Report - DD2380 - 2023-10-23

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):
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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.
We used the standard 12 statements/4 general questions LEQ course questionnaire to gather feedback from our students. The goal was to assess their learning experience and identify opportunities for course improvement. Students' responses were carefully analyzed to ensure that there were no issues relating to gender and disability.

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.)
During the course, I interacted with students mainly in lectures which allowed me to directly address any questions or concerns and maintain a line of communication with the class. A dedicated team of Teaching Assistants (TAs), consisting of both Master students who had taken the course before and PhD students, was also available to students. The TAs held consultation hours, led tutorial and lab sessions, and addressed students' questions. Regular meetings between myself and the TA team ensured we were aligned and responsive to students' needs and feedback.

COURSE DESIGN
Briefly describe the course design (learning activities, examinations) and any changes that have been implemented since the last course offering.
The course continued to be arranged as a series of lectures, three tutorials and three lab sessions designed to deepen students' understanding of selected areas. As always, the breadth of AI allowed us to invite a range of guest lecturers who are experts in various AI fields, supplementing the primary lectures given by our core faculty. We continued to include PASS/FAIL elements such as a programming assignment on Logic and Planning, online quizzes after lectures, and an essay on AI ethics and societal aspects. The final grade A-F is still determined by a set of three main programming assignments that are typically conducted in pairs and evaluated both on Kattis and through in-person presentations to the teaching team.
One significant change we made this year was the transition to requiring physical presence for student presentations, tutorials, and labs. This decision was driven by our teaching team's experience from previous years that face-to-face interaction could better facilitate the detection of academic misconduct. Additionally, the on-campus format enhanced the richness of student interactions during tutorial and lab sessions. However, recognizing the convenience of digital tools for both students and the teaching team, we continued to offer recorded lecture videos from the COVID-19 and facilitated student consultation through Zoom/ KTH queue.

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?
The students' workload for this iteration of the course generally fell within the expected parameters. Feedback from the students, as well as data gathered from the course evaluation questionnaire, indicated that the workload aligns closely with our intended workload target of 40 hours per 1.5 credits. Some students, in their open questions, reported that the Hidden Markov Model (HMM) lab was more time-consuming compared to other labs such as Reinforcement Learning, leading to variable weekly workloads. We have been aware of this and are planning to correct this imbalance, by slightly changing the assignments' difficulty but also the time that students have to complete the different assignments.

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?
About 87% of the students achieved a passing grade, which means the performance on the course this year remained consistent. We usually observe a slight difference between the two course offerings in the same year, which we believe has to do with the different programs in which the course is mandatory in different periods. In other words, students tend to have different backgrounds in the two different course offerings.

STUDENTS´ANSWERS TO OPEN QUESTIONS
What does students say in response to the open questions?
Students generally appreciated the comprehensive content, in particular the challenging projects, engaging lectures, and practical assignments. The quizzes and diverse perspectives on AI were also highlighted as strong aspects of the course. However, there were suggestions for improvement, especially concerning the relevance of some lecture topics and the utility of certain platforms like Kattis. Students recommended future participants start assignments early (they always do!), refresh their knowledge before starting, and emphasize understanding the theory behind the tasks. Overall, the feedback frames this course as a valuable introduction to AI, which is really our main goal.

SUMMARY OF STUDENTS' OPINIONS
Summarize the outcome of the questionnaire, as well as opinions emerging at meetings with students.
Overall, the students considered the course a positive learning experience, which is reflected in the relatively high LEQ scores, with most dimensions of their learning experience approaching 6 on a scale from 1 to 7. However, we had a relatively low response rather this round (N=14) which makes quantitative results difficult to generalize.

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 teaching team is satisfied with how the course went this year, especially seeing how well the students did and how they seemed to like the course. It's great to see that students have been doing well consistently and most of them had good things to say about the course. Having in-person classes again helped, making it easier for students to connect and work together, which is important for AI topics. Having online videos, consultations and discussion forums for students to ask questions was also helpful since it gave them more options in terms of accessibility and flexibility.

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?

We typically do this analysis after the two course offerings of each academic year are complete, based on joint feedback of students and teacher teams of both periods, since there is little room for change between two consecutive periods. Please refer to the course analysis report of P2 for more details.

PRIORITIZED COURSE DEVELOPMENT
What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?

Same as above.