Course analysis FAK3012 & FAK3014 & FAK3137 & FAK3138 period 1 2021-2022

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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 have been asked to fill out the LEQ through a survey using Survey and Report. This also investigates aspects regarding gender and disabled students. A 12 questions LEQ template was recreated in S&R to the best of my ability and used without additional questions.

In this analysis, data from the course evaluation of four course codes has been used, FAK3012, FAK3014, FAK3137 and FAK3138. The reason is that these courses are similar but have very few students each. Some important differences are noted below.

DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion.

No meeting with students has been arranged.

COURSE DESIGN

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

Eleven lectures, four seminars and three essay meetings. In addition, I held an introductory meeting to communicate the design of the course and point out common problems. FAK3014 (3 credits): Only nine lectures, three seminars and no essay meetings. FAK3012 (3 credits): Only the three essay meetings. Accompanying the lectures there were voluntary quizzes, giving bonus points for the exam, and there were mandatory quizzes for the seminars. The lectures have been transcribed and edited into a course compendium.

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 shorter versions (FAK3012 and FAK3014) report a workload roughly corresponding with the number of credits, with FAK3014 slightly over. For the longer versions of the course (FAK3137 and FAK3138) there is a bigger spread with half of the students reporting a workload corresponding with the number of credits, whereas the rest of the group is spread out over the interval between 20 hours and 40 hours. However, some of the students reporting a workload of less than 20 hours did not take the entire course during the period, as indicated by text comments.

The text comments also indicate that this course was perceived stressful by the students taking the longer versions, the voluntary quizzes are mentioned in particular as time consuming. However, the text comments also indicate that different study techniques play a role in how time consuming this course is.

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?

FAK3012 does not take any exam, instead submit an essay. This essay can be revised and is rarely failed. The seminars are also typically passed by all students unless a student had a scheduling conflict. Therefore, when looking at the results, the exam is the interesting factor.

Passing rate:

FAK3014: 73 %

FAK3137: 33 %

FAK3138: 37 %

For FAK3014, the result is on par with previous periods. For the other courses, it is harder to compare since the number of students vary significantly between years. However, I believe it is fair to say that there is a significant difference and that result is also lower than what was expected from both me and the students given their effort.

It can be noted that the courses are equivalent in content to master level courses, with only a slightly higher passing criterion. Comparing with these courses, the results are much lower, about half. There is no clear explanation as to why PhD students would find this course harder compared to master students.

Before this course round, I had an idea that it might be because PhD students typically lack the social context for studying compared to master students. They might take the course without knowing anyone else who does, for instance. To counter this, I had the introductory lecture where I pointed out this, and I encouraged students to get in touch with each other and study together. As far as I know, they followed my advice to some extent. However, there was no apparent increase in the score and this issue must be considered further.

STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

The students who wrote feedback point out several critical points, relating to the courses FAK3014, FAK3137, FAK3138. These can be summarised as follows.

- The exam is perceived as poorly designed. They felt confused by specific formulations of quiz alternatives where they believed that the truth or falsity of the option depended on a specific interpretation of a word, which was not communicated through the course literature. Testing this knowledge in a quiz formation (which is a part of the exam) is unsuitable. The exam tests skills that students were not able to practice on before, for instance the seminar tasks were much easier than the essay questions in the exam.
- The course content is not "true philosophy", teaching real philosophy is done by studying philosophical source texts. This, in contrast to the current content, would have a value for their future careers as PhDs in engineering.
- The ILOs are poorly formulated, and the course content does nothing to help with the student's research.

• The social science content (FAK3138) does not match the needs of the students.

Some positive feedback was also given.

- Students were able to receive help and support.
- The seminars were useful.
- They appreciated the work of the teachers.

SUMMARY OF STUDENTS' OPINIONS

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

The students' answers were spread over the scale for most of the LEQ-questions, so the summary will have to be that the students were divided regarding many aspects of the course.

There was some agreement on the positive side of the scale regarding these aspects of the learning environment: understanding key concepts had high priority, I was able to learn by collaborating and discussing with others, I was able to get support if I needed it.

There was some agreement on the negative side of the scale for this aspect: I was able to learn from concrete examples I could relate to. For the rest, there was no clear consensus among the students.

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 clear that there is work to be done, but it remains unclear what to do. The main change, the introduction lecture, was presumably positive but not enough.

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 be?

The student group taking these courses is heterogeneous: PhD research varies from theoretical physics to road construction, to studying children and hospitals. Some PhDs come directly from being master's students with a habit of studying for courses, others have worked for a company for many years and are only now returning to university. The expectations, needs and abilities vary – even among students taking the same course code.

Some PhD students seem to object to being "treated as students", which I interpret to include having to take an exam (as opposed to attending a seminar or writing an essay) and being offered quizzes for practice (in which they get answers wrong). Taking this course involves, for these students, a "loss of status" in multiple ways, which impacts their perception of the course and the attitude towards it.

There is, therefore, no clear solution to these issues. Introducing examples that would be close to industry practices for some would be incomprehensible to others. Removing incentives to study might reduce stress for some but would make the course down prioritized for others. For instance, raising the academic level by reading philosophical texts as was suggested in the evaluation, would presumably benefit a couple of students, while leaving other students behind who need the clear-cut answers. Removing practice quizzes would make some feel more confident, but would also mean that other students do not practice enough.

My analysis from the evaluation is that the first and foremost aspect to address is the appearance, rather than the structure and the content. Shifting the focus from the formative assessment, such as quizzes, to the content, for instance by introducing short Q&A sessions at the end of each week with the main focus being the students own research and how it related to the topics in this weeks lectures: "What can be an operationalization in your field of research?".

There could be more major changes, as transforming the exam into written assignments or making seminars that are specific in content to PhD students. A limitation to any major change is the number of students – for each course code there are only a few and making more specific versions for each course code would be draining already severely limited resources.

Are there significant differences in experience between:

- students identifying as female/male?
- international/national students?
- students with/without disabilities?

The LEQ survey was not designed to allow for such a breakdown.

PRIORITIZED COURSE DEVELOPMENT

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

- Q&A sessions at the end of each week.
- Study questions added to the course text.
- The quizzes will be continually improved.
- The course text will be completed.

OTHER INFORMATION

Is there anything else you would like to add?