

## Report - AG1815 - 2018-04-06

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	il):		
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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.

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

- 16 lectures (whereof 4 online mtrl), covering 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 (in general and with specific applications for the ICT sector) - 2 Thematic seminars, covering topics from the lecture, to which students prepare written assignments that are discussed during the seminars - projektarbete i grupp, i samarbete med företag eller forskningsinstitut som arbetar med ICT för HU

- 2 project seminars, where project groups present a draft and final report and make peer review

- 1 excercise with peer assessment of project reports

- 1 individual litearture assignment, where students write about ICT as a solution to sustainbility problems

Compared to 2017, the following changes were made

- 1 Thematic seminar was removed, while the remaining ones were redesigned and made longer
- 1 more lecture put online, to improve lecture content and increase flexibility for students
- Some lecturers were replaced, depending on availability but also on competence

#### 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?

A majority of students (60%) spend a reasonable amount of time on course work (12-26 hrs/week). A few individuals spend more than that, probably much due to personal interest in the topic (one says it was the toughest course yet). A few individuals spend less than that, which is a problem in particular in case it means that they did not participate on equal terms in project work.

#### 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 apparent difference in performance compared to last year (average C so far, however not all grades given at the time of writing).



#### **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?

A challenge of this course is that a large portion of the students do not see it as highly prioritised for their degree. As a way to deal with this, our aim is to motivate the students on both a professional and personal level, to create a course where it's clear what you need to do with strict rules for this, but still with a friendly and flexible atmosphere.

A recurring complaint from students is about compulsory attendance. My impression is that for some students this overrides some otherwise good and meaningful parts of the course, so that their overall experience is negative. Those students who are not surprised by compulsory attendence are less concerned. Some students claim they should come to the course from own interest, not because of compulsory attendance. My argument is that it is part of the education that they have chosen from own interest and therefore they need to make the expected effort inthe course. Compulsory attendance has shown to be a good solution to better performance and learning. But it can be better communicated that there is also flexibility for those students who are not able to attend because of clashes with other courses.

Female students give overall higher ratings. I see no obvious reason for this. A possible reason could be because of "teaching style", another reasone could be bias from students due to one's personal interest in the topic. \*Comments from students are welcome!\*

#### 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?

Students give rel. high rating (5.4 - 6.1) on aspects of togetherness, inclusive atmosphere, chances to collaborate and discuss, support from teachers. This is rewarding to see.

The lowest overall rating is on "challenging in a stimulating way" (3.9), which means that fail in creating stimulating course content and assignments. I'm not sure how to interprete this. Is 3.9 low in comparison with other compulsory courses? The course involes a lot of real life examples from industry and students work on projects in collaboration with industry. \*Comments from students are welcome!\*

Relatively low rating is given to aspects of understanding how to perform to get a certain grade, and course activities helping students to reach certain intended learning outcomes. Rather explicit grading criteria are shared with students and students also get t owork with these in peer assessment excercises. It's hard to know if there is a lack of information, if available info is not communicated well enough, or if the info is really unclear. \*Comments from students are welcome!\*



### 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?

- Students are positive about:
- opportunities for peer feedback
- guest lectures: variation and interesting
- projects
- good teachers - atmosphere

- well structured course
  project and individual lit assignment
  the topic of sustainability is interesting and important
- working with industry
- continous feedback from supervisors
- discussions in seminars
- "Nothing with this course was bad. On the contrary I would say that most was good."

Students ask for improvements about:

getting feedback before submitting individual literature assignment
 prefer P/F on project work

- less writing and more open discussions
   remove compulsory attendance and response papers
- too much repetition in lectures from industry
- too many "small pieces" in the course, worth more than 7.5 hp
- lectures were interesting but too many and didn't fel like we learned anything (just interesting talks)
- It would be nice if this course contained some really useful tools and theories for analysing and working with ICT
- some projects more demanding than others
- confusion about deadline for literature assignment
- hard to understand what was expected from the project
- Make it more interactive and workshop based and don't include projects with companies as they often don't put in a lot of effort and the same
- could be done without companies
- highschool level on some stuff

#### PRIORITY COURSE DEVELOPMENT

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

- Better instructions to invited lecturers, so that they are perceived as more relevant and in synch with rest of the course
- consider reducing no of lectures
- improve info on course design to students, to reduce confusion about deadlines etc
- clear rules in course memo about consequences about passing a deadline, in particular litterature assignment needs clarification
- Align students' expectation with aim of course: explain better to students that this course is not so much about learning key concepts, as
- practicing ability to reflect of sustainability aspects in relation to a given problem
- Maybe: revise intended learning outcomes in course plan to reflect the above?
   Maybe: combine lectures, response papers and thematic seminar into a more coherent content?
- Maybe: consider compiling a list of terms and concepts that students need to master
- Maybe:

- Maybe: To address students' annoyance with compulsory attendance, give compulsory writing assignments that can be avoided by attending lectures (now it's basically the other way around, compulsory writing assignments are given when students miss lectures). This requires better control of attendance.

- Peer review: Must explain better to students what peer review is for. Explain that it's an exercise.

Maybe: Improving project work: Test a few projects without company as commissioner. Learn core issues in first part of the course, then let students formulate problems and solution. Reuse good old projects. Build further on previous projects

- More discussions of how we perceive the problems7challenges of sust dev. Discuss what the solution is. Integrate more of this in Thematic seminars



OTHER INFORMATION Is there anything else you would like to add? The course evaluation and analysis was discussed in a meeting with the student board of the course, the program coordinator of TCOMK, and School student representative.

# Course data 2018-04-25

# AG1815 - Sustainable Development, ICT and Innovation, VT 2018

# **Course facts**

Course start:	2018 w.3
Course end:	2018 w.11
Credits:	7,5
Examination:	INL2 - Assignment, 0.5, Grading scale: P, F
	INLA - Literature Assignment, 2.5, Grading scale: A, B, C, D, E, FX, F
	NÄR1 - Attendance, 0.5, Grading scale: P, F
	PRO1 - Project Assignment, 4.0, Grading scale: A, B, C, D, E, FX, F
Grading scale:	A, B, C, D, E, FX, F

# Staff

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Assistants:	

# Number of students on the course offering

First-time registered:	75
Total number of registered:	81

# Achievements (only first-time registered students)

Pass rate <sup>1</sup> [%]	4.00%
Performance rate <sup>2</sup> [%]	65.10%
Grade distribution <sup>3</sup> [%, number]	
	C 67% (2)

1 Percentage approved students

2 Percentage achieved credits

3 Distribution of grades among the approved students