

Dr. Matthias Carl Laupichler

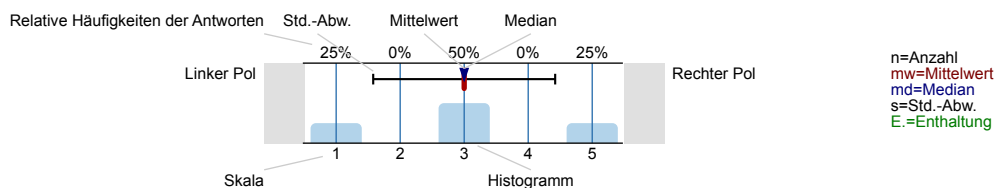
PI_anwesend_2025 ()
Erfasste Fragebögen = 4



Auswertungsteil der geschlossenen Fragen

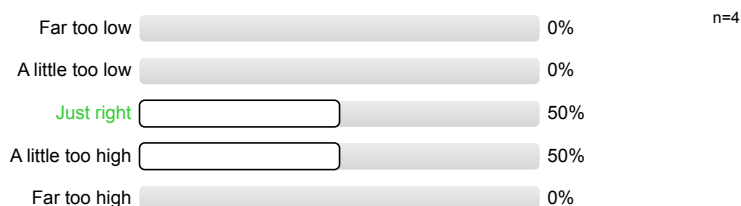
Legende

Frage**text**

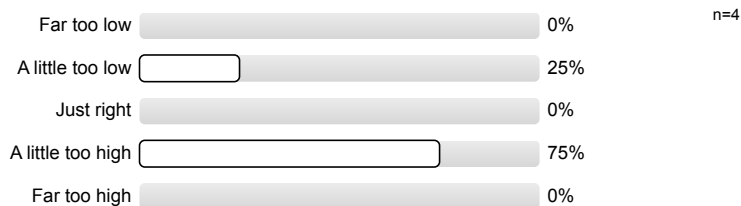


1. Questions about the course (1)

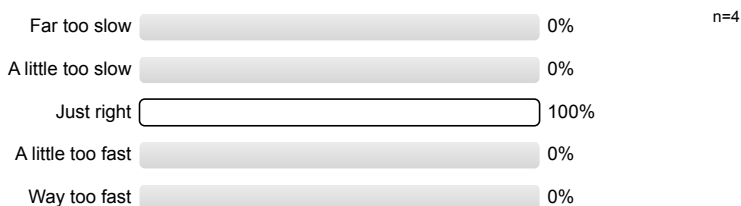
1.1) The difficulty of the lecture part of the course (i.e., theoretical input by instructors) is...



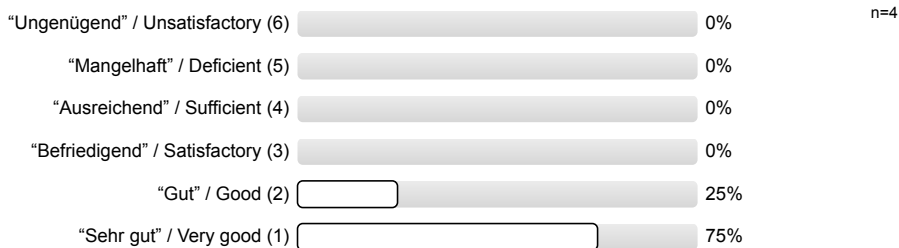
1.2) The difficulty of the exercise part of the course (e.g. programming exercises in python) is...



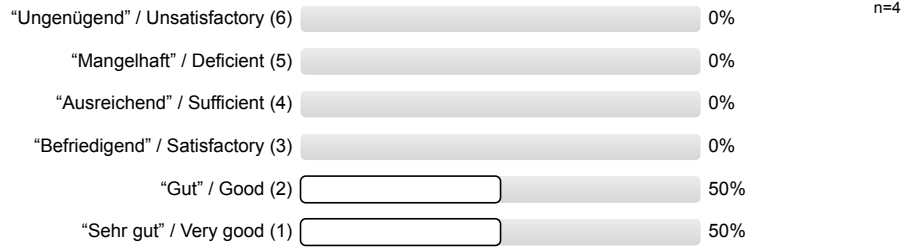
1.3) The pace of the course is...



