Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Hamdaniya
College: Education
Department: Computer Science
Stage: Third
Subject: Artificial Intellegence
Lecturer name:

Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		**Artificial intelligent Introduction Definition**	**Matlab installation**	
2		**Artificial intelligent Applications, Programming**	**Matlab component**	
3		**Characteristic of A.I. Programming language and A.I., Problem Solving**	**First program execution**	
4		**Graph Theory ,travel sales man problem**	**Input \Output statement**	
5		**8-puzzel Game , Search method**	**IF statement**	
6		**Systematic Methods,**	**for,while statement**	
7		**Depth – First Search**	**case statement**	
8		**Breadth – First Search**	**1-dimention,2-dimention matrix**	
9		**Heuristic Methods, Hill – Climbing Search**	**Problems, Depth – First, Breadth – First**	
10		**Best – First Search**	**Problems, Hill – Climbing, Best – First**	
11		**A Star (A*) algorithm**	**Problems, A Star (A*)**	
12		**Artificial Neural Network(ANN),Introduction**	**ANN in matlab**	
13		**ANN component, How Are ANN used Common Activation functions, ANN Architecture**	**Practical examples**	
14		♀ **Application(logical Function)**	**Practical examples**	
15		**Hebb Net (Algorithm, Applications)**	**Practical examples support the theoretical part**	
16		**Perceptron Net (Algorithm, Applications)**	**Practical examples support the theoretical part**	
		Half-year Break		
17		**Adaline Net (Algorithm, Applications)**	**Practical examples support the theoretical part**	
18		**Madaline Net (Algorithm, Applications)**	**Practical examples support the theoretical part**	
19		**Pattern Association ,Introduction, Hebb rule ,Outer Production**	**Practical examples support the theoretical part**	

20		**Hetro Associative Memory N.N, (Architecture, Algorithm)**	**Practical examples support the theoretical part**	
21		**(Applications)**	**Practical examples support the theoretical part**	
22		**Auto Associative Memory N.N, (Architecture, Algorithm, Applications**	**Practical examples support the theoretical part**	
23		**(Applications)**	**Practical examples support the theoretical part**	
24		**Discrete Hopfield Net**	**Practical examples support the theoretical part**	
25		**Expert System (Introduction, Architecture, Characteristic)**	**Practical examples support the theoretical part**	
26		**Knowledge representation**	**Practical examples support the theoretical part**	
27		**Fact and rule, Production system and rule base**	**Practical examples support the theoretical part**	
28		**Application of Expert System**	**Practical examples support the theoretical part**	
29		**The role of expert system in learning by computer**	**Practical examples support the theoretical part**	
30		**Genetics algorithm (Introduction, Characteristic)**	**Practical examples support the theoretical part**	
31		**Applications**	**Practical examples support the theoretical part**	
32		**Examples**	**Practical examples support the theoretical part**	