

# Report - DD2440 - 2024-05-26

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.

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

Ioana-Oriana Bercea, bercea@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.**

- there was a student representative who would gather feedback throughout the class
- the students are encouraged during class to give ongoing feedback, either in person (during lecture breaks or office hours) or by email (one student gave a detailed feedback after bringing it up in class)
- the course evaluation was sent to the students. It was open for 13 days and there were multiple reminders sent out. 48/232 students (20,69) responded

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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.)**

- two meetings with the student representative
- office hours (TAs and lectures) and exercise sessions with more senior students
- there were unscheduled meetings around 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.**

- the course structure was generally kept the same as the one from HT21 and HT22: 15 lectures and 3 exercise sessions, 3 individual, 3 group assignments and a project
- the content of the lecture changed slightly from previous years: some topics were added and some were taken out

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**THE STUDENTS' WORKLOAD**

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

The expected workload is 160 hours, which would average to about 12 hours/week (calculated according to 14 weeks, which includes 2 weeks in between period 1 and period 2). About 40% of the course evaluation respondents reported working more than 15 hours, with a majority of those working more than 18 hours a week. A similar percentage of about 40% reported working less than 11 hours/week. The main feedback from the students was that the individual assignments took longer time than the group assignments, so the distribution of workload was uneven. I plan to address this by allowing for longer periods of time for the group and individual assignments.

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**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?**

About 83% of the students passed the course (194). In general, everyone who attempted to do the group and individual assignments managed to pass. Out of those, 80% passed with a grade E, 6 students with D, 16 students with C (that would be 8%), 2 students with B and 14 students with A (that would be 7%). One issue that was brought up by the student representative was that the option of getting either an A, C or E in the individual assignments was steep. These issues were also brought up in the course evaluations. This issue came up in the context of two individual assignments (1-A and 2-C) that seemed hard and for which there were no intermediary grades/partial credit available. Overall, there were students who initially attempted harder problems but eventually settled for an E. I would like to address this issue in the next iteration of the course, by allowing intermediary grades/partial credit in the individual assignments.

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**STUDENTS' ANSWERS TO OPEN QUESTIONS**

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

The course evaluation had 22 LEQ statements. The scores ranged from 4.9-5.8 for most questions, with two exceptions: a score of 3.8 in question 20 and a score of 4.7 on question 5. Question 20 was about "opportunities to influence the course activities", 9 people (20%) answered with a -3 and one comment mentioned "What I was supposed to do felt very locked in place". I plan to address this by asking for feedback from the students on their understanding of the material (during the course), and specifically whether they would like some topics to be discussed in more depth. However, since this is a mandatory course with students taking it several attempts, I believe a clear set of assignments is beneficial.

Question 5 was about the feeling of "togetherness with others on the course". One aspect that was mentioned was the fact that the group work did not seem to be as engaging as it would be expected (e.g., "Had a lazy group", "group members had no reason to talk much once the work was divided up"). On the other hand, the score for question 21 ("collaborating and discussing with others") received a score of 5.8. I suspect that the reason for this was that students had access to solutions to the group assignments. It seems that this led to some groups picking one member/group to submit the solution on behalf of the group. This was also brought up by the student representative. I plan to address this issue by not releasing solutions to the group assignments.

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**SUMMARY OF STUDENTS' OPINIONS**

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

- students were happy with the lectures and some particularly enjoyed the project
- one main sore point was the way grading was done. Several issues were: (1) only being able to get A, C or E, and the grading being harsh at times (I consider these two things connected), (2) too little feedback on the individual assignments, and (3) no clear deadline on when to receive grades (some grading was delayed). I plan to address this by allowing intermediary grades, giving collective feedback during lecture time and enforcing strict grading deadlines from the TAs.

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**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.**

I would like to encourage more students to aim for higher grades. Otherwise, I think the basic structure is good and it seems that students were happy with the way the material was presented.

## 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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- female students generally gave higher scores than men, except in question 15 (4.9 vs 5.5 practicing and getting feedback without being graded). I think this is because office hours were not very well advertised. Students who identified as female noted a "positive effect" and feelings of "empowerment" towards having a female teacher.

- international masters students seemed to give slightly higher grades than Swedish students years 4-5, but the scores generally followed a similar pattern. The instances where there were >0.5 point difference were: question 18 (6 for international, 4.8 for national) and question 20 (4.4 for international vs 3.6 for national). Students who did not identify gave scores that were significantly smaller than average.

- there were no declared students with disabilities, although there were students who did not want to disclose. The scores were mainly the same. The instances where there were >0.5 point difference were: question 2 (5 for no vs 5.7 for no disclose), question 3 (5.1 for no vs. 4 for no disclose), question 8 (5 for no vs 4.3 for no disclose), question 9 (5.5 for no vs 6.3 for no disclose), question 11 (5.8 for no vs 5 for no disclose), question 16 (5.1 for no vs 4.3 no disclose), question 18 (5.1 for no vs 4 for no disclose), question 20 (4.2 for no vs 3.3 for no disclose).

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## PRIORITIZED COURSE DEVELOPMENT

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

Short term:

- making the workload more even. Next semester, we will have individual and group assignments in Period 1 as well as in Period 2 (this was not the case last year, with all the individual assignments being in Period 2). We will also encourage more active group work (by not posting solutions to the group assignments).
- allowing intermediate grades so that we reward partial progress on hard problems. Giving more feedback on the assignments (in class or during exercises).

Long term:

- perhaps incorporate more programming into the material, so that students can try out the techniques they learn and visualise the algorithms (this would be especially useful when it comes to teaching hash functions)
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