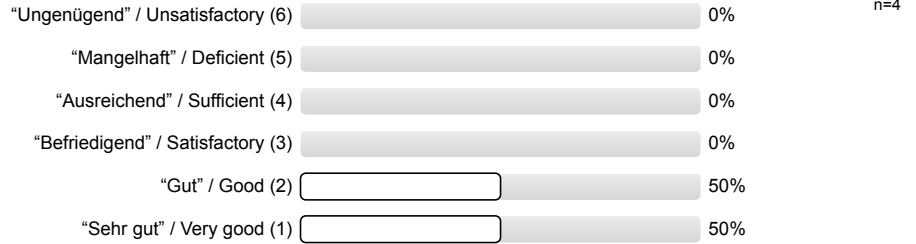
1.4) Overall, I give the course the following school grade:



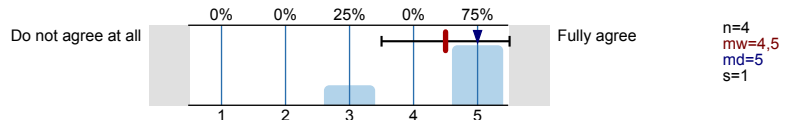
1.5) Overall, I give the lecture part of the course (i.e., theoretical input by instructors) the following school grade:



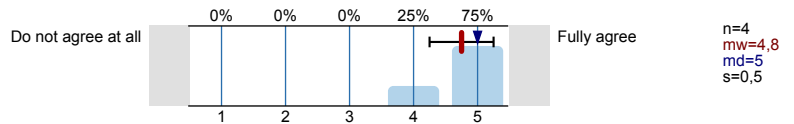
1.6) Overall, I give the exercise part of the course (e.g., programming exercises in python) the following school grade:



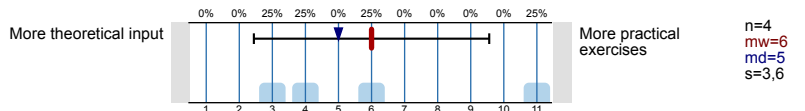
1.7) The course is useful for supervising my research group.



1.8) The amount of examples in the course was appropriate.

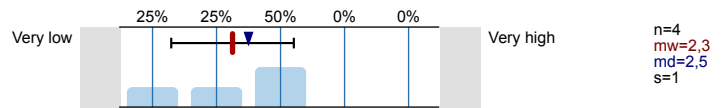


1.9) Would you have preferred a greater proportion of theoretical input or a greater proportion of practical exercises? If you think that the ratio of theory and practice was good, please check a box in the middle of the scale.

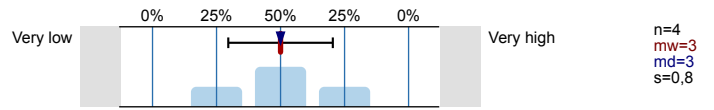


2. Evaluation of Learning Objectives

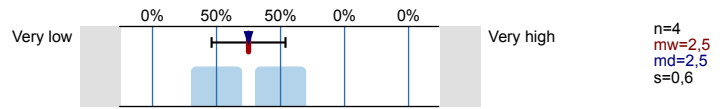
2.1) **Python programming (in general):**
My skills in this area *before* starting the course were...



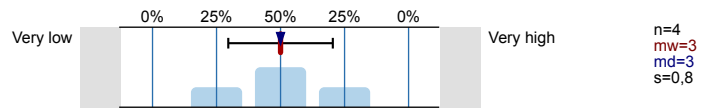
2.2) **Python programming (in general):**
My skills in this area are *now*...



