SOW-BKI124

Linear Algebra for AI

Results until 24-05-2018

Respondents (n) 53

Total average

Below are the total averages of all evaluations taken for this course. These averages are composed of all results on all questions, with the exception of the questions with the scales "Yes / No" and "Open question", and questions in which the set of questions states that they may not be included in the average.

TOTAL	SUBJECT	TEACHER	EXAM
8.4	8.4	9.1	8.1
Respondents 53	Respondents 53	Respondents 53	Respondents 53

Average per question

Below are the averages of all questions from all evaluations taken for this course.

De werkgroepbijeenkomsten waren zinvol — Agree (4.1)
Disagree to agree | 1.1σ | n 53

3 x Strongly disagree | 2 x Disagree | 4 x Neutral | 23 x Agree | 21 x Strongly agree

De samenwerking met mijn medestudenten heeft bijgedragen aan verdieping van de leerstof — Agree (3.7)
Disagree to agree | 1.1σ | n 53

2 x Strongly disagree | 5 x Disagree | 17 x Neutral | 14 x Agree | 15 x Strongly agree

The learning objectives (what you should know and be able to do by the end) of the course were clear to me. — Strongly agree (4.6)
Disagree to agree | 0.8σ | n 53

1 x Strongly disagree | 0 x Disagree | 3 x Neutral | 13 x Agree | 36 x Strongly agree

The coherence between the different components of the course is — Much (4.3)
Very little to very much | 0.7σ | n 53

0 x Very little | 0 x Little | 7 x Neutral | 21 x Much | 25 x Very much

Studying the course materials was necessary to successfully complete the course. — Strongly agree (4.5)
Disagree to agree | 0.7σ | n 53

0 x Strongly disagree | 1 x Disagree | 3 x Neutral | 15 x Agree | 34 x Strongly agree

The organisation (e.g. the planning, scheduling, method of information provision) of the course was good. — Agree (4.4)
Disagree to agree | 0.5σ | n 53

0 x Strongly disagree | 0 x Disagree | 1 x Neutral | 28 x Agree | 24 x Strongly agree

The information provided before and during the course was sufficient. — Agree (4.4)
Disagree to agree | 0.6σ | n 53

0 x Strongly disagree | 0 x Disagree | 2 x Neutral | 26 x Agree | 25 x Strongly agree

The time that I spent on this course was less/more/equal to the number of course

credits (EC).
Less to more | 0.8σ | n 53

Average (3.4)

1 x Much less | 3 x Less | 25 x Average | 21 x More | 3 x Much more

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My general opinion of the course is
Bad to good | 0.5σ | n 53

Very good (4.5)

0 x Very bad | 0 x Bad | 1 x Neutral | 26 x Good | 26 x Very good

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My general opinion of the lecturer(s) is
Bad to good | 0.6σ | n 53

Very good (4.6)

0 x Very bad | 0 x Bad | 2 x Neutral | 17 x Good | 34 x Very good

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The lecturer had a good command of English.
Disagree to agree | 0.6σ | n 53

Strongly agree (4.5)

0 x Strongly disagree | 0 x Disagree | 2 x Neutral | 21 x Agree | 30 x Strongly agree

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The difficulty level of the exam was appropriate.
Disagree to agree | 1.0σ | n 53

Agree (3.8)

0 x Strongly disagree | 8 x Disagree | 7 x Neutral | 25 x Agree | 13 x Strongly agree

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The sample questions provided beforehand gave me a good impression of what the exam would be like.
Disagree to agree | 1.0σ | n 53

Agree (4.1)

1 x Strongly disagree | 5 x Disagree | 5 x Neutral | 21 x Agree | 21 x Strongly agree

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The assessments reflected the learning objectives of the course well.
Disagree to agree | 0.8σ | n 53

Agree (4.2)

1 x Strongly disagree | 0 x Disagree | 4 x Neutral | 29 x Agree | 19 x Strongly agree

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The assessment criteria were sufficiently clear beforehand.
Disagree to agree | 0.6σ | n 53

Agree (4.2)

0 x Strongly disagree | 0 x Disagree | 5 x Neutral | 33 x Agree | 15 x Strongly agree

Open questions

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

If you see areas that could be improved in the course, what are your suggestions?

n 1

1. No suggestions

2. More drawings/pictures of what it is we are doing.

3. Links between subjects discussed early on and subjects later on weren't really explained. Because of this I needed to figure out how these subjects were related when the test was already near. The course presents you with the minimum material to know, but don't always contain a step by step guide to solve a problem. This had to be inferred from the examples given

4. Have people choose their tutors, since some of them were already doing maths 1, and you know they were really nice TA’s, that know the way you work and you want to have your answers.

5. x

6. The TA's differed quite a bit in how much of the assignments they would help you with. It may be useful to have a general model for the TA's of how much they are allowed to send students in the right direction.

