Course analysis carried out by (name, e-mail):

Jean-Baptiste Thomas jbthomas@kth.se

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 has been evaluated through two course committee meetings, the course survey at the end of the course, and program-wide meetings. A course committee meeting was held at the beginning of the course to identify any potential issues early on. The participants of the course committee collected information from other class participants via their common online channel. Additionally, opinions were gathered during sessions with teachers throughout the course, during lectures, seminars, etc. Furthermore, the course coordinator and teachers participated in meetings within the program (CENMI) where student representatives and the program coordinator were present. The course survey was sent out to all students to gather everyone's opinions after the course examination had taken place. In the course evaluation, results for different groups are presented separately. Once the course evaluation was completed, a final course committee meeting was held.

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.)

See above: course committee meeting, program meeting, and course survey.

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

Overall course design: Project assignment, 2.5 credits: Lectures, literature, library meetings, supervision meetings, project meetings, oral and written presentations. Examination, 2 credits: Lectures, guest lectures, literature, assignments, practice exercises, seminars, written exams. The only major change since the previous year was that the exam was held in computer rooms without access to the internet, as a precaution against the use of online language models like chatgpt. Re-examination for Fx students was also done as an oral exam.

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If these is a significant deviation from the expected, what can be the reason?

The course was conducted at a 1/3 pace. Generally student feedback was positive in terms of workload: that it was demanding but not exceedingly so. According to the course survey (35% response rate), some students worked above 30 hours a week, some worked in the region of 15-20, but the majority worked 9-11 hours per week.

How well have the students succeeded on the course? If there are significant differences compared to previous course offerings, what can be the reason?

Only half of the class passed the exam on the first attempt, with approximately one quarter failing outright and another quarter achieving Fx. The principle reason for this seems to be that the conditions for passing were maintained as the same from the home exam the previous year, i.e. not passing just one of the four questions automatically leads to Fx and failing two or more leads to F – so these were quite tough conditions for a pass. Fx students all passed after the oral re-examination. F students all also passed after the re-exam. Student feedback about exams focused on the challenging timeframe for the computer-room exams, which will be solved by increasing the exam duration by 50% for next year. Exam format may also be revisited to include fewer essay-based questions and more multiple-choice style questions. Students also requested past-questions to be made available to facilitate studying for the exam – this will be done for HT24.

Students´answers to open questions

Overall, students' comments are mostly positive. For instance, they highlight that current topics were addressed, the introduction to systems thinking was valuable, and guest lectures were rewarding. They also appreciated the interactive seminars and the way the project work was conducted. Topics and as a whole the course was considered relevant and interesting.

Suggestions for improvement focused primarily on improvements to the PM, project instructions and Canvas layout. Linked to this, respondents highlighted that email responses from the teachers were often not specific enough and could be improved. Students felt syllabus and Canvas were out of date and needed to be made more concise and given more structure. More emphasis will be given to both during the introduction lecture, to make sure students have clearly understood course content. The exam was also highlighted as too stressful, and could be improved by giving more time, which will be entirely redesigned for next year. Studying for exam will also be improved by providing past-questions.

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

The LEQ scores were mixed, with Qs 1 and 21 scoring above 5, Qs 4, 15 and 22 scoring 3.9-4.6 and the lowest score going to Q 16 regarding examination fairness. The responses reflect comments from students and are discussed in particular in student meeting 2 in December, see below.

First Meeting, Sept 7th 2023:
- Overall positive impressions of the info level course.
- Appreciation for system thinking lecture.

- Suggestions to improve Canvas page design and accessibility of documents.
- Course workload deemed manageable

Second Meeting, Dec 6th 2023:
- Appreciation for lectures and seminars, with some feedback on improving balance in lecture content.
- Mixed feedback on project work, highlighting issues with project work PM instructions and course PM not being updated.
- Concerns raised about exam preparation materials, timing issues, and technical difficulties during the exam. Exam was the single biggest issue with the course.
- Suggestions for clearer feedback on exam results and improving the re-examination booking process.
- Student representative raised concerns about inconsistent information and lack of response to emails.

Key Action Points:
1. Improve clarity and accessibility of course materials on Canvas.
2. Update project work PM instructions and course PM.
3. Provide additional study materials and clarify exam expectations.
4. Address technical issues during exams and ensure equal treatment for all students.
5. Enhance feedback on exam results and streamline re-examination booking process.
6. Ensure consistency in communication and responsiveness to student queries.

With regards to the LEQ, the main shortcoming was on Q16, fairness of the examination, with adjustments to be made to improve the exam information, provide past papers to enable more thorough studying for the exam, and lengthening the time of the exam by 50%.

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

Based on the sessions Thomas attended and the feedback he received from other teachers, the results he observed and heard about was good in relation to what was offered.

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?

Yes, from the LEQ it seems that students struggling with learning difficulties on average had lower responses to 5 out of 6 LEQs. Providing a clearer course and project PM, including structured indexes, and going through it systematically during the intro lecture are all ways in which we can improve the process for them.

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

See above regarding course PM, project PM, Canvas layout and improvements to the examination.

Other information

No.