

# Course

## Chapter 2

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## Chapter 3

score p6 □□; margin p6 □□; loss function □□; Perceptron algorithm p8 □□; Test set p16 □□; Bias/variance p29,44 □□;

## Chapter 4

Similarity p17 □□;

## Chapter 5

K-means p17 □□; PCA p16 □□;

## Chapter 6

Nearest Neighbours p4 □□; probabilistic distribution p10 □□; joint probability p12 □□; expectation p14 □□; variance p14 □□; independence p16 □□; conditional independence p16 □□;

## Chapter 7

Entropy p8 □□; joint entropy p16 □□; conditional entropy p18 □□; mutual information p19 □□;

## Chapter 8

Information gain p23 □□; gain p23 □□; random forest p36 □□;

## Chapter 9

DFS p27 □□; BFS p30 □□; DFS-iterative deepening p33 □□; Dynamic programming p47 □□;

## Chapter 10

UFS [p16](#) ☐ ☐.

## Chapter 11

## Chapter 12

$A^*$  [p14](#) ☐ ☐; optimality [p18](#) ☐ ☐; monotonicity [p22](#) ☐ ☐; dominance of heuristic [p35](#) ☐ ☐; relaxation [p40](#) ☐ ☐.

## Chapter 13

Bayes theorem [p8](#) ☐ ☐; probabilistic graphical models [p24](#) ☐ ☐.

## Chapter 14

Bayesian network three inference problems [p8](#) ☐ ☐; variable elimination [p16](#) ☐ ☐.

## Chapter 15

Expectation Maximization (no need formula but example) [p21](#) ☐ ☐.

## Chapter 16

cosine [p16](#) ☐ ☐.

## Chapter 17

Markov decision process [p21](#) ☐ ☐; policy [p2](#) ☐ ☐.

## Chapter 18

Bellman equation [p16](#) ☐ ☐; reinforcement learning [p41](#) ☐ ☐.

## Chapter 19

Minimax [p47](#) ☐ ☐; alpha-beta pruning [p16](#) ☐ ☐.

## Chapter 20