# Report - DD2557-2023-06-29 <br> Respondents: 1 <br> Answer Count: 1 <br> Answer Frequency: 100.00\% 

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):
Dilian Gurov, dilian@kth.se
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.

At the beginning of the course I asked for a volunteer to serve as kursnämnd, and one student agreed to take up this role. Then I announced to the students that they are welcome to contact this person as an anonymous channel to get feedback to me during the course, or else contact me directly. At the end of the course I also conducted a course survey, using the LEQ6 template.

From the 12 students who actively took the course, 3 were female and no one was disabled (to my knowledge). I made a special effort to make them as comfortable as possible to participate in the discussions (which are an integral part of my teaching style).

## 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.)
I have been talking rather informally with the kursnämnd and with separate students on various occasions throughout the course, but without
calling for separate, official meetings. Questions concerning all students I have simply rasied in class.

## COURSE DESIGN

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

The course consists of 15 classes, which are used as lectures and for peer-reviewing of homeworks. There are 6 homework assignments, each giving a bonus point for the 30-point final exam. At the end of the course, there is a workshop at which each student presents a research paper of their choice (from a pool suggested by me). There are two laboratory assignments, which are perfromed at home individually or in groups of two, and are reported to the TA on the basis of a written report and program implementations. At the end of the course the students write a takehome exam, for which they were given 24 hours (by their own choice).

The current course DD2557 is given for the first time as a 7.5 credit course. Previously it was a 6.0 credits course with code DD2457. The main change is the replacement of the 5-hour written final exam with a 24 -hour take-home written exam, complemented (if needed) with an oral examination. This change required a certain change in the format of the exam questions, mainly moving towards more open-ended ones.

## 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 7.5 credits correspond to 200 hours of total effort. Judging from the responses to the course survey, 3 students worked 12-14 hours per week, and other 3 worked $9-11$ hours. If we take these responses to have been made on the basis of the 7 weeks with lectures, then the work load seems not to have been overly high. And when compared to the responses from other 7.5 credits courses at our school, the load seems to be about average.

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?
From the 12 students who wrote the take-home exam, 3 students obtained grade A, 2 students grade D, and 7 students grade E. This is slightly lower than the grades from previous years in the earlier 6.0 version DD2457 of the course, in which the exam was a 5 -hour written one. The reason might be that the questions I gave this year were more open-ended and more ambitious than the ones from the previous years, based on the reasoning that students have 24 hours at home (with access to the Internet) as opposed to the closed-room, 5 -hour written exams. I may have overestimated the role of the additional time. Still, $25 \%$ of the students obtaining the highest grade seems to indicate that the exam problems were not overly difficult.

As to the homeworks and the laboratory assignments, I believe the students performed very well, and about as well as in earlier years.
STUDENTS'ANSWERS TO OPEN QUESTIONS
What does students say in response to the open questions?
Some exerpts (with amalgamated answers):
Q: What was the best aspect of the course?
A: The theme of the course is very interesting for me. The teacher pays a lot of attention to the students. The homeworks really helped in my understanding. The labs were fun. The book was good and not too hard to understand.

Q: What would you suggest to improve?
A: More mini-examples would be good. Sometimes we're so deep into the theoretical that the sun can't be seen. The part about axiomatic semantics felt not as well presented as others. It went very fast, and I didn't feel like I had as much grip on the subject just from the lectures. I'm talking about the section about wlp.

## SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.
The responses from the questionnaire indicate an overall very positive reception of the course. Still, there are some concrete suggestions for minor improvements, which I will take into account when preparing for the next course round.

## 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 am largely satisfied with how the course went. The students were very active in class, and showed great interest to the subject matter. The homework and laboratory assignments were highly appreciated. What surprised me on the positive side was the great effort students put in preparing their workshop presentations, even though I explcitly said that I will not be evaluating their presentation skills. So essentially they did it for the benefit of the other students

On the downside, I am somewhat disappointed by the relatively large proportion of students at the takehome exam who did not attempt to solve the problems above the E level, even though they were given 24 hours for that. I tried to find out the reasons for that by talking to some students after the course. It seems that the problem statements may have given the impression that the problems were harder to solve than they were in reality. All three students (out of 12) that actually attempted to solve the problems managed to do that and obtained grade A. This issue is clearly related to the change of the exam format and my move from more concretely formulated problems to more open-ended ones.

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?

In general, the learing environment seemed adequate to me. Or at least, I am not aware of how it could be improved under the constraints of lecture-based instruction.

To my knowledge, there were no students with disabilities in this course round
3 out of 12 students were female, and I did not observe any difference in how their learning progressed when compared to the male students (but the statistical basis for such a conclusion is of course extremely poor in such a small class).

As usual, the international students were slightly above average, which is not surprising given their selection. But this difference I found only stimulating for the rest of the students, leading to more even more active participation in class.

PRIORITIZED COURSE DEVELOPMENT
What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?
The primary aspect of the course that in my opinion needs to be addressed is how best to adapt the final written exam to the new format of a 24 -hour takehome exam (moving from a 5 -hour closed-room exam). It seems that the problem statements need to be less open-ended. A major chalenge in this is how to design examination problems for an examination environment that makes possible the use of the Internet and potentially AI.

Another aspect that needs some attention is the last part of the course, which is less based on the course book and appears more difficult to follow and connect to the previous parts

## OTHER INFORMATION

