



Report - IS1500 - 2019-02-27

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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COURSE DESIGN

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

The course teaches the fundamentals of computer organization, including both software and hardware. The course is divided into 6 modules:

1. C and Assembly Programming
2. I/O Systems
3. Logic Design
4. Processor Design
5. Memory Hierarchy
6. Parallel Processors and Programs

The course is divided into 3 LADOK parts:

1. Labs in logic design (1.5 hp)
2. Labs and home labs (4.5 hp)
3. Written Exam (3hp)

There are in total 14 lectures, 6 exercise sessions, 4 seminars, 6 laboratory exercises, and one mini project. The course ends with a 5 hour written exam.

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?

According to the feedback from the students and the course evaluation, many students find the course challenging. However, the amount of time spent by the students on the course seems on average quite reasonable. The required effort also depends quite heavily on the background of the students because some of the students have studied many computer science courses before, whereas some students only have taken a few programming courses.



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?

This year, 70% of the students passed the first exam. The distribution of grades was as follows: A 6%, B 10%, C 17%, D 17%, E 21%, and FX 3%. After careful analysis, the examiner found this exam harder and more time consuming compared to previous years. For this reason, the required points to pass and to get a specific grade was therefore lowered for this specific exam.

The pass rate has been fairly high and stable the past couple of years. For instance, in January 2017 the pass rate was 74%, and in January 2018 it was 75%.

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?

In general, the students are very happy with the course. During the course evaluation meeting, the student representatives said that this was one of the best courses they have taken so far. Some of the main strong points stated by many students:

- The lectures in general are very good.
- Many students liked the labs and said that they learned a lot.
- Both exercises and seminars were appreciated.
- Many students liked the project.
- In general, many students appreciated the structure of the course, including the structure and information on Canvas.

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?

The polar diagrams are in general very high. For instance, to the question "The course was challenging in a stimulating way, more than 91% answered +2 or +3 (the two highest alternatives). The question concerning if the course activities helped to achieve the intended learning outcomes, 91% answer +2 or +3. The lowest scores was on question 15 "I could practice and receive feedback without being graded" and question 16 "The assessment on the course was fair and honest". For question 15, around 72% gave a positive answer, 22% where neutral, and the rest were negative. Similarly, for question 16 about the assessment, 75% were positive, 7% were neutral, and around 18% were negative. This result is most likely due to the fact that the exam was a bit harder and more time consuming compared to previous years.

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?

Here is a summary (not quotes) of some advices that were given to future students:

- Attend the lectures, because they are really good. Be prepared before the lectures.
- Start with the labs and the project early.
- Do all the labs and the seminars. You will learn a lot.
- Study the book.

PRIORITY COURSE DEVELOPMENT

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

- This year I introduced additional video lectures, which focus on specific topics that many students find hard. The feedback I got on this was very positive. Hence, I will try to add more videos during the next course round.
- Together with the student representatives, we discussed the idea of making the LD-LAB more comprehensive and to remove part 3 from the exam. There are pros and cons of doing such a change. I will analyze this idea and make a decision before the next course round.

- Many course improvements have already been done during the last couple of years, and the majority of the students seem to be quite happy with the current course design.

**OTHER INFORMATION****Is there anything else you would like to add?**

To all students who might read this course analysis: Thanks for great feedback. Please do not hesitate to send me an email (dbro@kth.se) if you have some more feedback, comments, or questions.

Kursdata 2019-02-27

IS1500 - Datorteknik och komponenter, HT 2018

Kursfakta

Kursen startar:	2018 v.35
Kursen slutar:	2019 v.1
Antal högskolepoäng:	9,0
Examination:	ANN1 - Komponentuppgift, 1,5, betygsskala: P, F LAB1 - Laborationer, 4,5, betygsskala: P, F TEN1 - Tentamen, 3,0, betygsskala: A, B, C, D, E, FX, F
Betygsskala:	A, B, C, D, E, FX, F

Bemanning

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Antal studenter på kursomgången

Förstagångsregistrerade:	0
Totalt registrerade:	358

Prestationer (endast förstagångsregistrerade studenter)

Examinationsgrad ¹ [%]	Det finns inga kursresultat inrapporterade
Prestationsgrad ² [%]	Det finns inga kursresultat inrapporterade
Betygsfördelning ³ [% , antal]	Det finns inga kursresultat inrapporterade

1 Andel godkända studenter

2 Andel avklarade poäng

3 Betygsfördelning för godkända studenter