

خطة وتوصيف مساق									
اسم المساق	الذكاء الاصطناعي	رقم المساق	BMOB4322	نوع المساق	نظري	عدد فصول المساق	14	عدد محاضرات المساق	26
الكلية / القسم	كلية الهندسة وتكنولوجيا المعلومات	التخصص	الحوسبة النقالة	المتطلب السابق	رياضيات منفصلة - برمجة 2	المتطلب اللاحق	-	عدد ساعات المساق	3
محاضر المساق	د. اياد الشامي	جوال المحاضر	0599857723	البريد الالكتروني	eshami@iugaza.edu.ps	الساعات المكتبية اللقاء الافتراضي	الإثنين 11=10	الفصل الدراسي	الثاني
<p>Artificial Intelligence (AI) studies how computers can accomplish tasks that were traditionally thought to require human intelligence. The aim of this course is to give an overview of some basic AI algorithms and an understanding of the possibilities and limitations of AI. The course begins by describing what the latest generation of artificial intelligence techniques can actually do. After an introduction of some basic concepts and techniques, the course illustrates both the potential and current limitations of these techniques with examples from a variety of applications. We spend some time on understanding the strengths and weaknesses of human decision-making and learning, specifically in combination with AI systems.</p> <p>This course provides students with the main fundamentals of Artificial Intelligence (AI). The course covers the main techniques that are used in AI examples (from chess-playing to self-driving cars). These techniques include Search Algorithms, Probability, Reasoning and Inference, programming logic, Expert systems, Rule-based systems, Fuzzy logic, Machine Learning, Knowledge Representation, Pattern recognition, and natural language processing. The course helps students to use AI to solve specific problems in their future careers. The theoretical part of the course focuses on understanding concepts, structures, and algorithms, while the practical part (lab) includes a set of exercises to be performed using AI tools such as CLIPS, Weka, and Matlab.</p>									وصف عام للمساق

أهداف المقرر ومخرجاته					
م.٠	نوع مخرجات التعليم (مختصر)				أهداف المقرر
	مهارات عامة للاتصال والتواصل	مهارات تقنية وفنية	مهارات ذهنية	معرفة وفهم	
1.	Able to discuss some of Sci-Fri Movies of AI			Able to learn the definition of AI, history and how AI change our lives	Understand what is AI, its applications and use cases, history of AI and how it is transforming our lives
2.	Able to connect several life issues with AI			Able to know some issues about AI	Describe several issues concerns surrounding AI
3.			Able to use search method for solving problem	Able to learn search methods	Understand strategies for solving problem
4.		Able to program search method to find solution for some problems	Able to learn how to uses search methods to find solution in AI	Able to explain types of search method to find solution in AI	Explain Search methods to find solution with AI
5.		Able to write code in python for these topics	Able to learn how and when use these topics	Able to learn important topics in AI (Learning – classification ..etc)	Explain terms like Machine Learning, Classification and Neural Networks

مصفوفة التعليم والتعلم																	
أساليب التقييم المرحلية 3-2-1-0					أساليب التعليم والتعلم 3-2-1-0					مخرجات المحاضرة 3-2-1-0				محتويات المقرر	التاريخ	اليوم	الأسبوع
اختبار نهائي	اختبار قصير 2	اختبار نصفي	اختبار قصير 1	مناقشات	تكاليفات وواجبات	حالات عملية	ورش عمل	مناقشات/ استضافة خبير	محاضرات	مهارات عامة	مهارات تقنية وفنية	مهارات ذهنية	معرفة وفهم				
0	0	3	2	3	1	0	0	1	3					Introduction to Artificial Intelligence			.1
0	0	3	3	3	1	1	0	2	3	3	2	3	3	Solving Problems by Searching			.2
0	0	3	3	3	1	1	0	2	3	3	2	3	3	Uniformed Search Strategies			.3
0	0	3	1	3	3	2	3	3	2	3	2	3		Informed Search Strategies			.4
0	0	3	1	3	3	2	3	3	2	3	2	3	3	Heuristic Functions			.5
0	0	3	1	2	3	2	2	3	2	3	2		3	Game Playing			.6
0	0	3	0	2	2	2	1	1	2	3	2	3	3	Rule-based Expert Systems			.7
														Mid Exam			.8
3	3	0	0	3	3	1	3	3	3	3	2	2	3	Fuzzy Expert Systems			.9
3	3	0	0	3	3	1	3	3	3	3	3	3	3	Introduction to Machine Learning			.10
3	2	0	0	3	0	3	3	3	3	3	3	3	3	Artificial Neural Networks (Supervised)			.11
3	3	0	0	3	2	3	3	3	3	3	3	3	3	Artificial neural networks (Unsupervised)			.12
3	3	0	0	3	2	3	3	3	3	3	3	3	3	Evolutionary computation			.13
														Final Exam			.14
<ul style="list-style-type: none">Norvig P. Russell S., Artificial Intelligence: A Modern Approach, Prentice Hall, 4 edition, 2020Mehryar Mohri, Afshin Rostamizadeh, Ameet Talwalkar, Foundations of Machine Learning (2nd Edition), 2018															الكتاب المقرر		
كتاب مساند / إضافي																	

المجموع	اختبار نهائي	اختبار نصفي	أنشطة فصلية			توزيع درجات المساق
			تكاليفات وواجبات	اختبارات قصيرة (1،2)	حضور	

					ومشاركة	
100 درجة	50 درجة	20 درجة	10 درجات	10 درجات	10 درجات	