



Report - CM1001 - 2021-05-06

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.

Feedback was solicited throughout the course on what aspects to improve, despite there not being much room to change things during the course. A learning evaluation questionnaire was given at the end of the course.

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.)

Feedback was solicited during the presentation sessions, and once the assignments were given out, the beginning of every lecture was set aside to answer any queries/difficulties they might be having with the course. A final meeting is also scheduled for 10 May, to discuss improvements for the next version.

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 structured into lectures, and three assignments and a group project that cover the main themes: Ethics, Regression, Neural Networks and Reinforcement Learning. The final grade is based on the assignments and project, with no exam, written or oral. This is the first iteration of this course, and proposed changes are described in the course development section below.

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?

Workload increased in large part because of the computational time needed to train and run the models. Infrastructure needs for this are being investigated.

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?

37 out of 46 (80%) students enrolled in the course have completed the assignments, while 32 (70%) have completed the entire course which includes both the assignment and project. There have been no previous versions of this course. Most students have done well with the assignments, as well as with the project.



STUDENTS' ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

As for lecture number 2, the information was way above the student's area of knowledge.

The programming assignments were interesting

The first few lectures when we discussed about ethics of AI was interesting.

Maybe have some code examples.

The course needs more structure

First of all..theoretical lectures were not very relevant to programming assignment

Secondly need more programming assignment instructions and like what to expect...for instance mspacman assignment with 95% wins....

...

SUMMARY OF STUDENTS' OPINIONS

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

Students point out three main areas of improvement:

1. Making the lectures more accessible and practical.
 2. Give clear, detailed and practical instructions for assignments.
 3. Structure and communicate the course in a better fashion.
 4. Give more examples and code samples.
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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 part of the course that worked well were the assignments and the projects. The lectures and theoretical content helped, but needs improvement. The course scheduling, and assignment deadlines etc. also needs improvement.

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?
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Stronger aspects were practical: the coding and written assignments. Relationship between the lectures and the assignments is a clear weak point, which needs improvement. Support from the teachers is also an area of weakness. There were no differences observed among different student groups.



PRIORITIZED COURSE DEVELOPMENT

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

Lectures:

1. Change one of the lectures into two practical lab sessions, so they get help with installation, configuration, data cleaning and manipulation.
2. Change the structure of most lectures, by splitting into two parts: One part theory and one part code walk through and demonstration. Also reduce the content overall, focusing more on Regression, Classification and Neural Networks.
3. Schedule some sessions where students can ask for help with respect to assignments and projects.

Assignments and Scheduling: The course is now structured into one written and two programming assignments, and one group project. All of them are given for two weeks.

4. This was a significant challenge. Either we reduce one assignment and give longer periods for the assignments and projects, or allow them to submit the final project in April. Which will be beyond the end of period 3. It would be preferable to allow submission in April rather than reducing the number of assignments. Another solution is to publish all assignments and projects at the very beginning of the course, with staggered deadlines. This would give the students more time for the tougher assignments and project, rather than two/three weeks per assignment as it is right now.

5. It is unclear what to do with the presentations.

Infrastructure:

5. Most students struggled with running and training models on their laptops. This is a consequence also of the reduced timespan, and a timecrunch. It would be great to provide shared servers, atleast for the group projects.

6. Leaderboard: Ideally, we would have a Kaggle like environment where students can run their models and results are published onto a leaderboard, or atleast a leaderboard for every assignment so we can observe which models are performing well. This will help the students in getting intermediate feedback. This will also help in grading, both time and effort, since I now ran over the past month 90+ models on my machine to check and evaluate them. At the very least, there should be a leaderboard visible to everyone.

Datasets:

7. Students should be able to define their own projects. Considering the online nature of the course, and since this was the first iteration, it wasn't implemented in this edition, since students would spend most of their time collecting datasets, but if a few datasets were available they would have the freedom to work on problems that interest them.

OTHER INFORMATION

Is there anything else you would like to add?

This course was run for the first time, and was run completely online with no possibility of interacting in person. There are clear areas identified for improvement, which will be implemented in the next iteration.
