# Report - MH2101 - 2022-03-08

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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#### **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, students were encouraged to provide feedback. Students were invited to book an individual or group meeting if they wished to do so. A Learning Experience Questionnaire (LEQ) was sent to all participants. Students are able to identify according ot gender, any disability and by nationality (Swedish or not Swedish). Students from Uppsala Universitet who took the course in parallel with students form KTH also given the chance to complete a questionnaire, as part of the standard feedback procedure at Uppsala. I got the feedback from Uppsala

### **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.)

No students chose to arrange a meeting. Some short conversations did take place after lectures. No major issues were identified and the minor issues that were discusses (e.g. technical questions) were resolved during the course.

#### **COURSE DESIGN**

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

The course learning activities consist of 11 lectures, 1 student-led debate session and two laboratory exercises

Assessment consists of two reports, based on the laboratory exercises, a multiple-answer online exam, an extended answers exam done at home and submitted online and a home assignment based on an industrial-style problem, which included both technical and sustainability

Since the previous course offering in 2020/21, the debate was changed to include safety issues with metal powder and the second laboratory session was conceived, written and given (only one laboratory session was given to smaller groups in 2021/22 due to Covid-19 restrictions).

#### THE STUDENTS' WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If these is a significant deviation from the expected, what can be the reason?

Only two responses were received to the LEQ, so no quantitative data are available for the course. No students complained about excessive

# 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 in 2020/21 were: 1A, 2B, 5C, 2D and 2E

In 2021/22, the results were: 3A, 2B, 2C and 1D. One student did not submit the home assignment and so has not completed the course.

The small sample size makes it impossible to draw conclusions, but the spread of results in 2021/22 is similar to 2020/21, although more students achieved a grade "A". No major changes were made to the course content, so it is most likely that this is a simple fluctuation in performance between the two small groups.

# STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Only two responses were received to the LEQ, so no data are available for the course.

# **SUMMARY OF STUDENTS' OPINIONS**

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

Only two responses were received to the LEQ, so no data are available for the course. The informal feedback I received during and after lectures in the chat of the Zoom calls or vocally was positive, as was the feedback to the laboratory sessions, which was given in person Some students said they enjoyed the course and others said they found it interesting. No negative comments were given, but that is probably expected, since it is unlikely students would give negative comments in these fora.

# 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.

The current state of the course and the feedback from students is positive and the potential to develop the course is significant, especially to give the course as lifelong learning. No negative comments were received to the new course material introduced in 2021/22

# **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?

No data is available regarding breakdown of different demographics.

Some students commented that they would prefer lectures to be given in person, which could be implemented at KTH in 2022 if a solution to broadcast/stream the lectures to students in Uppsala can be found. However, my personal belief is that giving a fully digital lecture enables better teaching, as content may be optimised for one medium, not being forced to use one lecture for both online and in-person teaching. This will be discussed internally at KTH before the next course offering.

PRIORITIZED COURSE DEVELOPMENT
What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?

KTH will soon (in May 2022) get access to a new gas atomiser at Kista. This should be integrated immediately into the course as a practical or site visit. This is the highest priority. Also, reintroducing industrial presentations (which were not use din 2021/22 due to time restrictions and a lack of availability of industrial partners) is a secondary priority.