

# Course Analysis for MATP33 Group and Ring Theory, Spring 2022

#### Course Information

Lecturer: Anitha Thillaisundaram Teaching assistants: None Number of students:

16 newly registered and 10 re-registered.

8 students answered the course evaluation, 6 of them are enrolled on programme name.

#### Examination

**Oral examination:** 11 students passed. **Written examination:** 11 students passed.

- Ordinary examination 25/05 2022: 11 students participated and 7 of them passed.
- Resit examination 15/08 2022: 8 students participated and 4 of them passed.

#### Final grades

In all, 11 students, including 4 re-registered students, have got their final grade. 6 passed with distinction. 5 passed.

#### Course Evaluation

#### Summary of student's answers:

See above.

#### Teachers' comments:

This course was given jointly for science (Bachelor and Master) students, and engineering PhD students with respective course codes MATP33 and MATP33F. The lectures and seminars were held on campus. The lecture notes were uploaded on Canvas. For each seminar, a given sheet of exercises were to be discussed. The participation in the lectures and seminars were good. The examination was carried out on campus.

#### Changes from the previous course realisation:

The previous course was held completely via Zoom, whereas this course was held as normal in a seminar room. No changes were made to the course content, apart from the removal of category theory before introducing tensor products.

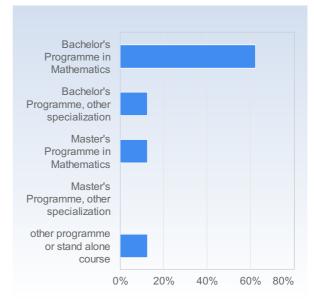
#### Suggestions for the next course realisation:

The course content has already been shortened a little, as mentioned above, to avoid having to sometimes rush through the material during the lectures. Further possibilities for shortening the applications part at the end of the course will be explored. The seminars will in future be weekly for an hour, as opposed to fortnightly for two hours.

# Group and Ring Theory Spring 2022

# I have studied this course as part of

I have studied this course as part of	Number of responses
Bachelor's Programme in Mathematics	5 (71.4%)
Bachelor's Programme, other specialization	1 (14.3%)
Master's Programme in Mathematics	1 (14.3%)
Master's Programme, other specialization	0 (0.0%)
other programme or stand alone course	1 (14.3%)
Total	8 (114.3%)



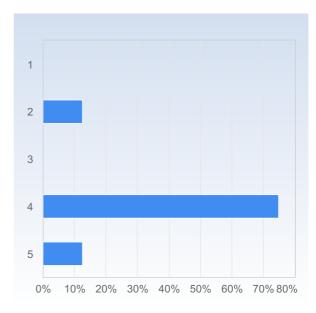
	Mean	Standard Deviation
I have studied this course as part of	1.9	1.5

## The course in general

# On a scale 1-5 select the option that best matches your opinion:1= disagree completely $\to\,$ 3= partly agree $\to\,$ 5= agree completely

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

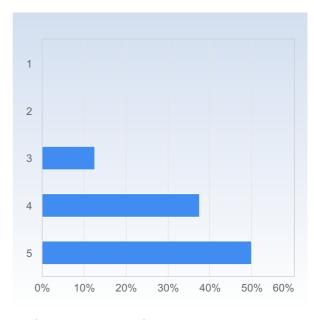
My prior knowledge has been sufficient to	Number of
assimilate the contents of this course.	responses
1	0 (0.0%)
2	1 (12.5%)
3	0 (0.0%)
4	6 (75.0%)
5	1 (12.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
My prior knowledge has been sufficient to assimilate the contents of this course.	3.9	0.8

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

The way the course was taught and organised	Number of
suited me.	responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (12.5%)
4	3 (37.5%)
5	4 (50.0%)
Total	8 (100.0%)

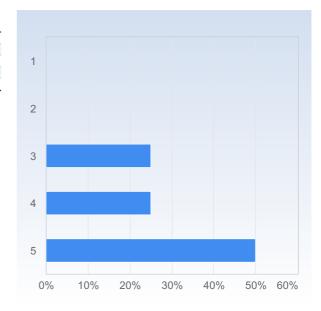


 Mean
 Standard Deviation

 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.

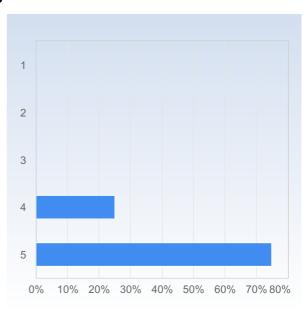
The number of teacher lead activities (lectures,	Number of
seminars etc.) has been satisfactory.	responses
1	0 (0.0%)
2	0 (0.0%)
3	2 (25.0%)
4	2 (25.0%)
5	4 (50.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
The number of teacher lead activities (lectures, seminars etc.) has been satisfactory.	4.2	0.9

