

### Report - SD2140 - 2019-03-05

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 consisted of 11 lecture sessions, 7 exercise sessions, 1 questions/review sessions, and 1 external lecture on industrial applications. There are 4 compulsory assignments and one final oral examination for each student individually. Changes since the previous course offering concern primarily the organization of exercise sessions in view of the oral examination: instead of focussing on questions by students out of the number of exercises to be considered in association with each exercise session, 2 exercises were selected by the teaching assistant for the students to prepare their solution in groups, followed by a presentation and discussion with the whole class at the end of each exercise session.

While the source material consists primarily of the reference book, lecture notes in the form of slides highlighting the main results were created and provided.

#### 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?

8 credits over 7 weeks (+3 between the last session and the oral exam), i.e. approx 21 (10 weeks) to 30 (7 weeks) hours/week on average.

More than 60% of the students who answered reported to have worked less than this on average, with 2 potential reasons identified: - Other courses in parallel which made some students feeling limited with the time they could allocate to the course, - Some students may not have taken seriously the need to work regularly, early enough, not only on the assignments but also on the exercise associated with each lecture

#### 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 are rather in agreement with the lack of time reported by the students to have spent on the course. Similarly to the previous year, the whole spectrum of results seems to be in line with the amount of time and efforts put into the course: students who had some difficulties at the beginning (mostly due to the background in terms of pre-required courses and knowledge) were able to reach among the top grades.

However, it also appears clearly that more could be done on the exercise sessions and applications in order both to ensure a more distributed workload, to support the motivation of the students, and to prepare them better for an oral examination.



#### 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 overall impression is that there is room for improvements on a few aspects, most of which can be effectively addressed via the exercise sessions.

In all three areas (meaningfulness, comprehensibility and manageability), the feedbacks seem to be overall better than the previous year, at least removing feedbacks where students were disagreeing.

The students who answered seem to have a general consensus between being neutral or agreeing with the statements.

The nature of the course, quite theoretical, as well as the current format, with a substantial part requiring personal work and self-discipline may generate quite contrasted perceptions of the learning environment, but in the present case, the students seem to have realised and agreed with the correlation between time and efforts, and outcome of the course.

#### 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?

One area that has improved a lot compared to the previous session is the feeling that the students have received adequate feedbacks (assignments and exercise sessions), although potential for improvement is still highlighted.

A weakness that remains is the lack of feeling that the students can have the ability to influence the course, for instance through trying their own ideas, or at times choosing what to do.

This reflects the rather rigid format of the course, which, despite the opening of exercise sessions with group work and oral participation, still has potential for improvements in terms of offering some flexibility.

#### 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?

Most good advices appearing in the open questions concern the format of the exercise sessions. One suggestion was that at least one of the exercises should be solved as a "model presentation" by the teacher during the session and then discussed with the students. Another good suggestion was to pre-assign exercises to sub-groups before the session so that these could be presented by these sub-groups during the session, and discussed with the whole class then.

#### PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term? One aspect that is intended to be further developed for next year, in line with most of the feedbacks received, is the format of the exercise sessions. The attempts made this year, following last year's observations, have not proved to be as satisfactory as anticipated. On the short-mid term, two directions may be implemented: reducing the number of exercises to the ones strongly highlighting the key concepts, and pre-assigning the solution to sub-groups responsible to present their work in class for further discussion.

#### OTHER INFORMATION

Is there anything else you would like to add?

No

# Course data 2019-03-14

## SD2140 - Vibro Acoustics, HT 2018

## **Course facts**

| Course start:  | 2018 w.44  |
|----------------|--|
| Course end:    | 2019 w.3   |
| Credits:       | 8,0  |
| Examination:   | TEN1 - Examination, 8.0, Grading scale: A, B, C, D, E, FX, F |
| Grading scale: | A, B, C, D, E, FX, F   |

### Staff

| Examiner:                   | Ines Lopez Arteaga <inesla@kth.se></inesla@kth.se>   |
|-----------------------------|--|
| Course responsible teacher: | Romain Rumpler <rumpler@kth.se><br/>Ines Lopez Arteaga <inesla@kth.se></inesla@kth.se></rumpler@kth.se>  |
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| Assistants:                 | Siddharth Venkataraman <sidven@kth.se></sidven@kth.se>   |

## Number of students on the course offering

| First-time registered:      | 0  |
|-----------------------------|----|
| Total number of registered: | 11 |

## Achievements (only first-time registered students)

| Pass rate <sup>1</sup> [%]                  | There are no course results reported |
|---|--------------------------------------|
| Performance rate <sup>2</sup> [%]           | There are no course results reported |
| Grade distribution <sup>3</sup> [%, number] | There are no course results reported |

1 Percentage approved students

2 Percentage achieved credits

3 Distribution of grades among the approved students