

RUHR-UNIVERSITÄT BOCHUM | 44780 Bochum | Germany

Prof. Dr. rer. nat. Laurenz Wiskott

DIE KANZLERIN

**Dezernat 1
Abteilung 1: Lehre, Informations-
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Student course evaluation results

Dear Prof. Dr. rer. nat. Laurenz Wiskott, Prof. Dr. rer. nat. Laurenz Wiskott,

please find enclosed the results of the student course evaluation for your course "Mathematics for Modeling and Data Analysis". Please discuss the results with your students. A session in which you present the results is a compulsory component of the student course evaluations at the Ruhr-University.

If you need inspiration, you can find a guide for feedback discussions on: www.rub.de/evasys (Information for teachers) and <http://www.rub.de/lehreladen/> (heading feedback).

Kind regards,

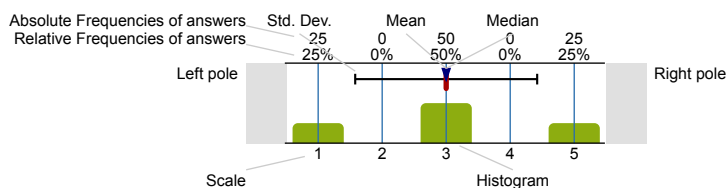
Saskia Skonetzki

Prof. Dr. rer. nat. Laurenz Wiskott
 Prof. Dr. rer. nat. Laurenz Wiskott
 Mathematics for Modeling and Data Analysis (SoSe25_211047)
 Erfasste Fragebögen = 11



Legend

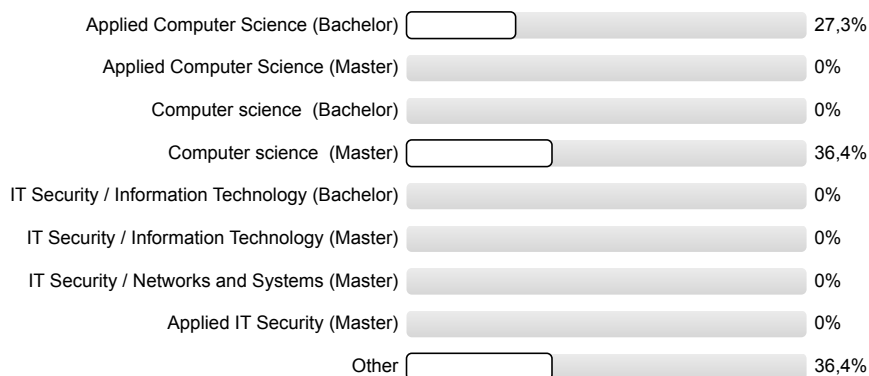
Question text



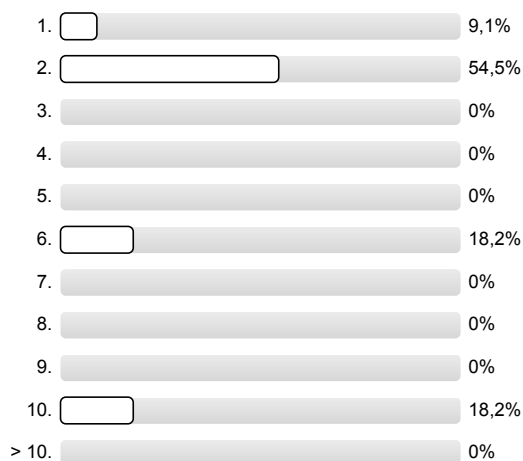
n=No. of responses
 av.=Mean
 md=Median
 dev.=Std. Dev.
 ab.=Abstention

Meta data

As part of which degree programme are you taking this course?

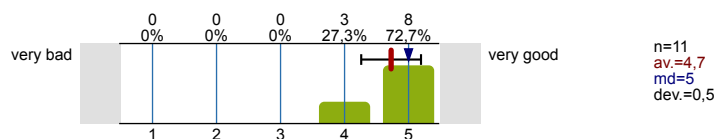


Current semester in this degree programme:

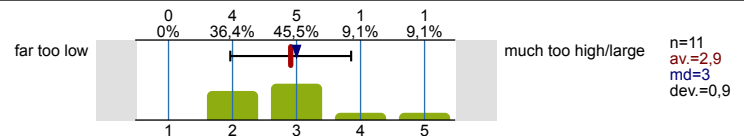


General Questions

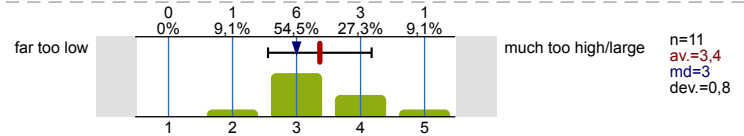
My overall assessment of the course:



