

Full Syllabus



| Course Title | |
|-------------------------------|------------------------------------------------------------------------|
| Introduction to Deep Learning | |
| Lecturer | |
| Dr. Noam Koenigstein | |
| Semester | |
| | |
| Course requirements | |
| Final grade components | |
| Course schedule | |
| Class no. / Date | Subject and Requirements (assignments, reading materials, tasks, etc.) |
| | Intro |
| | Loss Functions |
| | MLP - Multi-layer Perceptron (fully connected) |
| | Backpropagation |
| | Activation Functions |
| | Regularization |
| | CNNs |
| | Pooling |
| | Normalization |
| | Transfer Learning |
| | Babysitting the learning process |
| | RNNs |
| | Transformers |
| Required course reading | |
| Optional course reading | |
| | |
| Comments | |

Deep learning is an emerging field in Machine Learning that enabled break through achievements in a wide array of problems. The goal of this course is to provide a high level introduction of the main components and techniques of deep learning and give the student an opportunity to experience "hand-on" with





different real-world problems.