

# Report - EJ2410 - 2020-02-04

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):

Mats Leksell, leksell@kth.se, 2020-02-05

### **COURSE DESIGN**

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

Since last year the pre-maid simulation models have been corrected and more coherent. This enabled the students to focus more on the function, rather than the models themselves.

Also the lab demonstration has got a more coherent design.

#### 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?

The average time is slightly below 20 hours per week, which is a continued increase of the amount of time that the students spend, as compared to previous years.

However, all in all the the workload seems rather okay.

# 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?

With a close contact between the teacher and the students, and with the two seminars for the assignments, the students seem to align with the course pretty well. This can be seen in the examination where approx. 90% of the participants finish the course already after the ordinary exam.

The results are fairly well distributed between A and E, which corresponds to the general feeling that even though the attending groups of students all are "international males from vehicle engineering", there is a rather big difference in perfomance among the individuals.

# 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?

It is a very homogenous group, international male students from the Vehicle engineering program. Good or bad, it would be nice to have participants also from other disciplines. We try to get people also from chemistry and mechanics, but find this very hard to accomplish.



# 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?

We had a new question this year, asking if the students had sufficient "knowledge of electricity" beforehand. And the answers clearly indicate yes (which is not the impression I as the teacher have). It might be good to introduce a diagnostical test in the beginning, that should not contribute to the examination.

# **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?

Start to work on the assignments early, which we already urge the students to do ...
This course uses peer work a lot thanks to the assignments. (Not?) surprising, some students comment the presentations that they do as: "It's a little difficult for me to adapt to this kind teaching method because I never presented something to the other students formally. Thus, it took me a long time to prepare well."

The assignments conatain various tasks and therefore the comments vary FROM "The assignments we worked on were a very good support to understanding the course better" TO "The two assignments are too general and time wasting and not professional". I guess this means we are on average on the correct level.

#### PRIORITY COURSE DEVELOPMENT

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

More practical experience is looked for by the students. This is tricky question as we have high safety standards in the lab so letting the work on their own is not easily done.

The idea is to further improve the demonstration with at least something hands-on, and in the long run have a full lab that they can do under guidance. (Given that students abkground do not change.)

### OTHER INFORMATION

Is there anything else you would like to add?

We plan to integrate our 3 transport related courses, in order to streamline the offering to the students.

The study visit to Scania is much appreciated but the level is perhaps a bit too low, on the other hand we do not know how much Scania wants

The feeling is that the course is highly interesting, and that in general the content is challenging.