



# Report - SD2140 - 2022-02-10

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):**

Romain Rumpler, rumpler@kth.se

**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.**

The course evaluation process is organized in several stages:

First, the course comprises 7 problem-solving sessions where the students are given an opportunity to work in groups on problems with multiple options for solution-procedures. During these sessions, there is a constant interaction and opportunity for two-way feedback on key concepts in the course, there is room for discussing and elaborating multiple solution strategies, within student-student or student-teacher groupings.

Second, the students are given personal feedback on each of the four assignments they have to submit, with open possibilities to discuss these assignments at the end of each class before the deadline for submission. Once they have received their personal feedback, I organize a whole-class discussion on the key points from the assignment which were maybe not addressed in the most complete way. The students are given an opportunity then to comment on these points. They are then given a possibility to resubmit part of their assignment for an upgrade, if they wish to do so.

Third, the last session of the course includes a summary of the key concepts, where the format of the final oral examination is in focus (after multiple introductions of that format during the course, and examples of key concepts which could be discussed during this oral exam). Again, during this dedicated session, the students are given the opportunity to address any concern regarding the content or the format of the course and/or evaluation.

Finally, at the conclusion of the course, they have two opportunities to share their opinions on any aspect of the course: in a short individual discussion after the oral examination (with the passing students, and having disclosed their result, such that they are not pressured to think that their result could be affected by their expressed opinions), and an anonymous online evaluation questionnaire. Unfortunately, it seems to be a trend that fewer students take the time to fill in these valuable opinion questionnaires.

Additionally, I personally usually keep interactions with several students of the course beyond the scope of the course (internship or project placements, thesis search, interest in pursuing doctoral studies, request for mentorship, ...), and I, in this way, get a possibility to receive more informal feedback from students outside of the teacher-student relationship.

We also hold a post-evaluation meeting with the pedagogical team in order to share viewpoints on unfolding of the course, points which went more or less as anticipated, and opportunities for adjustments in the next course offer round.

**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.)**

The conclusion of the course being in the form of an oral examination, a discussion is held at the end of the examination for the willing students, mostly in order to secure some early feedback on the course by the students, before they are asked to fill in the LEQ.

**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 12 lecture sessions, 7 exercise sessions, 1 questions/review sessions. 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, as a continuation of the changes initiated for the previous offering: 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. Unlike the previous years, these group discussions consisted of smaller groups which worked in Zoom breakout rooms, due to the online nature of the course associated to the COVID-19 pandemic. Additionally, the selection of exercises to be solved has been kept reduced in order to target more specifically the key concepts that should be assimilated by the students.

While the source material consists primarily of the reference book, lecture notes in the form of slides highlighting the key concepts and results are provided. In-class problem-solving examples have been added for the lecture sessions, thus expanding the number of lecture sessions from 11 to 12.



## THE STUDENTS' 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 weeks between the last session and the oral exam), i.e. approx 21 (10 weeks) to 30 (7 weeks) hours/week on average.

Almost all 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.

Despite a very clear emphasis on this at the start of the course, as well as regular comments made by previous students in their recommendations to the next generation of students, the time dedication remains a key factor of diversity between the students, which is in my opinion also a key explanation for the diversity of results.

## 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 very much varying, covering the full range of grades. It is expected that they would be rather in agreement with the lack of time

reported by the students to have spent on the course.

Similarly to the previous years, 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.

Despite a strong emphasis put on the preparation to oral discussions in this offering (in the form of short online question&answer occurrences during the online lectures), which I acknowledge to be an added difficulty for the students, the outcome in terms of result distribution was marginally affected. Obviously, the difficulty for many students to keep up the motivation in connection with a feeling of isolation and general apathy with all courses being held online due to the COVID-19 pandemic is an additional factor that I take into consideration for this offering of the course.

## STUDENTS' ANSWERS TO OPEN QUESTIONS

**What does students say in response to the open questions?**

As in previous years, the answers to open questions are encouraging to be very engaged into the course, which I acknowledge to be a topically difficult course for many students. Below are a few quoted comments in answer to the general questions, see the outcome of the questionnaire for further details:

\* "What was the best aspect of the course?" (at most 7 anonymous answers)

Student 1: "The teacher and assistants were very accessible and always happy to help"

Student 2: "Teachers always ready to answer every questions during classes."

Student 3: "Definitely the teachers. Shout out to Romain and his genuin kindness. Too bad we did not have physical lectures"

Student 4: "The lectures and the home assignments"

Student 5: "Romain's energy."

