

| | Date | Topic | Assignment | Reading |
|--------|----------|---|---------------------|-----------------------------|
| MDPs | 1/16/24 | Introduction | HW1 | |
| | 1/18/24 | Probability and Random Variables | | 2.1-2.4 |
| | 1/23/24 | Bayesian Networks | | 3 |
| | 1/25/24 | Stochastic Processes, Markov Property | HW 2 (HW1 Due) | 2.5 |
| | 1/30/24 | MDPs, Policy Evaluation | | 7.1, 10.1 |
| | 2/1/24 | Policy Iteration, Value Iteration | | 7.2-7.7 |
| | 2/6/24 | No Class - Instructor Traveling | | |
| RL | 2/8/24 | Online Methods | HW3 (HW2 Due) | 9.1-9.8 |
| | 2/13/24 | VI Convergence | | A.15, Ex. 7.12 |
| | 2/15/24 | Continuous-space MDPs | Exam 1 | 7.8, 8, 9.9, |
| | 2/20/24 | Intro to RL: Model based, Tabular | | 16 |
| | 2/22/24 | Exploration vs Exploitation (Bandits) | HW 4 (HW3 Due) | 15 |
| | 2/27/24 | Model Free: Policy Gradient | | 11 |
| | 2/29/24 | Model Free: SARSA, Q-Learning | Project Ideas Due | 17 |
| POMDPs | 3/5/24 | Neural Network Function Approximation | | Appendix D |
| | 3/7/24 | DQN, Advanced Policy Gradient, Actor Critic | HW5 (HW4 Due) | 12, 17.6, 17.7 |
| | 3/12/24 | Entropy Regularization, Advanced Exploration | | 13 |
| | 3/14/24 | POMDPs and Bayesian Filters | Exam 2 | 19.1-19.2 |
| | 3/19/24 | Exact POMDP Methods, Alpha Vectors | | 20 |
| | 3/21/24 | Offline POMDP Methods | HW6 (HW5 Due) | 21.4-21.7 |
| | 3/26/24 | Spring Break | | |
| Games | 3/28/24 | Spring Break | | |
| | 4/2/24 | POMDP Formulation Approximations | | 21.1-21.3 |
| | 4/4/24 | Particle Filters and Online POMDP Methods | Proj. Proposals Due | 19.6, 22 |
| | 4/9/24 | POMDP Applications | | 2.5-2.6 |
| | 4/11/24 | Normal form Games | (HW 6 Due) | 24 |
| | 4/16/24 | Markov Games | | |
| | 4/18/24 | Partially Observable Markov Games | Exam 3 (Games) | 25, 26 |
| Misc | 4/23/24 | Bayesian Network Learning | | 6.1-6.3 |
| | 4/25/24 | Imitation, Inverse RL, Transfer and Meta-Learning | | 18 |
| | 4/30/24 | The Alignment Problem | | Nature link |
| | 5/2/24 | Course Summary - Takeaways | | |
| | 5/7/2023 | (Final Exam Slot) | Final Projects Due | |