# Course analysis AK2030 and AK2036, period 4 2019-2020

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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 the central KTH system. This also investigates aspects regarding gender and disabled students.

#### **DESCRIPTION OF MEETINGS WITH STUDENTS**

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

Students were invited to send representatives to the course analysis meeting. Student unions were also asked to send representatives.

#### **COURSE DESIGN**

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

Four mandatory seminars (1,5 credits) and exam (3 credits). For AK2036 also project part (3 credits). Non-mandatory lectures and quizzes.

This period was during the "corona pandemic". As such, seminars, exam, and lectures were moved online. The project part was already online. Some lectures were cancelled.

Seminars were shortened to 1 hr, and the other seminar hour given as a preparatory task to reduce the risk of Zoom-fatigue for the students. The seminars were held smaller groups of 12 instead of 22. Exam was given on Canvas as a non-supervised exam. Exam structure changed to a time limited part 1, and a part 2 that tested all three learning outcomes. Part 1 and 2 thus tested up to grade level C, assessed through a point system mapped to the grading criteria (similar to previous exams). A completely new third part testing grade levels A-C based on grading criteria. Bonus points included as a part of continuous examination to pass exam, up to grade C. The exam was open book.

#### 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?

Workload lower than what could be expected, and somewhat lower than what we normally see. This could be because of the pandemic and the online education, reducing social presence and therefore time. 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. It could also be that students are making incorrect assessments of their time spent on the course.

#### 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?

2020-05-27

Grades	AK2030	AK2036	Total	Percent
Α	4	5	9	9%
В	8	13	21	21%
С	16	14	30	31%
D	9	5	14	14%
E	1	2	3	3%
F	5	7	12	12%
Fx	4	4	8	8%
Total	47	50	97	

2018-2019, all exams including re-exams (n≈1100)

Grade	AK2030	AK2036	Totalt
Α	14%	15%	15%
В	13%	13%	13%
С	17%	15%	15%
D	13%	14%	14%
E	8%	10%	9%
F	20%	19%	19%
FX	15%	14%	14%

No large differences from the year average. The differences that are could be attributed to the exam format, given that they are not natural statistical variations. 16/97 students could have received a higher grade if they had submitted the part for the higher grade but did not do so. However, since students were able to distribute the time for part 2 and 3 however they liked, it could be that these students spent all time on part 2 and would not have been eligible for the higher grade had they not done so. Another reason is that the bonus points were only valid up to grade level C, whereas they before could increase grades up to A.

## STUDENTS'ANSWERS TO OPEN QUESTIONS

#### What does students say in response to the open questions?

There is a lot of positive feedback in the open questions and given that the course was now given digitally with little preparation, this indicates that the situation was in general handled well. The seminars, as usual, receives a lot of positive feedback. There are some comments indicating that the new seminar structure, with smaller groups and some of the seminar content done as a preparation, was not enough. This mirrors the teachers' impression of the seminars and a new structure has to be created for future digital seminars.

There is some critique of the exam: the grade levels, the MCQ and that the bonus points were included to pass the exam. The grade levels were raised to account for the fact that the exam now was open book. It would not have been a comparable exam if students with books and the internet are expected to be as able to answer questions as students without any aids. The change to the grade levels was announced later than one would have wanted, but this is due to the corona epidemic. The bonus points rule was changed as the new exam structure would otherwise have wasted the effort of those who actually had spent the time completing these tasks. This would definitely have been a worse option, since this choice did not make it harder for anyone to pass compared with if we had kept the same rules as announced in the beginning. However, one should also keep in mind that the standard exam usually receives a handful of negative comments, and there were not more negative text comments for this exam than usual.

#### **SUMMARY OF STUDENTS' OPINIONS**

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

Generally, have a favourable impression of the learning environment in this course. Students rate all aspects of the learning environment between 5,5-6 for AK2036, corresponding to 1,5-2 on a scale from -3--+3. AK2030 rate all aspects of the learning environment between 4,9-6,2 for AK2030, corresponding to 0,9-2,2 on a scale from -3--+3. The major noticeable difference is for AK2030 where "the course was challenging in a stimulating way" is ranked 4,9.

Student feedback in the course analysis meeting indicated similarly that the course in general was well executed, and that the transition to the online teaching had gone comparably well. Feedback indicated that the information flow was a problem, in particular in the beginning. It was hard to keep track of both what was to be done and what was important in the course material. The structure of the Canvas page was also indicated as a problem area, and that it is different from several other Canvas pages for other courses. A partial problem is that there is no main course text with exercises, as in many other courses, but multiple sources and quizzes. Since these are only on Canvas, it can be hard to know if one has everything one needs to know.

#### **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' expressed positive surprise when going over the student feedback given the chaotic situation, it was expected that this would have resulted in a worse course than normal. That did not seem to be the case, if anything they indicated a better course than normal. The same applied for the students' results. However, it was also noted that it could be that students rated the course positive given the circumstances and were, so to say, more forgiving than they would have normally been.

This would then not apply in the same way for any future period. The teachers' overall impression of the changes made is that there are still aspects of the seminars that need work. In particular, the seminars need to be improved so that they are closer to the standards of normal classroom education.

#### **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 general structure of the course in functioning well and fills its purpose. Beyond re-working the seminars to fit the digital format, one could also look at the information flow how are students informed. Could it be made clearer? The role of the bonus points and the associated quizzes could also be made clearer, in terms of content and scheduling. Finally, the course literature could be collected into a more cohesive form. Study questions could also be added.

#### Are there significant differences in experience between:

#### - students identifying as female/male?

AK2030: No breakdown.

AK2036: Female rated the learning aspects higher with about 0,5-1 on the scale. No clear explanation and could be a statistical artefact.

#### - international/national students?

AK2030: The major difference is in question 22, "I was able to get support if I needed it", where international students scored 6,3 vs Swedish students 4,9. This could be that the pandemic meant that international students were in more need of support than Swedish students.

AK2036: Swedish students rated the course higher in general, with about 1 on the scale.

#### - students with/without disabilities?

No breakdown.

In general, it is hard to draw any conclusions regarding these differences based on this material, as it is hard to determine what are statistical artefacts and not. Given that there is no information about the size of these groups it is impossible to tell if the results are due to actual differences related to these aspects. There are no written comments to support any special conclusion.

# PRIORITIZED COURSE DEVELOPMENT

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

- The seminars should be improved to be better suited to the online format.
- Could the online exam be augmented with more continuous examination?
- The quizzes for the video lectures should be standardized, with the same number of total points.
- Study questions could be created.

## **OTHER INFORMATION**

# Is there anything else you would like to add?

It is reported by the PA (master programme responsible) attending the course analysis meeting that this course plays an important part in completing the learning outcomes for the master programme. Increased communication between PA's and the course responsible could be beneficial.