Mathematics 2 for Al

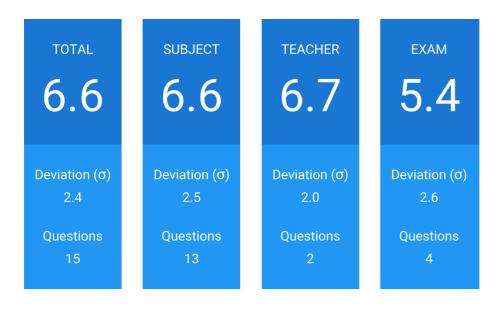
Results from 07-02-2018 till 21-02-2018

Respondents (n) 26 of the 150

Total average

Below are the total averages of all evaluations of this program. These averages are composed of all results on all questions. Except if a question meets one of the following constraints:

- It is a "Yes / No" question
- It's an "Open question"
- The question is part of a set of questions where is explicitly stated that they may not be included in the average.



Total average per question

Below are the total averages per question of this evaluation.

The learning objectives (what you should know and be able to do by the end) of the course were clear to me. Disagree to agree 1.10 n 26	Agree (3.5)
De werkgroepbijeenkomsten waren zinvol Disagree to agree 1.3σ n 26	Agree (3.6)
The coherence between the different components of the course is Very little to very much $\mid 0.9\sigma \mid n$ 26	Much (3.8)
De samenwerking met mijn medestudenten heeft bijgedragen aan verdieping van de leerstof Disagree to agree 0.90 n 26	Agree (3.6)
Studying the course materials was necessary to successfully complete the course. Disagree to agree 0.9\sigma n 26	Strongly agree (4.5)
The organisation (e.g. the planning, scheduling, method of information provision) of the course was good. Disagree to agree 1.10 n 26	Neutral (3.1)
The information provided before and during the course was sufficient. Disagree to agree 1.3σ n 26	Neutral (3.2)
The time that I spent on this course was less/more/equal to the number of course credits (EC). Less to more 0.80 n 26	Much (3.6)
My general opinion of the course is Bad to good 1.0σ n 26	Neutral (2.9)
My general opinion of the lecturer(s) is Bad to good 1.0σ n 26	Neutral (2.7)
The lecturer had a good command of English. Disagree to agree 0.6σ n 26	Agree (3.9)
The difficulty level of the exam was appropriate. Disagree to agree 1.3σ n 24	Neutral (2.5)
The sample questions provided beforehand gave me a good impression of what the exam would be like.	Disagree (2.4)

The assessments reflected the learning objectives of the course well. Disagree to agree 1.2 σ n 26	Neutral (2.7)
The assessment criteria were sufficiently clear beforehand. Disagree to agree 1.2\sigma n 26	Neutral (3.1)

Open questions

Below are the results of each open question of this evaluation.

What do you think are the strong points of the course?

n 26

- 1. It's fun when you finally get it
- 2. It's a 'No bullshit'-course. The course very clearly states what the learning goals are, and it simply teaches you those. No time is wasted in making the subject looking more appealing
- 3. The course notes has good cohesion between chapters
- 4. The TA's made everything clear what the teacher couldn't
- 5. The lecture notes are very good. I literally passed the course only reading the lecture notes (no lectures)
- 6. exercise classes are what will be asked on the exam
- 7. Clear structure and organization
- 8. The syllabus is very well written. Everything becomes clear from that. I also liked the exercises.
- 9. The syllabus. Including the exercises.

10. -

- 11. The course notes are still very good, they provide good examples and information. Also the weekly work sessions were very nice. I want to give credits to Nick Hupkes for being a very good TA.
- 12. Very interesting subject! Good level of difficulty

13. -

- 14. It teaches you how to solve the mathematic equations, you won't be able to pass if you didn't do the exercises (unless you are very good at guessing)
- 15. It was a challenging course, so you feel very proud when you passed it
- 16. Very interesting topics
- 17. Mathematics leaves little doubt for what is expected, so that's a good thing. The lecturer also seemed very knowledgeable.
- 18. My TA (Martijn) helped me understand the material much better than the teacher so i really appreciated that
- 19. You learn a lot
- 20. Honestly, none.
- 21. Assignments
- 22. If you are able to do the homework, you are able to do the exam.
- 23. I passed. Not sure how, but that's the one strong point I can think of.
- 24. The syllabus was very helpful and clear

If you see areas that could be improved in the course, what are your suggestions? $^{\rm n}$ $^{\rm 26}$

1. It takes a lot of self study to really understand the subject, the lecturer should be more interactive with the group and answer questions. Many people just sit in the lectures not knowing what is happening because the pace is too fast. On the other hand: the exam was way to easy. I took this course for the second time so I really studied hard to pass this year, only to get an exam with anfew multiple choice questions: not representative of the course.

2. -

- 3. 1. The EXAM. I strongly believe that, no matter the circumstances, a math exam should only have open-questions and no multiple choice. 2. In the course notes the authors make a lot of "jumps" (e.g. "from this it can be easily seen that...", "therefore x is obviously.."), some of these are not as obvious as they should be in the authors' eyes.
- 4. Instead of repeating the syllabus with abstract definitions of mathematical things, I can read the syllabus myself. From a mathematics lecture I want understanding by giving examples. And please record the lectures.

5. -

- 6. more explaining of the examples
- 7. Show practicability of theory.
- 8. The TA's did not seem very competent. My TA "Martijn Leeuwen" missed one practical without informing us. The door was just locked. This made it hard to submit as well. He was usually late 10-15 minutes each time. His feedback was very unclear if there was feedback at all. When asked, he could not explain why he subtracted points. Sometimes he explained things in front of the class in Dutch. As an international student, this can be very frustrating.
- 9. The lecture was for me not adding much and therefore not really needed. Also with in combination with the high quality syllabus. The TA's did not seem that competent. Also, the grading was done quite differently by each TA. A more explicit grading scheme would probably help with that.
- 10. I spent way more time on this course then we should for this EC. The exercises where very different from what we had in the lessons. The lecture notes were very unclear for me and hard to read. For every exercise I had to search and practice a lot before I could make the exercise. There could be more examples, which are useful for the exercises, in the lectures. I never have had any problems with math, but this was so different from what I ever have learned. It did cost me so much time to found out the small things and practice with them (like what i is), before I could make an exercise
- 11. The lecturer was very uninspired. He at one point even made clear he did not want to be there, which is more than ridiculous. The way the assignments worked should be revised, there was a hand in once every two weeks but the assignments for the hand in were announced only one week in advance which meant that every two weeks you would have no idea what assignments to do. The system from last year with weekly assignments worked much better. Further if it is possible, move back to an exam with open questions, or at least make the exam harder.
- 12. Communication between teacher students/ta's
- 13. more practice material!!!!!

