Course analysis (course evaluation)

Course code	Course title	Credits
1QA142	Artificial Intelligence in Mental Healthcare	3
Semester So25	**Period** 250602 - 250616	

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

Number of registered students at the three-week check-up	Number of pass marks at the last course date	Response rate course evaluation survey
14	13	57.14% (100%)

Other methods for student influence (in addition to the final course evaluation)
The students had continuous opportunity to give feedback on the different parts of the course during the course (individual and group format).
Time to reflect with the course leader on all aspects of the course (group format).

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:
2025-06-18
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 second time the course was given.

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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, 57,14% answered the survey (8/14). The course received overall high ratings in the course evaluation. Mean range per individual evaluation item = 4.1 – 4.5 of total score 5. Grand mean = 4.34 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 (7/8)
- Achieved the intended learning outcomes of the course (7/8)
- Experienced a common thread and common theme throughout the course, from intended learning outcomes to examination (7/8)
- 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 (7/8)
- Experienced that the teachers have been open to views and opinions regarding the structure and content of the course (8/8)
- Experienced that the course lectures were good and informative (6/8)
- Experienced that the course seminars and workshops where good and informative (8/8)
- Experienced that the examination assignments were relevant to the intended learning outcomes of the course (7/8)

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

- Great combination of theoretical and practical work.
- Lecturers were knowledgeable and passionate about the topic.
- Inspiring and thorough introduction to the topic of AI applied in mental healthcare.
- 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.
- That the group project was a very good, stimulating experience.
- Excellent combination of technical, medical and practical elements.
- 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

- Pace of the coding workshops was a bit too fast.
- Can be made even more clear that students need to read articles before the AI seminar, however this was already emphasized by the teachers in class and written on canvas.
- Scheduling can be improved a bit, a substantial portion of the group work designated time was towards the end of the course.

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 where students are encouraged to give their views on the topics dealt with during the course. 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 – essentially mimicking reality with respect to applying AI in healthcare today. We improved the group work this year around in terms of clarity and rules and the overall good feedback regarding the group work makes me comfortable that the group work part of the course was much more successful than it was the first year we gave the course. The high-quality group presentations and the written reports also attest to this fact. Another strength is that the course deliberately combines 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 predominantly 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, postdoc researcher) 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 still could benefit from a bit more tweaking regarding when group work timeslots are distributed across the course timespan. This should be an easy fix. Despite good initial interest in the course, and a targeted effort to recruit more reserves this year, the course recruitment was neither as KI Admissions nor I as the course responsible expected (see below for problem description and planned actions). For next year, an introductory R self-study segment will be introduced and recommended for those who feel that they need a bit more coding experience before they start coding as part of the course. The debate was for some the highpoint of the course, while a few felt it was a bit rushed in time. For next year we will slightly extend the debate time to make sure that students feel that they get to debate a topic with ample time available.

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. Our plan to address the issues 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.)

This time around we had a clearer structure for the group project, 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 also implemented a clearer responsibility for different parts of the project (e.g. coding lead). 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 again neither as KI Admissions nor as I as course responsible expected, despite extensive inclusion of reserves, and a greater overintake (överintag). This time around we also did extra advertising for the course and kept the course admission open longer (closer to the course start date). On the other hand, the problem with too few students was much smaller this time around, with 20 total course seats and 14 taking the course. 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 even further – there is no issue with the initial pool of students (over 100 eligible applicants), (b) advertise the course more, and (c) keep the course's admission open longer. Now we are even more experienced and 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. Similar to last year, those that actually took the course were also very pleased with it and performed well. Together with the course's stable and 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