Foundations of Data Science – Dr. Michael Nüsken

Lecture Survey – Fachschaft Informatik

September 7, 2019

Turned in Questionnaires: 19

1 Lecture Evaluation

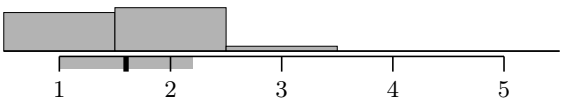
1.1 Please rate the lecture's concept.

1.1.1 How often did you attend the lecture?

Always – Never

44 % 50 % 6 % 0 % 0 %

Answers: 18
Mean: 1.6
Standard-Deviation: 0.6

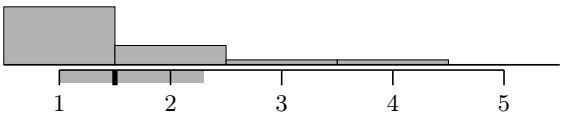


1.1.2 Did the lecture appear to be clearly structured to you?

Yes – No

67 % 22 % 6 % 6 % 0 %

Answers: 18
Mean: 1.5
Standard-Deviation: 0.8

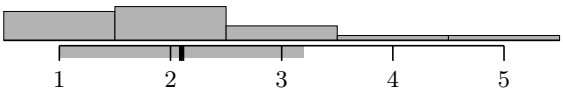


1.1.3 Have topics been illustrated by sensible examples?

Always – Never

33 % 39 % 17 % 6 % 6 %

Answers: 18
Mean: 2.1
Standard-Deviation: 1.1

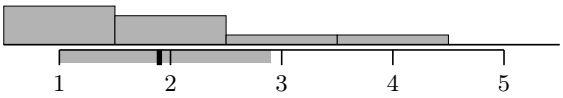


1.1.4 Were the slides/lecture notes helpful?

Very helpful – Not helpful

44 % 33 % 11 % 11 % 0 %

Answers: 18
Mean: 1.9
Standard-Deviation: 1.0

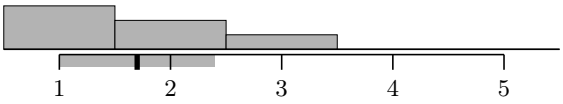


1.1.5 Have the topics been explained extensively enough?

Always – Never

50 % 33 % 17 % 0 % 0 %

Answers: 18
Mean: 1.7
Standard-Deviation: 0.7



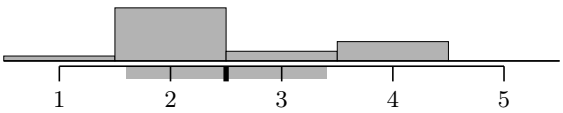
2 Lecturer Evaluation

2.1 Please rate Dr. Michael Nüsken.

2.1.1 How much of the content do you understand during the lecture?

Everything – Nothing

6 % 61 % 11 % 22 % 0 %

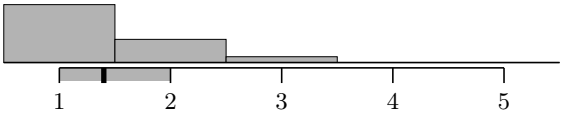


Answers: 18
Mean: 2.5
Standard-Deviation: 0.9

2.1.2 Did the lecturer answer your questions profoundly?

Always – Never

67 % 27 % 7 % 0 % 0 %

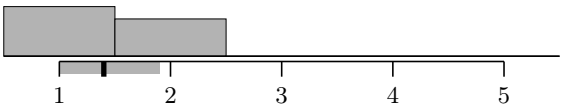


Answers: 15
Mean: 1.4
Standard-Deviation: 0.6

2.1.3 Was the lecturer available for questions outside of the lecture?

Always – Never

57 % 43 % 0 % 0 % 0 %

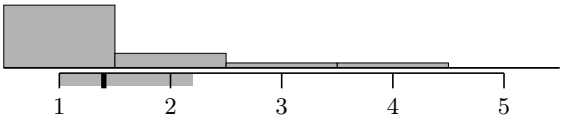


Answers: 14
Mean: 1.4
Standard-Deviation: 0.5

2.1.4 Could you understand the lecturer acoustically?

Very well – Not at all

72 % 17 % 6 % 6 % 0 %

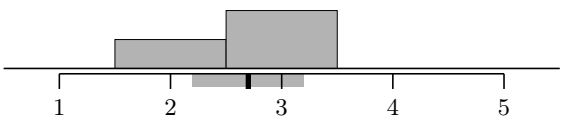


Answers: 18
Mean: 1.4
Standard-Deviation: 0.8

2.1.5 The speed of proceeding was...

Too fast – Too slow

0 % 33 % 67 % 0 % 0 %



Answers: 18
Mean: 2.7
Standard-Deviation: 0.5

3 Module Evaluation

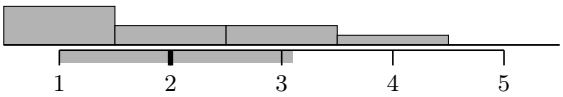
3.1 Please rate the module as a whole.

