	Advanced	l Deep Learning a	nd Reinforceme	ent Learning (COMPGI22)			
	Deep Learning Path Outline			Reinforcement Learning Path Outline		Coursework	
Week	Title	Lecturer	Date Thursday 9-11pm	Topic	Lecturer	OUT (Start of the week)	DUE (End of week)
1	DL1: Introduction to Machine Learning based Al	Thore Graepel	11/1/18	DL2: Introduction to Tenso	Matteo Hessel & Alex Davies		
2	DL3: Neural Networks Foundations	Simon Osindero	18/1/18	RL1: Intro to reinforcement learning	Hado Van Hasselt		
3	DL4: Convolutional Neural Networks for Image Recognition	Karen Simonyan	25/1/18	RL2: Bandits and exploration	Hado Van Hasselt	DLCW1	
4	RL3: Model-Free Prediction	Hado Van Hasselt	01/02/18	RL4: MDPs and Dynamic Programming	Hado Van Hasselt	RLCW1, DLCW2	DLCW1
5	DL5: Sequences and Recurre	Oriol Vinyals	08/02/18	DL6: Beyond image recognition, end-to-end learning, embeddings	Raia Hadsell	RLCW2	DLCW2
Reading Week				Reading Week		DLCW3	RLCW1
6	RL5: Model-Free Control	Hado Van Hasselt	22/02/18	RL6: Policy Gradient Methods	Hado Van Hasselt		RLCW2
7	DL7: Optimization for Machine Learning	James Martens	29/02/18	RL7: Planning and models	Hado Van Hasselt	RLCW3	DLCW3
8	DL8: Deep Learning for Natural Language Processing	Ed Grefenstette	08/03/18	RL8: Building full agents	Hado Van Hasselt	DLCW4	RLCW3
9	DL9: Attention and Memory in Deep Learning	Alex Graves	15/03/18	RL9: Guest talk	Vlad Mnih (TBC)	RLCW4	
10	DL10: Unsupervised Lerning and Generative Models	Shakir Mohamed	22/03/18	RL10: Guest talk	David Silver (TBC)		DLCW4
							RLCW4
	1 2 3 4 5 6 7 8	Week Title 1 DL1: Introduction to Machine Learning based AI 2 DL3: Neural Networks Foundations DL4: Convolutional Neural Networks for Image Recognition 4 RL3: Model-Free Prediction 5 DL5: Sequences and Recurre Reading Week 6 RL5: Model-Free Control 7 DL7: Optimization for Machine Learning DL8: Deep Learning for Natural Language Processing 9 DL9: Attention and Memory in Deep Learning DL10: Unsupervised Lerning	Deep Learning Path OutlineWeekTitleLecturer1DL1: Introduction to Machine Learning based AlThore Graepel2DL3: Neural Networks FoundationsSimon Osindero3DL4: Convolutional Neural Networks for Image RecognitionKaren Simonyan4RL3: Model-Free PredictionHado Van Hasselt5DL5: Sequences and Recurre6RL5: Model-Free ControlHado Van Hasselt7DL7: Optimization for Machine LearningJames Martens8DL8: Deep Learning for Natural Language ProcessingEd Grefenstette9DL9: Attention and Memory in Deep LearningAlex Graves10DL10: Unsupervised LerningShakir Mohamed	Deep Learning Path OutlineWeekTitleLecturerDate Thursday 9-11pm1DL1: Introduction to Machine Learning based AIThore Graepel11/1/182DL3: Neural Networks FoundationsSimon Osindero18/1/183DL4: Convolutional Neural Networks for Image RecognitionKaren Simonyan25/1/184RL3: Model-Free PredictionHado Van Hasselt01/02/185DL5: Sequences and RecurrerOriol Vinyals08/02/186RL5: Model-Free ControlHado Van Hasselt22/02/187DL7: Optimization for Machine LearningJames Martens29/02/188Natural Language ProcessingEd Grefenstette08/03/189DL9: Attention and Memory in Deep LearningAlex Graves15/03/1810DL10: Unsupervised LerningShakir Mohamed22/03/18	Deep Learning Path Outline Date Thursday 9-11pm	Week Title Lecturer Date Thursday 9-11pm Topic Lecturer 1 DL1: Introduction to Machine Learning based AI Thore Graepel 11/1/18 DL2: Introduction to Tensor Alex Davies 2 DL3: Neural Networks Foundations Simon Osindero 18/1/18 RL1: Intro to reinforcement learning reinforcement learning Hado Van Hasselt 3 DL4: Convolutional Neural Networks for Image Recognition Karen Simonyan 25/1/18 RL2: Bandits and exploration Hado Van Hasselt 4 RL3: Model-Free Prediction Hado Van Hasselt 01/02/18 RL4: MDPs and Dynamic Programming Hado Van Hasselt 5 DL5: Sequences and Recurre 08/02/18 DL6: Beyond image recognition, end-to-end learning, embeddings Raia Hadsell 6 RL5: Model-Free Control Hado Van Hasselt 22/02/18 RL6: Policy Gradient Methods Hado Van Hasselt 7 DL7: Optimization for Machine Learning James Martens 29/02/18 RL7: Planning and models Hado Van Hasselt 8 DL8: Deep Learning for Natural Language Processing Ed Grefenstette 08/03/18 RL8: Building full agents Hado Van Hasselt	Deep Learning Path Outline Reinforcement Learning Path Outline Course