Report - MH2000 - 2021-04-30

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):

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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 4 out of 15 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:
This course is intended to give an overview of common experimental methods used in the laboratory in materials science. Diverse areas are covered, including scanning electron microscopy (SEM), x-ray diffraction (XRD), measurement of thermophysical properties, and thermodynamic and kinetic measurement techniques. Emphasis will also be on analysing experimental data with respect to quantifying uncertainties in measurement. This is a hands-on course with some time being spent in the lab to become familiar with the different methods.

Examination:
LABA - Lab Report, 1.0, grade scale: P, F
LABB - Lab Report, 1.0, grade scale: P, F
TENA - Written Examination, 4.0, grade 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 these is a significant deviation from the expected, what can be the reason?

The few answered varied from 6 - 8 hours per week for 3 students and 3-5 hours per week for the fourth student. The workload is normal for all students.

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 of the course were the following:
A:3
B:4
C:3
D:3
E:2
Fx:0
F:0

All students passed the laboratory parts.

The result is overall okay. The grade distribution given here is similar to the distribution of the years before.

STUDENTS´ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

What was the best aspect of the course?
- The lab
- Multitude of state-of-the-art / relevant measurement techniques was presented. Thermocouple lab visit was well prepared and presented by the
lab assistants.
- I appreciated how they solved the first two labs.
- Also the Q&A session was good.
- The connection with the theory to the practical method and thus the experiment in the lab

What would you suggest to improve?
- Try to give the lecture just before the experimental session
- Individual feedback for Valter Ström' lecture on XRD:
- Badly prepared in general.
- Bad audio, should relocate to a place with better connectivity.
- No concept in explanation, all over the place with topic. E.g.: Points at a headline in a word document and gives loosely related explanation. It

is hard to tell apart his announcements of what will be presented in the next few minutes from when it is actually taught.
- I was left with the impression that the concept of the lecture was: "If you want to understand it, get the book."
- Connection between different concepts not outlined (e.g. Bragg diffraction and lattices), explains concepts without context (e.g. focusing circle where is that actually found?).
- Fails to understand and answer students' questions.
Laboratory Literature:
-There should be a preface that most of the articles provided are ads for certain manufacturers, disguised as science reports (e.g. Freeman rheometer or thermocouple hardware).
-If the labs stay digital I think it would be good to improve the layout for the lab because in the first lab we spent 3h plus, just sitting by the computer. The second one was more reasonable where there also was
time to work with the assignments and get help from Benjamin.
- Maybe some lecture could be done with more application examples

What advice would you like to give to future participants?
- Ask questions
- Be ready to study and to connect the experiment lab to the problems and the theoretical question

SUMMARY OF STUDENTS' OPINIONS

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

Some of the few students that answered seemed unsatisfied with a part of the course. It was pointed out that the organisation of this part of the course has to be improved.

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 in general are satisfied with the course since a good overview on experimental methods is given, which will help the students to work as future engineers. Some lecture parts should be improved.