

Course analysis ID1018 Programming I – HT19

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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 learning activities consists of course literature, self-guided exercises, lectures (20), tutorials (4), and programming assignments (5 mandatory and 4 optional for higher grades). The tutorials that were tentatively introduced in HT18 has been made permanent, as they were very appreciated by the students.

Examination consists of a closed exam (tentamen) and individual oral examination of programming assignments.

The Covid-19 pandemic in the spring of 2020 required a rapid reorganization of the April re-exams. The regular exam was given as a 6 hour home exam with open books, facilitated by the Canvas LMS. Where previous exams had asked students to explain and complete larger sections of given code, the home exams required a greater measure of design, construction, and explanation.

Similarly, the re-examination of programming assignments was provided as assignments in Canvas, with a completion window of 10 days. The requirement to complete all questions in the programming assignments was complemented with a short document reflecting on the learning experience. Even though the assignments were open for 10 days, a majority of the submissions arrived in the last day. This meant that requests for modifications had to be exchanged through email. In all likelihood, a different configuration of the Canvas system could have allowed these communications to remain confined to Canvas.

The student's workload

Do 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 survey had 36 answers from 254 respondents (14.17%, 15.45% HT18). Of these, the majority (7 / 20%) reported a workload of 18-20 hours per week, while 18 (50%) reported a lesser workload, and 6 (16.67%) worked more. Only two answers reported a workload of 40 hours per week.

The reported workload is consistent with previous years and is seen as a combination of previous programming knowledge in combination with pressure from concurrently running courses.

The student's 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 regular closed exam received 155 students. Of these, 147 received a passing grade. For the programming assignments, 159 were completed in nominal time. At the end of the course 136 (55%) students had completed it. By the April re-exams, 174 (70%) students had completed. With students from previous years included, 181 students out of 249 active (73%) completed the course.

These figures are a slight improvement from HT18. This may be due to a stronger requirement in the closed exam where certain questions had to be satisfactorily answered in order to pass.

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?

No significant differences between groups can be seen. Most responses to the LEQ survey indicate a good learning environment. One feature of interest is:

Statement 21, *I was able to learn by collaborating and discussing with others*, in which the center mass of the responses is shifted more towards zero than in other answers, i.e. less agreement. While no cause for immediate concern, it is recognized that the social study environment is complex and deserves continued attention.