Dr. Matthias Carl Laupichler Pl_anwesend_2025 () Erfasste Fragebögen = 4



	Auswertungsteil	der geschlosser	nen Fragen			
egende						
-	Relative Häufigkeiten der Antworten	_ \	Median 0% 0% 25%		n-	Anzahl
ragetext	Linker Pol			Rechter Pol	mv mc s=	<pre>>Mittelwert =Median StdAbw. =Enthaltung</pre>
	Skala	1 2 3	3 4 5 Histogramm			
1. Questions about the	e course (1)					
¹⁾ The difficulty of the lea	cture part of the course (i.e., theoretic	cal input by instru	ctors) is			
		Far too low			0%	n=4
	ŀ	A little too low			0%	
		Just right			50%	
	А	little too high			50%	
		Far too high			0%	
^{.2)} The difficulty of the ex	kercise part of the course (e.g. progra	amming exercises	s in python) is…			
		Far too low			0%	n=4
	ŀ	A little too low			25%	
		Just right			0%	
	A	little too high			75%	
		Far too high			0%	
^{.3)} The pace of the cours	se is					
		Far too slow			0%	n=4
	А	little too slow			0%	
		Just right			100%	
		A little too fast			0%	
		Way too fast			0%	
^{.4)} Overall, I give the cou	urse the following school grade:					
	"Ungenügend" / Unsa	atisfactory (6)			0%	n=4
	"Mangelhaft" /	Deficient (5)			0%	
	"Ausreichend" /	Sufficient (4)			0%	
	"Befriedigend" / Sa				0%	
		ut" / Good (2)			25%	
	"Sehr gut" / \	(am) manual (4)			75%	

1.5)	Overall, I give the lecture part of the course (i.e., the	oretical input by in	nstructors) the follow	ing scho	ol grade	:	
	"Ungenügenc	d" / Unsatisfactory (6)					0%	n=4
	"Mang	gelhaft" / Deficient (5)					0%	
	"Ausreio	chend" / Sufficient (4)					0%	
	"Befriedige	end" / Satisfactory (3)					0%	
		"Gut" / Good (2) (50%	
	"Seh	ır gut" / Very good (1) (50%	
1.6)	Overall, I give the exercise part of the course (e.g., p	programming exer	cises in p	ython) the	following	g school	grade:	
	"Ungenügenc	d" / Unsatisfactory (6)					0%	n=4
	"Mang	gelhaft" / Deficient (5)					0%	
	"Ausreio	chend" / Sufficient (4)					0%	
	"Befriedige	end" / Satisfactory (3)					0%	
		"Gut" / Good (2) (50%	
	"Seh	ır gut" / Very good (1) (50%	
1.7)	The course is useful for supervising my research group.	Do not agree at all	0%	0% 25% 2 3	0%	75%	Fully agree	n=4 mw=4,5 md=5 s=1
— — 1.8)	The amount of examples in the course was appropriate.	Do not agree at all	0%	2 3	25%	75% 1 5	Fully agree	n=4 mw=4,8 md=5 s=0,5
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.	More theoretical input	0% 0% 25%	6 25% 0% 25% 4 5 6	0% 0% 0%		More practical exercises	n=4 mw=6 md=5 s=3,6
2.	Evaluation of Learning Objectives							
2.1)	Python programming (in general): My skills in this area <i>before</i> starting the course were	Very low	25%	25% 50%	0%	0%	Very high	n=4 mw=2,3 md=2,5 s=1
2.2)	Python programming (in general): My skills in this area are <i>now</i>	Very low	0%	25% 50%	25%	0%	Very high	n=4 mw=3 md=3 s=0,8
2.3)	I can use the Linux terminal/console. My skills in this area <i>before</i> starting the course were	Very low	0%		0%	0%	Very high	n=4 mw=2,5 md=2,5 s=0,6
2.4)	I can use the Linux terminal/console. My skills in this area are <i>now</i>	Very low	0%	25% 50%	25%	0%	Very high	n=4 mw=3 md=3 s=0,8
 2.5)	I can explain gradient descent techniques. My skills in this area <i>before</i> starting the course were	Very low	50%	2 3	25%	0%	Very high	n=4 mw=2,3 md=2 s=1,5

