



Report - IK2215 - 2021-03-05

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):

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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.

We informed about the course evaluation procedure at the first lecture in the course. We then also solicited for volunteers 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. Admittedly, this meeting happened quite late this year (in January after the re-exam).

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 canvase.



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 roughly 10 lectures, 5 teacher-lead 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 written exam, graded A-F.

Lots of changes were made to the learning activities this year.

Lectures: Most of the lectures were given as combination of in-class and over zoom. A limited number of students could sign up for in-class presence and the rest joined 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:

All labs were re-designed to on-line lab assignments where students can experiment with networking protocols and applications in a virtualized environment. Together with the labs we used a combination of in-class and on-line (zoom) recitations and supervision.

Project:

The project assignment is re-designed to on-line assignment in a virtualized environment with Q&A and presentation sessions over zoom. We also change from having a large group size to having students work in pair instead to prevent free-rider and ensure that they are more engaged in all sub tasks of the project assignments. A combination of in-class and on-line participation was used for the project presentation and demonstration sessions.

Exam:

We changed the exam format from a written in-class exam to a canvas-based exam consisting of a set of quizzes. Part A consisted of a set of multiple choice questions and short-answer questions. Part B consisted of essay questions with more elaborative problem solving. We used a zoom-room during the canvas-based exam to give the students an opportunity to get in touch with the teachers during the exam.

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?

From the LEQ, it seems like the majority of the students report a workload that roughly corresponds to the expected level. However, the response frequency to the LEQ is low and there are also a few deviations both to higher and to lower level of workload.

Nothing related to 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. Close to 100% passed the labs and the project. Around 75% of the students passed the written exam, which is about the same as for previous years. Slightly over 40% of the students who took the exam scored a grade C or higher. Even though we changed examination from in-class exam to on-line exam over canvas, the results are roughly the same as usual.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What do students say in response to the open questions?

Students seem to appreciate the diversity in learning activities. 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.

Some students brought up that the on-line exam was challenging, but this is not something that has been reflected in the results compared to earlier years.



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 either slightly below or above 6 out of 7. Meaningfulness and comprehensibility are slightly higher than manageability.

Question 15 (practice without being graded), 17 (sufficient background knowledge), and 20 (opportunities to influence the course activities) are somewhat lower than the other, slightly above or below 5.

The explanation to 17 (sufficient background knowledge) is probably that we have phased out some material that can be considered as basic rather than advanced. The explanation to 20 is likely that it is only in the project assignment this opportunity is given.

During the course panel meeting, the following opinions came up:

- Some lectures would benefit from a lower pace
 - In-class participation in lectures were preferred compared to on-line participation (however there were often in-class seats left)
 - New design of labs and project was well received, even though the labs sometimes were experienced as time-consuming
 - A Q&A session before the exam would have been appreciated
 - No particular preference regarding on-line or in-class exam among the students
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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.

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 in last year's course analysis (labs and project).

The examination form was an adaptation prompted by the COVID-19 situation, but may actually become a permanent change since it worked fine.

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 differences in experience between:

- students identifying as female and male?
 - international and national students?
 - students with or without disabilities?
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The response frequency to the LEQ was unfortunately low (lower than normal) and it is difficult to draw any conclusions in differences among different student groups (the groups are very small in these cases).

Female students tend to give a slightly lower score on LEQ question 7-8 (goals and organization), and a slightly higher score on LEQ question 5 (feeling togetherness with others). The differences in the experience between students identifying as female vs male are not significant.

We had no students with disabilities.

PRIORITIZED COURSE DEVELOPMENT

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

We made significant course development to this course round, and we do not currently plan any major changes for next year. We have already decided to add a few lecture slots so that the pacing during lecture can be reduced where needed (see Summary of student opinions above).
