

Semester plan

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Find below the overview of the topics covered in the **lectures**. The corresponding Jupyter notebooks and Moodle exam questions will be discussed in the **practice session** of the following week. Be aware of the **deadlines** related to the project work.

Lectures:

CW	SW	Date	Topics
38	1	17.09.24	Introduction and overview
39	2	24.09.24	Basic concepts, types of ML problems
40	3	01.10.24	Data problems, exploratory analysis and preprocessing
41	4	08.10.24	The machine learning workflow
42	5	15.10.24	Supervised learning: Regression
43	6	22.10.24	Supervised learning: Classification
44	7	29.10.24	Decision trees, ensembles and boosting
45	8	05.11.24	Unsupervised learning: Clustering
46	9	12.11.24	Unsupervised learning: Dimensionality reduction
47	10	19.11.24	Model evaluation and selection
48	11	26.11.24	The machine learning workflow, revisited
49	12	03.12.24	Alternative learning paradigms
50	13	10.12.24	Common problems and challenges
51	14	17.12.24	Buffer / recapitulation
52	15	24.12.24	Semester break

Practice and project work:

CW	SW	Date	Comments
38	1	16.09.24	
39	2	23.09.24	Input: Introduction to git / github / Jupyter
40	3	30.09.24	Input: Data platforms and resources
41	4	07.10.24	
42	5	14.10.24	Deadline: Proposal of project works
43	6	21.10.24	
44	7	28.10.24	Start of individual project work
45	8	04.11.24	
46	9	11.11.24	
47	10	18.11.24	
48	11	25.11.24	
49	12	02.12.24	
50	13	09.12.24	
51	14	16.12.24	
52	15	23.12.24	Deadline: Submission of project work