exam topics:

- draw a visibility graph (know +/-)
- know of a voronoi diagram (+/-)
- 8- vs. 16- connected grids
- meaning of the configuration space
- order of expansions for uninformed A*, informed A*, weighted A*
- is this heuristics admissible, consistent (numbers on a graph)?
- examples of heuristics
- operation of anytime version of A* (ARA*), say what is INCONS/OPEN at the end of the first search iteration
- know the general principles of incremental version of A* (what it is for)
- know the concept of Freespace Assumption
- operation of Real-time heuristic search (LRTA*) (what it is for, +/-)
- know of RTAA* (+/-)
- Lattice-based Graphs (what it is for), Explicit vs. Implicit graphs (what it is for)
- construction of PRM (+/-)
- draw an RRT/RRT-Connect tree (+/-)
- postprocessing via shortcutting
- definition of Markov Property
- dependent vs. independent variables
- dominance relationship in states and its use in planning with limit on resources
- STRIPS representation
- Solving STRIPS problems with A*
- heuristics for STRIPS problems
- know of Partial-order Planning for STRIPS problems
- minimax formulation of MDP (+/-)
- expected cost-to-goal formulation for MDP (+/-)
- solve MDPs via Value Iteration
- know of RTDP (+/-)
- Rewards formulation of MDP
- solve Rewards MDP
- what is POMDP and how belief state-space is constructed for it
- what problems are really Deterministic planning vs. MDP planning vs. POMDP planning