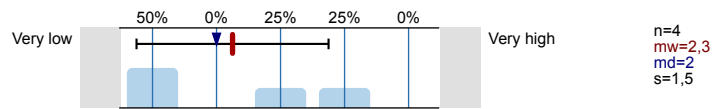
2.3) **I can use the Linux terminal/console.**
My skills in this area *before* starting the course were...



2.4) **I can use the Linux terminal/console.**
My skills in this area are *now*...



2.5) **I can explain gradient descent techniques.**
My skills in this area *before* starting the course were...

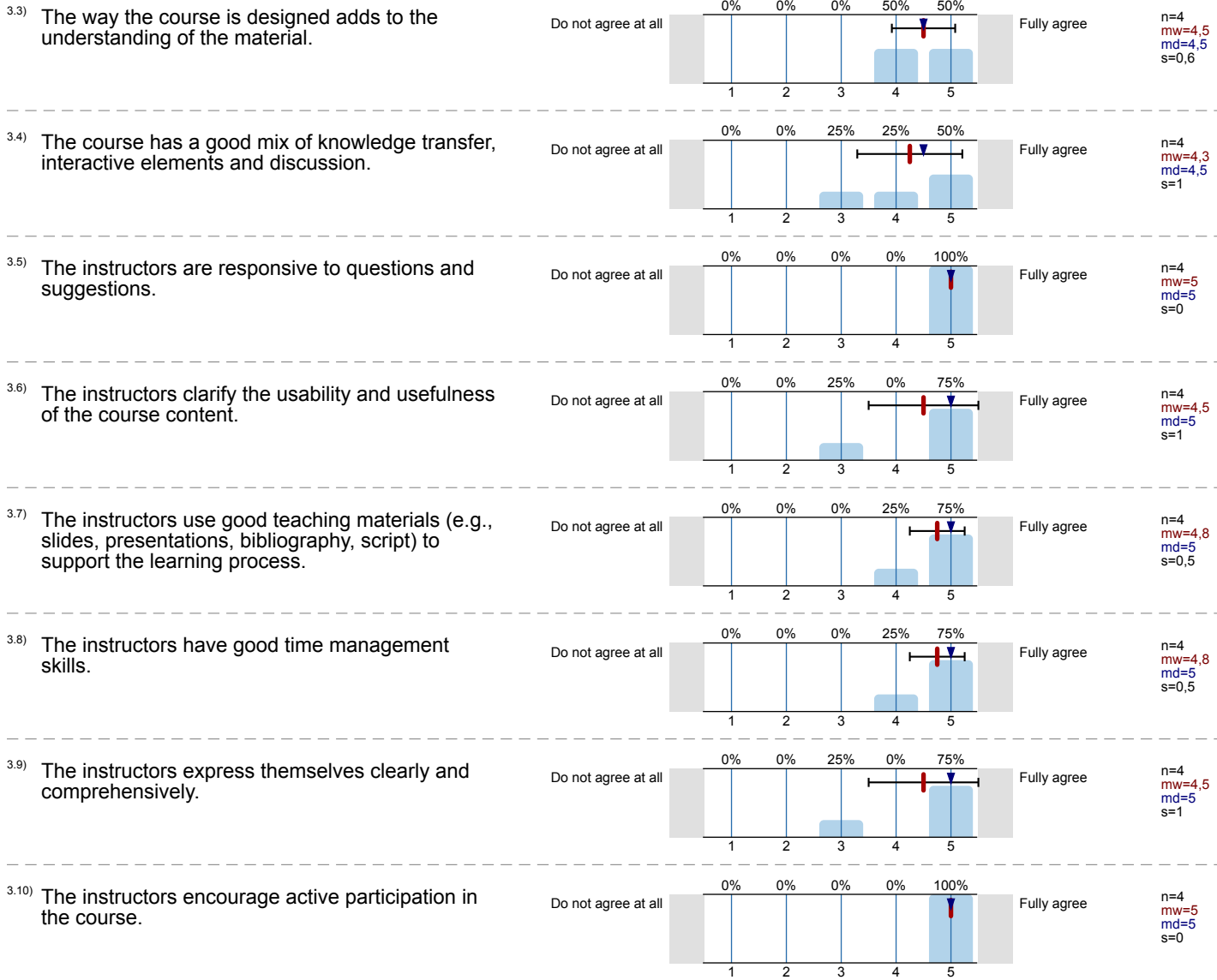


<p>2.6) I can explain gradient descent techniques. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=4 mw=3,8 md=3,5 s=1</p>
<p>2.7) I can calculate descriptive statistics like mean, variance, and distribution in Python. My skills in this area <i>before</i> starting the course were...</p>		<p>Very low Very high</p> <p>n=4 mw=2,8 md=3 s=1,3</p>
<p>2.8) I can calculate descriptive statistics like mean, variance, and distribution in Python. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=4 mw=3,5 md=3,5 s=0,6</p>
<p>2.9) I can explain the concept of Eigenvalues and their importance for PCA. My skills in this area <i>before</i> starting the course were...</p>		<p>Very low Very high</p> <p>n=4 mw=3 md=3 s=1,8</p>
<p>2.10) I can explain the concept of Eigenvalues and their importance for PCA. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=4 mw=3,8 md=3,5 s=1</p>
