

Report - MH2029 - 2019-01-03

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

COURSE DESIGN

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

The overall aims of the course are:

• To develop students' knowledge of current methods to produce base metals from natural ores and recycled materials with focus on steel, which are most relevant for the Swedish steel industry. However, the production of aluminum and silicon is also discussed to exemplify the production other metal as well as other production concepts.

To develop students' individual skills at performing relevant thermodynamic calculations for the extraction of base metals with focus on steel.
To develop students' individual skills at interpreting the significance of the results of these calculations.

One change that was introduced compared to the previous course is that some basics of casting was explained in one lecture.

THE STUDENT'S 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?

Most students reported that they epent 9-14 hours per week on the course, whicj is reasonable.



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?

Results on the ordinary exam:

A: 5 B: 4

C: 1 D: 1

E: 2

FX: 1 which was changed to an E after the student passed the FX questions F: 3

results on the re-exam:

2 A 1 E

Overall, I am very satisfied with the results on the exams. The three students that did not pass the ordinary exam managed to pass the re-exam.

OVERALL IMPRESSION OF THE LEARNING ENVIRONMENT

What is your overall impression of the learning environment in the polar diagrams, for example in terms of the students' experience of meaningfulness, comprehensibility and manageability? If there are significant differences between different groups of students, what can be the reason?

Overall, the students seem to think that the course was interesting. I could not see any major differences in the answers for different groups of students.

ANALYSIS OF THE LEARNING ENVIRONMENT

Can you identify some stronger or weaker areas of the learning environment in the polar diagram - or in the response to each statement - respectively? Do they have an explanation?

What was the best aspect of the course?

I really liked the different perspectives our professor provided us with. We could think differently with the small exercises which he took in class. The Steel University simulation was really interesting and helped us understand the applications of the concepts learnt during the course. learning about ladle metallurgy was best about the course

Basics of metallurgy

The corse was interesting and required the right amount of study/work for a 6 credit course. The professor gave very clear explanations of the topics that concearned the lectures.

What would you suggest to improve?

We could have some more lectures on aluminium and silicon production.

An increase in the scope of the Steel university simulation would be helpful as a more detailed study would help us to understand it better. everything was good about the course.but i think some flow charts were in swedish that should be converted into english. Nothing

Do not include in the exam questions about topics that have not been discussed during the lectures. It was not clear for the students that some topics were actually required.



ANSWERS TO OPEN QUESTIONS

What emerges in the students' answers to the open questions? Is there any good advice to future course participants that you want to pass on?

What advice would you like to give to future participants? They should also consider the kinetics part of the processes along with thermodynamics. the subject is very good. you will learn many basics about material science. & it's important for becoming good metallurgist. It is very useful to attend the recitations in order to understand how to deal with the exercises.

Is there anything else you would like to add? This was my first course of my masters and it was really interesting. Professor Par Jonsson is an excellent instructor and really helps in making you understand the concepts.

No.

PRIORITY COURSE DEVELOPMENT

What aspects of the course should primarily be developed? How could these aspects be developed in the short or long term? Overall, the performance on the exam was very good by most students. After the re-exam all students had passed the course. They were also satisfied with the mixture of lectures, recitations and own learning in using the steel university software.

I think that the following small specifics changes could be made to the next year course: Make a more extensive introduction to the steel university laboration

make a slightly more extensive presentation of the aluminium and silicon processes

Clarify that the basics of casting also will be part of the exam. It was mentioned in the "Notes on how to study for the exam", but some students seemd to have missed that information.

Course data 2019-02-01

MH2029 - Extractive Metallurgy, HT 2018

Course facts

Course start:	2018 w.35
Course end:	2018 w.43
Credits:	6,0
Examination:	TEN1 - Examination, 4.0, Grading scale: A, B, C, D, E, FX, F ÖVN1 - Assignments, 2.0, Grading scale: P, F
Grading scale:	A, B, C, D, E, FX, F

Staff

Examiner:	Pär Jönsson <parj@kth.se></parj@kth.se>
Course responsible teacher:	Pär Jönsson <parj@kth.se></parj@kth.se>
Teachers:	Pär Jönsson <parj@kth.se></parj@kth.se>
Assistants:	Mattia De Colle <mattiadc@kth.se> Henrik Welander <hwel@kth.se></hwel@kth.se></mattiadc@kth.se>

Number of students on the course offering

First-time registered:	0
Total number of registered:	16

Achievements (only first-time registered students)

Pass rate ¹ [%]	There are no course results reported
Performance rate ² [%]	There are no course results reported
Grade distribution ³ [%, number]	There are no course results reported

1 Percentage approved students

2 Percentage achieved credits

3 Distribution of grades among the approved students