Who, What, Where

What	Introduction to Knowledge Based Systems (Expert Systems)
Who	Edward (Ned) Blurock Room 0.3 tel. (07236) 3231-28 email: blurock@risc.uni-linz.ac.at
Where	Seminar Room TNF 810
When	10:15 Tuesday
Cost	Due to the amount of copies that will be handed out: 200 Schillings

Two Courses for the price of One

Expert System Shell The expert system tool, CLIPS 6.0, will be extensively used to illustrate what an expert system shell is and what it can do. This part of the course will be essentually learning how to formulate problems in the CLIPS language.

Search The basis of many expert systems (not just expert system shells such as CLIPS) is searching through knowledge space. For this reason, several search algorithms will be (very briefly) studied:

- Graph Search, Back-Tracking
- Heuristic Search
- Monte-Carlo, Simulated Annealing and Genetic Algorithms
- Numeric Optimization
- Game Theory
- Resolution
- (Planning Systems)

Framework

Lectures	Lectures will be given (for the most part) by those who are not only knowledgeable of the various systems, but also use them extensively.
Exercises	For each system that is available here, several homework exercises will be given.
In Depth Exercises	In some systems, more detailed exercises will be given in terms of programming projects and documenting projects.

Grading

Attendance Attendance is expected at all lectures (and as a courtesy to the guest speakers, be on time). I will listen to (and maybe even believe) all elaborate stories as to why one cannot attend.

Exercises For the most part, each exercise will be graded on the following scale:

- **Excellent (3 pnts)** Exercise above and beyond the call of duty. Usually this will mean it is clear and well documented.
- **Normal (2 pnts.)** The exercise was handed in and a satisfactory answer was given
- **Deficient (1 pnt.)** The exercise was either handed in with errors or was late.
- **Oh Well (0 pnts.)** oops.

Due Date Unless otherwise specified, the due date will be one week after assignment.

No final Exam The grading will be solely in terms of the exercises and attendance.

Grades If one attends all the lectures and averages 2 points on all the exercises, then a grade of 1.0 (Sehr Gut) can be expected. Let's hope I don't have to worry about making a grading scale below this.

Homeworks

Electronic	The exercises will be handed in electronically by email.
Form	For the most part, the handed in exercises will consist of the series of commands that must be given to the system to perform what was asked. This should be the same file the student uses to perform the tasks.
Sets	All the exercises from one set (i.e. from one week) should be sent in together with clear dilimitations between the exercises themselves.
Clarity	The exercises should be clear enough that I should be able to tell at a glance what was done and/or intended.