		Advanced Deep Learning and Reinforcement Learning (COMPGI22)						
		Deep Learning Path Outline			**Reinforcement Learning Path Outline**		**Coursework**	
Date Tuesday 2-4pm	**Week**	**Title**	**Lecturer**	**Date Thursday 9-11pm**	**Topic**	**Lecturer**	OUT (Start of the week)	DUE (End of week)
9/1/18	1	DL1: Introduction to Machine Learning based AI	Thore Graepel	11/1/18	DL2: Introduction to Tensc	Matteo Hessel & Alex Davies		
16/1/18	2	DL3: Neural Networks Foundations	Simon Osindero	18/1/18	RL1: Intro to reinforcement learning	Hado Van Hasselt		
23/1/18	3	DL4: Convolutional Neural Networks for Image Recognition	Karen Simonyan	25/1/18	RL2: Bandits and exploration	Hado Van Hasselt	DLCW1	
30/1/18	4	RL3: Model-Free Prediction	Hado Van Hasselt	01/02/18	RL4: MDPs and Dynamic Programming	Hado Van Hasselt	RLCW1, DLCW2	DLCW1
06/02/18	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
20/02/18	6	RL5: Model-Free Control	Hado Van Hasselt	22/02/18	RL6: Policy Gradient Methods	Hado Van Hasselt		RLCW2
27/02/18	7	DL7: Optimization for Machine Learning	James Martens	29/02/18	RL7: Planning and models	Hado Van Hasselt	RLCW3	DLCW3
06/03/18	8	DL8: Deep Learning for Natural Language Processing	Ed Grefenstette	08/03/18	RL8: Building full agents	Hado Van Hasselt	DLCW4	RLCW3
13/03/18	9	DL9: Attention and Memory in Deep Learning	Alex Graves	15/03/18	RL9: Guest talk	Vlad Mnih (TBC)	RLCW4	
20/03/18	10	DL10: Unsupervised Lerning and Generative Models	Shakir Mohamed	22/03/18	RL10: Guest talk	David Silver (TBC)		DLCW4
								RLCW4