Report - MH2051 - 2023-11-30

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

An LEQ was published 231104 - 231117. Only 3 out of 18 students answered

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.)

Discussions have been made during the period. Since the number of active students was low it was easier to have ongoing discussions on different parts of th ecourse

COURSE DESIGN

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

Goals

The course provides knowledge of:

- 1. Sustainable business and conditions for a circular economy
- 2. Materials and available resources (metals, ceramics, minerals, polymers and organic materials)
- 3. Natural raw materials
- a. Exploration and environmental impact (metals and minerals)
- b. Mining 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, 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)
- -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)

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?

The three students that answered the LEQ spent 6-14 hours per week. There were too few answers to make a clear conclusion.

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?

Only 10 students finished the course. They received the following grades:

D: 3

The result is high. However, the students that got A's really did a good job. I think that when we let the student select a project that they are very interested in they put in a large effort to do a good job. It is clear that these students took the opportunity to discuss their project work on a regular basis during the course with the supervisor, which made them progress much more than the students that did not take the opportunity to discuss with the advisor as frequent.

STUDENTS ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

What was the best aspect of the course?

Different lecturers sharing their research and perspectives, seminars to learn from each other.

Lecture by different lecturers who are experts in their field

Good supervision by Pär!

Interesting lectures from different lecturers

What would you suggest to improve?

The course information system could be better, sometimes guest professors got confused not knowing about zoom link they need to loog in to.

Make deadlines and the structure of the course clearer in the beginning.

Make sure that the lecturers know that a they are supposed to hold the lecture hybrid (some didn't know about the Zoom meeting until we told them in class) and that they roughly know about other lecture contents.

Writing a 2 page text about how the lectures met the learning outcomes didn't really help me to dive deeper into the topics. I would have preferred another essay about a topic of the course/answering some questions of lecture topics,... Better information plan.

Improve Canvas page and add deadlines in time plan.

Change individual reflection assignment (less focus on connecting lectures to learning outcomes

SUMMARY OF STUDENTS' OPINIONS

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

Overall the students were satisfied with the lectures from the different teachers with different expertise. Improvements are necessary with respect to hybride meetings and the reflection assignments.

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 teachers are were satisfied with the students performance in the class. Those that passed the course really made very good reports and presentations.

There were some complains about that some teachers could not handle the hybride meetings, which most likely lead to that some students dropped the course. We should also see if we can change the requirements regarding the reflection assignments.

PRIORITIZED COURSE DEVELOPMENT

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

Make sure that teachers know how to give hybride lectures.

See over the reflection assignment so it better meets the goals of the learning outcome.