



Report - DD2380 - 2021-05-05

Respondents: 1
Answer Count: 1
Answer Frequency: 100.00%

Please note that there is only one respondent to this form: the person that performs the course analysis.

Course analysis carried out by (name, e-mail):

Iolanda Leite, iolanda@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.

A criteria-based grading scheme is used with TEN2 (1,5hp) consisting of a series of 9 online quizzes released after lectures, RAP1 (0,5hp) consisting of an essay on ethics and risks of AI (with individual reflection and a team discussion part), and LAB1 (4hp) with 3 pair programming assignments and an individual assignment. There is no written exam, the final grade A-F is determined from the grades of LAB1.

DESCRIPTION OF MEETINGS WITH STUDENTS

Describe which meetings that has been arranged with students during the course and after its completion. (The outcomes of these meetings should be reported under 7, below.)

In addition to the lectures, labs and tutorial sessions, students met with the teaching team during consultation sessions (mostly about the lab assignments) and during the presentation sessions for obtaining their Lab grades. We also have discussion forums that are quite active and students can of course email the course teachers.

It is important to note that because of Covid, this course round was fully remote. All course events happened over Zoom.

COURSE DESIGN

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

The course is arranged as a series of lectures and four tutorial sessions to deepen the understanding of selected areas. Thanks to the breadth of AI, several lectures were given by guest lecturers, who are experts in the field (Johan Boye and Gabriel Skantze on Natural Language Processing, Mårten Björkman on Computer Vision, and Josephine Sullivan on Machine Learning). The rest of the lectures were given by Jana Tumova and Iolanda Leite and focused on topics from three areas: taming uncertainty, problem-solving, knowledge representation and planning. This round we also offered a lecture on the Ethical aspects of AI delivered by Katie Winkle, to better prepare students for the Essay assignment.

The programming assignments are conducted typically in pairs, in Python, evaluated in Kattis, and presented to teaching assistants (this year over Zoom). We also offer lab sessions for students to get started with the programming assignments.

Iolanda Leite was the course responsible in this round. Some minor improvements were introduced to the programming assignments, particularly in the Reinforcement Learning assignment that was introduced for the first time last round and needed some adjustments in terms of scoring on Kattis for certain grades. The quizzes and essay assignment also followed the same format as in previous course rounds.



THE STUDENTS' WORKLOAD

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

As usual in the spring edition of the course, there was large variability in the reported course workload. One possible cause might be that many exchange students and students from programs where this course is not mandatory take the course in this round, and their background might not be completely aligned with the course content, despite fulfilling the pre-requisites. It might be premature to take action given the low response rate of this LEQ, but we will keep this aspect into account and see whether in future rounds we need to adjust the course pre-requisites since this does not seem to be an issue in the course rounds where most students have this as a mandatory 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?

The students who passed did approximately as well as the previous course offer. The spring editions of the course usually have a lower completion rate because many students who are registered take this course as an elective (and sometimes end up giving up for not considering the course appropriate for them) or are taking the course not for the first time.

STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Students considered the course assignments time consuming but quite rewarding and "fun" at the same time: "The assignments are really good and made me understand the concepts even better. I'd say one of the best courses I have taken at KTH". Other students highlighted other course evaluation components like the quizzes, the teaching team and the fact that we offered the lecture and tutorial recordings.

Regarding aspects of improvement, one common suggestion was to offer more drop-in consultation sessions (using queue.csc.kth.se) instead of bookable slots.

SUMMARY OF STUDENTS' OPINIONS

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

See above.

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.

In general, students considered working with interesting issues, found the course challenging in a stimulating way, that the course assessment was fair and honest and that they were able to learn and collaborate with others. Considering that the course was fully remote because of Covid, these ratings are rather impressive.

It seems that we need to improve in terms of "practice and receiving feedback without being graded" (more challenging in remote courses but if we end up teaching remotely again in the fall we need to take action) and in providing more support if needed -- where changing the way consultation sessions are offered seems to be the desired solution.

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 for these be? Are there significant difference in experience between:

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

There did not seem to be any gender differences in the student answers.

There is a difference between the answers from "Swedish student in year 1-3" and the other respondents, but given the lower response rate of the survey, it is likely that this is simply an outlier.

None of the students who took the survey reported any disabilities.



PRIORITIZED COURSE DEVELOPMENT

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

Short-term:

- Improve consultation sessions by offering more of them closer to the deadline and with a drop-in option (e.g. using queue.csc.kth.se) as opposed to the current canvas calendar bookings.

Long-term:

- Adjust the course workload and ensuring that all assignments have similar difficulty level (or give more time to the more challenging assignments). This is long-term because we believe this might not be such an issue for the students who take the course as mandatory.
