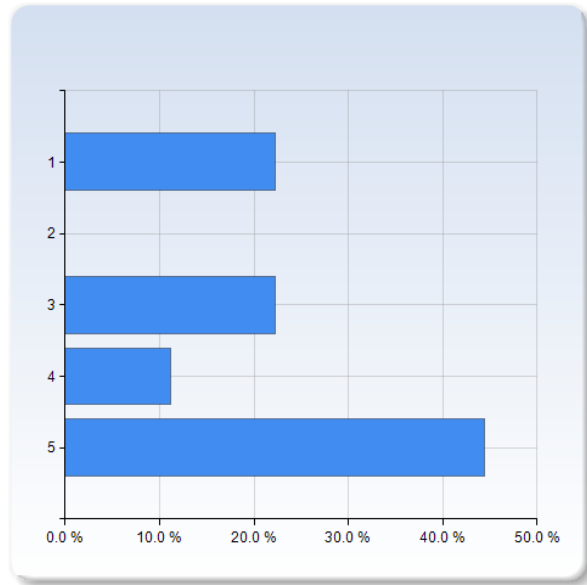
It was clear throughout the course what was expected of me.	Number of Responses
1	2 (22.2%)
2	1 (11.1%)
3	1 (11.1%)
4	4 (44.4%)
5	1 (11.1%)
Total	9 (100.0%)



It was clear throughout the course what was expected of me.	Mean	Standard Deviation
	3.1	1.5

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

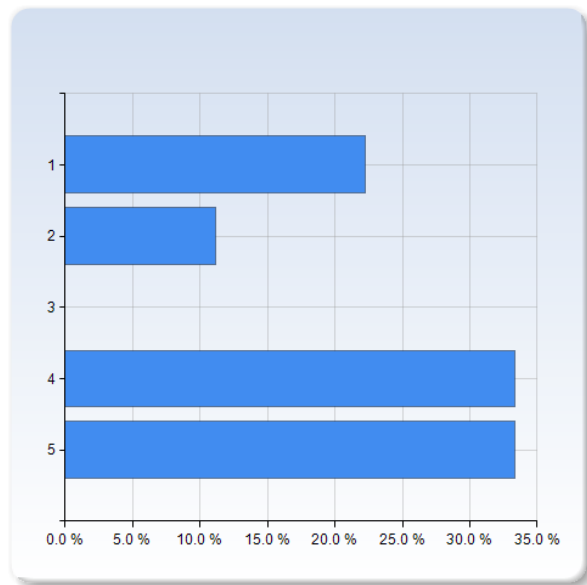
I have received valuable feedback from my teacher /teachers during the course.	Number of Responses
1	2 (22.2%)
2	0 (0.0%)
3	2 (22.2%)
4	1 (11.1%)
5	4 (44.4%)
Total	9 (100.0%)



I have received valuable feedback from my teacher/teachers during the course.	Mean	Standard Deviation
	3.6	1.7

The course had a reasonable workload.

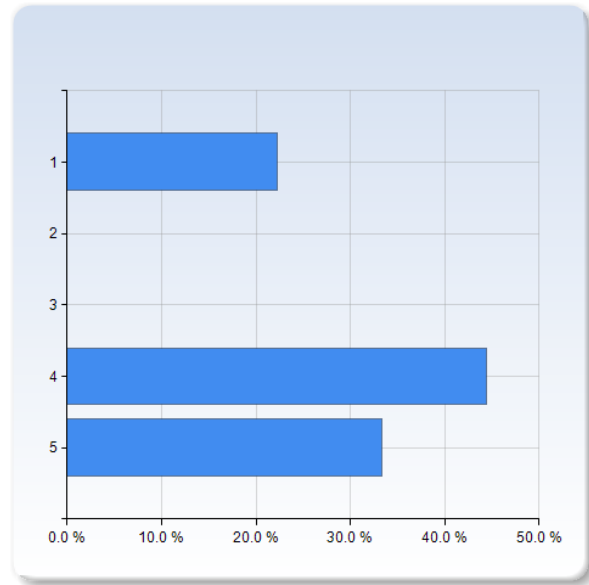
The course had a reasonable workload.	Number of Responses
1	2 (22.2%)
2	1 (11.1%)
3	0 (0.0%)
4	3 (33.3%)
5	3 (33.3%)
Total	9 (100.0%)



The course had a reasonable workload.	Mean	Standard Deviation
	3.4	1.7

The workload was evenly distributed throughout the course.

