

# Report - EP1200 - 2018-12-12

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):

Viktoria Fodor, vfodor@kth.se

# COURSE DESIGN

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

Learning activities: flipped classroom. Introduction of material in class, studying course book at home, example quiz questions, sequence of small projects, consultation

Examination: continuous examination with quiz and project, final written exam

Changes after last time: we had the ambition to introduce automatic testing of projects, but this is delayed due to limited time resources. Small changes have been introduced: moved the class to canvas, improved first lecture to provide more understanding on the study requirements, improved slide sets to include more examples that help with the project. Added more example quiz questions. More changes have been done two years back, with good effects on friendlier atmosphere in the classroom.

#### THE STUDENT'S 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 course is for 6 credits, it makes 160 hours of work. Most of the students report 12-20 hours of work per week for 8 weeks, which is according to the expectations. Still, students complain about too high workload.

## 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 were similar to those in previous years:

F: 12 E: 11 D: 10

D: 10 C: 13

B: 12

A: 10

As we see in each year, the grade distribution is rather even. We believe this is because of the many different moments in the course.



#### **OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT**

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

We see lines for gender. The curve for female students is moving between extremes. This shows the extreme views of the small student group. In general, grades are between 3 and 5. The diagram is star-like, so there are no particularly strong and weak areas, but answers within an area differ as well.

#### ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?

Strong points: simulating task, togetherness, collaboration.

Weak points: learning from concrete examples, feedback without grading, opportunities to choose.

As for the weaknesses, we do not find it problematic that the students do not have opportunities to choose (actually they have, since they solve programming problems as they want). We recognize the weakness of grading without preliminary feedback.

## ANSWERS TO OPEN QUESTIONS

What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?

The best advice is this:

"Make sure you understand every step on the way."

"Do not be afraid to ask for advice.

"Work in group."

"Look at the videos. Read the codes." "Reflect on what you have done in the project."

#### PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term? We see three significant problems that should be addressed:

1. While we have consultations, very few students come. We believe that students think asking questions with lower their grades (which is not true). Therefore, from next year, we will have earlier students giving the consultations.

2. Grading without feedback: the quiz questions are important parts of the learning, but they are also graded. Therefore, we extend the set of

example questions, using canvas. We also hope to get early feedback on the difficult topics this way. 3. In a few cases seminar leaders were grading differently. From next year we switch the structure, and each topic will be covered by one seminar leader only.

On the long terms we are looking for solutions to decrease the invested teaching hours, because the course does not scale this way.