Republic of Iraq
The Ministry of Higher Education and Scintific Resrearch
Supervision and Scientific Evaluation Body

College : Shatt Al Arab University College
Department Computer Science
Stage: third
Lecturer Name : Ali AbdulRazzaq AbdAli
Academic Status : Assistant Lecturer

Course Weekly Outline

Course Lecturer	**Ali AbdulRazzaq AbdAli**
e-mail	**ali.abdulrazzaq@sa-uc.edu.iq**
Title	**Artificial intelligence**
Course Coordinator	
Course Objective	•The student's understanding of the basic concepts of artificial intelligence and how knowledge is represented and its types. •The ability to acquire knowledge and transform it into data that can be stored and organized as an organized database that can be used in building various systems and projects. •Learn ways to represent knowledge •Learn the process of linking different facts and deducing new facts that do not previously exist. •Learn the methods and mechanisms of deduction •Learn how to use the Turbo Prolog programming language, how to build intelligent programs and how to represent variables, facts, and rules. As well as how to build lists, self-repetition, mathematical expressions, and database building. •Learn and understand problem spaces and research methods used in artificial intelligence •Learn and understand what an expert system is, how to build and deal with it, how to represent knowledge of an expert system, and how to design the user interface.

Course Description	The course include: - General review for the topics of AI. - Study the modern techniques to involve the intelligent Agent theories with the AI topics.			
Textbook	George F. Luger, "Artificial Intelligence Structures and Strategies for Complex Problem Solving" , 6th Edition, Addison Wesley Longman, Inc., MIT press, 2009. Artificial Intelligence A Modern Approach Third Edition Stuart J. Russell and Peter Norvig			
References	The basics of artificial intelligence, research methods, knowledge representation and conclusion, Prof. Dr. Ahmed Tariq Sadiq 2016			
Course Assessment	**Term Exam**	**Project**	**Quizzes and Attendance**	**Final Exam**
	30		**10**	**60**
General Notes				

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College : Shatt Al Arab University College
Department : Business Adminstration
Stage:
Lecturrer Name:
Academic Status:
Qualification:

Week	Date	Topics Covered	Number of Hours	Notes
1	**2/10/2022**	Introduction to Artificial Intelligence Definition, scientific Goals of AI	**3**	
2	9/10/2022	Artificial Intelligence related fields	**3**	

		and Application		
3	16/10/2022	Knowledge Representation	**3**	
4	23/10/2022	Knowledge representation/ Propositional logic	**3**	
5	30/10/2022	Knowledge representation/ predicate logic	**3**	
6	6/11/2022	Conversion To clause normal Form	**3**	
7	13/11/2022	Clause form Resolution theorem proving	**3**	
8	20/11/2022	Resolution example	**3**	
9	27/11/2022	knowledge representation/ semantic network	**3**	
10	4/12/2022	knowledge representation/ conceptual graph	**3**	
11	11/12/2022	knowledge representation/ frame representation	**3**	
12	18/12/2022	solve problem	**3**	
13	25/12/2022	State Space problem/ water Jug Problem	**3**	
14	1/1/2022	State Space problem/ Tower of Hanoi Problem	**3**	
15	8/1/2023	State Space problem/traveling salesman	**3**	
16	26/1/2023	Semantic search	**3**	
17	19/2/2023	1-Blind search- Depth First Search.	**3**	
18	26/2/2023	Breadth First Search.	**3**	
19	5/3/2023	Hybrid Search.	**3**	
20	12/3/2023	solve problem	**3**	
21	19/3/2023	2- Heuristic search -Hill Climbing.	**3**	
22	26/3/2023	Best First Search.	**3**	
23	2/4/2023	A algorithm.	**3**	
24	9/4/2023	A* algorithm.	**3**	
25	16/4/2023	solve problem	**3**	
26	23/4/2023	8-puzzle problem	**3**	
27	30/4/2023	minimax algorthim	**3**	
28	7/5/2023	Expert System Introduction, Architecture	**3**	
29	14/5/2023	Control Strategy and Expert Systems	**3**	
30	21/5/2023	Constraint Satisfaction Problems (CSPs)	**3**	

Lecturer signature **Head of Department Signature**