



LUND  
UNIVERSITY

Centre for Mathematical Sciences  
Division of Mathematics and Numerical Analysis

Centre for Mathematical Sciences  
Faculty of Science

## Course Analysis for MATA21 Analysis in one variable, autumn 2023

### Course Information

**Lecturer:** Malin Christersson, Eskil Rydhe

**Teaching assistants:** Alex Bergman, Joakim Cronvall, Thomas Munn, Giang To, Erik Troedsson

**Number of students:**

95 newly registered and 25 re-registered.

27 students answered the course evaluation.

### Examination

**Computer based tests:** 70 students passed.

**Written examination:** 55 students passed.

- Ordinary examination 9 January, 2024: 98 students participated and 40 of them passed.
- Resit examination 27 January, 2024: 59 students participated and 15 of them passed.

### Final grades

In all, 47 students, including 2 re-registered students, have got their final grade.

20 passed with distinction.

### Course Evaluation

#### Summary of student's answers:

The response rate for the survey was 20%. It appears that the survey generated using Canvas Survey is not the standard one. It therefore has fewer questions, and a lot of the usual information is missing.

The level of general satisfaction is rated 3.4 on a 1 – 5 scale, compared to 3.7 in the previous semester. Although this seems like a minor difference, the profiles look rather different, since in the present semester 3 was a more common response than 4.

The value of different teaching activities were rated: Lectures 3.9; Seminars 2.9; Self study 4.0. The mentor meetings are not mentioned among the questions. They are however mentioned as valuable in the free text answers.

#### Teachers' comments:

- The lectures and seminars took place on campus.
- A detailed planning was published and updated throughout the course, where the contents of lectures, seminars, and how to prepare (pages to be read, exercises to be attempted) was given.
- As support, students were offered a place in mentor groups with 8 – 10 students per group.

*Please, turn over!*

- During the course, six instances of computer based tests were used. To receive their final grade, students had to complete each test with at least 8 points out of 10. The number of attempts was limitless. Therefore the tests are equal part training exercises.

**Changes from the previous course realisation:**

- The course had two lecturers, due to scheduling constraints.
- The computer based tests were used for the first time on this course.

**Suggestions for the next course realisation:**

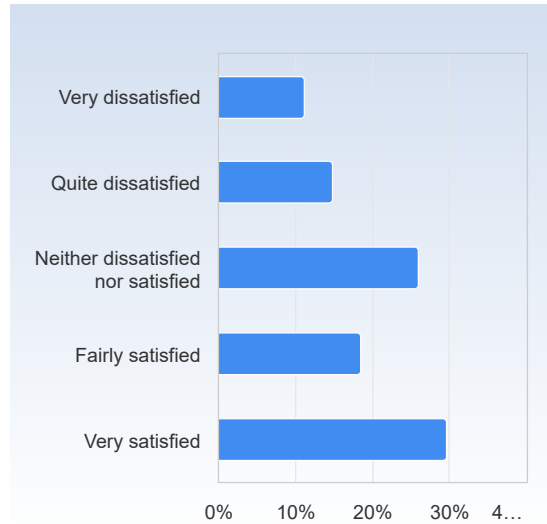
- The setup with two lecturers needs better coordination, or should be avoided altogether. Free text answers indicate that students agree.
- The computer based tests offer large scale diagnostics of basic computational skill at very low administrative cost. They also serve as additional exercises. We encourage future teachers to develop the use of these tests.

## Analysis in One Variable, Autumn 2023

Respondents: 133  
 Answer Count: 27  
 Answer Frequency: 20.30%

### How satisfied are you with the course overall?

How satisfied are you with the course overall?	Number of responses
Very dissatisfied	3 (11.1%)
Quite dissatisfied	4 (14.8%)
Neither dissatisfied nor satisfied	7 (25.9%)
Fairly satisfied	5 (18.5%)
Very satisfied	8 (29.6%)
Total	27 (100.0%)

