

CS341 Artificial Intelligence – Spring 2015  
Final (Monday, May 4 - 8:00 AM) – Review

1. Chapter 18, 19: Learning Agents
  - (a) Learning elements
  - (b) Inductive learning
  - (c) Decision trees and information theory
  - (d) Ensemble Learning
    - i. bagging
    - ii. boosting and other techniques
  - (e) Concept Learning
    - i. hypothesis space
    - ii. generalization and specialization
    - iii. current-best hypothesis, find-S and candidate elimination algorithms
    - iv. importance of bias
  - (f) Artificial neural networks
    - i. biological basis for ANNs
    - ii. terminology and topologies
    - iii. perceptrons
    - iv. backpropagation
  - (g) Reinforcement Learning
    - i. differences from supervised learning
    - ii. Q learning
2. Homeworks and Bagging Project