7. The assignments were good and we had a really good TA. Maybe fix the pointer :)

8. No

9. -

10. The workgroups were not that useful to me

11. Less strict checking of the home work assignments would be better, now a lot of time got lost in only writing everything down the way it had to be (write down each step, name echelon form, etc), while that time could have been used by really practising and studying

12. Switch some of the components around: treat vectors more in-depth earlier in the course. The test was too long / there was too little time to make it. It required more time that the practice test. Therefore, grades don't reflect a student's skill and knowledge levels of the topic.

13. nothing

14. More time on exam

15. -Leave out the unnecessary proofs -Maybe try out some more interaction with the students (instead of just plain course material, try to give some examples, e.g. show a small video about a game where the vectors are drawn and recalculated while moving the character) -Try to keep it interesting (less monotone..)

16. Might be nice to make the workgroups obligatory, so people really show up and more people will succeed in the course. Because not doing stuff makes you fail the course easily. Of course then not going once will be fine and more times you need a good explanation (like illness, funeral), like in Math1a.

17. .

18. Personally I think the lecturer could have emphazid more on what vectors and matrices and a

plain in a 3d space all mean. For me only I only got that halfway through the course by watching videos on youtube (3blue1brown), but I think this could also be addressed more during the lecture. A second point, the lecture should focuss more on the main points and not on the theoratical deriviations of a formula, for all that is what a lecture is meant for.

19. Less mistakes when explaining equations during the lecture, it is confusing

20. The TA's from the working groups and the pace of the lectures: my TA was the worst at checking answers or explaining things; the lectures were either too slow or too fast

21. The way the TA's graded the homework was sometimes a bit inconsistent, for example one TA substracted another amount of points for the same mistake compared to another TA

22. None.

23. The TA's looked differently to the assignments which meant that if you worked together with someone of another TA they got their assignments checked for a different grade even though we worked together on it so it was basically the same answer.

24. Nvt

25. More real life examples

26. -

27. I don't feel like I got to show my skills on the exam because of lack of time

28. Sometimes the slides were a bit overwhelming

29. The slides should be much more clear. The most easy subjects were very hard to understand from the slides

30. /

31. The homework assignments gradings can be confusing. When reduction in points is given for failing to write down certain steps, it is unclear if you understood the material wrong or if the given answer is not elaborate enough.

32. Maybe you should have specified more what is asked from the student in the exercise, e.g. there was a homework assignment this year where we had to give a drawing of a situation (this was not asked explicitly), but due to the fact that this was not asked specifically, a lot of people lost points because they did not do that

33. More stress on notation, for the first few weeks my grades weren't as good because i didnt really understand what they wanted us to exactly write down

34. The TA's for the exercise hours differed very much, where some TA's gave almost answers, other TA's only gave hints after long insist

35. Not that strict rules about the assignments. Opportunity to send the assignment digitally(via e-mail and to be assessed as well)

36. TA grades a bit closer to each other (someone could get a 5 with 1 TA and a 6.5 with the next)

37. The exam was fair in the sense of difficulty however we lacked much time to complete the tasks, which led to us leaving our tasks in the exam that we knew we were able to do, we just didn’t have the time

38. Perhaps visualisations / animations

39. .

40. Workgroups can include tasks similar to the homework but not the same to ensure more

practising.

41. Maybe provide an extra exampler exam, because I think it is really nice to look at one to know what you have to study and keep one for after studying the material to look for subjects you still need to practice and give an indication of how you whould score on the exam.

42. Can't think of something now

43. More practicing material for the exam (including answers)

44. .

45. Dont know

46. more time to make the exam, or less difficult matrices during the exam

47. To have more examples

48. /

49. The course notes were not useful, the slides missed clear explanations for some parts. You really had to use Google/Youtube to understand those parts

50. The exam was no too hard, but there was too little time. I felt that you had no time to double check your answers or go back if you made a mistake.

51. I didn't like that the "punishment" for not going to the lecture in person was that the video was only uploaded after the practical sessions. I understand that this might be benefitial for lazy students, but I learn much better from the video than the actual lecture (I can go back if I didn't understand something, I can pause the video to follow the example in writing which really helps understanding, I can take a break whenever my brain shuts down, ect.). This way I couldn't benefit from the practical sessions at all.

52. Give a more general solution to problems, now you often only got explained how to solve a specific instance. Also, if possible, use more images so it is clearer what exactly is happening when you for example 'map a vector' (there were drawings on the board sometimes but more would be great :))

53. The slides look too crowded. Could use a better style.

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

n 1

1. Everything

2. Very clear way of giving learning goals. Also, good approach of material (the 'engineer' way of math).

3. The course presents you with all information necessary to pass the course and is very structured

4. I really liked the lectures and the way they were, things did not go too fast or too slow, and in the end all the homework and online tests proved to be helpful towards the exam

5. Learning goals are emphasized often and every lecture starts with a recap of the previous week.

6. Clear goals and methods to use

7. I really liked this course. The only thing what annoyed me was that, in the lectures, we walked

trough some examples that were really hard to follow, because of small mistakes in explaining the examples. Making mistakes is natural but I found it hard to follow because of that. Also, the pointer did not work properly so I got a bit lost in the slides.