<p>2.11) I can demonstrate how k-nearest neighbors algorithms work in Python. My skills in this area <i>before</i> starting the course were...</p>		<p>Very low Very high</p> <p>n=3 mw=1,3 md=1 s=0,6</p>
<p>2.12) I can demonstrate how k-nearest neighbors algorithms work in Python. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=3 mw=3,3 md=3 s=0,6</p>
<p>2.13) I can demonstrate how support vector machine algorithms work in Python. My skills in this area <i>before</i> starting the course were...</p>		<p>Very low Very high</p> <p>n=4 mw=1,3 md=1 s=0,5</p>
<p>2.14) I can demonstrate how support vector machine algorithms work in Python. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=4 mw=3,3 md=3,5 s=1</p>
<p>2.15) I can explain the concept of Gaussian mixture models. My skills in this area <i>before</i> starting the course were...</p>		<p>Very low Very high</p> <p>n=4 mw=3 md=3 s=0,8</p>
<p>2.16) I can explain the concept of Gaussian mixture models. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=4 mw=3,3 md=3 s=0,5</p>
<p>2.17) I can use PCA for dimensionality reduction in Python. My skills in this area <i>before</i> starting the course were...</p>		<p>Very low Very high</p> <p>n=4 mw=2 md=2 s=1,2</p>
<p>2.18) I can use PCA for dimensionality reduction in Python. My skills in this area are <i>now</i>...</p>		<p>Very low Very high</p> <p>n=4 mw=3,3 md=3,5 s=1</p>

