Report - MH2041 - 2020-05-19

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.

Students were offered to fill out an LEQ, but only 8 out of 22 students handed in their answers. In addition, the teachers have discussed details of the course with the students throughout the course.

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.)

The teachers have discussed details of the course with the students 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.

Objectives:
Application of phase diagrams and thermodynamic theories for evaluation of equilibrium between metallic melt, slag and non-metallic inclusions in different stages of pyro metallurgical processes. This knowledge can be used for analysis and optimization of metallurgical processes and provides a basis for subsequent advanced courses (Advanced Course in Process Science).

Examination:
TEN1 - Written Examination 5 hp (A,B,C,D,E,Fx,F)
LAB1 - preparation for the examination, exercises provided by the teachers 1 hp (P/F)

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 few answered varied from 3 - 14 hours per week. These mentioned workload can be considered as normal and expected.

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 grades on the course were the following:
A:0
B:5
C:7
D:4
E:2
F:2

LAB1: all students passed

The result is overall okay, but could be better. The exterminators opinion is that some of the students don't have the thermodynamic background as required for an applied course.

STUDENTS´ANSWERS TO OPEN QUESTIONS
What does students say in response to the open questions?

What was the best aspect of the course?
- The lectures with Andrey
- The teachers
- Some topics delivered by specialised teachers was good.
- Numerical part and three phase diagram
- The part about slag calculations, since it was new.
- Calculation Part was explained well and enough time was given to practice and understand the concepts using numericals.
- Doing the exercises helped a lot to the learn the concepts well.

What would you suggest to improve?
- Visual aids
- More of the material was needed on canvas, not everything that was used in class could be found in canvas and I think it should have been. And
the solutions to the questions as well.
- The bulkiness of the material.
- more lectures on three phase diagrams and more practical examples
- During the exercises in part 2, too much emphasis is put upon the simple things, and too little on explaining assumptions and the harder things.
- The assumptions are not included in the slides so it is also hard to understand all solutions.
- The exam is completely numerical based which proves to be a bit tiresome at the end of 4 hours. Some theory part if included can reduce the stress while managing to write the exam.
- Course is well structured and easy to follow through if one pays attention and spent sufficient time on it.

What advice would you like to give to future participants?
- Attend the lectures
- To attend lectures always as this will help a student to be in tune.
- work on numerical
- Just to be regular in class so as to update themselves with every concept and eventually apply them
- It's a must take course. I would recommend everyone studying materials science to take this course.

SUMMARY OF STUDENTS' OPINIONS
Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.

The few students that answered seemed satisfied, but also pointed out some issues with lecture materials and course structure.
When we have discussed with the supervisors they also said that dont have the background knowledge to be able to follow 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.

It is all supervisors opinion that the students are satisfied with the course and the students appreciate to get an deeper knowledge about industrial applied thermodynamics.

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?

Too few answers to be able to evaluate.

PRIORITIZED COURSE DEVELOPMENT

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

We should make sure that the students which take the course have the required knowledge to follow the course. To ensure, additional thermodynamic lectures have been added to an earlier course.