

Report - MH2051 - 2025-01-03

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):

Pär Jönsson, parj@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.

At the beginning of the class a student representative was elected. We have received feedback from that person throughout the course. At the end of the course a LEQ was started, but only 5 students filled out the form.

We have had several interactions between students and supervisors throughout the course, since a majority of the course is based on project work.

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.)

As described above, the teachers have been in contact with the student representative. Also, the supervisors have met with their student groups on a regular basis.

COURSE DESIGN

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

The course provides knowledge of:

1. Sustainable business and conditions for a circular economy
2. Materials and available resources (metals, ceramics, concrete, minerals, polymers and organic materials)
3. Natural raw materials. Exploration and environmental impact (metals and minerals)
4. Processing and recycling of materials (all materials)
5. Design, manufacture and use in a circular economy (all materials)
6. Recycling and reuse (polymers, ceramics, concrete, organic materials and metals)

After passing the course, the student should be able to fulfill the following learning goals:

- ILG1: Explain the different principles of circular economy and apply them to different materials. (PRO1)
- ILG2: Explain how properties of different processes and different materials contribute to a circular economy. (PRO1 + PRO2)
- ILG3: Analyze how changes in processes and / or materials composition affect sustainability goals and the conditions for a circular economy. A perspective includes technical, organizational as well as society's perspective. For higher grades, the student is required to adapt the analysis to the context of the problem. (PRO2)
- ILG4: Demonstrate the ability to independently solve problems, as well as the ability to present the solution orally and in writing. (PRO2)

Course requirements:

- IPRO1 - Seminar assignments, 1,5 credits, grading scale: P, F
- IPRO2 - Project assignment, 6,0 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?

Too few students answers to be able to evaluate.

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?

At the moment, 50 out of 66 students have completed all parts of the course. the grades were the following:

A: 39
B: 5
C: 6

The grade is solely based on the project. Since the students could select their topics, they have been very motivated. We supervisors have really experienced that they have worked well and presented interesting results.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Of the five students answering the LEQ, we received the following feedback:

What was the best aspect of the course?

The Project as the lectures lacked in quality content.
different perspectives on circular economy from experts from different industries
Free work, topic choice, interactive presentation
We got to choose our own group and topic to work on.
To show the processes how the material recycling is going nowadays and what are the problems behind that.

What would you suggest to improve?

Lectures covering the concept of circular economy in relation to the materials. Most lecturers lacked in proper knowledge on circular economy principles and mainly referred to recycling processes in their lectures.
Please improve communication with students, quality of supervision, and information transparency in advance. For example, it was absolutely not clear that we were about to write a peer review, such information should be included in the PM from the beginning.
Maybe it should better show the collaboration between the parts like we can smash mechanical some part and put it into the concrete system so there can be connection to handle the waste.

What advice would you like to give to future participants?

Choose the course if you are interested in recycling of materials and want to learn about them on a very basic level.
go to class

The partner does not matter just find it as fast as it is possible and finding a theme that you can get the vibe together. And thinking every scenario even if it is not possible because there can be other ways to reach goals.

The feedback from the student representative was the following:

This is my feedback regarding the Economical process analysis and strategy course.

Firstly, the course is divided into lectures, project and an exam which seems to be a wholesome experience for learners, as during the project we can apply our knowledge that we have learnt so far.

Secondly, the lectures taught well the economics behind steel industry operations which is crucial as well as didn't know before.

Lastly, there are no suggestions to improve.

Example of feedback from another student that sent comments: This is my feedback regarding the Economical process analysis and strategy course.

Dear Professor,

I hope this email finds you well. I wanted to take a moment to express my sincere gratitude for the great learning experience I had taking MH2051. It was very engaging and your teaching made the subject come alive. I would also like to thank you for accommodating my late submissions when circumstances arose. Thank you for taking the time to evaluate and support my studies, which made a big difference on me.

The course has sparked my enthusiasm for the circular economy as well as different material studies of sustainability. It is my first time venturing into this type of studies and I find myself eager to explore further. It would be incredible to have the opportunity research more into this area or deepen my understanding in the future.

If there's ever a chance to learn more about the work happening in sustainable production of materials, I would be thrilled to learn more. Are there any readings or materials I should read up on?

Regardless, I wanted to thank you for making such a positive impact on my academic journey, wishing you all the best in your continued work!

SUMMARY OF STUDENTS' OPINIONS

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

Based on the student representative comments the students were overall satisfied with the 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.

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PRIORITIZED COURSE DEVELOPMENT

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

We need to make the instructions clearer with respect to

1. What description is required to hand in if you miss more than 20% of the lectures
2. What is required with respect to the peer-review of another student groups presentation and report

OTHER INFORMATION

Is there anything else you would like to add?

Overall, we teachers need to improve our abilities in giving hybrid lectures.