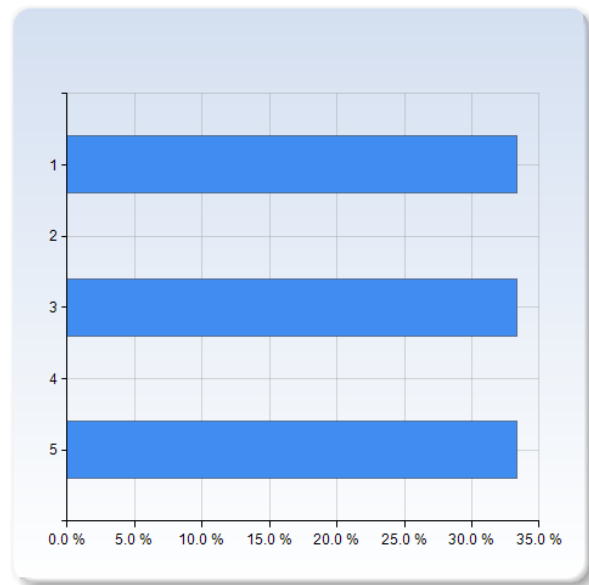
The workload was evenly distributed throughout the course.	Number of Responses
1	2 (22.2%)
2	0 (0.0%)
3	0 (0.0%)
4	4 (44.4%)
5	3 (33.3%)
Total	9 (100.0%)



	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	3.7	1.6

The examination matched the contents and level of the course.

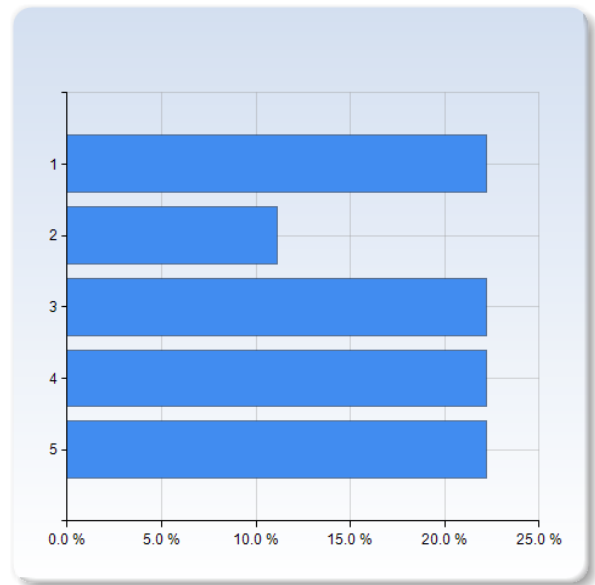
The examination matched the contents and level of the course.	Number of Responses
1	3 (33.3%)
2	0 (0.0%)
3	3 (33.3%)
4	0 (0.0%)
5	3 (33.3%)
Total	9 (100.0%)



	Mean	Standard Deviation
The examination matched the contents and level of the course.	3.0	1.7

Overall, I am satisfied with the course.

