Report - AK2055 - 2021-02-17

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):

Henrik Lundvall

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.

Apart from using KTH's standard course-evaluation tool, we also arranged a meeting at the end of the course with the purpose of partly going through information regarding the course's examination and partly giving students the possibility to verbally express their attitudes regarding the course setup in general. Aspects regarding gender and disabled students are observed via KTH's standard course evaluation. No significant differences could be observed regarding such aspects.

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.)

During the course, students had meetings (all online) via lectures, seminars, flipped classrooms, and a "before-the-exam meeting". After the course, we arranged a meeting for evaluating the course together with relevant representatives. The program-responsible for CLGYM, student-union representative, as well as a couple of students from the current course period, were all invited.

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

The course design consists of ordinary lectures, one flipped classroom, seminars, and one home exam. The seminars are mandatory since they give students credits, and therefore they are also examined through a preparatory assignment before each seminar. The other examination was carried out using a home exam which students had one week the complete. The big difference with the current course round was that everything was carried out online, and some of the lectures were also pre-recorded video lectures which students had access to during the whole course. Finally, we merged two lecture topics into one lecture and used the empty slot to implement a flipped classroom that was supposed to cover topics that by the time (halfway through the course) had been presented through the lectures.

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?

There is no significant deviation in the reported workload from students. The average reported workload is 6-8 hours/week, while the expected workload for this course (4 hp credits course) is around 9 hours/week. In other words, students studied slightly less than 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?

This year's students succeeded relatively well.

HT20 scores (grade from high to low): A - 1 student, B - 3 students, C - 5 students, D - 6 students, E - 8 students, Fx - 4 students, F - 3 students.
HT19 scores (grade from high to low): A - 0 students, B - 2 students, C - 13 students, D - 6 students, E - 12 students, Fx - 2 students, F - 2 students.

We don't interpret these numbers as indicating a significant difference between the two latest course offerings.

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

In general, students report that they can relate the course material to the rest of their education - the course feels relevant. Further, students report that they enjoy the seminar structure and the course literature (mainly Jerkert's book). Regarding the lectures, students seem to report in general that the lectures were good with interesting content. However, the lecture setup could have been improved in the sense of which order we plan each lecture, as well as combining video lectures and regular lectures. Furthermore, some students felt that the content in some of the lectures was repetitive as it had partly been covered (maybe with a slight difference in focus) in earlier lectures/seminars.

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

I general, the quantitative data from the questionnaire's bar charts and polar diagrams indicate that students think that the course is good in general. The qualitative data reflect the same attitudes in general, even though this data shows more detailed nuances regarding specific points. From both the quantitative and qualitative data, our conclusion is that even though the general attitude is that the course is a good one, some minor things (indicated in this evaluation across different questions) could 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.

The teachers' overall impression is positive with regard to students' responses about the course's online format. We expected that students would report that online lectures and video lectures couldn't keep the same standard as regular on-campus lectures, but the results show (partly) the opposite (even though there are areas where this format can be improved).

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?

Based on students' reported attitudes, an interpretation is that they seem to feel that their learning is refined and applied during the seminars, while most of the knowledge-gathering is gained on the lectures and when reading the course literature. This attitude corresponds to our purpose with the course's setup and is thus considered as a strong "area" in the course.

A weaker area identified in the current course setup was the flipped classroom. Students had nothing against the idea of a flipped classroom, but it could have been carried out better. The idea was that students could post questions regarding the course material on a discussion forum on Canvas before the flipped classroom. The teacher would then prepare in-depth answers to the most interesting and liked questions which students, after hearing the teacher's answer, then could discuss together with the teacher. However, only one question was posted before the flipped classroom, and thus one can't really say that the flipped classroom was a success. This was - based on a couple of reports - due to how the flipped classroom was scheduled. We gave all our video lectures in a row and directly after held the flipped classroom. Students felt that this created a "vacuum" which might have affected the low response to the flipped classroom. Our attitude is that flipped classroom is a good tool if it is incorporated successfully, and there is room for improvement on this aspect.

No significant differences between gender, international/national students, and students with/without disabilities could be observed with regards to these points.

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

A short-term development would be the flipped classroom. One suggestion is to have some kind of motivating benefit which students would receive for having posted questions and liked questions before the flipped classroom takes place. Another suggestion is to motivate students by having a teacher posting a couple of interesting questions that hopefully would make students think about the course material, as well as acting as examples of what kind of questions could be asked.

In terms of long-term development, an idea - rather than a suggestion - is presented under "other information". Based on the current analysis's feedback, specific long-term development does not seem to be demanded. We should rather keep the same course content and setup - focusing instead on smaller implementations/changes more in line with short-term development e.g., the one mentioned about the flipped classroom.

OTHER INFORMATION
Is there anything else you would like to add?

During the course-analysis meeting, an idea for future development was presented: Since students take this course with the purpose of learning about general scientific methodology (as well as learning about the philosophy of science) and they write their master's thesis directly after, one possibility would be to give the course to the students simultaneously as they are writing their master's thesis. This would maybe enable the students to tie the course content stronger to their respective works. From the philosophy division's perspective, this is an idea that we have nothing against and it could probably be worked out. However, it would require some serious reorganization in the course's structure, and as long as this idea isn't an explicit wish from CLGYM there won't be any changes in line with this idea.