

# 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	<a href="#">Overview</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Motivating MDPs.
Oct 14	<a href="#">Modeling</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a> <a href="#">code</a>	Defining MDPs, Dice game, transportation problem.
Oct 14	<a href="#">Policy evaluation</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Policy evaluation, discounting factor.
Oct 16	<a href="#">Value iteration</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Value iteration.
Oct 16	<a href="#">Reinforcement learning</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Introducing to reinforcement learning.
Oct 16	<a href="#">Model-based Monte Carlo</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Model-based Monte Carlo.
Oct 16	<a href="#">Model-free Monte Carlo</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Model-free Monte Carlo.
optional	<a href="#">SARSA</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	SARSA, Model-free Monte Carlo vs SARSA.
offline	<a href="#">Q-learning</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Q-learning, on-policy vs off-policy.
offline	<a href="#">Epsilon-greedy</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Epsilon-greedy exploration.
offline	<a href="#">Function approximation</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Generalization, Function approximation.
offline	<a href="#">Recap</a>	<a href="#">video</a> html: <a href="#">slides, 1pp, 6pp</a> pdf: <a href="#">1pp, 6pp</a>	Recap of MDPs and reinforcement learning, Deep RL, and applications.