Report - ML2302 - 2024-06-28

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):

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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.

At the end of the course, a final presentation was held on February 29, followed by the deadline for INL1 submission on March 8 and PRO1 on March 14. An online course survey was created before the final PRO1 submission deadline and was open from March 13 to March 26. Students had sufficient time to respond to the survey, which was conducted anonymously through the KTH course evaluation system. However, we received only 6 responses out of 36 registered students. Notably, only 19 of the 36 registered students actively participated in the course this year, as the remaining students had rejoined from previous offerings to complete the course requirements.

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.)

At the end of the course, a summary session was held to gather feedback from students. During lab sessions, we received immediate feedback from students about the course. No meetings were arranged with students after the course completion.

COURSE DESIGN

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

The course comprises three main assessment elements: INL1, PRO1, and LAB1. INL1 is a hand-in assignment with basic and advanced parts. The basic part covers theoretical background on basic statistics, modeling, and simulation at the beginning of the course, while the advanced part focuses on applying theoretical knowledge to practical problems. LAB1 emphasizes practical skills in using different simulation modeling tools, including Arena, AnyLogic, and SUMO. Students use one of these tools for their project work in PRO1, which involves real-world problems provided by industrial partners. PRO1 includes guest lectures from problem owners, supervision sessions with teachers, peer feedback sessions, and a final presentation and report submission.
Since the last course offering, we made several changes. The most significant change was switching the INL1 basic part to an on-site written exam to reduce plagiarism cases, which were prevalent with online submissions. Additionally, we removed MATLAB lab sessions, as they were not essential for the course's focus on discrete event system simulation and added to the course load, as per student feedback.

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?

This course is worth 9,0 credits, equating to 240 hours of work. According to the course survey, the time students spent on the course varied significantly. Comments ranged from "demanding a lot of time" to "manageable." This variation likely stems from students' differing skill levels, particularly in programming, which can affect their ease with using modeling and simulation tools and completing project work.

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?

Of the 19 active students this year, 5 did not pass the course. One did not complete LAB1 due to personal reasons, three did not pass INL1, and one did not pass PRO1. Compared to previous offerings, fewer students failed INL1 this year, possibly due to the change to an on-site exam for the INL1 basic part.

STUDENTS´ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

Students appreciated the opportunity to work on real industrial cases but requested clearer problem definitions from industrial partners and more organized materials for project work and study visits. Comments also suggested improving video materials for SUMO lab sessions and questioned their relevance since they were not used in project work. Some students found INL1 basic/advanced challenging and suggested practice sessions for INL1 basic. Additionally, students wanted more feedback to improve their work. Feedback on group work was mixed, with both positive and negative comments.

SUMMARY OF STUDENTS' OPINIONS

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

Despite the small number of survey responses, students generally appreciated working on real problems from industrial partners. Opinions on group work were mixed, reflecting varied experiences with group dynamics. Students highlighted the need for clearer project case definitions and better online materials for lab sessions.

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.

Overall, the changes implemented this year, particularly for the INL1 basic part, have improved issues such as plagiarism and student failures. Group work remains challenging due to varying student expectations for grades. The use of AI tools like ChatGPT emerged as an issue this year; while allowed for project work, clear guidelines are needed to govern their use for project reports in future offerings.

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?

It is challenging to identify significant differences in experience based on gender, nationality, or disabilities. The variations in student experiences seem to be more related to individual interest and skill levels in the course topics.

PRIORITIZED COURSE DEVELOPMENT

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

The project work's problem definition should be clearly defined and supported with prepared materials. Additionally, lab session materials need updating so that students can follow them independently before the sessions. Early contact with industrial partners is necessary to gather more information and reach a consensus on project work.

OTHER INFORMATION

Is there anything else you would like to add?

No additional informaiton.