

# Course analysis AK2040, period 1 2021

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

Students have been asked to fill out the LEQ through the central KTH system. This also investigates aspects regarding gender and disabled students. A 12 questions LEQ template was used without additional questions.

## 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 for period 1 2021. 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.**

AK2040 has eleven video lectures and four seminars that covers the main areas of the course. The seminars are, to a great extend given at campus (if not for pandemic-related reasons). AK2040 take a project part; this project consists of 4 lectures (non-mandatory) and ends in an examination devoted for the philosophy of mathematics. Students individually write a home assignment about some of the central questions that have been brought up in the lectures. The examination 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 changes were made from period 4. See these analyses for further pandemic-related changes.

## 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. A possible explanation is that the new course text enables students to learn the material in a more "classical" way and thus reduce their spent time. However, the participants of the meeting agreed that the average is not so low so that any particular changed needed to be made, but rather indicated that there is some headspace for students who do need to study more to complete 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?**

There are differences in the grade distribution compared to one year ago, which is due to the exam being different in format. There are no particular differences in the grade distribution compared to last period. The meeting concluded that the grades follow a vague bell curve and that the percentage of students with F or FX was about what could be thought of as reasonable.

AK2040

A	10%
B	15%
C	17%
D	35%
E	14%
Fx	6%
F	5%

## **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.

It was also reported that students want to have the seminar on campus (as compared to online). Due the pandemic-related reasons, this is something we try to implement as much as possible while still meeting general restrictions as well as some students' need for having education online.

Several students reported that it was hard to get 14/15 points for the quizzes. The meeting did not 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.

Overall, the most reoccurring topic that students think should be improved is the project part (see also comment above).

## **SUMMARY OF STUDENTS' OPINIONS**

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

Generally, students have a favourable impression of the learning environment in this course. On this scale, zero equals an average of -3 and 7 equals on average +3, while 4 being neutral. Students taking AK2040 rate all aspects of the learning environment between 4.4 - 6,5 (27 responses). Overall, this is a good result over all aspects, and nothing particular stands out.

## **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, rather than drastic changes. A recurrent topic which students find less enjoyable is the project part. Before this period, we had planned to increase the opportunity for discussions and practice on this part by having seminars in the project part as well. Unfortunately,

we had to trash this idea to the pandemic-related reasons, along with insufficient manpower. 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 the project part.

One weaker element might be the grading of the exam. In the same area, the video quizzes might be improved. However, students' self-reported attitudes do not generally single out these parts, but we have reasons to believe that it is something they think could be better. Here the meeting decided that "keeping a watchful eye" was the best strategy, with continual improvements when issues are brought up.

The meeting also discussed the previously titled "flipped classrooms", which will continue as discussion forums during the autumn. It was agreed that students should be encouraged to bring questions to the seminars as well.

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

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

No significant differences.

**- 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.

## **OTHER INFORMATION**

**Is there anything else you would like to add?**