

Report - DD2420 - 2021-06-20

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.

Course survey and all students asked to be part of the course board, two were with. The TAs were also there and we met afterwards with the TAs to form an action plan for next year's round.

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.)

We meet the students constantly and individually during the course as they have weekly oral examinations plus the help sessions. There is also a lively discussion on CANVAS.



COURSE DESIGN

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

John high Lecture slides should be improved and made more smoothly flowing.

Extra Helper session on Probability theory

John low 1 Tutorial 1 (Taras Message Passing) some small rewording of some questions only

Olga high 2 Tutorial 2 (Mikeal Bayes Nets PGMPY, students) Remove task 5 completely and some other smaller changes to wording of questions.

 $\dot{\mathrm{A}}\mathrm{dd}$ a module maybe taken vlads, Add more on Factorization and D-separtation

John low 3 Tutorial 6 (Marcus MRF Grabcuts) There were issues but I think Marcus has fixed them, Just need to check it over.

More on goal, and also the MRF basic Factorization and D-separation.

John high 4 Tutorial 8 (Nacho and Daneil Factor Graph SLAM) There were some problems The pdf has to be redone and the code also.

Rika low 5 Tutorial 10 (Partial Data Sam). Might be ok?

Rika high 6 Tutorial 9 (POMDP Fernando) Rika has suggestions on improvements to the instructions and background material.

Olga/Rika high 7 MCMC Tutorial

Olga med/low 8 Tutorial 11 (Olga VI GMM) There were a few suggestions Jypter Notebook?

Olga low 9 Tutorial 12 (Joonatan LDA) Was there any problem?

Clean up data forlder had the answers, Make harder optional deriveations

Rika low 10 Tutorial 13 (Rika FIVO) What is needed? Felt like it was fine.

More modular

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 that try for an A do a bit more than that the students that go for an E much less (and often do not pass). Giving this course online was not very optimal.

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 overwhelming pattern is that students that do the optional tutorials all pass while the ones that do the minimum required work all fail.

STUDENTS'ANSWERS TO OPEN QUESTIONS

What does students say in response to the open questions?

That the exam was too hard and they were not sufficiently prepared for it.

SUMMARY OF STUDENTS' OPINIONS

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

The course board also emphasized that the lectures came too fast and compressed. As well as many detailed suggestion (see their protocol).

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.

There is a need to give some more help in the theory parts of some of the tutorials. The exam is a bit problematic here.



ANALYSIS

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?
 No issues with student type.

PRIORITIZED COURSE DEVELOPMENT
What aspects of the course should be developed primaily? How can these aspects be developed in short and long term?
We will eliminate the final exam and replace it with a series of smaller focused assignments during the term. We will introduce two parts for some of the tutorials. The first theory part will be done in writing then discussed in a seminar, then corrected and uploaded with the practical part of the tutorial,

DD2420 Probabilistic Graphical Models Review Board Summary

In this document we summarize the relevant comments and suggestions that came up during the review board for the course. These are grouped according to the aspect of the course they deal with.

Exam format:

Suggestions focused on remote open-book exams:

- -Having a 24 hour exam would be beneficial, mostly to ensure the upload process has a minimum bearing, but it could also facilitate the process for asking questions during the exam if needed.
- Removing theoretical questions altogether seems unnecessary, as they could be orally cross-examined or just orally examined from the start. This should still be doable even if students can look up information, as they'd still have to show they have a proper understanding in the oral exam.

Other general comments/suggestions:

- Fast grading and having results ready the day after the exam is great, but there could be a less immediate oral examination and/or a more uniform notification process. These measures can prevent students from getting anxious due to not knowing whether they passed or not (and whether or not they are to expect an oral examination, if there is one).
- The exam is a bit too difficult with respect to the knowledge students gain from the mandatory assignments and lectures as of now. Perhaps adding exercises and pre-exam sessions where previous exam questions and math examples are covered could help (it's great to have the extra help session before the exam where people can come and ask related questions).

Tutorials/help sessions:

- The assistance received in help sessions is quite thorough and helpful when students have questions. It's likely unnecessary, but if there are too many students, break-out rooms should be used so that everyone can get help at the same time
- -The flexible grading regarding students' understanding in tutorials seems like a good system for the content of the tutorials.
- It can be hard for students to come up with good questions on Mondays, as they have barely had any time to try and understand the new assignment (the presentations of the previous assignment were just 3-4 days earlier). Moving help sessions or adding more of them to allow students to come better prepared (and with more questions) could be helpful.
- The MATLAB code in some tutorials should probably be transferred to Python, so that the whole course is available in Python. Not all students have experience in MATLAB and this makes it unnecessarily difficult for them to go through these tutorials.

- The fact that students may re-present assignments to earn points they missed in the first presentation should be made clearer.
- When an error is found on an assignment an extra paragraph should not be added to canvas, instead the original assignment should be modified. Otherwise students can be stuck in the assignment for a long time, without realising that the solution is written on Canvas. Perhaps it is worth going over the assignments to make sure there are no typos, mistakes or confusing notation, and also updating them according to comments made on Canvas.
- The expected time limit on the tutorials did not always reflect students' experiences (they could take 2-3 times longer than the estimates to complete). Maybe they could be removed, revisited or qualified to ensure they are not misleading for anyone.

Lectures

- The speed at which lectures are given is very fast and it is hard for students to learn all of the material as it is given. Because of this, most is forgotten and has then to be re-learned several weeks later either for an assignment or for the exam. Perhaps lectures could be more spread out over the 8 weeks of the course. After all, the material for the later assignments won't be used until the last weeks anyway. However, it is nice to have a lot of time left for tutorials after the topics have been covered, yet a slower pace and going more thoroughly through topics could also help a lot for tutorials: This means more time can be spent on each topic and thus help students understand them better. Perhaps adding some computations and old exams exercises in between could also work nicely.
- Some slides in the lectures are barely covered when first shown and practically just skipped over. For example, the SLAM graph has a slide in the 2nd lecture but when we got to that slide it was briefly described followed by "This will be covered in another lecture" and then skipped. Perhaps it is worth considering removing these to decrease confusion of what it is that students should learn from each lecture. In general, considering redistributions of the topics to avoid surprises as much as possible could make it easier for students to understand what is expected of them after each lecture.

Written by:

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