



MWL

The Marcus Wallenberg Laboratory
for Sound and Vibration Research

COURSE EVALUATION AND ANALYSIS – NON-LINEAR ACOUSTICS 2021

Code: SD2180

Credits: 6

Lecturer and examiner: Leif Kari 070-798 7974 leifkari@kth.se

Prerequisites: Undergraduate courses in mechanics and mathematics.

Grading scale:

A, B, C, D, E, FX, F

Examination:

TEN1 - Examination, 6.0 credits

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Other requirements for final grade:

Written home assignments (TEN1; 6 university credits).

Number of students:

4

Grade of achievement:

100%.

Grade of examination:

100%; from D to A.

Form of course evaluation and analysis:

The course evaluation and analysis is performed during the last lesson with all students present (that want to participate) and the responsible teacher. This year it was 4 students. The specific questions raised are given in appendix (Course_Evaluation_Questionary_SD2180.doc). More questions were naturally brought up during the dialogue.

Date of course evaluation and analysis:

29 October 2021

Results of course evaluation and analysis:

- The previous studies for the students are sufficient to follow this course
- The prerequisites containing more specific math courses were appreciated.
- The home assignments help the students to meet the learning objectives.
- The lecture notes help the students to meet the learning objectives.
- The lessons help the students to meet the learning objectives.
- The students prefer home assignments instead of a regular, final written examination. A final written examination is not suitable for a course like this was the common opinion from the students. Home assignments are much better.
- The extra written assignment helps the students to meet the high level learning objectives. They recommended the future students to do the extra assignment and the seminar.
- The seminar gives help to the students to meet the high level learning objectives.
- The students would have had even more detailed information about the extra written assignment and seminar.
- The students suggested an extra lesson in-between the hand out of the extra assignment and the seminar to sort out possible questions.
- The students appreciate the flexibility to adapt the lesson schedule according to their overall schedule.
- The students like the pace of the course and that a week or so is given between the hand-out of the home assignments and the deadline of the hand-in of the home assignments.
- The students liked that it was a longer time between the hand-out of the papers and the deadline of the hand-in of the report + seminar.
- The tempo of the course is neither too fast nor too slow. It is suitable. However, it is not possible to write down everything that is said and covered during the lessons. Tip for future students from the former students: write down (if you wish to do so) only that is not explicitly written in the compendium – then the tempo is good.
- The lessons were made mainly in the classroom. The students liked the lessons. In particular, the teacher-student-student interaction between was good. The student liked the high involvement of the teacher in the subject and the students.
- The students asked several questions during the lesson. They said they learned a lot from it.
- The students liked the power point presentations and that they got the presentations after the lessons.
- The YouTube clip of non-linear waves including traffic disturbances shown in the class were appreciated from the students.
- The students liked the more focus on the sustainable development examples shown.
- The student suggested that a lesson in the end of the course is dedicated to the-state-of-the-art of non-linear acoustics.

Modification of the course due to evaluation and analysis from 2020:

- Most of the form of the course (lessons, time schedule, adaptive flexibility, home assignments, course literature, extra written assignment, seminar etc) were kept as before.
- The final seminar was given before the start of period 4.

General recommendations for the next time the course is given (2022):

- Keep most of the form of the course (lessons, time schedule, adaptive flexibility, home assignments, course literature, extra written assignment, seminar etc).
- The students would have had even more detailed information about the extra written assignment and seminar.

- The extra written assignment helps the students to meet the high level learning objectives. The students recommended the future students to do the extra assignment and the seminar.
- The students would have had even more detailed information about the extra written assignment and seminar.
- The students suggested an extra lesson in-between the hand out of the extra assignment and the seminar to sort out possible questions.
- The student suggested that a lesson in the end of the course is dedicated to the-state-of-the-art of non-linear acoustics.