			<u> </u>	
^{2.6)} I can explain gradient descent techniques. My skills in this area are <i>now</i>	Very low		Very high	n=4 mw=3,8 md=3,5 s=1
^{1.77} I can calculate descriptive statistics like mean, variance, and distribution in Python. My skills in this area <i>before</i> starting the course were	Very low	25% 0% 50% 25% 0% 1 2 3 4 5	Very high	n=4 mw=2,8 md=3 s=1,3
^{.8)} I can calculate descriptive statistics like mean, variance, and distribution in Python. My skills in this area are <i>now</i>	Very low		Very high	n=4 mw=3,5 md=3,5 s=0,6
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	Very low	25% 25% 0% 25% 25% 1 2 3 4 5	Very high	n=4 mw=3 md=3 s=1,8
¹⁰ I can explain the concept of Eigenvalues and their importance for PCA. My skills in this area are <i>now</i>	Very low		Very high	n=4 mw=3,8 md=3,5 s=1
^{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	Very low	66,7% 33,3% 0% 0% 0% 1 2 3 4 5	Very high	n=3 mw=1,3 md=1 s=0,6
⁽¹²⁾ I can demonstrate how k-nearest neighbors algorithms work in Python. My skills in this area are <i>now</i>	Very low	0% 0% 66,7% 33,3% 0%	Very high	n=3 mw=3,3 md=3 s=0,6
^{1:13)} I can demonstrate how support vector machine algorithms work in Python. My skills in this area <i>before</i> starting the course were	Very low	75% 25% 0% 0% 0% 1 2 3 4 5	Very high	n=4 mw=1,3 md=1 s=0,5
¹⁴⁾ I can demonstrate how support vector machine algorithms work in Python. My skills in this area are <i>now</i>	Very low		Very high	n=4 mw=3,3 md=3,5 s=1
 ^{1.15)} I can explain the concept of Gaussian mixture models. My skills in this area <i>before</i> starting the course were 	Very low	0% 25% 50% 25% 0%	Very high	n=4 mw=3 md=3 s=0,8
 ^{1.16)} I can explain the concept of Gaussian mixture models. My skills in this area are <i>now</i> 	Very low		Very high	n=4 mw=3,3 md=3 s=0,5
 ^{1.17)} I can use PCA for dimensionality reduction in Python. My skills in this area <i>before</i> starting the course were 	Very low	50% 0% 50% 0% 0% 1 2 3 4 5	Very high	n=4 mw=2 md=2 s=1,2
^{2.18)} I can use PCA for dimensionality reduction in Python. My skills in this area are <i>now</i>	Very low		Very high	n=4 mw=3,3 md=3,5 s=1

^{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	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	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	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	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	75% 25% 0% 0% 0% 1 2 3 4 5	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	0% 25% 50% 25% 0%	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	50% 50% 0% 0% 0% 1 2 3 4 5	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	0% 25% 50% 25% 0%	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	66,7% 33,3% 0% 0% 0% 1 2 3 4 5	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	0% 100% 0% 0% 0% 1 2 3 4 5	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	50% 25% 25% 0% 0% 1 2 3 4 5	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	0% 0% 75% 25% 0% 1 2 3 4 5	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	0% 0% 25% 50% 25%	Very helpful	n=4 mw=4 md=4 s=0,8
^{3.2)} The course follows a clear structure.	Do not agree at all	0% 0% 50% 50% 1 2 3 4 5	Fully agree	n=4 mw=4,5 md=4,5 s=0,6

						Dr. M	atthias Ca	rl Laupichler, Pl_a	nwesend_202
3.3)	The way the course is designed adds to the understanding of the material.	Do not agree at all	0%	0%	0%	50%	50%	Fully agree	n=4 mw=4,5 md=4,5 s=0,6
.4)	The course has a good mix of knowledge transfer, interactive elements and discussion.	Do not agree at all	0%	0%	25%	25%	50%	Fully agree	n=4 mw=4,3 md=4,5 s=1
.5)	The instructors are responsive to questions and suggestions.	Do not agree at all	1 0%	20%	3 0%	4 0%	5	Fully agree	n=4 mw=5 md=5 s=0
.6)	The instructors clarify the usability and usefulness of the course content.	Do not agree at all	0%	20%	3	4 0%	5 75%	Fully agree	n=4 mw=4,5 md=5 s=1
.7)	The instructors use good teaching materials (e.g., slides, presentations, bibliography, script) to support the learning process.	Do not agree at all		20%	3 0%	4 	5 75%	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	1	20%	3 0%	4 	5 75%	Fully agree	n=4 mw=4,8 md=5 s=0,5
.9)	The instructors express themselves clearly and comprehensively.	Do not agree at all	1 0%	20%	3	4 	5	Fully agree	n=4 mw=4,5 md=5 s=1
	The instructors encourage active participation in the course.	Do not agree at all	0%	20%	3	40%	5	Fully agree	n=4 mw=5 md=5 s=0
4.	Questions about the course (4)		1	2	3	4	5		
4.1)	How much did you learn in this course?	Very little	0%	0%	25% ⊢ 3	50%	25%	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	0%	0%	0%	25%	75%	Very much	n=4 mw=4,8 md=5 s=0,5

