



Report - SD2150 - 2018-06-14

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 spans over 2 periods. In the first period the course participants should learn and exercise,

- structure dynamics fundamentals
- experimental methods to acquire necessary data and
- process data to extract structure dynamic models.

In the second period the participants work in project groups with an industrial test object.

The course material consists of

- a compendium,
- a set of presentations,
- a collection of calculation problems
- a set of video-clips accessed via Scalable-learning

The idea is to use learning activities that promotes participant activity and collaboration among participants.

Activities promoting learning of basic theory consist of

- prepare for class meetings with video-clips including short quizzes and material from compendium.
- class meetings with key concept discussion and demonstrations
- problem solving home assignments
- reporting experimental investigations.

Activities promoting practical experimental skills are

- two laboratory exercises and
- a project on an industrial test object.

The examination consists of three parts:

- Computer and laboratory exercises, Pass/Fail. Pass requires participation in data acquisition, data processing and a short report with sufficient quality.
- Project, P/F. Pass requires participation in data acquisition, data processing and reporting.
- Oral and written examination, A - F. Examines participant's ability to understand, explain, experimentally determine and use structure dynamic concepts and models in a critical way.

Final grade equal to grade on written examination with possibility to increase one step with a high quality oral examination result.

Since previous course offering, an oral examination, that covers experimental methodology, has been added.



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 weekly workload among course participants who answered the questionnaire is 9-11 hrs/week. This is lower than expected (12 – 14 hrs/week) considering the course credits 9 hp. From responses given in the questionnaire one reason is the heavy workload in other courses. Another reason is that it is one often tends to underestimate the work.

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 participant's learning results are good.

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?

From the average learning experience polar diagram the learning experience is good. One observation is that there is a significant difference between "Swedish" and "International" student's replies. On average international student's are roughly +1 unit compared to Swedish. A possible explanation is the difference between the learning environments on KTH and on their home universities.

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?

Stronger aspects:

In the polar diagram statements 1, 4, 6, 11, 12, 14 20 and 22 have average responses ≥ 6 . A summary of these are,

- interesting and challenging issues,
- open and inclusive atmosphere,
- understanding of key concepts have high priority,
- course activities helped to achieve intended learning outcomes,
- I received useful regular feedback,
- I could choose what to do and
- I could get support when needed.

From Free text answers:

- Good mix of theory and practical measurements.
- Many different possibilities to learn: Classes, video-clips, quizzes, assignments, laboratory exercises etc.
- The laboratory exercises and the project.

Weaker aspects:

In the polar diagram statements 3, 5, 8 and 13 have average responses ≤ 5.2 . A summary of these are,

- I was able learn by trying my own ideas (5.2),
- I felt togetherness with others on the course (5.2),
- I understood how the course was organized and what I was expected to do (5.2) and
- I understood what I was expected to learn in order to obtain a certain grade (4.8).

From Free text answers:

- Time schedule regarding classes, deadlines etc were not clearly stated at course start.
 - The routine for providing laboratory exercises feedback.
 - Information on examination requirements and preparation for examination.
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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?

Suggestions for improvement were,

- Improve information on time schedule, deadlines, exam requirements and preparation for exam.
- Increase number of calculations problem in collection of exercises.
- Introduce quizzes on theoretical aspects.
- Update the compendium. In particular the tricky parameter estimation part.
- Sum-up lecture in the end where theory and important concepts are repeated.

Advice to future participants:

- Study regularly during the course and focus on understanding the key concepts as soon as possible.
 - Prepare for classes and ask questions during classes.
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PRIORITY COURSE DEVELOPMENT

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

Aspects of the course to develop:

- Improve/clarify course information. In particular deadlines, examination requirements and preparation for exam.
 - Revise the compendium. In particular make the compendium consistent with the video-clips.
 - Increase number of calculations problem in collection of exercises.
 - Introduce quizzes on theoretical aspects.
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Kursdata 2018-06-14

SD2150 - Experimentell strukturdynamik, projektkurs, VT 2018

Kursfakta

Kursen startar:	2018 v.3
Kursen slutar:	2018 v.23
Antal högskolepoäng:	9,0
Examination:	LABA - Dator- och mätövningar, 3,0, betygsskala: P, F LABB - Projektlaboration, 3,0, betygsskala: P, F TENA - Muntlig tentamen, 3,0, betygsskala: A, B, C, D, E, FX, F
Betygsskala:	A, B, C, D, E, FX, F

Bemanning

Examinator:	Hans Bodén <hansbod@kth.se>
Kursomgångsansvarig lärare:	Ulf Erik Carlsson <ulfc@kth.se>
Lärare:	Ulf Erik Carlsson <ulfc@kth.se>
Assistenter:	

Antal studenter på kursomgången

Förstagångsregistrerade:	35
Totalt registrerade:	37

Prestationer (endast förstagångsregistrerade studenter)

Examinationsgrad¹ [%]	74.30%
Prestationsgrad² [%]	95.20%
Betygsfördelning³ [%, antal]	A 31% (8) B 12% (3) C 27% (7) D 19% (5) E 12% (3)

1 Andel godkända studenter

2 Andel avklarade poäng

3 Betygsfördelning för godkända studenter