Course analysis
Research: Theory, Method, Practice (DA2205)

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The goal of this course gives MSc students an insight into the process of science. The course is divided into two parts. First part (3 ECTS) is offered by me and the second part (4.5 ECST) is offered by ABE school. In the first part Arvind Kumar gives 5 lectures on aspects of research relevant to computer science and associated topics. In the second part they undergo more formal discussions on philosophical aspects of research and models used in science which is led my Henrik Lundvall. The following analysis pertains to the first part of the course. The course evaluation for the second part is on page 3.

Student workload: After every lecture (2nd onwards) I asked the students for their perception of the workload. Students do not think that workload is more than required for the ECTS requirements. Most students submit their assignment within the course period even if they miss the official deadlines.

Grade: Students submit writing assignments weekly and a long essay at the end of the course. These are of very high level. Most students received a pass grade. Only a handful of students (<5) were asked to revise their essays.

Key Challenge

Challenge	Our approach
Student assignments: As a part of the course students write weekly assignments on a topic related to the one discussed in the formal lecture setting. Students get 1 week to finish the assignment and another week to do a peer-review on the assignments of others. Only a fraction of students finish their assignment in time. Part of the assignment is to do the peer review but there is no way to set a deadline for this in the system.	Overall more number of students submitted their assignment in time but this issue of late submission remains. I am essentially forced to grade their assignments as and when they can submit as the grade in this course affects their graduation. I have contacted canvas admin to check if it is possible to set a deadline for the review.
Student engagement in the course: Only a handful of students participate in the discussion, even though we make it clear that everyone must contribute to the discussion.	One way I try to enforce some inter-student interaction is via peer-review on written assignments. At least then they have an opportunity to read what others have to say and they can in fact respond in the comment box.

Course relevance: Most students find this course interesting but not relevant. And this is true that with the course we are not helping them solve any real problem. Sometimes students are also very myopic in their view that they think most of the issues do not relate to their own research.	To make it more relevant I have started to keep the MSc thesis of the students in focus during my discussions. For example we discuss what hypothesis makes sense for the thesis and how they can be certain about their results during their thesis work.
Reading and Writing assignments: I feel that our students read and write much less than students elsewhere. So, to encourage writing and reading I ask them to submit not just weekly assignments but also a longer essay based on either bunch papers or on a book. Now, LLMs are posing a major obstacle to this assignment as students rely on LLMs not just to write but also to read (when forced).	I think the use of LLMs is inevitable and we cannot stop the students from using it. But I ask them to reveal their prompts and if they accepted the first response itself. This seems to have worked to an extent.

For this course I keep an open mind and adapt the discussion and contents according to the students composition. Usually at the end students do not mention anything they may have missed.

I have not added the course feedback because I think that the feedback is useless. First, only a handful of students respond, and they are usually not the representative samples. I once received rather harsh feedback from a student (as a comment to LEQ) and I discussed it with my colleagues, and they simply advised me to ignore that. Second, the questions that we have in the standard LEQ are pretty much meaningless. I would like to revise that but to hope that same questionnaire can apply to every course is a fallacy. I take feedback from students who are regular in the course, and they do provide useful feedback which reflects in our teaching on lecture-by-lecture basis.

Course analysis DA2205, period 1&2 2022 PART 2

Course analysis DA2205, period 1&2 2023

Course analysis carried out by (name, e-mail): Henrik Lundvall, henrik12@kth.se

DESCRIPTION OF MEETINGS WITH STUDENTS

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

A meeting for course evaluation where student representatives and PAs has been arranged in period … 2023. Much of the information in this report is based on that meeting.

COURSE DESIGN

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

DA2205 (part 2) has eleven lectures and four seminars that covers the main areas of DA2205's second part. Two lectures are given at campus, and 9 of them are video lectures. The course's 4 seminars are given at campus. It also includes 2 flipped classrooms, also given at campus. The examination for part 2 of DA2205 is a 4 hour exam which consists of 3 parts. It is given online and is an open-book exam, but no supervision is demanded and it can be taken from anywhere. No setup changes were made from last the last time DA2205 was given.

THE STUDENTS' WORKLOAD

Does the students' workload correspond to the expected level (40 hours/1.5 credits)? If it is a significant deviation from the expected, what can be the reason?

In general, students study less than the expected level. As has been discussed in previous analyses, there are many possible reasons for this, such as students putting in the effort only to pass the course or other courses requiring more time than they should. The relevant staff are in agreement that the average is not so low so that any particular changed needed to be made, but rather indicates that there is some headspace for students who do need to study more to complete the course. Some students report that they think the workload is heavy in relation to the amount of credits the course gives. However, the teachers' experience is that there is a correlation between those expressing such an attitude, and those reporting they spend less time/week 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?

There are no particular differences in the grade distribution compared to last time the course was given. The grades seem to follow a vague bell curve and the percentage of students with F or FX was about what could be thought of as reasonable.

DA2205	
A	13%

B	12%
C	24%
D	33%
E	13%
F	2%
Fx	3%

STUDENTS´ANSWERS TO OPEN QUESTIONS
What does students say in response to the open questions?
Students seem to be very satisfied with the video lectures and their quality, and also with the seminars (some students want them to be longer). They also report that they enjoy the opportunity to plan the schedule for themselves, since the video lectures are available from day one and can be watched whenever.

Several students reported that it was hard to get 14/15 points for the quizzes. The staff have mixed opinions on this. Some don't consider that this in itself was an indication that something should be changed (rather that the quiz questions should be continually improved based on feedback), others think that it warrants a lower bar for receiving bonus points for the quizzes.

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 saw a general positive trend for the course and its development. We are now in the area of fine tuning most aspects of the course (that is, part 2 of the course), rather than drastic changes. One task now is to reach students who are not performing as well and motivate them.

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?
There is no aspect of the learning environment that sticks out in either direction, the courses taken as a whole. The general structure of the course is functioning well and fills its purpose. Improvements can be made to particular aspects, such as quizzes.

One weaker element might be the grading of the exam. In the same area, the video quizzes might be improved. Here the staff are feels that "keeping a watchful eye" is the best possible strategy, with continual improvements when issues are brought up.

Are there significant differences in experience between:
- students identifying as female/male?
No breakdown.
- international/national students?
Generally, exchange students usually have a less favourable view of the course than the Swedish students. However, this period this attitude couldn't really be seen in students' attitudes (which we take as a positive sign).
- students with/without disabilities?
No breakdown.

PRIORITIZED COURSE DEVELOPMENT
What aspects of the course should be developed primarily? How can these aspects be developed in short and long term?
- Grading system will be further discussed and developed by the teachers.
- The quizzes will be continually improved.

- The course text will be updated.
- Transcriptions of videos from course text might be transferred into the videos as captions.
- Flipped classrooms will continue to be held as campus activities.

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