Overall, I am satisfied with the course.	Number of Responses
1	2 (22.2%)
2	1 (11.1%)
3	2 (22.2%)
4	2 (22.2%)
5	2 (22.2%)
Total	9 (100.0%)

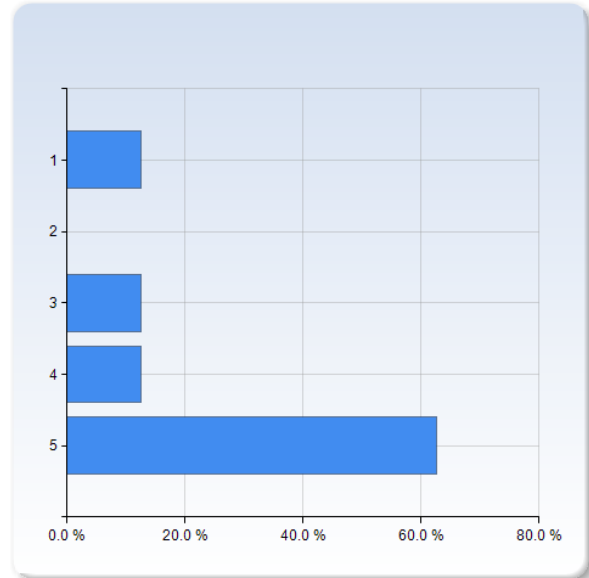


	Mean	Standard Deviation
Overall, I am satisfied with the course.	3.1	1.5

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.

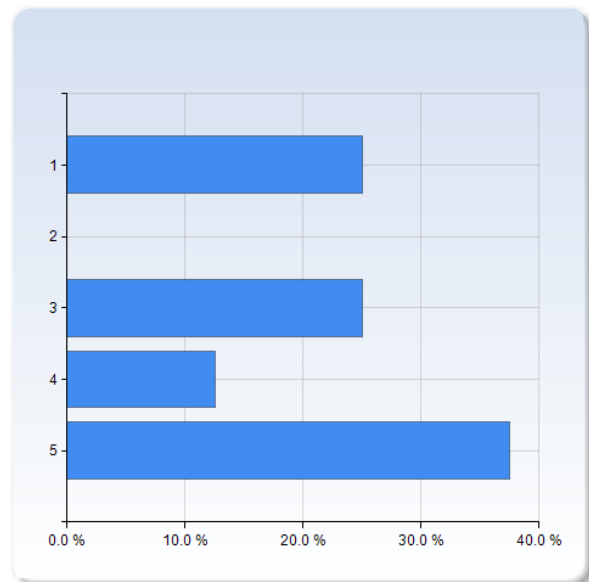
The course has increased my ability to read a mathematical text.	Number of Responses
1	1 (12.5%)
2	0 (0.0%)
3	1 (12.5%)
4	1 (12.5%)
5	5 (62.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to read a mathematical text.	4.1	1.5

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

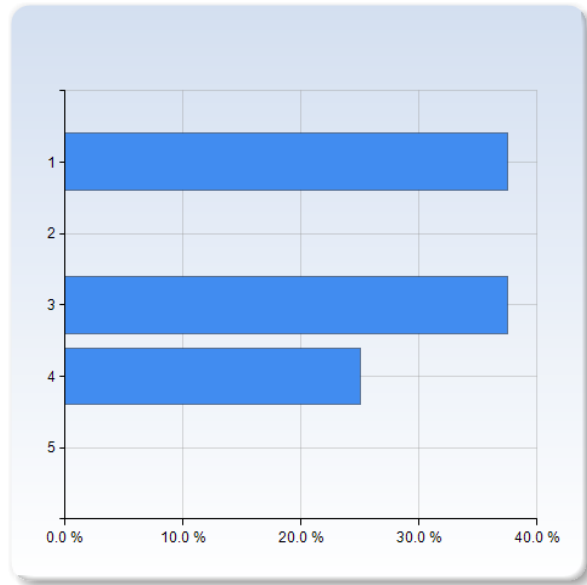
The course has increased my ability to communicate the subject in writing.	Number of Responses
1	2 (25.0%)
2	0 (0.0%)
3	2 (25.0%)
4	1 (12.5%)
5	3 (37.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject in writing.	3.4	1.7

