

Course analysis (course evaluation)

Course code 1QA142	Course title Artificial Intelligence in Mental Healthcare	Credits 3
Semester (spring/autumn year) So24	Period 240603 - 240617	

Course coordinator John Wallert	Examiner John Wallert
Teachers responsible for the module	Other participating teachers Christian Rück Julian Striegl Manne Sjöstrand Magnus Boman

Number of registered students at the three-week check-up 12	Number of pass marks at the last course date 11	Response rate course evaluation survey 31.43% (100%)
Other methods for student influence (in addition to the final course evaluation) Separate Menti-evaluation of all five lecturers performance in direct connection with their lectures. The students also had continuous opportunity to give feedback on the different parts of the course during the course.		
Feedback of course evaluation results to students The course evaluation has been brought up at training meetings with the teachers involved. The course evaluation and course analysis are reported on the open course web and on the learning platform Canvas.		

Please note that...

The analysis must (together with a summary quantitative summary of the students' course evaluation) be communicated to the education board at the department giving the course and, for programme courses, also to the programme coordinator board.

The analysis has been communicated to the Board of Education on the following dates:
2024-07-05

The analysis has been communicated to the programme director on the following dates: -

1. Description of any changes made since the previous course based on previous students' views

This was the first time the course was given.

2. Brief summary of the students' values of the course

(Based on the students' quantitative responses to the course evaluation and key views from free-text responses. A quantitative summary and any graphs are attached.)

Of the students who completed the course, 91,67% answered the survey (11/12). Counted registered in Ladok, 64,71% answered (11/17). The course received high ratings in the course evaluation. Mean range per individual item = 4.1 – 4.5 of total score 5. Grand mean = 4.35 of total score 5.

A majority of the students stated that they, to a high or very high degree, have

- Developed valuable expertise during the course
- Achieved the intended learning outcomes of the course
- Experienced a common thread and common theme throughout the course, from intended learning outcomes to examination
- Been motivated and encouraged to take a scientific approach, for example in the form of analytical and critical thinking, independent research, and evaluation of information
- Experienced that the teachers have been open to views and opinions regarding the structure and content of the course
- Experienced that the course lectures were good and informative
- Experienced that the examination assignments were relevant to the intended learning outcomes of the course

Based on free-text answers, the following particularly positive aspects of the course were stated

- That there was an excellent diversity among the students but also the lecturers' interdisciplinary background, which gave rise to rewarding discussions and insights as well as different perspectives on the course content during the course.
- The combination of theoretical and practical work.
- That the course provided a very good, content-rich and stimulating introduction to further studies on the subject.
- High teacher attendance and that the teachers were helpful, listening, receptive to feedback, and easily approachable

Based on the free-text responses, the following areas of improvement were stated

- The group work demanded a lot from the participants, and they need to be given an even clearer structure.
- Clearer information that coding in the statistical programming language R is included in the course.
- The format of the course could be extended and then deepened in terms of both statistical programming and ethical aspects of the course content.

3. The course coordinator's reflections on the implementation and results of the course

Course Strengths: Many competent lecturers with good variation regarding both content expertise (clinical, technical, medical ethics) and also academic experience (professors, associate professors, doctoral students). A well-thought-out combination of more traditional knowledge acquisition (lectures) with more active learning elements (group work, presentations, workshops, seminars, ethical debate). Exams that match well with the learning outcomes. Planned time for reading and generous amount of time for active discussion/dialogue regarding key parts of the course content. The group work is a critical part of the course where the students, in an interdisciplinary team, get to practice defining their research question, apply their ML/AI model with

pre-simulated data, and give a written and oral account of the technical structure, clinical potential, and ethical challenges of their model. That the course contains theoretical and practical elements regarding ML/AI programming, but also a consistent focus on clinical application potential and ethical issues that this groundbreaking technology entails. In terms of time, the course is a two-week summer course that does not clash with the semesters of clinical programs or Swedish midsummer celebration (however, see the problem below regarding the unexpectedly high student dropout prior to course start). A broad intake resulted in a student group with varying backgrounds in terms of age, gender, nationality, and knowledge. Good teacher density, given that in addition to the lecturers I also integrated junior colleagues from my team (teaching assistant, doctoral student) in the different parts of the course, which gave both the students a lot of support during the course and also my junior colleagues some valuable hands-on teaching experience, in benefit of their future professional lives.

Course weaknesses: The group work needs to be structured more clearly (see below for problem description and planned actions). Despite good initial interest in the course, course recruitment was neither as KI Admissions nor I as the course responsible expected (see below for problem description and planned actions).

3. Other comments

Overall, as the course responsible, I am very satisfied with the course. The students who took the course were very satisfied with it and everyone involved on the teacher side were stimulated and happy to give the course. A completely new course usually brings with it a couple of "teething problems" (see example below). Our plan to address these seems appropriate and we are fully motivated to give the course again next summer.

4. The course coordinator's conclusions and any suggestions for changes

(If changes are proposed, please indicate who is responsible for implementing them and a timetable.)

Some of the students felt that their group work got partly stuck. Revision of the students' group work during the course has begun. Its structure will be clarified in terms of its format with more frequent follow-up and more clearly defined sub-goals so that the timetable is better followed. We will also implement that written group contracts are signed by all students regarding agreed communication channels, division of labor and the like. It should be mentioned that all students completed the group work and received a passing grade regarding both the written report part and the oral group presentation part of their group project.

Recruitment to the course was neither as KI Admissions nor as I as course responsible expected. From the beginning, we had 85 applicants, of which 40 were qualified. Together with KI Admissions, it was decided to overintake 5 students (a total of 35). There was also an early decision to close the course for further admissions. We did not do any extra advertising for the course. It was the first time the course was given and the extra uncertainty this entails motivated us to ensure that we did not get too many applicants and thus risk that the teaching would suffer (the course contains several active parts, and it is given on site in Flemingsberg with high teacher presence). However, the number of students registered and the number of course participants was underestimated, with the result that fewer students than expected completed the course. The problem was noticed too late, although the course was reopened for late admission just before the start of the course, but it did not help much. Since this is a freestanding summer course that is given after the completion of the regular student semester during the month of June – and one can therefore expect a comparatively significantly larger "student dropout" than usual – we will on the next occasion the course is given (a) in consultation with KI Admissions increase the number of overadmitted students significantly, (b) advertise the course more, and (c) keep the course's admission open longer. Now we know that we can handle the different parts of the course, even if in the end there will be slightly more students than expected who completes the course. A positive aspect was that we only had a

single dropout of those that actually started the course (for personal medical reasons). Together with the course's very good ratings on the course evaluation and our own qualitative assessment of the course, we feel safe and motivated to give the course again.

Attachments: Course evaluation