نموذج وصف المقرر

وصف المقرر

يوفر وصف المقرر هذا إيجازاً مقتضياً لأهم خصائص المقرر ومخرجات التعلم المتوقعة من الطالب تحقيقها مبرهناً عما إذا كان قد حقق الاستفادة القصوى من فرص التعلم المتاحة. ولابد من الربط بينها وبين وصف البرنامج.

1. المؤسسة التعليمية	Shatt Al-Arab University College
2. القسم العلمي / المركز	Computer science Department
3. اسم التدريسي	Associate professor Hayder Naser Kh.
4. اسم / رمز المقرر	Advanced Intelligent Application
5. أشكال الحضور المتاحة	Weekly / theoretical and practical
6. الفصل / السنة	By year
7. عدد الساعات الدراسية (الكلي)	120 hours
8. تاريخ إعداد هذا الوصف	01-10-2022
9. أهداف المقرر	
The aim of this course is to develop applications that use historical and real-time data from user interactions and other sources to make predictions and suggestions, delivering personalized and adaptive user experiences.	
The aim of this course to learn the artificial intelligent algorithms and the applications of these algorithms.	
This course aim to learn some applications in real life.	

10. مخرجات المقرر وطرائق التعليم والتعلم والتقييم

أ- الاهداف المعرفية

أ1-The student learns about intelligence programs and how they work

أ2-The student will identify the bugs and malfunctions that get in the software .

أ3- The student learns about the basis for intelligence systems .

أ4-The student describes the progress and follow-up of technology in intelligence systems

ب - الاهداف المهاراتية الخاصة بالمقرر

ب1 - The student developing the skill of experience and expertise in smart devices

ب2 - The student developing the skill of applying modern practical methods in the use of intelligence programs

ب3 - The student acquires the skill of using the best methods for AI

طرائق التعليم والتعلم

The presentation slides.
Supporting video tutorial.
Online International lecture.

طرائق التقييم

Semester Exam	Lab	Daily exams	Final exam
30	10	10	50

ج- الاهداف الوجدانية والقيمية

ج1-Works in the spirit of one team

ج2-He abides by the ethics of the university institution

ج3-Receives and accepts knowledge

د - المهارات العامة والتأهيلية المنقولة (المهارات الأخرى المتعلقة بقابلية التوظيف والتطور الشخصي).

د1-Develop student work in AI laboratories

د2-It develops the student's skills on its programs

د3-The student acquires the ability to his divisions

11. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة / أو الموضوع	طريقة التعليم	طريقة التقييم
1	4		Introduction to Applications in Artificial Intelligence	Tutorial and lab	-
2	4		Blocks World Problem-1	Tutorial and lab	-
3	4		Blocks World Problem-2	Tutorial and lab	Oral test
4	4		Example about blocks world	Tutorial and lab	Quiz
5	4		Introduction to genetic algorithm	Tutorial and lab	-
6	4		Genetic algorithm life cycle	Tutorial and lab	-
7	4		Genetic algorithm crossover and mutation	Tutorial and lab	-
8	4		Genetic algorithm example by using mathematical function (Example 1)	Tutorial and lab	-
9	4		Genetic algorithm example by using mathematical function (Example 2)	Tutorial and lab	-
10	4		Genetic algorithm example by using travelling salesman problem (Example 1)	Tutorial and lab	Oral test
11	4		Genetic algorithm example by using travelling salesman problem (Example 2)	Tutorial and lab	Quiz
12	4		Introduction to Ant colony optimization algorithm	Tutorial and lab	-
13	4		Ant colony optimization algorithm life cycle	Tutorial and lab	-
14	4		Ant colony optimization rule construction and pheromone update	Tutorial and lab	-
15	4		Ant colony optimization example by using travelling salesman problem (Example 1)	Tutorial and lab	Assignment
16	4		Lab exam	Lab exam	Lab exam
17	4		First term exam	First term	Written

exam	exam				
-	Tutorial and lab	Ant colony optimization example by using travelling salesman problem (Example 3)		4	18
-	Tutorial and lab	Introduction to Artificial neural networks		4	19
-	Tutorial and lab	Artificial Neural Networks Architecture		4	20
-	Tutorial and lab	The types of activation function		4	21
Oral test	Tutorial and lab	Application of Artificial Neural Networks-1		4	22
Quiz	Tutorial and lab	Application of Artificial Neural Networks-2		4	23
-	Tutorial and lab	Expert systems		4	24
-	Tutorial and lab	Rules based expert system architecture		4	25
-	Tutorial and lab	Expert systems applications-1		4	26
-	Tutorial and lab	Expert systems applications-2		4	27
Lab exam	Tutorial and lab	Lab exam		4	28
Written exam	Tutorial and lab	Second term exam		4	29
	Tutorial and lab	Second term exam		4	30

12. البنية التحتية	
1-Applications in Artificial Intelligence. 2-Introduction to Genetic Algorithms. 3-Ant Colony Optimization. 4-Introduction to Data Mining.	1- الكتب المقررة المطلوبة
Machine Learning and Artificial Intelligence	2- المراجع الرئيسية (المصادر)

أ) الكتب والمراجع التي يوصى بها (المجلات العلمية ،التقارير ،.....)	Artificial Intelligence Review – Springer Machine Learning - Springer
ب) المراجع الالكترونية ،مواقع الانترنيت ،.....	1- https://www.tutorialspoint.com/matlab/matlab_overview.htm

13. خطة تطوير المقرر الدراسي
1. Visiting intelligent laboratories. 2. Preparing an educational laboratory for intelligence systems.