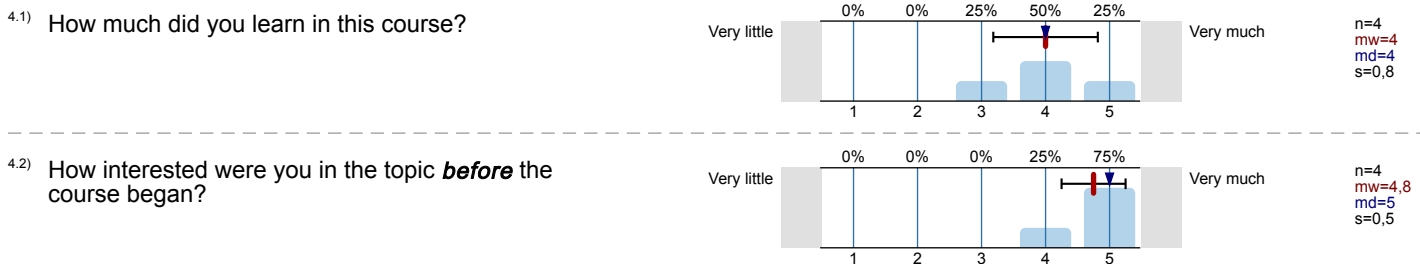
2.19)	I can explain the concepts of feedforward neural networks and convolutional neural networks. My skills in this area <i>before</i> starting the course were...	Very low		Very high	n=4 mw=2,3 md=2,5 s=1
2.20)	I can explain the concept of feedforward neural networks and convolutional neural networks. My skills in this area are <i>now</i> ...	Very low		Very high	n=4 mw=3,3 md=3,5 s=1
2.21)	I can demonstrate the training process of simple neural networks in Python. My skills in this area <i>before</i> starting the course were...	Very low		Very high	n=4 mw=1,3 md=1 s=0,5
2.22)	I can demonstrate the training process of simple neural networks in Python. My skills in this area are <i>now</i> ...	Very low		Very high	n=4 mw=3 md=3 s=0,8
2.23)	I can explain the link between convolutional neural networks and cross correlation. My skills in this area <i>before</i> starting the course were...	Very low		Very high	n=4 mw=1,5 md=1,5 s=0,6
2.24)	I can explain the link between convolutional neural networks and cross correlation. My skills in this area are <i>now</i> ...	Very low		Very high	n=4 mw=3 md=3 s=0,8
2.25)	I can lead projects based on large language models (LLMs) in an informed way. My skills in this area <i>before</i> starting the course were...	Very low		Very high	n=3 mw=1,3 md=1 s=0,6 E.=1
2.26)	I can lead projects based on large language models (LLMs) in an informed way. My skills in this area are <i>now</i> ...	Very low		Very high	n=2 mw=2 md=2 s=0 E.=2
2.27)	I know the most important software engineering principles and instruct my team members to follow them. My skills in this area <i>before</i> starting the course were...	Very low		Very high	n=4 mw=1,8 md=1,5 s=1
2.28)	I know the most important software engineering principles and instruct my team members to follow them. My skills in this area are <i>now</i> ...	Very low		Very high	n=4 mw=3,3 md=3 s=0,5

3. Questions about the course (2)

3.1)	Was GitHub a helpful tool for conducting the course?	Not helpful at all		Very helpful	n=4 mw=4 md=4 s=0,8
3.2)	The course follows a clear structure.	Do not agree at all		Fully agree	n=4 mw=4,5 md=4,5 s=0,6



