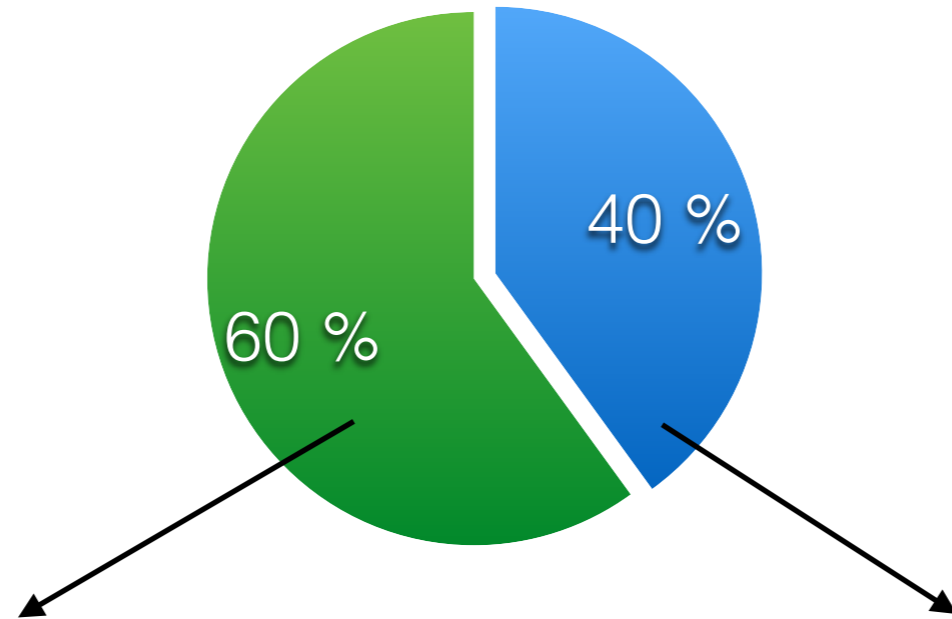


1. <b>Recap of Machine Learning</b> , Multi-Layer Perceptron	Lab 1: <b>Double Descent</b>
2. <b>Backpropagation</b>	Seminar 1
3. <b>Convolutional Neural Networks</b>	Lab 2: <b>Backpropagation, Computational Graph</b>
4. <b>Training Deep Models</b>	Seminar 2
5. <b>Regularization Methods for NNs</b>	Lab 3: <b>From Scratch: Initialization &amp; regularization</b>
6. <b>Stochastic Gradient Descent (SGD)</b>	Seminar 3
7. <b>Adversarial Patterns, Robust Learning Approaches</b>	Lab 4: <b>CNN Fine-Tuning, Visualization &amp; Adversarial Patterns</b>
8. <b>Adaptive SGD Methods</b>	Seminar 4
9. <b>Learning Representations I: Word Vectors, Metric Learning</b>	Lab 5: <b>Metric Learning</b>
10. <b>Learning Representations II: Unsupervised Learning, VAE</b>	Lab 6: <b>VAEs</b>
11. <b>Graph Neural Networks</b>	Seminar 5
12. <b>Self-Attention, Transformers</b>	Lab 7: <b>GNNs / Transformers</b>
13. <b>TBA</b>	Seminar 6

- ◆ Practical labs: implementation of selected methods (Python/PyTorch),
- ◆ Theoretical labs: solving theoretical assignments  
assignments are published in advance, you are expected to present/discuss solutions
- ◆ Study plan expectations: 6 credits = 160 hours
  - about 6 hours / week working independently

# Grade Structure



Your grade:

Score %	Grade
50-59	E
60-69	D
70-89	C
80-89	B
90-100	A

◆ Labs (programming homework):

- Every two weeks
- Graded during semester  
7 labs = 65 points = 60%
- Not mandatory
- Required minimum: half of the points

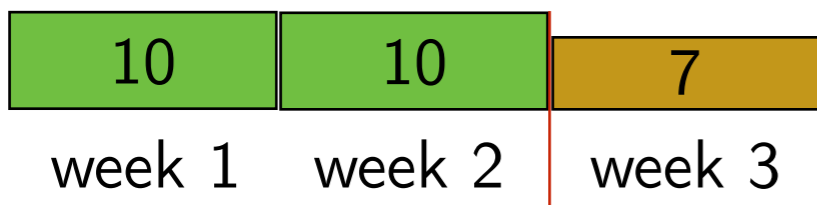
◆ Seminars:

- Theoretical assignments
- Discussed in class
- Not graded during semester

◆ Written Exam:

- Assignments like during the semester
- Required minimum:  
40% of exam points

◆ Deadline policy for labs:



hard deadline, submissions closed

teachers start correcting, feedback in BRUTE, no resubmission