8. The Lectures followed by the working groups were very nice to work with the material

9. Clear communication and a very passionate lecturer

10. Interesting, well explained

11. Doesn't require any prior knowledge about mathematics, really starts at the beginning which was very nice

12. clear learning goals, gradual build-up

13. The assignments prepare you very well for the exam

14. Clear explanation, lots of examples

15. -Very clear subtopics -Good structure and flow

16. Very good teacher who knows what to tell so people understand it and can make it practical. No unnecessary stuff. Also nice to combine all material at the end of the course to calculate special different things. The assignments as well prepared you very well for the exam, indeed if you make them and participate it are easy ECs. Also, the BlackBoard is very well organised, nice consistent naming of files for example. Clear overview.

17. Entry level corresponds with entry requirements. Clear explanations and cooperative lecturer. Lots of help available

18. The material was clear and not that much, every week where specified on one or two topics. Also the homework assigments where good practice with a suitable difficulty

19. Workgroups give good understanding of what is expected of you

20. The actual material

21. The lectures slides contained much examples, so the topics became clear. Also the workgroups were very useful for me, attending the lectures and workgroups were really worth it

22. The highly compregensive approach.

23. The coherence of the lectures and information provided was good. The assignments were a good practice. The lectures were interesting

24. Great assignments, great lectures

25. The methods used to teach lineair algebra

26. Luc Seelen has a high quality level of teaching and makes the material very understandable

27. The course material has been explained very clearly!

28. I really like the subject

29. It gave some practical cases of it being useful

30. Good exercises and the TA helped me a lot during the workgroups.

31. The lectures in the course are very strong. Clear explanations made the course very enjoyable.

32. The powerpoints were very clear and the workgroups were a good addition to the lecture series

33. Clear goals, clear content, good lectures

34. The clear explanations and that I could easily understand the slides after the lecture

35. Very detailed presentations. Good organization.

36. Have to work, but when you work you get rewarded

37. Really helpful slides and good explanations by the teacher. Helpful TA‘s

38. Clear explanations and engineer instead of notational approach. Top down. Good working groups.

39. I feel like I have a pretty good understanding of Linear Algebra after this course, so the strong point is the teaching material

40. Showing practical application of the course was essential.

41. The homework really represents what you should be able to do to pass the exam. Making the assignments obligatory helped.

42. Clear explanation during the lecture with lots of examples, not focusing to much on proving why it works like that but more how it works

43. Clearness Usefullness

44. Good lectures

45. The workgroups

46. good, clear course notes with good examples

47. The planning of assignments and the clarity of course materials

48. /

49. Clear what was expected from you, assignments and test exam reflected the actual exam, working groups were set up in a good way

50. The teacher was great and the lectures were well structured

51. I liked that expectations were clear and the course material was a digestable amount. I appreciated that in the exam, general knowledge about how to solve a problem was more important than the actual implementation of that knowlege (what I mean is that miscalculations weren't punished hard). I was very happy that the lectures were recorded.

52. The assignments we did helped a lot with understanding the material

53. Super good organization; Clear presentation of the material; Useful and easy to understand material; TA (Felicity) was demanding - that's good! Luc himself :)

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

n 1

1. No

2. Good course.

3. For the following question: "The time that I spent on this course was less/more/equal to the number of course credits (EC)" my answer much means: a bit more About the Test: The level of

difficulty of the test wasn't that big of a problem. However, if you did not know how to solve question 3a 3b-3e were nearly unsolvable without giving example values. Due to the extremely short time we had available for the test I stressed a lot and did not have time to carefully calculate and think about my answers. This greatly reduced my accuracy.

4. -

5. x

6. No comment

7. No

8. I enjoyed the lectures very much

9. -

10. -

11. Please allow us to use a calculator during the exam, now we're being tested on calculating by head while it should be about understanding the computations and concepts of linear algebra

12. Harder topics remained somewhat unclear, in part because the solutions to the homework assignments were not shared.

13. nothing

14. You have a lot of time for your homework but on the exam you don't.

15. -

16. No, it was just a very good course and very nice and interesting as well. Also my TA Anna was very good and prepared :)

17. .

18. nope

19. none

20. nvt

21. The tempo and the diffuculty of the course were good, as long as you put sufficient effort in it

22. -

23. no

24. Nvt

25. nope

26. -

27. I really enjoyed the course :)

28. Using visual examples can help create an intuition

29. The slides just need to be improved a lot

30. /

31. One of the better courses so far!

32. -
33. none
34. No further comments
35. None
36. no
37. No
38. All in all I enjoyed the course very much and learned a lot about linear algebra
39. .
40. Workgroups with additional assignments.
41. no.
42. No
43. N/A
44. No
45. None
46. -
47. Nil
48. /
49. -
50. -
51. -
52. -
53. None.