



Report - AG1815 - 2021-04-22

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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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.

Individual answers were collected through the course evaluation form (LEQ). This year the response rate was extremely low (15%), despite several reminders to the course.

This year, no course committee with students was formed. The course normally has a course committee with 2-3 student who meet with the course coordinator once during the course and once after the course evaluation has been completed. At the beginning of the course students who were interested in joining the course committee were invited to contact the course coordinator. Despite a reminder, no students showed interest.

Students have also been encouraged to contact the course responsible during the course in case they had comments and/or questions.

Aspects regarding gender etc are covered by the default questions in the course evaluation form.

An important part of the course evaluation process has been a close cooperation with the other three teachers/course assistants in the course. They have submitted comments regarding various parts of the course as the course went along, and we have discussed them continuously and collected them for further improvements.

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.)

See above



COURSE DESIGN

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

Examination

- Project work, 4.0 hp (A-F)
- Response papers and thematic seminars, 0.5 hp (P/F)
- Literature assignment, 2.5 hp (A-F)
- Attendance, 0.5 hp (P/F)

The course includes

- Lectures: 11 "live" lectures and 4 lectures consisting of only online mtrl. Lectures cover 1) The concept of sustainable development, the sustainability goals of society and societal challenges, 2) ICT and sustainable development - how ICT may be a positive driver for sustainable development, but also mean risks and negative impacts, 3) Innovations and business opportunities - examples with company perspective, 4) Environmental and sustainability assessment with systems perspective.
- Discussion seminars (2). These cover themes from the lectures. Students prepare written assignments in advance that are discussed during the seminars.
- A group project (with 4-5 students/group). Projects are provided from industry or KTH researchers.
- Project seminars (3). Project groups present 1) early stage draft for oral feedback, 2) near-final draft for written peer review, and 3) final report.
- Individual literature assignment, where students write about ICT as a solution to sustainability problems

Update of course from 2020

- Due to the covid situation, all lectures, seminars, and project supervision was online
 - "Live" lectures were recorded and posted on Canvas
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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?

Students report having worked between 3-35 hrs/week, with the majority reporting 9-20 hrs/week. This extreme variation mirrors variation in ambition level that we can see among students. The lowest number of hours must be *excluding* scheduled course hours, since the scheduled compulsory attendance in itself exceeds 3 hrs/week on average.

One student reporting a high workload says it is too much for a course in the 3rd year, while those reporting few working hours claim the course does not require much effort. According to the comments, most working hours are spent on the course project.

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?

No significant changes in grades compared to earlier years. One could have expected lower grades on average due to difficulties of distance learning - with less teacher interaction on campus. However, interaction in seminars and project supervision has been good. Even during lectures there has been quite good interaction, although it was more difficult to get a good sense of how "present" students were when they were logged into zoom. The possibility to watch recorded lectures can also have been good for some students.



STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

One student with dyslexia reported that it was challenging, since the course requires a lot of reading and writing. This is correct. However, there are no writing assignments with a time limit (written exam) which gives possibility to plan ahead and make use of both for instance Tortalk (text to speech) and spelling software (SpellRight and StavaRex) available to KTH students.

Students give several positive comments about

- lectures (variation of speakers with different perspectives and backgrounds, variation of new interesting topics, competent lecturers)
- project (interesting to work on topics that one can select yourself, get to find own solutions to problems, getting to work with companies)
- environment (nice lecturers and supervisors)
- Supervisors were very open about being available

Students suggest improvements in a number of areas:

- Too much to do, maybe drop some assignment/activity
 - Provide example reports from previous year
 - Provide more solutions in lectures, not only problems
 - Find ways of making sure there is more even distribution of workload in groups
 - Use "flipped classroom" (recorded lectures + discussion seminars) instead of mandatory lectures, it was hard to keep focus
 - Remove individual performance from grading criteria
 - Release the instructions for the tasks earlier to relieve stress
 - Stricter grading criteria!
 - Maybe give the students a simple guide on how to write a report on the beginning of the course.
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SUMMARY OF STUDENTS' OPINIONS

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

Similar to earlier years, there was large variation in how students perceive the course. Most seem to think that the course overall is well designed, like the atmosphere in the course, say that supervisors are helpful and available, and lecturers are competent. But while some find it demanding, interesting, and that they learn a lot new stuff, others find it too simple and say that they are not interested in the topic. Some are disappointed with uneven workload in projects and ask for better ways to manage this. Since the number of students who answered the course evaluation form was very low, it is difficult to know if the answers are representative, but they are fairly similar to previous years. The problems brought up are things that we consider every year and try to find solutions to. When doing so, trade-offs with other aspects always need to be considered, meaning not all aspects can be adjusted in the way some students ask for.

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.

See above

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?
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As the number of students responding to the course evaluation was very low, it is not possible this year to draw any general conclusions in these regards.



PRIORITIZED COURSE DEVELOPMENT

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

- It is desirable to find ways for more even sharing of responsibility and work load in project, and to reduce the perceived unfair grading of some project groups due to this. One possibility could be to remove grades on projects, combined with stricter requirements on individual contributions to projects. This needs to be considered carefully if it will create any other tradeoffs.
 - Possibly remove some activities in the course. However, it seems that only a few students complain about the number of activities and assignments, so this may not be a well motivated priority.
 - Find alternatives to compulsory lectures, while still ensuring that students take part of lecture content. Alternatively even more clear communication to students that lecture in fact are NOT compulsory, since there is always the possibility to compensate for absence
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