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## Report - EL2820 - 2021-11-22

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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):**

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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.**

The course evaluation is carried out via the LEQ questionnaire, available from 2021-11-12 until 2021-11-19, that is, after the exam was given, and finished after the final exam and lab grades have been uploaded. The LEQ survey splits the answers according to gender and disabilities; unfortunately only 14 out of 64 students answered it, and they were only males. One student with dyslexia stated that his disability did not affect him in the course.

At the beginning of the course I asked for volunteers for the course committee (kursnämnd), but no one volunteered.

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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.)**

As mentioned above, at the beginning of the course I asked for volunteers for the course committee (kursnämnd), but no one volunteered. However, I am also a mentor in the EL2220 course, which had one seminar during the course, so I took the opportunity to ask students who were taking simultaneously EL2820 their opinion about the course.

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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 has 13 lectures, 10 exercise sessions and 2 computer labs. Regarding assessments, the course has 2 homework assignments, two labs, 2 quizzes and an on-campus exam.

The main change with respect to last year has been that the course has been given in an almost fully online manner, except for the final exam (which last year was a take-home exam but in 2021 it was done on campus).

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**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?**

The student workload is similar to last year, but it is in general high. The reason for this is that many students lack good prerequisites, so a form of continued assessments throughout the course is used to make them go through the course material on a weekly basis. Also, a high workload is necessary, unfortunately, since the students are taking in parallel another course, Introduction to Robotics, which has an even higher workload (in spite of having the same number of credits as EL2820), so lowering the workload would only make students prioritize the other course (as it happened prior to 2020, when the workload of EL2820 was lower).

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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?**

The pass rate this year was similar to last years: around 70-75%. However, the total number of students taking the course is lower than in previous years; this seems to be not just a problem with this course, but for many other master level courses, and I am not aware of the reason for it.

#### **STUDENTS' ANSWERS TO OPEN QUESTIONS**

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

It is difficult to draw specific conclusions, but, as some students mention, due to the online disposition of the course it was difficult to provide help/feedback to the students.

#### **SUMMARY OF STUDENTS' OPINIONS**

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

The responses of the students are mixed: some liked the course and found the virtual format useful, while others felt that they had little help and feedback from the teachers. Some felt that some of the topics were not well motivated.

#### **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.**

This time the course was given in an almost fully online manner. While this has some advantages over traditional lecturing (like the possibility to use pre-recorded videos to supplement material, etc.), it impairs the teacher-student communication, making it difficult for the teacher to get feedback on the evolution of the course, and for the students to ask for help. I believe many of the difficulties mentioned by the students in the survey are due to this communication problem (in addition to their wide discrepancies in prerequisites).

#### **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?

As mentioned before, the number of respondents was very low, and consisted only of male students. However, international students seem to have a more positive opinion of the course (in most aspects) than Swedish students. Regarding students with disabilities, only one mentioned that his disability (dyslexia) was not an impediment during the course.

#### **PRIORITIZED COURSE DEVELOPMENT**

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

Teaching the course on campus should be a priority, since it is easier for students to ask questions and receive feedback than in an online manner. This will depend on the evolution of COVID, of course.  
Also, we need to continue developing supplementary material such as lecture notes.