



Report - MH2300 - 2020-06-22

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):

Pavel Korzhavyi <pavelk@kth.se>, Claudio Lousada <cmlp@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.

The learning outcomes are assessed via two written tests (KS1 and KS2). These two tests constitute the exam TEN1 (3.0 credits). The gender aspects are considered in the creation of student groups in the cases when we intervene in forming those. The evaluation of the project part of the course is adapted for disabled students when these have difficulties with for example the presentation. In this case a written summary can be used as a replacement. The students have been handed out short questionnaires in order for them to provide feedback. This year due to the pandemic we carried out many sessions digitally and we asked constantly for feedback from the students in order to improve the online learning environment.

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.)

Besides the regular lectures where students have the chance to ask questions and give feedback on the learning environment, the students had sessions where they could openly discuss with us the proceedings for the presentations and writing of the reports. In the wrap up of the mini-workshop students also had the chance to give and get feedback in the learning environment and on their strategies to achieve the intended learning outcomes.

COURSE DESIGN

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

The course consists of 9 lectures divided into 2 blocks. The learning outcomes of each block are assessed via a written test (KS1 and KS2). These two tests constitute the exam TEN1 (3.0 credits). The students are required to develop strategies related with searching for knowledge in the existing literature. Hence among the learning outcomes for the other part of the course is a project based on a literature review on a selected topic within the field of Functional materials. This review is presented both as a written report and an oral presentation (ÖVN1, 3.0 credits). The course is usually given during 4th period (Spring semester, March-June) and is concluded with a mini-workshop in which the students' projects are presented and discussed. Since the last course offering, we have improved the peer-review procedure where the different student groups are reviewing the written reports by their peers. Due to the covid19 pandemic most of the teaching as lectures has been done remotely using Zoom and relying more on the tools that Canvas provides for providing remote support for the students (for instance, narrated slides of all lectures, handouts, and Compendium chapters were uploaded into Canvas).



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 expected workload for this course (6 credits = 160 hours during 10 weeks) is about 16 hours/week. 33% of the respondents answered that the workload has been of 3-5 h/week and 22% answered 6-8 h/week. For some of these respondents, given this year's exception situation with the covid pandemic with lockdowns and because the students spent much more time at home we suspect that these figures have been wrongly estimated by these respondents. Additionally some of the students that complained of large workloads also answered that they worked on the course from 3-5 h/week in these cases we suspect that the students had wrong expectations with the workload necessary to obtain 16 credits.

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 students have performed better than on previous years. The written reports and presentations have been of better quality than on previous offerings. The exceptional situation of 2020 made the teaching largely done remotely. In this sense we think that the students had more time to dedicate to the course. Recorded lectures allow the students to follow these at the proper pace. Because the course took place remotely, there was more interaction with the students than on previous years. Additionally because of more time spent at home the students could dedicate more time to studying.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What do students say in response to the open questions?

The students liked the teachers and the support that they received. The comments related with the strategies for passing the course are also interesting with the mention on the fact that if they follow the course syllabus in detail the work feels easy. A few students say that there is a lot of support material that sometimes is difficult to select. This is expected as a part of the course consists of a literature review.

SUMMARY OF STUDENTS' OPINIONS

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

The students suggest the following reasonable things

- to reduce the bulkiness of the course material
- to have a text version of teachers' explanations to the lecture slides
- to make the exam more challenging and the best grades more difficult to obtain

The suggestions seem reasonable and possible to implement in the next round.

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 students feel that they get good support from the teachers and are satisfied with the teachers' methodologies. The students also feel that the course has a structure that allows them to follow the diverse range of topics that the course covers. We are satisfied with the overall feedback that the students gave in the evaluation. Last year we improved the method for the peer-review tasks in the project block and we noticed that these changes had a positive effect in the students' performance.



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?**

We did not find differences between gender nor related with students disabilities. Additionally most of the students are international and it is hard to get statistics on how these would compare with national students. The stronger and weak areas identified are as follows.

Stronger areas:

The course subject is of interest to most of the students.
The ILO's have been correctly understood.
The students appreciated the emphasis on explaining key concepts.
ILO's and course activities were constructively aligned.
The course design took into account the students' background knowledge.
The students felt that they got the necessary support from the teachers.

Weaker areas:

Some students felt they were not challenged enough.
Some students felt that the feedback could be more. Some students felt they did not have enough background to follow the course at a good pace.

PRIORITIZED COURSE DEVELOPMENT

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

The developments to be completed next year are on the feedback. Given this years exception situation some students say that the feedback could be improved and we expect to develop this perhaps with blended teaching where some remote sections could be devoted to answering students questions in an environment of open discussion.
