Report - SE2126 - 2019-01-23

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):
Peter Gudmundson, petergu@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 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 used a new non-compulsory part. A minority of students used this tool for learning.

Since last year the time for self-corrections of the homeworks were reduced to one hour. The finite element exercise 4 and the laboratory work were modified so that there was a direct connection between the two moments.

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 number of respondents to the course questionaire was 11 out of 41 (27%). This makes if difficult to make definitive conclusions. The average workload reported by the students was about 10 hours per week which corresponds to about 5 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 slightly better in comparison to the previous year. 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?

The number of respondents to the course questionaire was 11 out of 41 (27%). This makes if difficult to make definitive conclusions.

Generally the judgements for the course were very positive. Out of 22 questions, 21 had a score of 5.0 or above. The weak point was: 20. "I had opportunities to choose what to do" (3.6). This reflects that the course content is well defined and there is limited time to go outside the scope of the course.

There were very small differences between men and women. The largest difference was related to the question: "feedback that helped to see my progress" (women 4.0, men 6.4).

No differences were observed between international and Swedish students.

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: good lecturer and teaching assistant, well-written book, finite element exercises and laboratory work, homework assignments, interesting topic, useful knowledge, well organized

Negative responses: scheduling of finite element exercises, would like to see more own programming.

The finite element exercises are intended to give experience on what can be done by commercial finite element programs. It is no scope for inclusion of more own programming tasks. This is taken care of by other courses.

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 lectures and tutorials, follow the course step by step, take notes on lectures, study on a regular basis, solve own problems

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

In addition to the course analysis a meeting was held with three course representatives. Based on the course analysis and the course representative meeting, the following issues will be addressed for the course in fall 2019.

1. For each finite element exercise a short introduction will be made at a tutorial prior to the exercise. Here, the main goals of the finite element simulations will be explained as well as particular features. It will be emphasized that the finite element exercises are used to demonstrate material models for more complicated geometries that can not be analysed by paper and pen.

2. It will be investigated if is possible to use the same groups for all four finite element and laboratory exercises. This year new groups had to be formed for each exercise.

3. We will have a closer look at the scheduling of the finite element exercises. Since only one teaching assistant was available this year (last year two teaching assistants), there was less time for each student group. We will find a better solution for next year.

OTHER INFORMATION
Is there anything else you would like to add?

Few students used the opportunity to do the quizzes. Since they are not part of the course requirements, it is up to the individual student to make quizzes if they think it is useful for their learning. There is no reason to remove the quizzes. Some students regard them as useful.

SE2126 - Materialmekanik, HT 2018 Mat.mek.

Kursfakta

Kursen startar:	2018 v.35
Kursen slutar:	2019 v.3
Antal högskolepoäng:	9,0
Examination:	LAB1 - Laboration, 3,0, betygsskala: P, F
	TEN2 - Tentamen, 4,5, betygsskala: A, B, C, D, E, FX, F
	ÖVN1 - Inlämningsuppgifter, 1,5, betygsskala: P, F
Betygsskala:	A, B, C, D, E, FX, F

Bemanning

Examinator:	Peter Gudmundson <petergu@kth.se>
	Per-Lennart Larsson <plla@kth.se>
Kursomgångsansvarig lärare:	Peter Gudmundson <petergu@kth.se>
Lärare:	
Assistenter:	Hossein Shariati <hsha@kth.se>
	Christopher Miller <chrismi@kth.se>
	Irene Linares Arregui <irenela@kth.se>

Antal studenter på kursomgången

Förstagångsregistrerade:	0
Totalt registrerade:	48

Prestationer (endast förstagångsregistrerade studenter)

Examinationsgrad[1] [%]	*Det finns inga kursresultat inrapporterade*
Prestationsgrad[2] [%]	*Det finns inga kursresultat inrapporterade*
Betygsfördelning[3] [%, antal]	*Det finns inga kursresultat inrapporterade*

1 Andel godkända studenter
2 Andel avklarade poäng
3 Betygsfördelning för godkända studenter