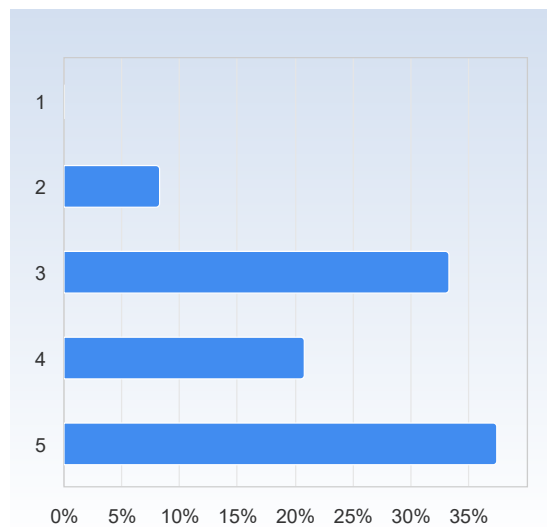


	Mean	Standard Deviation
How satisfied are you with the course overall?	3.4	1.4

To what degree did each course component below contribute to your learning during the course? Make your assessment on a scale of 1 to 5 where 1=to a very low degree and 5=to a very high degree.

### Lectures

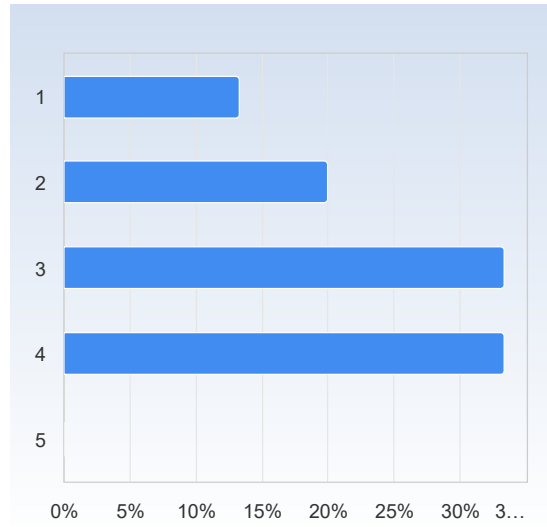
Lectures	Number of responses
1	0 (0.0%)
2	2 (8.3%)
3	8 (33.3%)
4	5 (20.8%)
5	9 (37.5%)
Total	24 (100.0%)



	Mean	Standard Deviation
Lectures	3.9	1.0

### Laboratory exercises

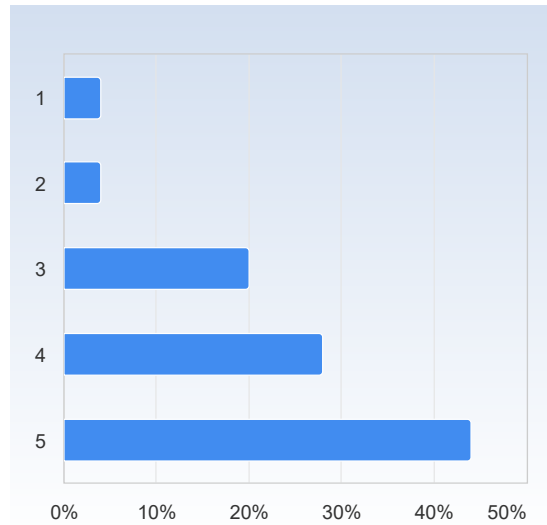
Laboratory exercises	Number of responses
1	2 (13.3%)
2	3 (20.0%)
3	5 (33.3%)
4	5 (33.3%)
5	0 (0.0%)
Total	15 (100.0%)



	Mean	Standard Deviation
Laboratory exercises	2.9	1.1

### Required reading

Required reading	Number of responses
1	1 (4.0%)
2	1 (4.0%)
3	5 (20.0%)
4	7 (28.0%)
5	11 (44.0%)
Total	25 (100.0%)



	Mean	Standard Deviation
Required reading	4.0	1.1

Space for comments:

Mentor meetings and Math Lab were perhaps the most valuable part of this course for my learning.

It would have been good to have solution set uploaded of the seminars after they had been conducted.

Sadly, sometimes the lectures left me and many others confused rather than informed. Doesn't help that sometimes the teacher just assumes that we have gone through something in school (even if we haven't) and doesn't explain it further

I redid this course while continuing with other ones, so I didn't use the scheduled time much.

