



Fayoum University  
Faculty of Computers & Information  
Second Term 2019/2020

Course Name: Artificial Intelligence

Course Code: CSC343

Course Level: 3

Course Dr. Name: Ass. Prof. Shereen Taie

Status: Pass ☐ Not Pass: ☐

**Choose one of the following topics for your research:**

**Topic 1: Agents and environments in Artificial Intelligence** including:

Robotic agent definition and architecture, agent programs, rational agents, agent's types, environments types etc...

**Topic 2: Searching Algorithms** including:

Uninformed Search Strategies (blind search), Informed Search Strategies (heuristic search) talk about in details for at least two algorithms for each type of searching algorithms, the characteristics of each searching algorithm, give an example with solved problem for each selected searching algorithm.

**Topic 3: Artificial Intelligence Knowledge Representation Techniques** including:

Logic technique, Object-Attribute Value technique, Rules technique, Semantic Networks technique, and Frames technique the characteristics of each Knowledge Representation Techniques, give at least 2 examples with solved problem for each selected Knowledge Representation Techniques.

**Topic 4: Rule-based expert systems** including:

Introduction and what is knowledge, rules as a knowledge representation technique in expert systems, the main players in the expert systems development team, structure of a rule-based expert system, characteristics of an expert system, forward chaining and backward chaining, give an example with solved problem for each forward chaining and backward chaining.

**Topic 5: Understanding AI, Types of Artificial Intelligence** including:

Main areas of Artificial Intelligence, Understanding Artificial Intelligence, the types of AI classification, Artificial Narrow Intelligence (ANI), Artificial General Intelligence (AGI), Artificial Super Intelligence (ASI), Artificial Intelligence Applications.

**The research must include:**

- 1- Research Objectives
- 2- Introduction
- 3- Research Details
- 4- Research Applications and Conclusion
- 5- References

- يختار الطالب احد الموضوعات عاليه لاجراء مقالة بحثية
- يكتب البحث الكترونياً ويرسل كملف واحد بصيغة PDF على البريد الالكتروني لاستاذ المقرر عاليه على ان يسمى الملف وكذلك موضوع البريد الالكتروني باسم الطالب ثلاثي والمقرر.
- سيتم رفض البحوث المتشابهة جزئيا او كليا ويعتبر الطلاب المتقدمون بها راسبين في هذه المادة
- الموضوعات المطروحة هي لما تم تدريسه سواء عن بعد او قبل تعليق الدراسة.