4. Questions about the course (4)

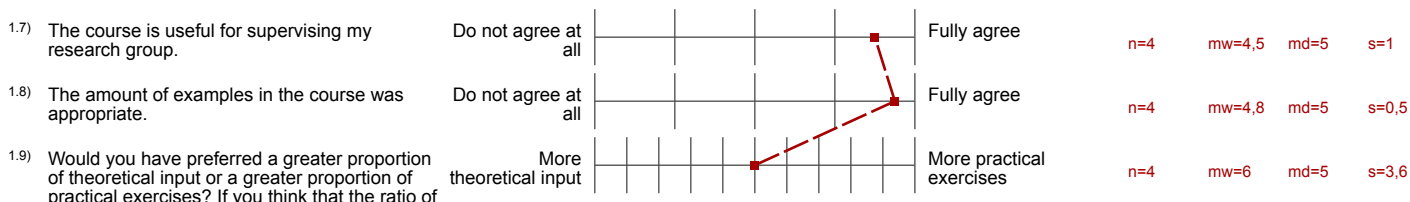


Profillinie

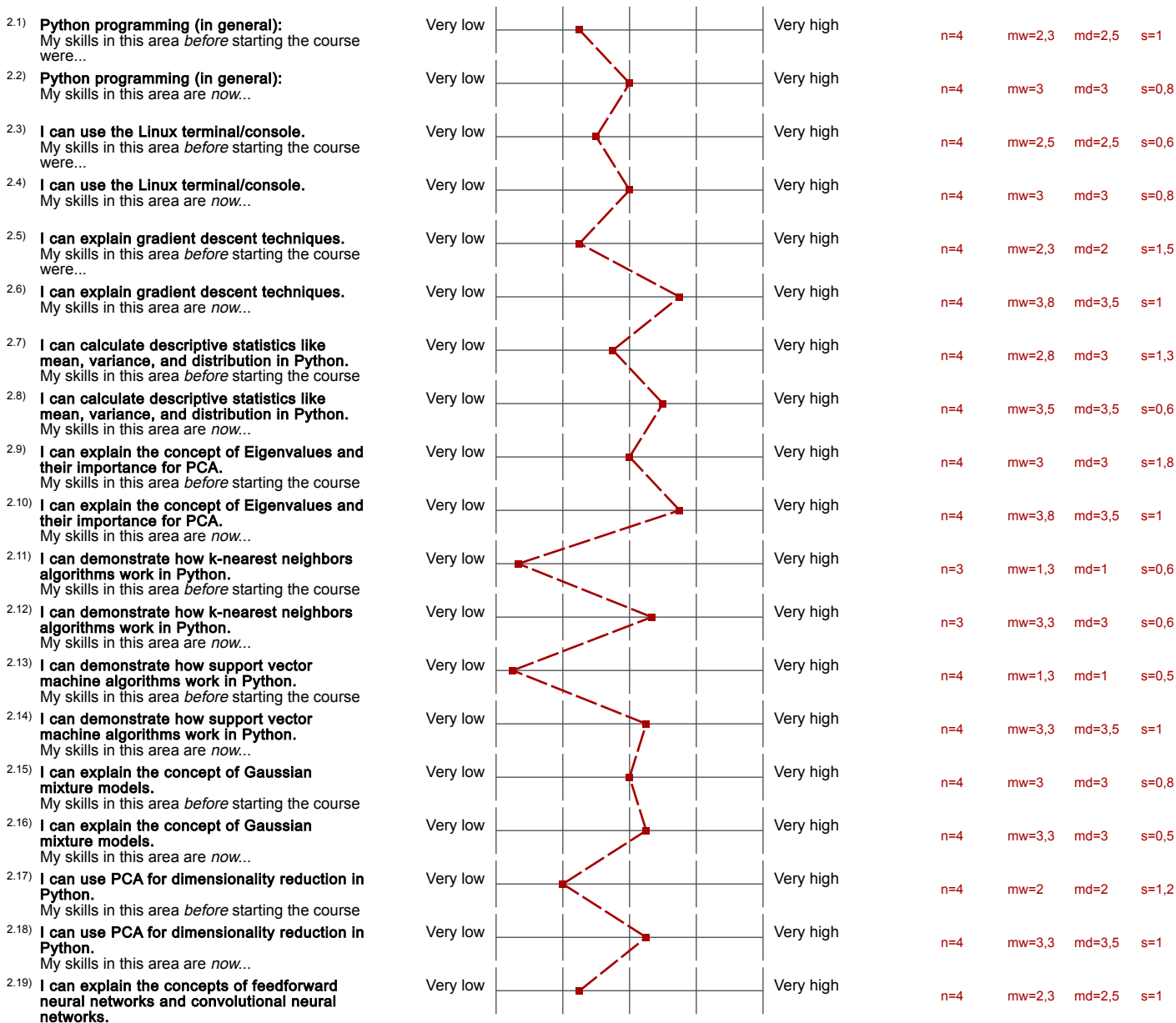
Teilbereich: Institut für Medizindidaktik
 Name der/des Lehrenden: Dr. Matthias Carl Laupichler
 Titel der Lehrveranstaltung: PI_anwesend_2025
 (Name der Umfrage)

