# AI – Summary information

Lecture 1 – Search

* Agents that Plan Ahead
* Search Problems
* Uninformed Search Methods
  + Depth-First Search
  + Breadth-First Search
  + Uniform-Cost Search

**Planning agents do the following.**  
-Ask, “what if”

-Decisions based on (hypothesized) consequences of actions

-Must have a model of how the world evolves in response to actions

-Must formulate a goal (test)

-Consider how the world WOULD Be

A search tree:

* A “what if” tree of plans and their outcomes
* The start state is the root node
* Children correspond to successors
* Nodes show states, but correspond to PLANS that achieve those states
* For most problems, we can never actually build the whole tree