### How was your prior knowledge at the start of the course?

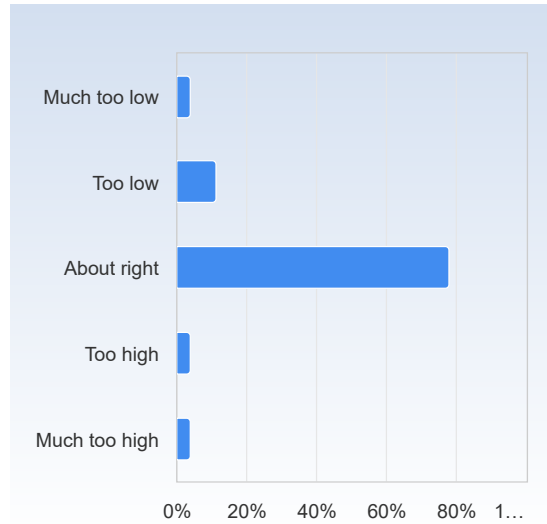
How was your prior knowledge at the start of the course?	Number of responses
My prior knowledge was insufficient	5 (18.5%)
My prior knowledge was sufficient but not more	14 (51.9%)
My prior knowledge was good	8 (29.6%)
Total	27 (100.0%)



	Mean	Standard Deviation
How was your prior knowledge at the start of the course?	2.1	0.7

### How did you feel about the requirements on your work efforts during the course?

How did you feel about the requirements on your work efforts during the course?	Number of responses
Much too low	1 (3.7%)
Too low	3 (11.1%)
About right	21 (77.8%)
Too high	1 (3.7%)
Much too high	1 (3.7%)
Total	27 (100.0%)



	Mean	Standard Deviation
How did you feel about the requirements on your work efforts during the course?	2.9	0.7

## If you have any further comments on the course, please write them here:

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Having to switch so often between Eskil and Malin made the course harder to understand towards the end as both have different teaching styles. It was fine with the initial switch between the first and second half of the course, however when Malin still took over some lessons it became quite difficult to go randomly back and forth between lecturers

I liked that we had many previous examinations to practice on before the test. I have a complaint with the final exam. The things that we were tested on were of course part of our course, but I think the focus was on very different things then on the previous tests which was confusing. I feel like my knowledge wasn't properly tested as I had focused my studies on those other topics. I also feel that the test wasn't very diverse, there were too many questions on integrals, but no questions on for example the fundamental theorem of calculus or definition of the limit.

Mathlabs, seminars and mentor meetings were very helpful to me especially in the beginning as I had never studied in university before, I think they are a really great part of this course.

The final was abnormally Hard compared to previous ones

Malin was an excellent lecturer. Her presentations along with her enthusiasm made every lecture engaging. The final test was not very good due to it being so different from every previous exam, all of which followed clear patterns in the questions asked. Of course a test is supposed to test your ability to solve new problems, but the problems on this test were so different that most of the studying I did became irrelevant.

The final exam was far harder than previous example exams, and almost everyone I have discussed it with felt a great deal of rage at how different it was since it made much of ones practice feel irrelevant. On the same note, the midterm felt far too easy in comparison.

I like the book that we use currently but would prefer to use some other standard book like Abbott's Analysis.

The mentor group programme was very helpful in both developing the intuition and techniques for analysis in one variable, the questions Viktor brings in were always interesting and served as a good way to relieve the boredom of repetitions in studies and revision.

The exam should be akin to the previous exams. This exam was very different and overly difficult. When you have a 500 page book to read, often you mostly study using previous exams, but if the next exam barely includes anything that was used in the previous exams then you're done for.

The work itself was alright, but i believe that the exam was too extreme for such a course and we were not properly prepared for it by the lecturer who put the exam together. He did not take the past exams into account as much as we were promised at the start of the term and thus could not prepare adequately. As such I believe the exam to be an unfair assessment of the work put in by the general student populace.

I really enjoyed this course, and feel that I've learned a lot. I especially appreciated Malin's lectures. She was engaging and brought up interesting real world examples when appropriate. Her slides were also often interactive and they were a very helpful study tool later on.

The final exam, however, felt very different to the ones that came before, and some of the questions really caught me off guard, and there was almost a complete lack of questions on continuity, differentiability, limits, or series.

Overall, I loved the course it was fun. Learned new things and started to like math even more. :)

Malin's lectures were good but Eskil was far too theoretical in his teaching. Eskil would usually spend at least 20 minutes explaining trying to explain a concept (and fill up 6 blackboards with writing), not answer questions most of the time, and then erase it all and do it again with the next concept. Also, the way that Eskil shares materials from his lectures is subpar compared to Malin. He posts walls of handwritten notes (with no labeling anywhere), making it quite difficult to navigate and to understand. It would be good if the structure were unified (towards digital mediums such as slides) to make revision for the final test a bit easier.