



Report - ED2200 - 2017-06-19

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):

Jan Scheffel, jans@kth.se

COURSE DESIGN

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

The lectures are goal oriented and focus on target problems that relate to the course's goals and content.
The course requires continuous work and is continually examined on the basis of weekly home assignments and weekly participation in mini group work.
Grading: P / F. No final written is given.

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?

Only one student claims working with the course for more than 60 hours in total.
Being a 6 hp course, the students should nominally devote 160 hours to the course.

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?

As usual, the students do well. Only one student needs a complementary examination to pass the course.
Sadly, there were two occasions of plagiarism with three different students involved.
The students were approached and warnings were given. Also the scores from the homework of the corresponding week were set to zero.



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?

Overall the course received high scores from the students.
This is also standard; we have been able to develop and tune this course since the mid-90's.

The highest grading (6.5) was obtained for
16. ("The assessment on the course was fair and honest")

The lowest scores (3.6-4.0) were given to questions
3. ("I was able to learn by trying out my own ideas")
17: ("My background knowledge was sufficient to follow the course")
20: ("I had opportunities to choose what to do")

Regarding questions 3 and 20 the response was quite adequate, since the course is designed interest the students for the topics that are being emphasized rather than letting the students drift away on their own.

Regarding question 17, it is a bit surprising that fourth year's engineering students, interested in energy topics, may have meagre knowledge of electromagnetics and vector analysis.

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?

The reasons that some students have poor pre-knowledge in electromagnetism and vector analysis are that a) these topics are unfortunately lacking in some engineering tracks and b) the course is designed so that a rather broad category of engineering students can reach the pass grade by concentrating on topics that require less mathematics and electromagnetism.

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?

We believe that the student who wrote "The best aspect of the course for me was being able to use the course textbook and learn at my own pace while working on the home assignments. I also enjoyed the collaborative environment of the group work exercises." has precisely found the spirit of the course. This view is fairly representative for the students.

Today's students expect a selection of learning activities. One student says "I think it would be beneficial to add more variety to the lectures. Instead of using a chalkboard for nearly every lecture, add more engaging components like class surveys or relevant videos". We will consider a development in this direction.

Regarding advice to future students, we believe this student puts it well: "My advice is to read the textbook material after every lecture. I believe the subject is not intuitive, and thus, extra reading (starting from simplified examples to more complicated ones) really helps".

PRIORITY COURSE DEVELOPMENT

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

- It seems from the survey, that we can ask for more work from the students. We should consider how this can be related to extending the student's learning. One possibility is to let the students initially work with some preparatory vector analysis + electromagnetics; several students seem to be weak in these topics.

- Maybe we should include more alternative material like class quizzes and videos to the lectures. This is not trivial, since the time devoted to today's lectures is needed for presenting and discussing the course content.

OTHER INFORMATION

Is there anything else you would like to add?

Only 5 of this year's 14 students (36 %) replied in the LEQ questionnaire.
This is less than half the response frequency that we are used to from previous year's paper based evaluations.

It is nice to work with a course that is appreciated; one student says: "It was a very well taught and interesting class. Go ahead!".

Kursdata 2017-08-15

ED2200 - Energi och fusionsforskning, VT 2017

Kursfakta

Kursen startar:	2017 v.12
Kursen slutar:	2017 v.23
Antal högskolepoäng:	6,0
Examination:	PRO1 - Projektuppgift, 1,5, betygsskala: P, F ÖVN1 - Inlämningsuppgifter, 4,5, betygsskala: P, F
Betygsskala:	P, F

Bemanning

Examinator:	Jan Scheffel <jans@kth.se> Per Brunsell <brunsell@kth.se>
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Assistenten:

Antal studenter på kursomgången

Förstagångsregistrerade:	15
Totalt registrerade:	15

Prestationer (endast förstagångsregistrerade studenter)

Examinationsgrad ¹ [%]	80.00%
Prestationsgrad ² [%]	80.00%
Betygsfördelning ³ [%, antal]	P 100% (12)

1 Andel godkända studenter

2 Andel avklarade poäng

3 Betygsfördelning för godkända studenter