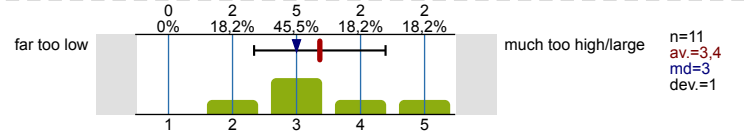
My time expenditure for the course in relation to the credit points awarded (1 CP = 30 hours) is ...



The course's level of difficulty is for me:

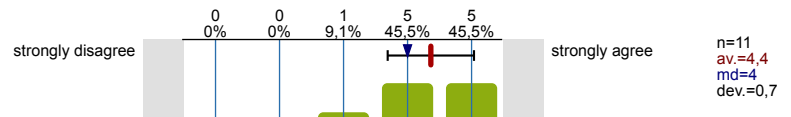


The course's pace is for me:

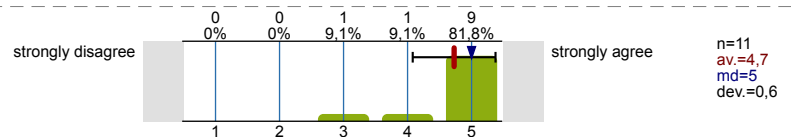


Structure & teaching material

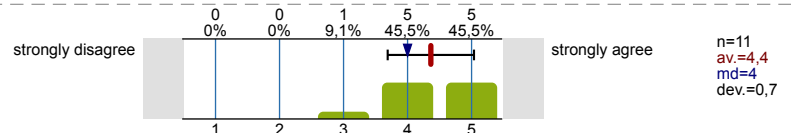
The teaching/learning objectives of the course are clear to me.



The course is well organized.

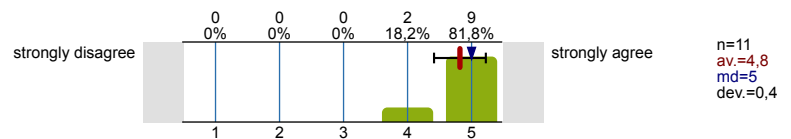


The teaching material of the course (lectures, exercises,...) supports the learning of the contents well.

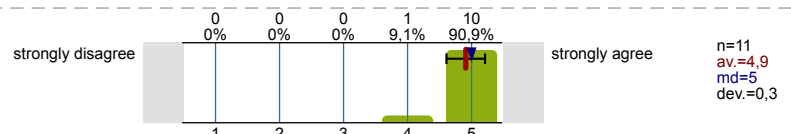


Interaction & Support

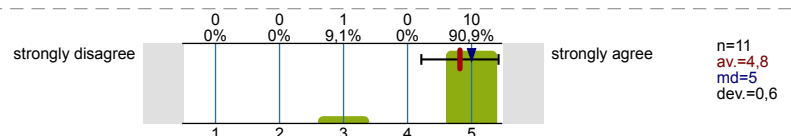
In sessions in presence/web conferences the lecturer seems well prepared.



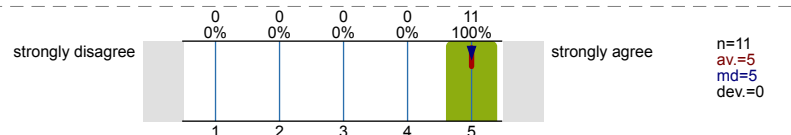
In the course, there is a good working atmosphere.



The lecturer is committed to teaching and knows how to convey enthusiasm.



The lecturer is friendly and respectful towards the students.



Further feedback

Do you lack prior knowledge for this course? If so, which one?

- An sich keines, außer, die Vokabeln der mathematischen Terme auf englisch.
- Bisher nicht
- Englisch reicht manchmal nicht aus, manches aus Mathe 1 wurde vergessen. Für die frühen Vorlesungen haben mir persönlich einfach die Vorstellungskräfte bzw. Kreativität gefehlt um mir die Funktionen vorzustellen.
- For me, having learned all of my math up to this point in the US, the main things that I was less confident about consisted of terminology. For instance I had to go look up what a monotonic function was. Also, I am confident with matrices, but I found that applying transformations and different things combined with matrices would make my head spin. Perhaps this is only natural.