3.1.1 Did the course teach you helpful knowledge and abilities that will be useful in later work life?

Much – Nothing

44 % 22 % 22 % 11 % 0 %

Answers: 18
Mean: 2.0
Standard-Deviation: 1.1

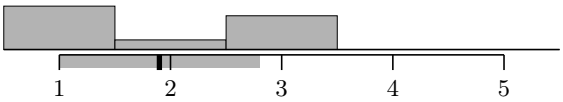


3.1.2 Do the obligatory course achievements support successful completion of the module?

Yes – No

50 % 11 % 39 % 0 % 0 %

Answers: 18
Mean: 1.9
Standard-Deviation: 0.9

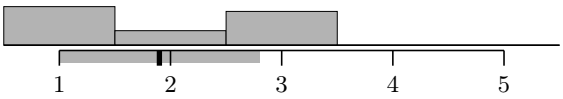


3.1.3 Do you think the obligatory course achievements are adequate?

Yes – No

44 % 17 % 39 % 0 % 0 %

Answers: 18
Mean: 1.9
Standard-Deviation: 0.9

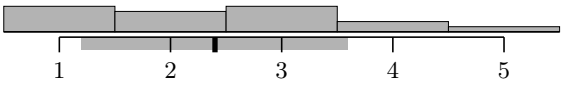


3.1.4 Did your interest in this module's field of study change?

Strongly inc. – Strongly dec.

29 % 24 % 29 % 12 % 6 %

Answers: 17
Mean: 2.4
Standard-Deviation: 1.2

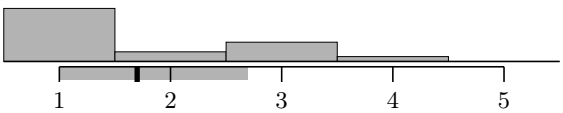


3.1.5 Would you recommend taking this module to your best friend?

Yes – No

61 % 11 % 22 % 6 % 0 %

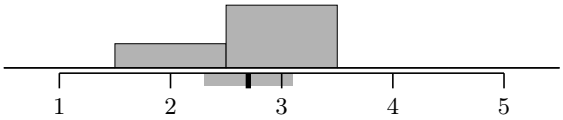
Answers: 18
Mean: 1.7
Standard-Deviation: 1.0



3.1.6 In relation to the number of credit points awarded, is the amount of work to be done justified?

Too high – Too low

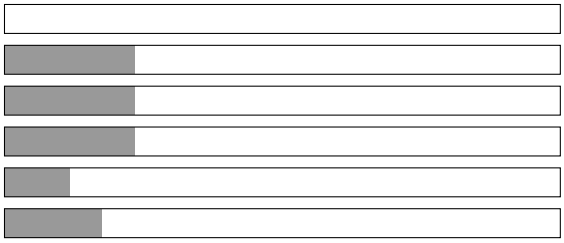
0 % 28 % 72 % 0 % 0 %



Answers: 18
Mean: 2.7
Standard-Deviation: 0.4

3.2 How much time did you spend on this module every week, including lecture, exercises, exercise tasks. . . ?

[0,3) hours	0 %
[3,6) hours	24 %
[6,8) hours	24 %
[8,10) hours	24 %
[10,12) hours	12 %
[12,∞) hours	18 %



