

# Course analysis AK2036, period 1 2023

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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. A 22 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 2023. This is meeting is held together with other very similar course version given in the same period. 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.**

AK2036 has eleven video lectures and one campus lecture, four mandatory seminars that cover the main areas of the course, two flipped classrooms, and three exercise sessions. The seminars are given at campus. AK2036 also has a 3 credits project work in which students practice on evaluating research from a popularized and methodological perspective. 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. The only change we made from as compared to period 4 was in the project work (more on that below).

## 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. 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. There also seems to be a positive correlation between students reporting impressions of the workload being too heavy, and having reported that they study less hours 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 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. One potential issue raised was that there is a majority of students receiving the grade D. This is a problem if the exam's structure is skewed towards this grade. However, on the meeting it was agreed that there are probably several other, fair, reasons behind such a distribution.

AK2036(152  
students)

A	10%
B	11%
C	12%
D	39%
E	18%
FX	6%
F	4%

## **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 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.

Due to AI language models being available online, we now plan to go back to having our exam in hand-written format. However, this will, at the earliest, be in place in early 2024.

## **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 seven equals on average +3, while a four represents a neutral attitude. Students taking AK2030 rate all aspects of the learning environment between 3.8 – 5.8 (36 responses). The meeting considered this as a pretty good result over all aspects. The lowest value of 3.8 is due to one particular question about the students' opportunities to influence the course activities, which to be fair is not that large. However, the reason for this is that AK2036 is a course taken by a large amount of students from different programs, as well as the fact that the nature of the course's topic is abstract and general. The next lowest value was 4.6 (somewhat positive).

## **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.

## **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 PA present on the meeting raised an issue regarding the course text/video lectures. This has to do with the way we present course material that is exemplified to particular engineering topics/natural science fields. Sometimes examples used in the course material are used in an unconventional way to make an abstract/philosophical point, although that might go over the head for someone with a non-philosophy background due to example's unconventional context. It was decided that the course's examiner will keep a close contact with PAs to improve the course material with regards to issues of this nature.

One weaker element might be the grading of the exam. In the same area, the video quizzes might be improved. 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 classrooms, which will continue. We have also opened for the idea of incorporating more flipped-classroom sessions.

For this period we partly changed the assignment for the project work, due to AI-related reasons. However, the instructions concerning how the students could tackle this assignment needs to be a bit clearer as we received some submission where the project task clearly had been misunderstood.

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

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

No significant differences.

**- international/national students?**

No significant differences.

**- students with/without disabilities?**

No significant differences.

## **PRIORITIZED COURSE DEVELOPMENT**

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

- 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.
- New exam format (on-campus-written exam)

## **OTHER INFORMATION**

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