

Outline of topics

Week	Problem Solver Topics
0	Introduction to Knowledge-Based AI
1	Classical Problem Solving
2,3	Pattern-Directed Systems
4	Truth-Maintenance Systems (TMS)
5	Justification-based TMS
6	Antecedent constraint languages
7	Symbolic relaxation systems
8	Logic-based TMS
9, 10	Logic-based reasoners and applications
11	Assumption-based TMS
12	Assumption-based constraint languages
13,14	Final presentations
15	Special topics

Additional topics

- Symbolic programming languages
- Use of macros for representation languages
- Intelligent condition handling
- Object-oriented AI systems
- AI systems and the web

Format

- Lectures
- Frequent extended programming assignments using existing symbolic AI systems
- Term project

Project and assignments

- Biweekly project-based assignments which involve extending or adapting existing AI modules
- Student project
 - Project proposal
 - Peer evaluation of proposal
 - Revised proposal (optional)
 - In-class presentation
 - Final report