

Modules

This page shows the list of all the modules, which will be updated as the class progresses. There are three types of modules:

- [date]: It was covered in class, and you are responsible for the material.
- offline: It was not covered in class, but you are responsible for the material.
- optional: It was not covered in class, and you are not responsible for the material.

Date	Module	Links	Description
Markov Decision Processes (MDPs)			
Oct 14	Overview	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Motivating MDPs.
Oct 14	Modeling	video html: slides, 1pp, 6pp pdf: 1pp, 6pp code	Defining MDPs, Dice game, transportation problem.
Oct 14	Policy evaluation	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Policy evaluation, discounting factor.
Oct 16	Value iteration	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Value iteration.
Oct 16	Reinforcement learning	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Introducing to reinforcement learning.
Oct 16	Model-based Monte Carlo	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Model-based Monte Carlo.
Oct 16	Model-free Monte Carlo	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Model-free Monte Carlo.
optional	SARSA	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	SARSA, Model-free Monte Carlo vs SARSA.
offline	Q-learning	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Q-learning, on-policy vs off-policy.
offline	Epsilon-greedy	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Epsilon-greedy exploration.
offline	Function approximation	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Generalization, Function approximation.
offline	Recap	video html: slides, 1pp, 6pp pdf: 1pp, 6pp	Recap of MDPs and reinforcement learning, Deep RL, and applications.