Report - HE1201-2020-02-12

Respondents:<br>Answer Count:<br>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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## DESCRIPTION OF THE COURSE EVALUATION PROCESS

Describe the course evaluation process. Describe how all students have been given the possibility to give their opinions on the course. Describe how aspects regarding gender, and disabled students are investigated.

1. Students are each week during course given some lecture time at start of one of week's lecture, to bring up questions and suggestions for course
2. Contact is intiated with student representatives early in course, if available
3. A few assignments during course include a closing question, as part of assignment, to evaluate own learning and course content/structure /teaching/course admin. This has developed over time in response to low reply frequency to LEQ
4. Course evaluation is made available through course and reminded to complete after course, after final written exam
5. Meeting is initiated with student study committee, either by student representative or by course responsible teacher. Meeting includes
discussion of LEQ report and students's comments and positive/negative feedback and suggestions for development
6. Notes from meeting are shared with student representative
7. Course analysis is written and uploaded together with LEQ report and student meeting notes to KTH web

## DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)
see above

## COURSE DESIGN

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

## course offering

weekly lectures
weekly assignments
examination of ÖVN 2,0 credits through weekly individual hand-in of assignments
examination of TEN 4,0 credits
Part A through four short exams during course
Part B through 4-6 'laboratory assignment' to relate theory to practical examples and analyse in working group and hand in group report passed Part A+B can give grade pass E
Part C is open to students who have completed Part $\mathrm{A}+\mathrm{B}$
Part $C$ is final written exam for higher grade D-A

THE STUDENTS' WORKLOAD
Does the students' workload correspond to the expected level ( 40 hours/1.5 credits)? If these is a significant deviation from the expected, what can be the reason?
The course is at $25 \%$
still slightly below 10 hours per week

## 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?
overall in line with previous years

## OVERALL IMPRESSION

Summarize the teachers' overall impressions of the course offering in relation to students' results and their evaluation of the course, as well as in relation to the changes implemented since last course offering.
overall a positive impression
most important improvement is to raise the challenge for short exams
In general positive commments on course clarity, course information, response to students questions and student feedback
3h lectures 8-11 are not popular even thought they allow an hours work 11-12 before lunch.
This affects attendance to be potentially lower.
Lectures contained too much repetition from previous lectures (partly caused by irregular attendance)

## ANALYSIS

Is it possible to identify stronger and weaker areas in the learning environment based on the information you have gathered during the evaluation and analysis process? What can the reason for these be? Are there significant difference in experience between:

- students identifying as female and male?
- international and national students?
- students with or without disabilities?
the challenge of the course is the weaker part
It is a subject not prioritised in relation to engineering and science subjects, still many student have or discover an interest to learn, and to learn more after course


## PRIORITIZED COURSE DEVELOPMENT

What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?
COURSE INFORMATION, LECTURES and SCHEDULE
Maybe there is a group of students that 'miss' lectures that start 8 if it is a 3 h lecture with a blank in schedule before lunch.
Pedagogically it is not evident that lecture should be moved to $9-12$, but it is worth trying for better attendance
CHANGE move schedule to 9-12 and use 9-10 for questions, hand-ins, reviews, feedback and repetiton.

## EXAMINATION

KS part examination 'kontrollskrivning' in digital course environment on own computer has (too) low treshold to tempt (some) to look at non-allowed prepared own documents (on own computer) for support in writing replies or solving assignments.
CHANGE revert to only examination on paper
KS part examination was possible to make upp part-missed examination This was initiated after KS1, and then carried on throughout course on KS2-KS4 for equal fair examination, but was too generous, even though it may support learning by developing new solutions to assignments, some students are tempted to not prepare well enough
CHANGE instead add a KSxtra, where a missed KS1-KS3 may be made up in a KSxtra, and a missed KS4 made up for in written final exam.

## OTHER INFORMATION

Is there anything else you would like to add?
WORKING GROUPS
Students could form groups themselves. Comments on forming groups vary between years. If students form groups themselves, motivation may be higher. If teacher forms groups group dynamics may evolve better within group.
(maybe) CHANGE to teacher formed groups

A popular working method is used in course 'Modern Physics' where students get a benefit from attendance through a mini-test at start of each lecture. Each lecture, three questions one at a time on (ppt) screen
multiple choice replies. Replies are exchanged with neighbour, then peer-reviwed, corrected as the correct answers are reviewed togheter on screen. The person correcting signs and hands in to teacher. A correct sheet receives a bonus for final written exam.