Additionally, something I just thought of was one time when Rings and Fields were mentioned. Thankfully, I had learned about them in a niche upper level math course I took to finish my math minor in the US, but I am pretty sure that a lot of the people in the class had not learned about them yet.

- Ich würde sagen an Vorwissen fehlt es nicht, außer das glaube ich bei vielen die Mathemodule etwas her sind. Daher ist es gut dass man nochmal auf die basics eingeht.
- I do not come from a "mathematics-adjacent" background, so while I understand laws and theorems when I hear them, I do not know them myself. High-school math did not prepare for that :')
- Nein
- No
- Since I haven't studied something related to Mathematics before, all that I have is the knowledge from school, which is quite rusty. It also becomes clear to me throughout this course which concepts I didn't understand in school.
- Yes, I have prior knowledge about all the materials of the course and I think Professor Laurenz Wiskott provide all the materials very well for us.

What did you like about the course (lectures, exercises,...)? What should be kept?

- Auf fragen wird ausführlich eingegangen und Dinge werden, falls nötig, gut verständlich wiederholt. Man kommt sich nicht dumm vor nur weil man eine vermeintlich leichte Sache vergessen hat
- Die offenen Diskussionen über z.B. hochdimensionale Räume und insgesamt der Fokus auf Intuition
- Die Organisation ist sehr transparent und der Dozent hat viel Expertise, die er auch immer zeigt. Die Themen sind gut strukturiert und die Art, wie man auf die Folien zugreifen kann, ist sehr gut.
- Die Vorlesung kann ich leider zeitlich nicht besuchen. Ich finde es besonders gut, dass man hier eine online alternative hat. In den Übungen macht das zusammenarbeiten/diskutieren spaß. Besonders das weiterführende Material was dazu verlinkt ist finde ich gut.
- Guter Modus von Übung und Vorlesung. Erarbeiten und interaktives Besprechen des Übungszettels auf durchgehen hohem Niveau gibt viel Raum Unklarheiten zu bekämpfen.
- I like the conversational tone of the class, and the phrase "Be opportunistic" will forever be ingrained in my brain from this class. I like that it does not feel like we are in a hurry and can instead slow down and discuss different mathematical subjects. For me it is a lot easier to learn this way than it was in high school.
- I really like that at first we spend 1,5h for discussing homework and questions we have and discuss about different scenarios in which the exercise could have gone. I also like that we have access to videos and written materials that show the same things that we did in class, so if we didn't catch something right away we can always come back to it.
- I really like the learnscapes as they are to prepare and revisit the material and are a good representation of the relation between the topics. The video formats are very accessible. I think the exercises and the solutions are quite good and discussing them in plenum is very helpful. For me, as I have little prior knowledge, the length of the sessions is quite intense, but I'm not sure if it would be more beneficial for the entire group to distribute the sessions throughout the week as the current format allows for smoother transmission between topics, which I quite like.
- Sehr gutes Vorlesungsformat mit kleiner Gruppe und interaktiv
- The learning material is really well prepared and very accessible!
- The part related to the exercise and discussion part, when we are trying to solve the exercise.

What did you not like about the course (lectures, exercises,...)? What could be done better?

- Bis jz bin ich sehr zufrieden
- Die Anzahl von Stunden hintereinander.
Mathe konzentriert sich viel auf einen Tag, was in zwei Sachen mir nicht gefällt:
1) Zu wissen, Donnerstag wieder von 9-14 Uhr Mathe zu haben, motiviert mich nicht wirklich.
2) Mathe wiederholt sich zu selten. Wäre z.B Montags/dienstags etwas, dann würde der Stoff nicht alles in einem dran kommen und es gibt mehr Atemraum dazwischen und keine 5 Stunden am Stück.
(Technisch gesehen ist es natürlich auf freiwilliger Basis, aber man tut sich ja nie einen Gefallen dabei, zu schwänzen).
- For me, the course is very intense. However, I realize that this is due to my personal background and I do feel like the level is appropriate for the group overall. Also, the lecturer makes an effort to make the topics accessible to students with different levels.

One more interesting thing would perhaps be to discuss how the material of the course could be practically applied in some of the fields that the students come from if there is time.
- I do not have a lot of prior knowledge and look some things up mid-session (which is, in itself, fine). The length of the course however makes it hard to stay attentive, especially as thursday - afternoon slots are very popular for classes and getting to eat in-between.