- 14. More exercises. I know the teacher doesn't want to provide the answers to those, but for a lot of people the exercises were very difficult and it would have been better to have more exercises to study with.
- 15. The lectures were insufficient to understand the topics. A lot of time is spent on the proofs and difficult mathematical background and few time is spent on how to do the exercises (the tricks you need to answer questions)
- 16. More elaboration on the LTI-systems part
- 17. The lectures were utterly useless. Not only did the lecturer go through the information much too quickly and was reluctant to give examples, he also seemed very uninterested if people could keep up with him, and literally everything he provided (even the examples!) could be found in the lecture notes exactly the same way. The lecturer's attitude bothered me, too. He looked like he only went to the lectures to scribble stuff on the blackboard that he probably memorized from the lecture notes and get paid for that, not actually teach. He seemed to care very little about whether the students would learn mathematics in a comfortable way, and his lack of sympathy for the students did not benefit anyone's motivation to want to learn, I think.
- 18. Perhaps showing more examples during the lectures instead of proofs
- 19. Better information: use blackboard to give all information, provide example exams, provide video-lectures.
- 20. Homework, LECTURES, PREPERATION MATERIAL!!!!
- 21. More examples during lectures
- 22. Multiple Choice as a form of examination is questionable in my eyes for Mathematics. I passed the course with a 7 but honestly did not understand the course material enough to deserve more than a five in my opinion. Due to the MPC questions it was very easy to at least make a very educated guess, while I would never have been able to even start solving the problems.
- 23. The course is taught by someone who does math in "mathematician's style", focusing on proofs and truth, and while proofs are important and have their place, the focus should be more on understanding and skills, "engineer's style" to fit into the program. Have a physicist teach this course instead of a mathematician. Talking about fitting in the program, this course is very difficult but the skills we learn are only used rarely, never for a lot of people who do not make certain specific choices.
- 24. I would have very much appreciated to be provided with weblectures since I was not able to attend the lectures due to a teaching assistant job in another course.
- 25. Lectures could connect better to exercises, more examples
- 26. Record the lectures for students which are really not able to come to the lectures.

Other comments and/or explanations regarding the answers you gave to specific questions.

n 26

1. No

2. -

3. Notes on the exam: - the exam was, to put it mildly, for the mentally disabled. It did not reflect the expectations some of us had (yes, I'm not the only one thinking this) at all. Personally speaking, I could have gotten the same grade if I would have studied 10% of what I studied. - we were told that the homework (and the other exercises from the course notes) give a good idea about how the exam will look like. It did not. While most of us struggled with homeworks, even with the help of TAs, the exam

was by far the most disappointing exam I've had to make. - another factor that contributed to the difference in expectation and the actual exam was the scheduled exam time. 2 hours and 45 minutes were enough to make 3 exams of that kind.

- 4. I find this course way too hard. There were also no assignments WITH answers given to practice
- 5. The teacher was quite impolite to a group of students who couldn't attend the lectures due to them being SA's in overlapping workgroups. There was no way he wanted to record his lectures (even only giving them to us) even though he had trouble finding TA's himself...
- 6. none
- 7. -
- 8. No.
- 9. MC exams suck. But this one was actually not too bad! I had fun: D even though it was an MC exam. From others I heard that one could sometimes infer the correct answer from the following question. That seems improvable. I didn't realize as I was actually calculating. But I think it would be great to improve that to make sure that the exam is actually testing (and not getting hijacked).
- 10. -
- 11. The lectures were not very useful because they were very theoretic and did not really contain concrete examples, last year the examples in the lectures were the most useful thing.
- 12. -
- 13. -
- 14. -
- 15. none
- 16. none.
- 17. While the style of teaching may work for a mathematics programme, it does not work for us AI students. Whereas mathematics students may not, AI students like seeing examples, be it code, psychological phenomena, or mathematical formulas. Even so, the lectures were useless since you could just read the lecture notes at home at your own pace and get precisely the same information. I'm sure even mathematics students would agree.
- 18. I think the gradiig of the test was a bit weird. Someone got a 6 by only answering 1/4 of all questions, whereass i got a 6.7 by answer 3/4 of the questions correctly
- 19. Think more about the student. We want information about the organisation, we need video-lectures, we want to use blackboard (or the new software) to get and share information (homework).
- 20. No.
- 21. X
- 22. have given my opinion in the last one
- 23. Our teacher just isn't gifted to be a teacher and has no clue how he can make concepts he understands very well understandable to his students.
- 24. I thought it was very unfortunate that the use of weblectures was not considered at all and even though i was willing to follow the course despite my inability to attend the lectures, I was not supported in this matter by providing online versions of the lectures

26. On the exam it was unclear what to fill in. The question numbers and the multiple choice form did not cohere. It was unclear what they expected from the questions, if you should give calculations for the multiple choice questions or not.