



## Report - SG2214 - 2021-11-23

Respondents: 1  
Answer Count: 1  
Answer Frequency: 100,00 %

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Please note that there is only one respondent to this form: the person that performs the course analysis.

**Course analysis carried out by (name, e-mail):**

Anders Dahlkild, aad@kth.se

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**DESCRIPTION OF THE COURSE EVALUATION PROCESS**

**Describe the course evaluation process. Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.**

The course evaluation was performed electronically with LEQ.

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**DESCRIPTION OF MEETINGS WITH STUDENTS**

**Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)**

Informal meetings at lecture breaks.

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**COURSE DESIGN**

**Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.**

14x2h Lectures

14x2h Recitations

3x1h Tutorials

1x3h Laboration (mandatory)

3 Homework assignments (mandatory, may give bonus points on written exam).

1 Written exam

This year we offered lectures and recitations live and via zoom in parallell. All lectures were also recorded in Zoom and made available in Canvas.

Due to the pandemic restrictions the class was divided in two halves and were invited to attend every second lecture live.

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**THE STUDENTS' WORKLOAD**

**Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If there is a significant deviation from the expected, what can be the reason?**

Most probable estimated workload by students was 18-20 h/week (with a spread of about +/- 10h).

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According to course credits 7,5 it should have been 20 hours per week. If you add 6 hours per week for teaching in class one gets 24-26 hours per week, which is then at least according to the expected value (in average).

Comments indicated that work load was fair.



#### THE STUDENTS' RESULTS

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

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11A

4B

2C

2D

4E

5F

The amount of F:s was 1:3rd of last year.

The amount of A:s was doubled as compared to last year.

(Possibly the exam was a little easier this year.)



## STUDENTS' ANSWERS TO OPEN QUESTIONS

### What does students say in response to the open questions?

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Comments about workload.

The workload is fair in every aspect, such as lecture, recitation, and self-reading.

The amount of work was what I expected for a high credit course in which I already had some knowledge.

Comments (I worked: 18-20 timmar/vecka)

As a Student from abroad, I struggled a bit with the math background at first but the teaching was really well and the homework really made you work the course

Comments (I worked: 30-32 timmar/vecka)

I did not have any problem with the number of scheduled hours per week for the course.

What was the best aspect of the course?

(I worked: 3-5 timmar/vecka)

It was generally a fun and interesting course. The canvas page was well structured and the hybrid classes worked well

(I worked: 12-14 timmar/vecka)

The lectures are really good. All of the concepts are derive clearly.

The recitation helped us to understand.

(I worked: 18-20 timmar/vecka)

The homework was really challenging and made you work the course content pretty well.

(I worked: 30-32 timmar/vecka)

Very good lectures and the laboration was interesting.

The content of the course. It was very thorough, detailed and well-structured.

What would you suggest to improve?

The way the videos were placed on canvas was pretty chaotic and the theoretical questions that could show up could be more clearly described in the course information and not just refer to the infinitely long course book.

There were some conflicting dates in the course memo and canvas page. This needs to be addressed, go through the course pm before the course please.

(I worked: 12-14 timmar/vecka)

I believe a formula sheet summarizing all the formulas would be of interest.

(I worked: 18-20 timmar/vecka)

Maybe a few exercise with correction to learn and assure that stuff is well understood

(I worked: 30-32 timmar/vecka)

I think there is some room for improvement on the recitations. Sometimes the problems that were solved was very difficult. Which made it hard to follow etc. Maybe try to fill some recitations with more of an discussions regarding the theory. Help students understand the lectures more and then let the students solve problems by them self.

The teaching can improve. It would have been better to focus on explaining concepts thoroughly than completing the syllabus on time.

Although, given the vastness of the syllabus and the short lecture times, I understand the difficulty.

What advice would you like to give to future participants?

(I worked: 3-5 timmar/vecka)

Learn the theoretical questions

(I worked: 12-14 timmar/vecka)

Be focused during the lecture! Otherwise, you will lose a lot!

Never give up in front of hard maths : you won't be lost in an exercise.

(I worked: 18-20 timmar/vecka)

Do the homework first by yourself and then try to check with others and explain stuff to each other.

(I worked: 30-32 timmar/vecka)

Start with the Home Assignments early so you can ask a lot of questions in the lectures/recitations because some of the Home Assignments are

quite hard. Also start to do the theory questions to the exams early. There is a list in canvas with the possible theory questions, if you manage to do all of them correct and memorize them you have a guaranteed E on the exam since you only need 20 points to pass and the two first theory questions are together worth 20 points.

Hade du användning av de videoinspelade föreläsningarna under kursen? Hur ofta?

Yes, usually.

Very often. When I wasn't able to go to the lectures I watch the videos. Also when I studied for the exams it was great to be able to go back and look at the videos to get a better understanding. I think that all courses on KTH should have video recorded lectures that the students could go back and look at.

Never

Yes I did, in case I missed lectures and during revision, it was really useful to revise certain topics

Yes, very often. There was a lot of valuable information communicated during the lectures for which a certain level of knowledge of the concepts was needed. So after learning from the text, going back to watch parts of the lectures was very useful.

Watched all recorded lectures once more during exam period.

Hade du användning av de videoinspelade övningarna under kursen? Hur ofta?

Yes, usually.

Same as above.

Never

Yes not as often as the lecture videos but still a good help

Yes, same as lectures.

Watched them all once more during exam period.



#### **SUMMARY OF STUDENTS' OPINIONS**

**Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.**

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Apart from some administrative criticism the opinions were quite good.

#### **OVERALL IMPRESSION**

**Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.**

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Although many students choosed to study from distance, it seems to have worked out quite good for them. According to comments the recorded classes were appreciated.

Better result on exam than last year.

#### **ANALYSIS**

**Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between:**

- students identifying as female and male?
  - international and national students?
  - students with or without disabilities?
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Too few answers to draw any general conclusions for the different groups.

The positive feedback for hybrid teaching might partly be a result of the teachers experience of this procedure from the previous year.

A weak point is the lack of easier exercises with available solutions. That would be a valuable resource for students that find the homework assignments too demanding as a first exercise to try. Although there are old written exams with solutions available, maybe they are not useful as first exercise either.

#### **PRIORITIZED COURSE DEVELOPMENT**

**What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?**

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Enable problem solving on the side on shorter basic problems.

One could possibly produce one or two shorter problems each year to end up finally with a collection on long term.