Report - SD2140-2020-03-15

Respondents:<br>Answer Count:<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):
Romain Rumpler, rumpler@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.
In order to receive feedbacks on the content and the organisation of the course, the students were offered the possibility and asked to fill in the LEQ survey. Unfortunately, only 4 responded to the course which provides only limited insight into the perception by the students. This unfortunately did not allow to form subgroups of response, for example associated with gender-dependent perception.

## 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.)
The conclusion of the course being in the form of an oral examination, a discussion is held at the end of the examination for the willing students, mostly in order to secure some early feedbacks on the course by the students, before they are asked to fill in the LEQ.

## COURSE DESIGN

Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.
The course consisted of 11 lecture sessions, 7 exercise sessions, 1 questions/review sessions, and 1 external lecture on industrial applications. There are 4 compulsory assignments and one final oral examination for each student individually. Changes since the previous course offering concern primarily the organization of exercise sessions in view of the oral examination, as a continuation of the changes initiated for the previous offering: instead of focussing on questions by students out of the number of exercises to be considered in association with each exercise session, 2 exercises were selected by the teaching assistant for the students to prepare their solution in groups, followed by a presentation and discussion with the whole class at the end of each exercise session. Additionally, the selection of exercises to be solved has been reduced in order to target more specifically the key concepts that should be assimilated by the students.

While the source material consists primarily of the reference book, lecture notes in the form of slides highlighting the main results were created and provided.

## 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?
8 credits over 7 weeks (+3 between the last session and the oral exam), i.e. approx 21 ( 10 weeks) to 30 ( 7 weeks) hours/week on average
Almost all the students who answered reported to have worked less than this on average, with 2 potential reasons identified:

- Other courses in parallel which made some students feeling limited with the time they could allocate to the course,
- Some students may not have taken seriously the need to work regularly, early enough, not only on the assignments but also on the exercise associated with each lecture.

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?
The results are very much varying, covering the full range of grades. It is expected that they would be rather in agreement with the lack of time reported by the students to have spent on the course.
Similarly to the previous year, the whole spectrum of results seems to be in line with the amount of time and efforts put into the course: students who had some difficulties at the beginning (mostly due to the background in terms of pre-required courses and knowledge) were able to reach among the top grades.
However, although such changes have already been introduced in the latest offering, it still appears that more could be done on the exercise sessions and applications in order both to ensure a more distributed workload, to support the motivation of the students, and to prepare them better for an oral examination.

## STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?
The responses to the open questions are in general rather positive concerning the teaching environment and the course in general. Although the fact of receiving few answers makes the value of the suggestions questionable, it is interesting to notice that some suggestions are made several time, such as an emphasis on discussions about the home assignment before these are due.

## SUMMARY OF STUDENTS' OPINIONS

Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.
It seems that the course is appreciated by the students, but perceived as a difficult and heavy course, which is to some degree acknowledged by the teachers. A few students have expressed their wish for the course to be spread over two periods.

## 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.
Despite the few responses, the course seems to have improved in certain areas where it showed weaknesses in the past, although other areas may have showed up as weaker this time. Overall the difficulty observed by the teachers is in the awareness that the students should get to start working seriously on the course from the beginning, since the pace is quite sustained all along the course.

## 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?

One point that has gone weaker with this offering of the course is the perception by the students not to receive regular feedback helping them to see their progress. This is identified in part by the partial change of the teaching team, which has led to some of the feedback on the assignments to be received late in the course. This is a priority development considered for next offering, with possibly including discussion sessions on the assignments.
On the other hand, there seems to have been an improvement in terms of the perception by the students of the goals and organization of the course, as well as their understanding of the message taught by the teachers. This aspect could also be connected to the partial changes operated in the teaching team, in particular with the positive dynamic and regular communication between the 3 teachers involved all along the course.
No distinctions could be made in terms of gender, international, or disability-related origin of these feedbacks due to the non-representative size of the samples.

## PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primaily? How can these aspects be developed in short and long term? A priority for the next offering is definitely found in the communication of the progress of the students all along the course, trying to provide feedbacks as early as possible already with the first assignment.

OTHER INFORMATION
Is there anything else you would like to add?
No.

