FUTURE UNIVERSITY IN EGYPT جامعة المستقبل

Faculty of Computers and Information Technology

Artificial Intelligence

Information :

Course Code :	CSC 341	**Level :**	Undergraduate	**Course Hours :**	3.00- Hours
Department :	Department of Information Systems				

Area Of Study :

Knowledge Representations: Predicate Calculus, Structured Representations, Network Representations. State Space Search: trees and graphs, heuristic search, model based reasoning, case-based reasoning, reasoning with uncertain or incomplete knowledge. Overview of AI languages, Overview of AI Application Areas.

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Course outcomes :

a.Knowledge and Understanding: :	
1 -	Have some understanding of the basic concepts and techniques of AI
2 -	Have some understanding of the basic concepts of knowledge based systems.
3 -	Have some understanding of some blind and heuristic search techniques
4 -	Have some understanding of issues in knowledge acquisition, and representation
5 -	Have some understanding of issues in monotonic and non-monotonic Logic
6 -	Have some understanding of Machine Learning and Neural Networks
b.Intellectual Skills: :	
1 -	Appreciate the subtleties related to different approaches to AI
2 -	Appreciate the subtleties related to different AI techniques
3 -	Decide the suitability of AI techniques for a problem/domain
4 -	Analyze and design a KBS for a simple domain.
c.Professional and Practical Skills: :	
1 -	Have some practice of knowledge acquisition
2 -	Represent knowledge of a domain in a suitable knowledge representation formalism
3 -	Write simple AI programs in PROLOG or C/C++.
4 -	Represent and implement AI solutions to a suitable AI problems
5 -	Implement a KBS for a simple domain
d.General and Transferable Skills: :	
1 -	Deploy communication skills

2 -	Deploy research skills
3 -	Work effectively within a group to analyze, design and implement an Intelligent Systems
4 -	To work to tight deadlines
5 -	Effectively present the final work in a demo
6 -	Justify students design decisions in a written document

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to AI Concepts	4	2	2
Problems and Problem space	4	2	2
Problem Characteristics	4	2	2
AI-Search	4	2	2
1st Mid-Term Exam	4	2	2
Knowledge Acquisition	4	2	2
Knowledge Representation (Production Rules)	4	2	2
Knowledge Representation (Semantic Nets. ï Frame)	4	2	2
2nd Mid-Term Exam	4	2	2
Geometric analogy net	4	2	2
Recording Cases	4	2	2
AI Topics	4	2	2
Revision	4	2	2
Final Exam	4	2	2

Teaching And Learning Methodologies :

Lectures
Practical training
Projects
Web-Site searches

Course Assessment :

Methods of assessment	Relative weight %	Week No	Assess What
Final Exam	40.00	16	
Midterm I	15.00	6	
Midterm II	15.00	12	
Quiz &assignment	30.00	4	