

# Report - IK2215 - 2022-02-22

Respondents: 1 Answer Count: 1 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): Markus Hidell, mahidell@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.

We informed about the course evaluation procedure at the first lecture in the course. We then also solicited for volonteers to the a course panel. After some reminders, a course panel was formed and communicated to all students, so that all students were given the possibility to contact course panel members with input.

After the exam had been graded and results reported, we launched the LEQ to the students and notified them about the importance to contribute to it.

After the LEQ closed we arranged a meeting with course panel where we discussed the LEQ and the course in general so that the course panel could give feedback. The course panel meeting could not be arranged until after the re-exam, in January 2022.

#### 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.)

We did not organize any specific meetings for students to give feedback during the course. A meeting with the course panel was held after completion of the course (described above in the course evaluation process).

Students had lots of informal opportunities to bring up issues, during and in conjunction with the learning activities and also through discussion foras in canvas.

# COURSE DESIGN

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

We use a mix of learning activities in the course, something which has worked really well over several years now. The learning activities are based on 12 lectures, 7 networking labs, and one project assignment during the later parts of the course where all different topics are brought together in practice. The course ends with a final exam, graded A-F. The last two years, the final exam has been arranged as on open-book on-line exam in Canvas, with Zoom presence.

The changes since last course offering were as follows:

Lectures: A yearly revision of the lectures was made. We increased the number of lectures from 10 to 12 based on feedback from last year regarding too high pace in the lectures about dynamic routing and transport protocols. Lectures were given as combinations of in-class and over zoom. Some lectures were given over zoom only. All lectures were recorded in zoom and the video recordings were made available in canvas.

Labs: We have introduced preparatory Q&A sessions during recitations before the labs.

Project: Conents have been updated and new report templates in Overleaf have been introduced.

# 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?

From the LEQ, it seems like the majority of the students report a workload the roughly corresponds to the expected level. However, the response frequency to the LEQ is low and there are also a few deviations to lower level of workloade. Nothing related the workload has come up during the course or at the course panel meeting after the course.

#### 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 students' results after the exam were overall good. The absolute majority passed the labs and the project. 80% of the students taking the exam passed the final exam. Slightly over 55% of the students who took the exam scored a grade C or higher. At the re-exam, 70% of the attending students passed.

Overall, the results are quite similar to earlier course offerings.

#### STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Students seems to appreciate the diversity in learning activities and the course is perceived as well organized. There is specific positive feedback on labs and project assignment, which indicates that the students really appreciate these hands-on learning activities where the theoretical concepts are put into practice.



# SUMMARY OF STUDENTS' OPINIONS

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

The majority of the LEQ responses are rated as an either slightly below or above 6 out of 7. However, this year there were a few LEQ statements that came out with lower scores than normal. Those were:

- 5) I felt togetherness with others in the course
- 20) I had opportunities to influence the course activities

21) I was able to learn by collaborating and discussing with others

We have not really made any changes to this year that could explain this. There are normally not that many opportunities for students to influence the course activities, since these are designed and rather well planned in advance. The results of LEQ statements 5) and 21) are somewhat surprising. The course was not given on-line. Most of the lectures were held in a hybrid format and the on-campus seats were not fully booked. The campus was not closed during the course. So there were possibilities to collaborate and discuss with others during different learning activities. Perhaps many students still felt that they wanted to be very careful in meeting people physically, something which could explain lack of feeling togetherness and difficulties to collaborate and discuss with others.

# 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.

The general impression is that the course works well from a learning perspective. We also conclude that all the changes that have been made have been well received by the students. Many of the changes would have been made regardless of the COVID-19 situation, and were planned already before the pandemic broke out (labs and project).

The examination form was an adaptation originally prompted by the COVID-19 situation, but we decided to go with the same examination form since our goal is to move away from a final written on-campus exam.

# 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?

The response frequency to the LEQ was unfortunately low (lower than normal) and it is difficult to draw any conclusions in differences amoung different student groups (the groups are very small in these cases). We had no students with disabilities.

# PRIORITIZED COURSE DEVELOPMENT

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

We made significant course development to the last two course rounds, in particular when it comes to the design of lab activities and project assignment. We also added a few lecture slots to this year's course round to adjust the pace somewhat in a few specific topics. The major change planned for next year is to eliminate the final exam and move over to continuous examination. We plan to instead have three partial exams spread out during the course, and to carry them out as digital on-line partial exams in computer rooms on campus.