

# Report - MJ2659 - 2020-05-11

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.

In addition to the LEQ, two meetings have been held with student representatives of the course (the first meeting roughly a month after course start and the second at the end of the course). During these meetings the students have an opportunity – and are encouraged to – raise any issues related to the course (critique/suggestions etc.). Taking part in the meeting are course responsible teachers. Comments and issues brought up at the final meeting are corroborated with the answers from the LEQ. Aspects regarding gender and disabled students (JML) are not specifically addressed but included in the LEQ.

### **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.

Lectures (~10): some more directly related to the course literature and some more open but within general focus of the course.

Literature assignment (LIT1): seminars and written essay (analysis of one of the course books).

Project work (PRO1/PRO2): individual (part1) and group (part2) with written reports for each part and a presentation of group work. Part 2 builds on part 1.

Focuses on sociotechnical systems and planetary boundaries.

Written examination (TEN1)

## Changes implemented since last course:

- (1) Possibility to get Pass with distinction (P+) on the individual examinations LIT1 and PRO1. One (or two) P+ will raise the final grade of the course with one (or two) step(s).
- (2) A (non-mandatory) bus excursion to show and give examples of different ecosystems, sociotechnical systems and related challenges and possible solutions.
- (3) Implementation of outcomes based criterion-referenced grading criteria.



#### THE STUDENTS' WORKLOAD

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 LEQ answers suggest that the workload is slightly over what should be expected. However, the students did not confirm this during the meetings and did not indicate that it was a matter of concern. One reason may be that the course literature is rather extensive compared to more technical courses, which some students finds challenging and time consuming.

#### 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?

TEN1: Ok, and evenly distributed (A-E). Much fewer students got an F compared to previous years (and a larger part got and E). A reasonable explanation for this might be the implementation of goal oriented grading criteria.

LIT1/PRO1-2: Ok. A general expression is that the written reports indicated that the students this year had fewer problems with writing reports (both format and content) and how to handle references compared to previous years. The exact reason for this is unclear but we believe that the implementation of goal oriented grading criteria in an informative matrix made the tasks clearer. Another possible explanation could be the implementation of Pass with distinction (P+), which might have spurred the students into an extra effort in writing the reports.

FINAL GRADE: given the implementation of P+, there is a tendency towards higher final grades on the course (though this pattern is not completely clear).

#### STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Lectures: Varied critique but in general the students like the lectures and see value inthem. A suggestion is to align the lectures more directly towards the course literature. We will look into this, but at the same time we would like the lecturers brought in to the course to have a rather large degree of freedom in relation to their specific field of expertise and research.

LIT1: Overall very positive critique.

PRO1-2: Positive, but mixed, critique. One aspect brought up, which has also been discussed during the course development during previous years, are that the topic selected for the project work i.e. what kind of sociotechnical system (STS) that the group choose to focus on, make the assignment more or less "easy". Since some STSs are easier to relate to the specific planetary boundaries, perhaps an idea would be that the teachers of the course would have a list of "suitable" STSs. This is however a balance in relation to what the students are supposed to learn on the course.

Bus excursion: around 25 of 40 students took part in the (non-mandatory) excursion that was implemented for the first time on the course. The comments we got from a survey after the excursion, as well as from the LEQ, are very positive. The students liked the excursion and what it brought in to the course, though have some suggestions of how to develop the excursion (e.g. have fewer but longer stops). We will consider those comments, but unfortunately for the upcoming course offering (ht-2020) we will due to economic reasons have to cancel the excursion.

Assessment templates: the students think that these are a very useful part/tool when working with the different assignments. On the negative side, templates at the same time opens up for a more strict (less flexible) evaluation of the assignments where "one size has to fit all", and this is also something brought up by some students.

Course literature: the students like the course literature.

TEN1: positive comments, but more than one bring up the suggestion of changing the current written exam into an open book exam. Which is under discussion and evaluation.

Administration: Very positive comments.

### SUMMARY OF STUDENTS' OPINIONS

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

Overall positive comments (regarding all parts/aspects of the course). The bus excursion stands out a bit as being mentioned several times as a (very) positive part.



## 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.

Overall very positive (values between 5.8-6.7). The students seem to appreciate the course (former students have commented on the value of this course in later courses on the program).

### **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?

LEQ: 12 questions. Answers: 18/43 (42%)

Stronger: the main part (11/12) of the questions had a response between 6.1-6.7.

Weaker (5.8): "The assessment on the course was fair and honest". It is a relatively high number (5,8), but still needs to be considered. Not the least as it has gone down from 6.3-6.4 compared to the previous two course offerings. The reason for this is unclear but one possible explanation could be that the written exam this year had implemented goal oriented grading criteria, which made the assessment somewhat stricter in the sense that the students had to display knowledge in relation to all the assessed intended learning outcomes. It is further a rather large difference between female/male and international/national students where the female students has given the assessment 5.5 compared to male students 6.7 and the international 5.5 compared to 6.3 for national. The reason for these differences is unclear but it is troublesome and will be analyzed further. It is worth noting though that last year it was the opposite, i.e. male students gave the lower grade (5.4) regarding assessment compared to female (6.7) and no difference between int/nat students.

### PRIORITIZED COURSE DEVELOPMENT

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

- Possibly new/alternative course literature, which will be done prior to ht-2020.
- Evaluate the newly implemented grading. This will be done in relation to the ongoing discussion whether to replace the current written exam with an open book exam.
- · Analyze the course from a gender perspective (aid from colleague at SEED and from KTH Equity Office.)