Spring 2018 Syllabus

This syllabus is subject to change! Note that unreleased project out and due dates are just guesses and will likely change somewhat.

Note: To view the videos, login with @berkeley.edu credentials.

Day	Topic	Optional Reading	Slides and Notes	Video (see note above)	Assignment	Due
Wed 1/17	Introduction to AI	Ch. 1, Ch. 2	[pptx] [pdf]	video	Math Self-Diagnostic P0: Tutorial	(ungraded Fri 1/26 11
Mon 1/22	Agents and Search	Ch. 3.1-4	[pptx] [pdf] lecture notes 1 discussion 1 solutions + video	video		
Wed 1/24	A* Search and Heuristics	Ch. 3.5-6	[pptx] [pdf]	video	HW1 P1: Search Contest 1: Search	W 1/31 11: M 2/5 11:5 TBD
Mon 1/29	Constraint Satisfaction Problems	Ch. 6.1	[pptx] [pdf] lecture notes 2	video		

Day	Topic	Optional Reading	Slides and Notes	Video (see note above)	Assignment	Due
Wed 1/31	CSPs II	Ch. 6.2-5, Ch. 4.1	[pptx] [pdf] lecture notes 2 [discussion] [discussion solution] [exam prep] [exam prep solution]	video	HW2	W 2/7 11:59
Mon 2/5	Game Trees: Minimax	Ch. 5.1-3	[pdf] [pptx] lecture notes 3	video		
Wed 2/7	Game Trees: Expectimax; Utilities	Ch. 5.4-5	[pdf] [pptx] lecture notes 3 [discussion] [discussion solutions] [exam prep] [exam prep solutions]	video	HW3 P2: Multi-Agent Search	W 2/14 M 2/19
Mon 2/12	Markov Decision Processes	Ch. 16.1-3, Ch. 17.1-2	[pdf] [pptx] lecture notes 4	video		
Wed 2/14	Markov Decision Processes II	Ch. 17.3	[pdf] [pptx] [exam prep] [solutions] [discussion] [solutions] lecture notes 4	video	HW4	W 2/21 11:

Day	Topic	Optional Reading	Slides and Notes	Video (see note above)	Assignment	Due
Mon 2/19	Holiday		No lecture lecture notes 5 [pdf] [pptx]			
Wed 2/21	Reinforcement Learning	Ch. 21.1-3	lecture notes 5 [discussion] [solutions] [exam prep] [solutions]	video	HW5 P3: Reinforcement Learning	W 2/28 11: M 3/5 11:5
Mon 2/26	Reinforcement Learning II	Ch. 21.4-5	[pdf] [pptx]	video		
Wed 2/28	RL/Probability/Bayes	Ch. 13.1-5 (2e: Ch. 13.1-6)	[pdf] [pptx] lecture notes 6 [discussion] [solutions] [exam prep] [solutions]	video		
Mon 3/5	RL/Bayes Nets	Ch. 14.1-2,4	[pdf] [pptx] lecture notes 6 [discussion] [solutions] [exam prep][solutions]	video	HW6	M 3/12 11:
Wed 3/7	Bayes' Nets: Representation/Independence	Ch. 14.3, Jordan 2.1	[pdf] [pptx] lecture notes 6	video		
Mon 3/12	Bayes' Nets: Independence/Inference	Ch. 14.4-5	[pdf] [pptx]	video		

Day	Topic	Optional Reading	Slides and Notes	Video (see note above)	Assignment	Due
Wed 3/14	Midterm (xx-xx)				P4: Bayes Nets	M 4/2 11:59
Mon 3/19	Bayes' Nets: Inference/Sampling	Ch. 15.1-3, 6	[pdf] [pptx] lecture notes 7	video		
Wed 3/21	Bayes' Nets: Sampling/Decision Networks	Ch. 15.2-5	PDF lecture notes 8	video	HW7	W 4/4 11:59
Mon 3/26	Spring Break!	Ch. 15.2,6				
Wed 3/28	Spring Break!!	Ch. 15.2,6				
Mon 4/2	Decision Networks/VPI	Ch. 15.2,6	PDF lecture notes 10	video		
Wed 4/4	Markov Models, HMMs			video	HW8 P5: Ghostbusters	W 4/11 11: M 4/16 11:
Mon 4/9	HMMs/Particle Filtering	Ch. 15.2,6	PDF	video		
Wed 4/11	ML:Naive Bayes.	Ch. 15.2,6	PDF	video		
Mon 4/16	ML: Perceptrons	Ch. 15.2,6	PDF	video	P6: Machine Learning	see piazza
Wed 4/18	ML: Deep Learning	Ch. 15.2,6	PDF	video		
Mon 4/23	Special Topics		PDF	video		
Wed 4/25	Special Topics		PDF	video		
Fri 5/11	FINAL EXAM (3:00pm-6:00pm)					