Student 6: "Lots of feedback and exercises that was good for learning"

Student 7: "That all of the teachers were very helpful, it made it easier to motivate myself to study. Thank you for that! I also liked the lectures. I think its good to focus on the theory and then we can solve problems on our own. If i compare with other courses these zoom-lectures were more as "normal lectures" which was very good. I think its good to try to get everyone to turn on their cameras etc., it really makes it easier to focus."

\* What would you suggest to improve? (at most 7 anonymous answers)

Student 1: "A better organisation of the exercise sessions"

Student 2: "Maybe on or two more Home Assignments ? As it is the only way to receive feedbacks, I feel like it would be better."

Student 3: "The tutorials could include examples different from the ones in the vibro-acoustics book. I would have liked an example of something similar to HA4."

Student 4: "More feedback before the exam period. Try to show examples on exam questions on different levels, it would make it easier to know how to study."

\* What advice would you like to give to future participants? (at most 7 anonymous answers)

Student 1: "Study as the course goes, there is a lot of new concepts and it is easy get behind."

Student 2: "Work regularly and be sure to understand the key concepts before the oral examination."

Student 3: "Read the chapters in the book before each lecture so that you are prepared and can learn more during the lectures."

Student 4: "It's a very demanding course. Give this course a high priority and dedicate lots of time to learn the problems. Find someone to discuss the concepts with and don't try to learn the concepts from the book."

Student 5: "Spend a lot of time trying to solve all of the recommended problems before the exam period and work early with the material. This course contains more theory than the ones on bachelor level so its important to take that seriously. Make sure you take time to really understand the steps in the solutions."

\* Is there anything else you would like to add? (at most 7 anonymous answers)

Student 1: "I just want to thank the teacher and the assistants for making the course less hard by being so friendly and helping."

Student 2: "I enjoyed the course but since everything was over zoom and we early on got behind each lecture felt rushed. we usually took a 10 min break instead of 15 min and still the lectures draged over with at least 10 minutes each time. This combined with the difficulties of having discussions over zoom discouraged asking questions. I would also suggest to create a couple "study sessions" and telling the students in advance what problems that will be used during the problem lectures."

Student 3: "I think this course has been well structured and I liked that there is a lot of focus on theory. I have been in situations during Covid where I have gotten the paper script from the teacher to read on my own instead of zoom lectures/exercises. So I am very happy with these lectures and exercises, I think they were very good. Thank you for that!"



### **SUMMARY OF STUDENTS' OPINIONS**

#### **Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.**

---

As in previous years, it seems that the course is generally appreciated by the students, even though this offering had to be made entirely on Zoom, but perceived as a difficult and heavy course, which is to some degree acknowledged by the teachers. A few students have expressed their wish for the course to be spread over two periods.

Although the students have been extremely positive about the lectures, in terms of content and interactions despite the special circumstances, the problem sessions suffered in terms of interactions and potential for feedback, which was clearly expressed by the students. Hoping for a return to teaching on site, highly interactive exercise sessions are a key point to focus on for the next round of this course.

---

### **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.**

---

Despite the few responses, the course seems to have improved in certain areas where it showed weaknesses in the past, although other areas may have showed up as weaker this time (e.g. the exercise sessions which didn't turn out to be as interactive as intended when migrated to Zoom sessions). Overall the difficulty observed by the teachers is in the awareness that the students should get to start working seriously on the course from the beginning, since the pace is quite sustained all along the course.

---

### **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?
- 

One point that has gone weaker with this offering of the course is the perception by the students of the problem-solving sessions, which, migrated to online sessions, have not fulfilled the degree of interactions intended. If such sessions are to be maintained online, a key focus should be put on this aspect, after having put a special effort to enable an effective migration of the lecture to online lectures this year, which was well received by the students.

On the other hand, there seems to have been a continued improvement in terms of the perception by the students of the goals and organization of the course, as well as their understanding of the message taught by the teachers. This aspect could also be connected to the partial changes operated in the teaching team, in particular with the positive dynamic and regular communication between the 3 teachers involved all along the course.

No distinctions could be made in terms of gender, international, or disability-related origin of these feedback due to the non-representative size of the samples.

---

### **PRIORITIZED COURSE DEVELOPMENT**

#### **What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?**

---

A priority for the next offering is definitely found in the increased amount of interactions within the problem-solving sessions. If these are resumed to be on site sessions, the intention is to have group work directly on the whiteboard, thus helping the students to be engaged, motivated, and better prepared for an oral discussion and examination at the end of the course.

---

### **OTHER INFORMATION**

#### **Is there anything else you would like to add?**

---

No.

---