



Report - MH2042 - 2021-06-07

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):

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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.

The LEQ questionnaire has been used. Students have been able to also voice their opinions of the course in the mandatory self reflection.

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.)

Regular meetings on Discord. Students have been able to book appointments throughout the course.

COURSE DESIGN

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

Intended learning outcomes: During the course you will plan, carry out and present an industrially relevant project, in a scientific manner, that also assesses the business impact. Hereafter a number of ILOs will be listed with specific items that assess them. After successful completion of the course you will be able to: 1. Present project ideas as well as project results in a clear and informative manner to a group of Peers. a) Dragon's den pitch. b) Project seminar. 2. Incorporate ideas of innovation and entrepreneurship into the project in order to enhance the outcome. a) Project report. 3. Operate in a project group with the intended goal to deliver a solution to an industrially relevant problem, using CFD simulation software. Assess the organization structure of the project group. a) Individual reflection. 4. Write, assess and criticize reports based on CFD simulations. a) Lab report 1 b) Lab report 2 c) Peer-review lab report 1 d) Peer-review lab report 2 e) Opponent session during final seminar. 5. Have a working understanding of the finite volume method in order to design a CFD model according to an industrially relevant problem. a) Project report

The course is assessed based on the learning outcomes (SEM1 and PRO1, corresponding to the two different types of communication with which the students present their results and ideas).

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?

The LEQ only contains 5 answers which are too few to draw any conclusions upon. It seems that the students do not use 160 hours in total for this course.



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 are in line with previous years. The pandemic does not seem to affect the results to any large degree.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

The LEQ only contains 5 answers which are too few to draw any conclusions upon.

SUMMARY OF STUDENTS' OPINIONS

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

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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.

My overall impression is that the course offering was OK, but not great. The information about individual lab reports (new for this year) was not transmitted well enough it seems. Many students worked in groups (as they should) so having an individual lab report is useless. This must be changed back to group reports as it was for previous years. Also, the peer-review system on Canvas failed this year which meant the feedback (and learning from reading another lab report) was lost. Instead I had to read the reports and give comments. This was delayed since I did not recognize that the peer-review was not working.

The Dragon's Den presentations were really good this year over the board. The industrial contribution this year was also good.

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?

I think the course could benefit from some more focus on the ANSYS Fluent software. I have noticed that some students work very efficiently in groups, by assigning different tasks to different members. This means that not everyone gets to use the software in an equal amount. This was exacerbated this year due to the pandemic where not every student had a good simulation computer at home (i.e. the student with the best computer mainly input all the settings and ran the simulations for the project, while the other students in the group followed over Discord/Zoom)

Perhaps one option is to use an oral examination of the software for all students. This would force students to take turns using the software and as such the learning process would probably be better than just observing.

PRIORITIZED COURSE DEVELOPMENT

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

Oral examination (in computer room, where PhD students can help in the examination) and lab reports as group reports instead of individual reports.