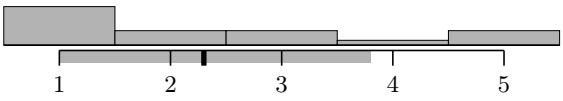
4 Exercise Evaluation

4.1 Please rate the quality of the exercises that accompanied the lecture.

4.1.1 How often did you attend the exercise class?

Always – Never

44 % 17 % 17 % 6 % 17 %

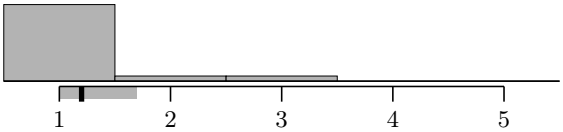


Answers: 18
Mean: 2.3
Standard-Deviation: 1.5

4.1.2 Have the exercise sheets been available on time?

Always – Never

88 % 6 % 6 % 0 % 0 %

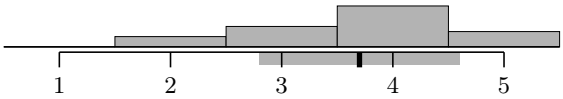


Answers: 17
Mean: 1.2
Standard-Deviation: 0.5

4.1.3 The difficulty of the exercise sheets varied...

Not at all – Greatly

0 % 12 % 24 % 47 % 18 %

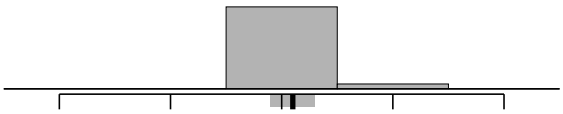


Answers: 17
Mean: 3.7
Standard-Deviation: 0.9

4.1.4 Did the contents of the exercises match the current contents of the lecture?

Lecture far ahead – Lecture far behind

0 % 0 % 94 % 6 % 0 %

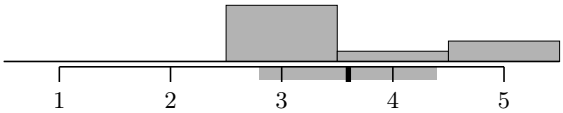


Answers: 18
Mean: 3.1
Standard-Deviation: 0.2

4.1.5 Judge the size of your exercise group!

Too big – Too small

0 % 0 % 65 % 12 % 24 %

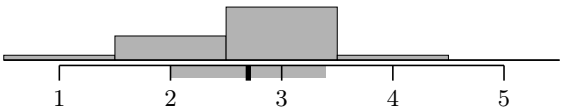


Answers: 17
Mean: 3.6
Standard-Deviation: 0.8

4.1.6 Usually I thought the exercises were...

Too difficult – Very easy

6 % 28 % 61 % 6 % 0 %



Answers: 18
Mean: 2.7
Standard-Deviation: 0.7

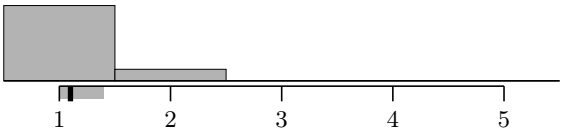
5 Exercise Class Evaluation

5.1 Please rate the exercise class you visited.

5.1.1 Has the tutor been available for questions outside of the tutorial?

Always – Never

87 % 13 % 0 % 0 % 0 %

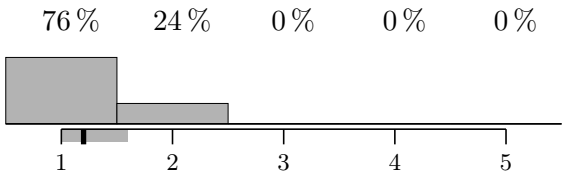


Answers: 15
Mean: 1.1
Standard-Deviation: 0.3

5.1.2 Could you understand your tutor's corrections and gradings?

Always – Never

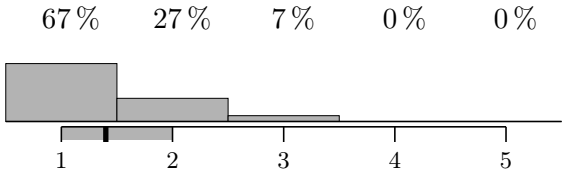
Answers: 17
Mean: 1.2
Standard-Deviation: 0.4



5.1.3 Did the tutor manage to handle all the relevant content in the exercise class?

Always – Never

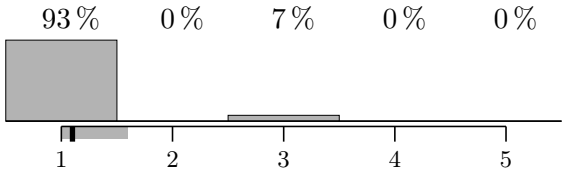
Answers: 15
Mean: 1.4
Standard-Deviation: 0.6



5.1.4 Would you recommend visiting this exercise class?

Yes – No

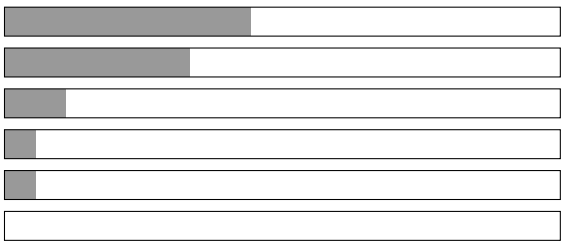
Answers: 15
Mean: 1.1
Standard-Deviation: 0.5



6 Comprehensive Rating

6.1 Please give an overall rating of the course on a scale from excellent (1) to very poor (6).

excellent (1)	44 %
good (2)	33 %
satisfactory (3)	11 %
adequate (4)	6 %
poor (5)	6 %
very poor (6)	0 %



7 Free Text Comments

7.1 Which aspects of the course did you like?

- Good lecturer and tutor
- asking ethical questions
-> what aspects of data science could be dangerous?