Verwendete Werte in der Profillinie: Mittelwert

1. Questions about the course (1)



2. Evaluation of Learning Objectives



2.20)	I can explain the concept of feedforward neural networks and convolutional neural networks.	Very low					Very high	n=4	mw=3,3	md=3,5	s=1
2.21)	I can demonstrate the training process of simple neural networks in Python. My skills in this area <i>before</i> starting the course	Very low					Very high	n=4	mw=1,3	md=1	s=0,5
2.22)	I can demonstrate the training process of simple neural networks in Python. My skills in this area are <i>now</i> ...	Very low					Very high	n=4	mw=3	md=3	s=0,8
2.23)	I can explain the link between convolutional neural networks and cross correlation. My skills in this area <i>before</i> starting the course	Very low					Very high	n=4	mw=1,5	md=1,5	s=0,6
2.24)	I can explain the link between convolutional neural networks and cross correlation. My skills in this area are <i>now</i> ...	Very low					Very high	n=4	mw=3	md=3	s=0,8
2.25)	I can lead projects based on large language models (LLMs) in an informed way. My skills in this area <i>before</i> starting the course	Very low					Very high	n=3	mw=1,3	md=1	s=0,6
2.26)	I can lead projects based on large language models (LLMs) in an informed way. My skills in this area are <i>now</i> ...	Very low					Very high	n=2	mw=2	md=2	s=0
2.27)	I know the most important software engineering principles and instruct my team members to follow them.	Very low					Very high	n=4	mw=1,8	md=1,5	s=1
2.28)	I know the most important software engineering principles and instruct my team members to follow them.	Very low					Very high	n=4	mw=3,3	md=3	s=0,5

3. Questions about the course (2)

3.1)	Was GitHub a helpful tool for conducting the course?	Not helpful at all					Very helpful	n=4	mw=4	md=4	s=0,8
3.2)	The course follows a clear structure.	Do not agree at all					Fully agree	n=4	mw=4,5	md=4,5	s=0,6
3.3)	The way the course is designed adds to the understanding of the material.	Do not agree at all					Fully agree	n=4	mw=4,5	md=4,5	s=0,6
3.4)	The course has a good mix of knowledge transfer, interactive elements and discussion.	Do not agree at all					Fully agree	n=4	mw=4,3	md=4,5	s=1
3.5)	The instructors are responsive to questions and suggestions.	Do not agree at all					Fully agree	n=4	mw=5	md=5	s=0
3.6)	The instructors clarify the usability and usefulness of the course content.	Do not agree at all					Fully agree	n=4	mw=4,5	md=5	s=1
3.7)	The instructors use good teaching materials (e. g., slides, presentations, bibliography, script) to support the learning process.	Do not agree at all					Fully agree	n=4	mw=4,8	md=5	s=0,5
3.8)	The instructors have good time management skills.	Do not agree at all					Fully agree	n=4	mw=4,8	md=5	s=0,5
3.9)	The instructors express themselves clearly and comprehensively.	Do not agree at all					Fully agree	n=4	mw=4,5	md=5	s=1
3.10)	The instructors encourage active participation in the course.	Do not agree at all					Fully agree	n=4	mw=5	md=5	s=0

4. Questions about the course (4)

4.1)	How much did you learn in this course?	Very little					Very much	n=4	mw=4	md=4	s=0,8
4.2)	How interested were you in the topic <i>before</i> the course began?	Very little					Very much	n=4	mw=4,8	md=5	s=0,5

Auswertungsteil der offenen Fragen

4. Questions about the course (4)

4.3) What did you like most about the course?

- * I learned a lot about workflows (Github, Python, Visual Studio etc.).
- * Altogether, very good summary of relevant topics.
- * Great assistance/support by tutors during excercises.

- Interaction and Discussions with the tutors. Discussions about single parts of the scripts improved learning a lot.

- Overall good mix of lectures and exercises.

4.4) What could be improved about this course?

- For me too many examples around image classification but of course that depends on the personal use case.

- In the announcement of the course, please be more specific about the requirements (programming skills, mathematical background knowledge etc.).

- More practice. Smaller practical step sizes with group discussions of single steps.

5. Participant statistics

5.1) What is your main field of research?

- Biomedical research

- Biostatistics

- MRI Imaging in neurodegenerative Diseases