

# Course analysis for CH2006 Autumn 2024

## Performed by:

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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.*

During the course we had several anonymous web-form 'minute papers' for students to reflect on their favorite learning, things they want to know more about (or are confused about), and other general feedback about the course or session. The final day of class had a course reflections session where students discussed their learning and also suggestions for course improvements, including a 'stop/start/continue' exercise with post-it notes.

An LEQ-evaluation was performed at the end of the course including categories on gender and disabilities. Unfortunately, insufficient responses were available to review.

## COURSE DESIGN

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

This course was delivered in two parallel parts with different teaching teams: Catherine Trask, and Bengt Johansson for noise and vibration, and Ann-Beth Antonsson Lundberg and Lena Andersson for air contaminants. **This was the second course offering.**

### OVERALL CONTENT OF THE COURSE

- Organic and non-organic particles (dust)
- Sound and vibrations
- Acute and long-term health effects
- Advanced methods for exposure measurements and analyses.
- Intervention strategies
- Work environment rules in the area

### FORMS OF EXAMINATION

- LAB1 - Laboratory work, 2.0 credits, grading scale: P, F
- RED1 - Project work, 2.5 credits, grading scale: P, F
- SEM1 - Seminar, 1.0 credits, grading scale: P, F

- TEN1 - Written exam, 2.0 credits, grading scale: A, B, C, D, E, FX, F

## **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?*

As no LEQ-results were available, we base our assessment on the class discussion of course reflections. No reflections related to being over-burdened, and some reflected requests for alternative assessment, so we interpret that the workload is appropriate.

## **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?*

4/5 students active students in this Masters course passed on the first exam attempt. There were 3 Cs and a D, which is lower than last year (the first year running this course) and a bit lower than average in our program (although this is an advanced course).

## **STUDENTS' ANSWERS TO OPEN QUESTIONS**

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

As no LEQ-results were available, we base our assessment on the class discussion of course reflections, see below.

## **SUMMARY OF STUDENTS' OPINIONS**

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

Overall the feedback from in-class learning reflections was positive, with some specific opportunities to improve as described in 'overall impression' below.

## **OVERALL IMPRESSION**

This course remains successful in the second-time offering, if a little bit small.

Over the canvas structure with linked schedule was very appreciated, although there was a request to add links to all sessions (including air contaminants) and specify if there are multiple activities per session.

Students appreciated having pre-recorded videos, but did not like watching them again during classtime. They seemed to be confused about the purpose of this repetition, so the purpose could be emphasized during these sessions to promote higher engagement. Students also requested higher-quality video recordings, with better audio and fewer interruptions.

The lab was appreciated as being highly relevant with the in-class discussions being very useful for the report. Suggestions emerged for: 1) a pre-lab quiz to feel confident about knowledge before the lab starts; 2) a WBV practice session altogether in the room before leaving to go to vehicle measurements; 3) teachers or TAs to double-check all the devices for settings, accurate time clocks, and deleting unneeded files before the lab starts.

We specifically asked for feedback on the very small class size, which supported only one project group and limited peer review opportunities. Students mostly saw the positives in this, such as greater access to teachers during supervision time, though they did miss having lively class discussions and 'opposition' during project presentations. The adaptation of having them review a report from the previous year was acknowledged as useful. There was also a suggestion to bring in research articles to have a more 'advanced' form of review. In addition, as fewer groups meant more class time, students suggesting re-designating unused presentation time as group collaboration time (i.e. 'studio work').

## **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 be? Are there significant differences in experience between:*

- *students identifying as female/male?*
- *international/national students?*
- *students with/without disabilities?*

Unfortunately too few students responded to have a disaggregated analysis.

## **PRIORITIZED COURSE DEVELOPMENT**

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

We plan to maintain the flipped classroom format with class discussions and the applied 'professional practice' approach.

Short term for the next course offering:

- Update the Canvas schedule with links.

- Update course content to reflect the new Swedish provisions that came into effect Jan 1, 2025
- Extend the duration of the noise & vibration lab to allow for more practice with equipment, specifically a WBV practice session to the lab before leaving for vehicle measurement Ensure all the equipment is adequately checked before the lab.

Long term development:

- Assemble a 'library' of relevant research articles to serve as a potential alternative to peer-review
- Re-record some lectures to bring them all to a high audio standard.
- Add pre-session quizzes for the labs