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

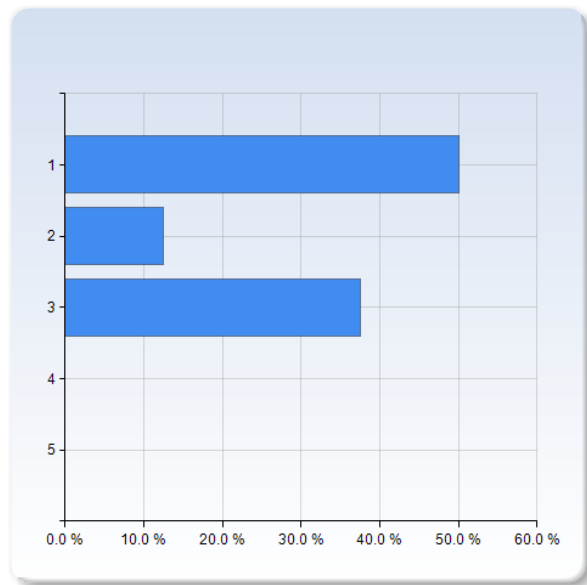
The course has increased my ability to communicate the subject orally.	Number of Responses
1	3 (37.5%)
2	0 (0.0%)
3	3 (37.5%)
4	2 (25.0%)
5	0 (0.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to communicate the subject orally.	2.5	1.3

The course has increased my ability to cooperate.

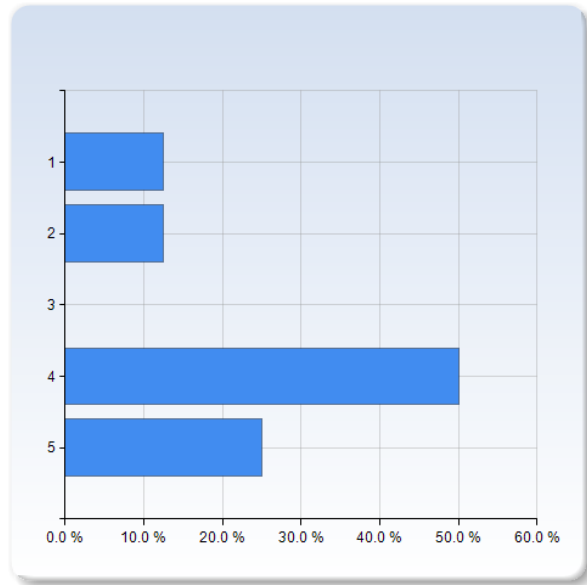
The course has increased my ability to cooperate.	Number of Responses
1	4 (50.0%)
2	1 (12.5%)
3	3 (37.5%)
4	0 (0.0%)
5	0 (0.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
The course has increased my ability to cooperate.	1.9	1.0

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

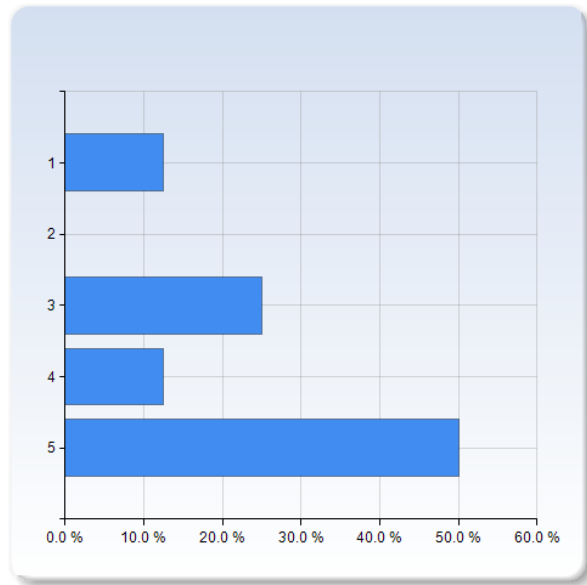
The course has increased my ability to search and process information.	Number of Responses
1	1 (12.5%)
2	1 (12.5%)
3	0 (0.0%)
4	4 (50.0%)
5	2 (25.0%)
Total	8 (100.0%)



The course has increased my ability to search and process information.	Mean	Standard Deviation
	3.6	1.4