## The lectures were valuable for my learning.

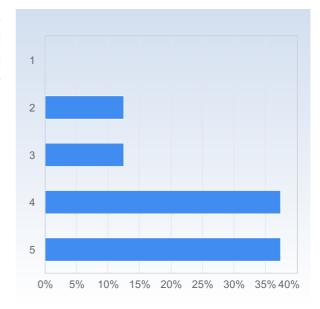
The lectures were valuable for my learning.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	2 (25.0%)
5	6 (75.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
The lectures were valuable for my learning.	4.8	0.5

## The seminars were valuable for my learning.

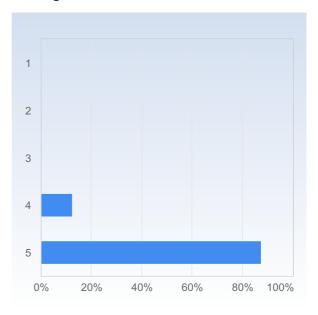
The seminars were valuable for my learning.	Number of responses
1	0 (0.0%)
2	1 (12.5%)
3	1 (12.5%)
4	3 (37.5%)
5	3 (37.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
The seminars were valuable for my learning.	4.0	1.1

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

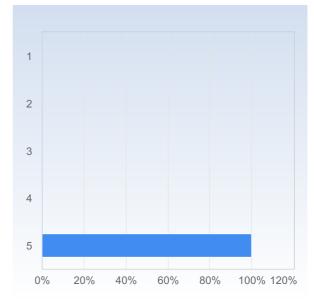
Studying on my own was valuable for my	Number of
learning.	responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	1 (12.5%)
5	7 (87.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
Studying on my own was valuable for my learning.	4.9	0.4

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

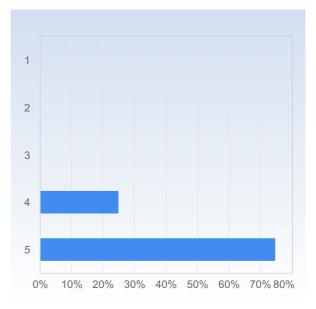
The course literature/material was a valuable	Number of
learning resource.	responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	0 (0.0%)
5	8 (100.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
The course literature/material was a valuable learning resource.	5.0	0.0

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

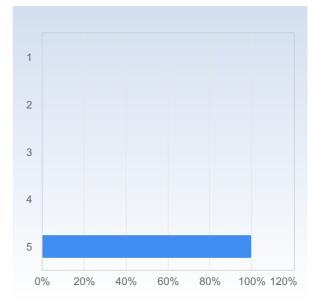
The information I received before the course start was satisfactory.	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	2 (25.0%)
5	6 (75.0%)
Total	8 (100.0%)



	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.

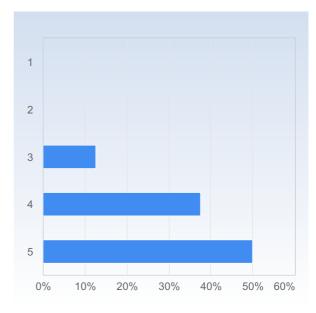
The communication with the teaching staff during	Number of
the course was good.	responses
1	0 (0.0%)
2	0 (0.0%)
3	0 (0.0%)
4	0 (0.0%)
5	8 (100.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
The communication with the teaching staff during the course was good.	5.0	0.0

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

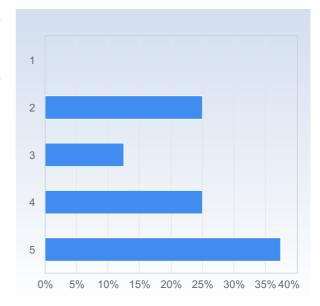
It was clear throughout the course what was	Number of
expected of me.	responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (12.5%)
4	3 (37.5%)
5	4 (50.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
It was clear throughout the course what was expected of me.	4.4	0.7

#### The course had a reasonable workload.

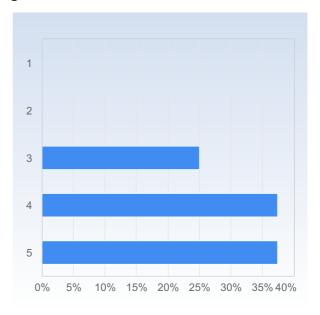
The course had a reasonable workload.	Number of responses
1	0 (0.0%)
2	2 (25.0%)
3	1 (12.5%)
4	2 (25.0%)
5	3 (37.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
The course had a reasonable workload.	3.8	1.3

#### The workload was evenly distributed throughout the course.

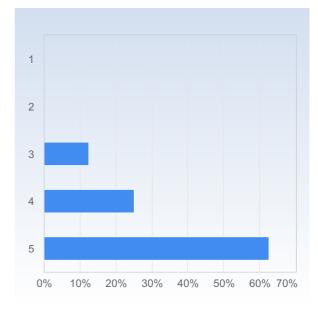
The workload was evenly distributed throughout	Number of
the course.	responses
1	0 (0.0%)
2	0 (0.0%)
3	2 (25.0%)
4	3 (37.5%)
5	3 (37.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
The workload was evenly distributed throughout the course.	4.1	0.8