Give us lots of math background of this topic

The course give through proof to the theory mentioned in machine learning

---

Perception, gaussian distribution, tail bound, vc dimensions were taught in depth and very nicely.

Excellent lecture + tutorial, great discussions

- Good comprehensive slides including proofes.
- More detailed proofes in lecture.
- Follows a book. Makes studying easier

- very good teacher
- very good excercice class teacher
- very good english, very good slides!

Professor, tutor and everything Professor's teaching is really good. Tutor helps in all possible ways.

- lecture topics and concepts
- concepts are thaught from up to date study materials are highly applicable

---

1. High dimensional data.
2. Machine learning.

Tho topics are very relevant to the data science area.

- Proofs were explained exceptionally well.
- The fact that the lecture was based on a book is very helpful.

I liked the programming exercise in python, they helped me understand the lectures.

7.2 What could be improved?

- Proofs on over-head not always easy to read/follow
- in general too much time spend on proofs

Need more interesting examples.

However, it gives little insight on how the scenario which should be applied. I wish there are less proof, but more senarios where various algorithm should or should not be applied

---

Need more examples, preferably with real numbers

Exercises can be more application based.

- spending less time on mathematical proofs

I think some of the voluntary excercises could have been also presented in the tutorial. Well than again there was not enough time for that.

---

stretching eveery thursday lecture by 15 minutes was OK for my schedule, but probably not for everyone.

---

exercises could be abit easier or atleast some questions should be easy. To boost confidence of average students like me.

- I believe that the concepts should be explained more in terms of practical work.
- sometimes the theories are too difficult to comprehend.

I think it will be better to reduce the overall content of the course and spend more time on the topics which are there.

Maybe staple the corrected solutions, so that sheets don't get lost

---

To be more applied & practical

7.3 You can leave remarks and further feedback here.

I think this course is very necessary to data science, and examples can help us to understand the math principles better.

Is it possible to upload hand-written proofs up to scibo, since it is hard to see during the class due to the size of font.

Prof. Michael and [redacted] were very nice and helpful in clearing doubts and had sufficient concepts for the class

---

It would be nice if the latex slides (PDF) were searchable for text.

One of the best structured and organized lectures I've seen this far.
It's obvious that Nüske likes to teach and puts a great deal of time and effort into producing high quality slides and exercise sheets. Including solutions. So awesome.

Mr. Nüsken is a very good teacher! - Thank you. Also the exercise class teacher. Should definitly awarded for a teaching award!
Also the exercises i like to do! - Was quite fun and helped to improve understanding.

I really like the professor's way of teaching and look forward for his other modules.

The Course is too difficult for students who have as mandatory Course. The course is more suitable for math students rather than informatics students.

Lecturers' Questionnaire

This part contains data provided by the lecturers.

1 Lecture metadata

Number of students in the lecture at the beginning of the semester	60
Number of students in the lecture at the end of the semester	30
Number of students participating in the exercise classes at the beginning of the semester	56
Number of students participating in the exercise classes at the end of the semester	33
Number of students that have registered for the exam	45

2 Exercise classes

Number of exercise classes	1
Average number of students per exercise class at the end of the semester	30

The students have been assigned to an exercise class in the following way:

n/a

3 Helpful stuff

There has been **no** test exam.

The students were provided with sample solutions for exercise tasks.

4 Free text comments

4.1 In your opinion, what aspects of the module worked well this semester?

Interaction in class: average. Interaction on ML: low (as usual). Lecture: demanding, slower than planned. Tutorial: Good. Could activate students a little more.

4.2 What would you change if you were to offer this module again and why?

Small changes in content selection.

4.3 In case there have been obligatory course achievements: Please judge on their effectivity regarding the learning success of the students.

n/a

4.4 Further remarks

Number of students that have registered for the exam: 31(BN/Master Computer Science) + 10-15(AC/b-it/Master Media Informatics)