Profillinie

Teilbereich:

Institut für Medizindidaktik Dr. Matthias Carl Laupichler

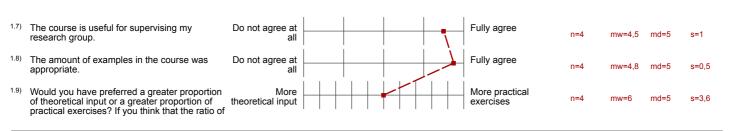
Very low

Name der/des Lehrenden: (Name der Umfrage)

Titel der Lehrveranstaltung: PI anwesend 2025

Verwendete Werte in der Profillinie: Mittelwert

1. Questions about the course (1)



Very high

n=4

n=3

n=3

n=4

n=4

n=4

n=4

n=4

n=4

n=4

mw=2.3

mw=3

mw=2.5

mw=3

mw=2,3

mw=3,8

mw=2,8

mw=3.5

mw=3

mw=3.8

mw=1,3

mw=3,3

mw=1,3

mw=3,3

mw=3

mw=3,3

mw=2

mw=3,3

mw=2.3

md=2.5

md=3

md=2.5

md=3

md=2

md=3,5

md=3

md=3.5

md=3

md=3.5

md=1

md=3

md=

md=3.5

md=3

md=3

md=2

md=3,5

md=2.5

s=1

s=0,8

s=0.6

s=0,8

s=1,5

s=1

s=1,3

s=0.6

s=1,8

s=1

s=0,6

s=0.6

s=0,5

s=1

s=0,8

s=0,5

s=1,2

s=1

s=1

2. Evaluation of Learning Objectives

- **Python programming (in general):** My skills in this area *before* starting the course 2.1) 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...
- 2.6) I can explain gradient descent techniques. My skills in this area are *now*...
- 2.7) I can calculate descriptive statistics like mean, variance, and distribution in Python. My skills in this area before starting the course
- I can calculate descriptive statistics like mean, variance, and distribution in Python. 2.8) My skills in this area are now.
- I can explain the concept of Eigenvalues and their importance for PCA. My skills in this area *before* starting the course 2.9)
- I can explain the concept of Eigenvalues and their importance for PCA. My skills in this area are *now*... 2.10)
- I can demonstrate how k-nearest neighbors algorithms work in Python. My skills in this area *before* starting the course
- 2.12) I can demonstrate how k-nearest neighbors algorithms work in Python. My skills in this area are *now*...
- 2.13) I can demonstrate how support vector machine algorithms work in Python. My skills in this area before starting the course
- 2.14) I can demonstrate how support vector machine algorithms work in Python. My skills in this area are *now*...
- 2.15) I can explain the concept of Gaussian mixture models.
- My skills in this area before starting the course 2.16) I can explain the concept of Gaussian
- mixture models. My skills in this area are *now*...
- ^{2.17)} I can use PCA for dimensionality reduction in Python. My skills in this area *before* starting the course
- 2.18) I can use PCA for dimensionality reduction in Python. My skills in this area are *now*.
- ^{2.19)} I can explain the concepts of feedforward neural networks and convolutional neural networks

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11.03	3.202	5	

Seite 6

mw=3,3

mw=1,3

mw=3

mw=1,5

mw=3

mw=1,3

mw=2

mw=1.8

mw=3,3

md=3,5

md=1

md=3

md=1,5

md=3

md=1

md=2

md=1.5

md=3

s=1

s=0,5

s=0.8

s=0,6

s=0.8

s=0,6

s=0

s=1

s=0,5

n=4

n=4

n=4

n=4

n=4

n=3

n=2

n=4

n=4

Very high

2.20) I can explain the concept of feedforward neural networks and convolutional neural networks.

Very low

- 2.21) I can demonstrate the training process of simple neural networks in Python. My skills in this area *before* starting the course
- 2.22) I can demonstrate the training process of simple neural networks in Python. My skills in this area are now...
- ^{2.23)} I can explain the link between convolutional neural networks and cross correlation. My skills in this area *before* starting the course
- ^{2.24}) I can explain the link between convolutional neural networks and cross correlation. My skills in this area are *now*...
- 2.25) I can lead projects based on large language models (LLMs) in an informed way. My skills in this area *before* starting the course
- 2.26) I can lead projects based on large language models (LLMs) in an informed way. My skills in this area are *now...*
- 2.27) I know the most important software engineering principles and instruct my team members to follow them.
- 2.28) I know the most important software engineering principles and instruct my team members to follow them.
- 3. Questions about the course (2)

3.2)		Not helpful at all	•	Very helpful	n=4	mw=4	md=4	s=0,8
	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)							

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

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