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

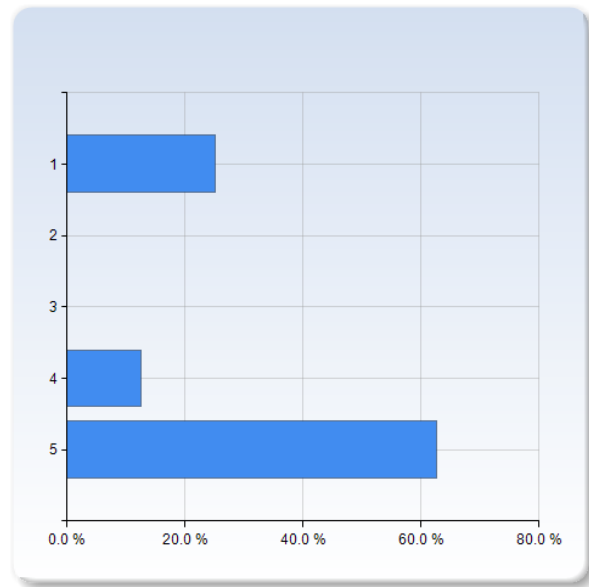
The course has increased my ability to analyze and solve problems.	Number of Responses
1	1 (12.5%)
2	0 (0.0%)
3	2 (25.0%)
4	1 (12.5%)
5	4 (50.0%)
Total	8 (100.0%)



The course has increased my ability to analyze and solve problems.	Mean	Standard Deviation
	3.9	1.5

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 (25.0%)
2	0 (0.0%)
3	0 (0.0%)
4	1 (12.5%)
5	5 (62.5%)
Total	8 (100.0%)



As a result of this course, I feel confident about tackling unfamiliar problems.	Mean	Standard Deviation
As a result of this course, I feel confident about tackling unfamiliar problems.	3.9	1.8

What did you appreciate most with the course?

What did you appreciate most with the course?

I think the course content was good, the Sylow theorems especially were very interesting along with modules and the noetherian/artinian properties

Improving how to learn on my own from literature and then discussing with my lecturer to solidify concepts and understanding.

The construction of tensor products was fun. What I enjoyed the most was Sylow's theorems and group actions.

The really interesting content of it. I wish we had more algebra courses.

Nothing.

What do you think should be improved?

What do you think should be improved?

There were some definitions which had not been covered in the group theory taught in algebraic structures, for example I believe the annihilator subgroup. This led to having search for the definitions in earlier parts of the book. This was demotivating, especially in the early part of the course with group theory due to the heavy load of definitions. However I think, in a classic lecture setting, this would not be as much of an issue, although it might be good to cover more things in algebraic structures.

I think the tensor products were very abstract and difficult to learn how to work with, it would've been nice to have an example of explicit calculations of the tensor product. Again, this is probably not as much of an issue in a classic classroom setting.

In general I think it is hard to give feedback for the course due to the circumstances

I would have liked one more online conference.

Classical lectures would have been nice, but understandably it was not possible

I think this course's main problem is that no course at the university sufficiently prepares you for this one knowledge-wise.

Due to Corona we had no normal lectures and the lecturer did choose to not hold any lectures on zoom. Instead it was all just us reading the book. Since I feel that I learn a lot from lectures and seminars, that was a big downside. Although, he was very approachable via email if I had any question which was nice.

Everything. The school did not provide me as a student with anything helpful at all. Furthermore any request that I know about by me or my classmates (which during normal circumstances would be provided without requests) was swiftly denied or sidetracked. Every student of this course instance should be given a new real course instance with a teacher who knows how to organize a distance course, this was not okay.

Communication from the teacher was really bad, for example we got information on the day before the exam that we were not allowed to use the course book on a home exam!!! To me it is reasonable to assume that the course book would be allowed since among other things you have no way of knowing if people cheat. Also the course structure didn't work well, if we are having a distance course then maybe we should have had material suited for that and a more suitable examination method!

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.)?

Of course not

No.

No

No