



Annual Course Report

(KNOWLEDGE BASE SYSTEMS)

A- Basic Information

- 1- **Title and Code** Knowledge Base Systems / CS471
- 2- **Programme(s) on which this course is given** CS and IT
- 3- **Academic year / Level of programme** 4th year - 1st Semester
- 4- **Units/Weekly hours**

Lecture Tutorial/Practical Total

5- Names of lecturers contributing to the delivery of the course

1- Dr. Ashraf Elsisí

Course co-ordinator: Dr. Ashraf Elsisí

External evaluators: Not assigned yet

B- Statistical Information

No. of students attending the course: No. %

No. of students completing the course: No. %

Results:

Passed: No. % Failed: No. %

Grading of successful students:

Excellent: No. % Very Good: No. %

Good : No. % Pass: No. %

C- Professional Information

1- Course Teaching

Topics actually taught	No. of hours	Lecturer
1 Introduction	3	Dr. Ashraf Elsis
2 Fundamentals of Expert Systems <ul style="list-style-type: none"> • History of Expert Systems • Basic Concepts of Expert Systems • Structure of Expert Systems. • The Human Element in Expert Systems. • How Expert Systems Work. • Problem Areas Addressed by Expert Systems. • Benefits of Expert Systems • Problems and Limitations of Expert Systems • Types of Expert Systems. 	12	Dr. Ashraf Elsis
3 Knowledge Acquisition and Validation <ul style="list-style-type: none"> • Knowledge Engineering. • Scope of Knowledge. • Difficulties in Knowledge Acquisition. • Methods of Knowledge Acquisition • Interviews • Tracking Methods • Selecting an Appropriate Knowledge Acquisition Method • Validation and Verification of the Knowledge Base 	18	Dr. Ashraf Elsis
4 Knowledge Representation <ul style="list-style-type: none"> • Introduction. • Representation in Logic and Other Schemas. • Semantic Networks. • Production Rules. • Frames. • Multiple Knowledge Representation • Experimental Knowledge Representations. • Representing Uncertainty 	12	Dr. Ashraf Elsis
5 Inferences, Explanations and Uncertainty <ul style="list-style-type: none"> • Reasoning in Artificial Intelligence. • Forward and Backward Chaining. • The Inference Tree. • Inferencing with Frames. • Case-based Reasoning. • Explanation and Metaknowledge. • Inferencing with Uncertainty 	12	Dr. Ashraf Elsis
6 Building Expert Systems <ul style="list-style-type: none"> • Introduction • The Development Life Cycle. • Organizing the Development Team. 	24	Dr. Ashraf Elsis

<ul style="list-style-type: none"> • The Future of Expert Systems. • Case study 		
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Topics taught as a percentage of the content specified:

>90 %

 70-90 %

 <70%

2- Teaching and Learning Methods:

Lectures:
 Practical Training/ Laboratory:
 Seminar/Workshop:
 Class Activity:
 Case Study:
 Other Assignments/Homework:

3- Student Assessment:

Method of Assessment	Percentage of total
Written examination	70
Oral examination	10
Practical/laboratory work	10
Other Assignments/class work	10
Total	100 %

Members of Examination Committee:

Dr. Ashraf Elsisi
Ms. Asmaa Haroon

Role of external evaluator:

External evaluator not assigned yet

4- Facilities and Teaching Materials:

Totally adequate
 Adequate to some extent
 Inadequate

5- Administrative Constraints

- Insufficient class rooms and halls
- Need extra hours for practical implementation

6- Student Evaluation of the course: Response of Course Team

Needing for prerequisite course Talking with administration
(Artificial Intelligent)

7- Comments from external evaluator(s):

External evaluator not assigned yet. .

8- Course Enhancement:

Progress on actions identified in the previous year's action plan:

This is the first year and no previous action Plan.

9- Action Plan for Academic Year 2006 – 2007

Actions Required	Completion Date	Person Responsible
Use CLIPS to develop expert system	2007	Ms. Asma Haroon

Course Coordinator: Dr. Ashraf Elsis

Signature:

Date: