

Report - SE2126 - 2018-01-30

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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COURSE DESIGN

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

The course was composed of lectures, tutorials, two homeworks (each with three problems), four finite element exercises and one laboratory work. Credits were given for the final exam, the homeworks and the finite element/laboratory exercises. Basically the same as last year. Quizzes were introduced as a new non-compulsory part. A minority of students used this tool for learning.

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 reported workload reported by the students was about 15 hours per week which corresponds to 6-7 full weeks. This is well in line with 9 ECTS points.

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?

The results of the exam was about the same as previous years. Almost all students who followed the course finished the homeworks and the laboratory exercises.

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?

Generally the judgements for the course were very positive. Out of 22 questions, 19 had a score of 5.0 or above. The weak points were: 3. "I was able to learn by trying out my own ideas" (4.4); 18. "I regularly spent time to reflect on what I learned" (4.5); 20. "I had opportunities to choose what to do" (3.7). This reflects that the course content is well defined and there is limited time to go outside the scope of the course.

There were no differences between men and women. Some differences were observed between international and Swedish students. A large majority of the international students expressed that they had explored parts of the subject by their own. This was not the case for Swedish students. The international students also expressed that they to larger extents had understood what was expected and the learning outcomes.



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?

Positive responses: interesting topic, useful knowledge, well organized, finite element exercises and laboratory work, good lectures, helpful teachers

Negative responses: Coupling between finite element exercises, laboratory work and lectures, to much time spent on follow up of homework assignments, no scheduled time for questions before exam, more coupling to real life applications

The finite element exercises are intended to a give experience on what can be done by commercial finite element programs. It is difficult to have a close and direct coupling to the lectures which are focused on the governing equations.

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?

Many students point out the importance of continuous studies - go to the tutorials, follow the course step by step, take notes on lectures, study on a regular basis

PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term? We will evaluate the finite element exercises and the laboratory work to see if there are ways to closer couple these two parts of the course.

This year, as well as last year, one full lecture (seminar) was devoted for each homework. The correct solutions were thoroughly explained and then the students were asked to correct each others homeworks. The final decision about point count and decision about passed/failed was however taken by the examiner. My conclusion is that too much time was spent on these items. It would be better to instead give more time for tutorials. This possible change will be considered for the course next fall.

OTHER INFORMATION

Is there anything else you would like to add?

Since few students used the opportunity to do the quizzes I will consider to make some changes. I will however keep them as non-compulsory moments of the course intended to be a help for learning.

Course data 2018-02-01

SE2126 - Material Mechanics, HT 2017 Mat.mek.

Course facts

Course start:	2017 w.35
Course end:	2018 w.3
Credits:	9,0
Examination:	LAB1 - Laboratory Work, 3.0, Grading scale: P, F TEN2 - Examination, 4.5, Grading scale: A, B, C, D, E, FX, F ÖVN1 - Assignments, 1.5, Grading scale: P, F
Grading scale:	A, B, C, D, E, FX, F

Staff

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Number of students on the course offering

First-time registered:	40
Total number of registered:	42

Achievements (only first-time registered students)

Pass rate ¹ [%]	60.00%
Performance rate ² [%]	78.80%
Grade distribution ³ [%, number]	A 21% (5)
	B 17% (4)
	C 42% (10)
	D 4% (1)
	E 17% (4)

1 Percentage approved students

2 Percentage achieved credits

3 Distribution of grades among the approved students