- Manches geht zu schnell. Die anderthalb stunden vor der Übung reichen oft nicht aus um alle aufgaben durchzugehen, sondern man sollte sich vorher vorbereiten bzw. einige der aufgaben vorher schon lösen. Das sollte meiner Meinung nach in der ersten vorlesung gesagt werden.
- Nothing actually.
- One thing that would help me would be if there were videos for each week's problem sets that were released after we met that week. That would mean that we would have already worked out the problems ourselves and gone over the problems in class, this would just make the reviewing easier. It would help me be more efficient going over the problems later.
- Sometimes I'm lacking some examples on actual numbers. 90% of the time it's fine, but sometimes when there's some strange or hard mathematical thesis to understand/accept, it would be easier to see that it "actually" works.
- Zweiter Aufgaben Typ der nur elektronisch überprüft wird. Mit denn Objekten sicher rechnen können ist ungleich ein gutes Verständnis für die Objekte zu haben.
- Zwei verschiedene Tage für Übung und Vorlesung hätten den Vorteil, dass Studierende zweimal pro Woche mit dem Stoff konfrontiert werden würden. Aber der aktuelle Modus ist auch gut

Do you have any further comments on this course?

- -
- Again, the material is great! I do not feel excluded due to my lack of prior knowledge - but I do have to put in some extra work before and after each class.
- Ist auf jeden Fall ein guter Kurs und ich wünsche not, ich würde besser passiv englisch verstehen, wenn ich mitschreibe, oder nachdenke, da hier schon mitunter sehr schnell gesprochen wird, was aber absolut mein Fehler ist.
- I was not really intending to take this course as it is not required for my electrical engineering major, however, I went to try it out the first week and liked the experience so much that I withdrew from a different course and signed up for this one instead. I appreciate being able to sit down and talk about math, a subject that fascinates me. Keep it up professor! Thanks for the semester in advance.
- No
- Rot ist eine wirklich schöne Farbe.
- Sympathischer Dozent mit viel Geduld :)
- Thank you for the learnscapes! They really are great material and even though the course is hard for me, I like it very much.
- This course is amazing, it's my favorite mathematics course I've ever had. My favorite parts are the atmosphere for discussing concepts and our ideas and how well prepared everything for the course is (material, lecturer). I really enjoy that everything is so well organized. The only thing is I'm not sure why the course is open to non-engineering degrees or people who don't have enough prior knowledge to attend it. I think it's very hard for them and then it's also hard to find the right pace for the entire class.
- Wenn das Vorlesungsmaterial gar nicht während der Vorlesung verwendet wird, gibt es keinen Wiedererkennungswert bei der Nachbereitung

Profile

Subunit: Fakultät für Informatik
 Name of the instructor: Prof. Dr. rer. nat. Laurenz Wiskott
 Name of the course: Mathematics for Modeling and Data Analysis
 (Name of the survey)

Values used in the profile line: Mean

General Questions

My overall assessment of the course:	very bad					very good	n=11	av.=4,7	md=5	dev.=0,5
My time expenditure for the course in relation to the credit points awarded (1 CP = 30 hours) is ...	far too low					much too high/ large	n=11	av.=2,9	md=3	dev.=0,9
The course's level of difficulty is for me:	far too low					much too high/ large	n=11	av.=3,4	md=3	dev.=0,8
The course's pace is for me:	far too low					much too high/ large	n=11	av.=3,4	md=3	dev.=1

Structure & teaching material

The teaching/learning objectives of the course are clear to me.	strongly disagree					strongly agree	n=11	av.=4,4	md=4	dev.=0,7
The course is well organized.	strongly disagree					strongly agree	n=11	av.=4,7	md=5	dev.=0,6
The teaching material of the course (lectures, exercises,...) supports the learning of the contents well.	strongly disagree					strongly agree	n=11	av.=4,4	md=4	dev.=0,7

Interaction & Support

In sessions in presence/web conferences the lecturer seems well prepared.	strongly disagree					strongly agree	n=11	av.=4,8	md=5	dev.=0,4
In the course, there is a good working atmosphere.	strongly disagree					strongly agree	n=11	av.=4,9	md=5	dev.=0,3
The lecturer is committed to teaching and knows how to convey enthusiasm.	strongly disagree					strongly agree	n=11	av.=4,8	md=5	dev.=0,6
The lecturer is friendly and respectful towards the students.	strongly disagree					strongly agree	n=11	av.=5	md=5	dev.=0