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

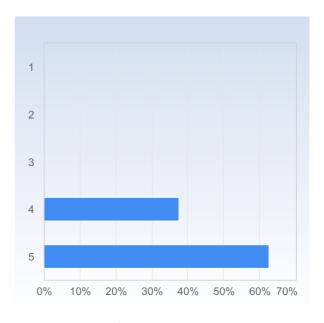
The examination matched the contents and level	Number of
of the course.	responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (12.5%)
4	2 (25.0%)
5	5 (62.5%)
Total	8 (100.0%)



	Mean	Standard Deviation
The examination matched the contents and level of the course.	4.5	0.8

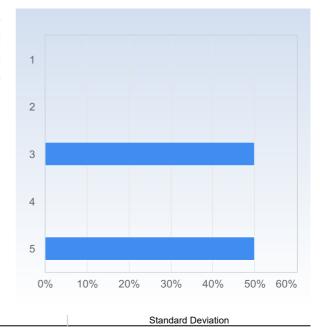
# Overall, I am satisfied with the course.

Overall, I am satisfied with the course.	Number of responses	
1	0 (0.0%)	
2	0 (0.0%)	
3	0 (0.0%)	
4	3 (37.5%)	
5	5 (62.5%)	
Total	8 (100.0%)	



	Mean	Standard Deviation
Overall, I am satisfied with the course.	4.6	0.5

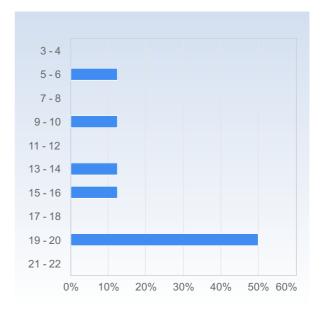
	Number of responses
1	0 (0.0%)
2	0 (0.0%)
3	1 (50.0%)
4	0 (0.0%)
5	1 (50.0%)
Total	2 (100.0%)



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

Mean 4.0

Average number of hours spent in total on the course per week (including scheduled activities):	Number of responses
3 - 4	0 (0.0%)
5 - 6	1 (12.5%)
7 - 8	0 (0.0%)
9 - 10	1 (12.5%)
11 - 12	0 (0.0%)
13 - 14	1 (12.5%)
15 - 16	1 (12.5%)
17 - 18	0 (0.0%)
19 - 20	4 (50.0%)
21 - 22	0 (0.0%)
Total	8 (100.0%)



	Mean	Standard Deviation
Average number of hours spent in total on the course per week (including scheduled activities):	15.4	5.7

#### What did you appreciate most with the course?

What did you appreciate most with the course?

I really enjoyed the style of the lectures - I felt like they gave alot of context to the material which complemented the course literature nicely. I really appreciated the pedagogy of the lecturer. The lectures/seminars were engaging and not like listening to a live audiobook. For instance, the lecturer referenced to where some theorems oftentimes pop up in research, which highlighted the material and made it more memorable. The lecturer was also very patient with questions and allowed for discussions, which was very valuable in learning the course material. This has been one of the best courses - and not just content wise, in Lund.

Teaching, Lecture notes

The teacher was great! Knowledgeable, present, patient and thoughtful.

The professor was passionate about the subject and the subject was very interesting. The scope of the lecture notes was extensive but well reflected on the exam. There was clear information about study techniques and on the course in general. During the course it never felt uncomfortable to ask questions.

In general, I thought that it was a fun course. The lecturer was friendly and motivational and paid attention to our questions. She was also very clear when explaining things, which I appreciated.

I also liked that there was revision material on the Canvas website.

## What do you think should be improved?

What do you think should be improved?

I would appreciate if the distinction between direct sums of rings as rings and rings as modules was made clear from the beginning. This was very confusing.

By the end of the course, applications of modules part of the course went a bit too slowly. I think by then it is and should be obvious the structure of theorems per se, so emphasis should rather be on the idea of the theorems - their application with clear examples than mechanical proof.

It is a lot of content. So it would be nice to have a tiny bit more teaching activities, so that the lectures don't have to be rushed. It would also greatly help to get a guideline for the oral.

Maybe some more words motivating the theory, or at least pointers for where to find context and relationship to the bigger picture in math. More interaction: blackboard problem solving sessions for the students. Possibility to earn extra points through black board problem solving participation or through optional hand-ins.

Instead of having two hours of seminars every other week, we could have a one-hour seminar once a week. After the seminars, it would have been nice if the suggested solutions could be published on the Canvas page, similarly to how the lecture notes were published after the lectures

In the last lecture, I would have preferred if more time was spent summarising the course and bringing up the most important aspects of it. Instead, we spent much time talking about a more challenging problem from a previous exam.

# 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
Not at all.
No
No.
No.
No.