## توصیف مقرر دراسی

		١ - بيانات المقرر
المستوى: الثالث	اسم المقرر : Structured Programming	كود المادة : Math 341
تمارین: ۰ عملی: ۲	عدد الوحدات الدراسية: ٣ ساعة معتمدة نظرى: ٢	التخصص: الإحصاء وعلوم الحاسب

For students undertaking this course, the aims are to:	٢ - هدف المقرر:
1. Have gained a deeper appreciation of the way in which computer science has	
been applied to the problem of artificial intelligence, and in particular for more	
recent techniques concerning knowledge representation, uncertainty learning.	
2. Know how to model situations using a variety of knowledge representations.	
3. Be able to design problem solving method based on knowledge representation	
and learning techniques.	
4. Know how probability theory can be applied in practice.	
، المقرر:	٣-المستهدف من تدريس أ - المعلومات والمفاهيم:
a- Knowledge and Understanding	أ ـ المعلومات
On completing this course, students will be able to:	والمفاهيم:
a1. Recognize the basic concepts and methods used in the field of Artificial	
intelligence.	
a2. Understand the theories, method and practices of Artificial Intelligence techniques.	
a3. Be familiar with an agent-based intelligent system.	
a4. Understand how to solve problems by searching.	
a5. Understand several problem solving using fuzzy logic and statistical learning	
theory.	
b- Intellectual Skills	ب - المهارات الذهنية:
On completing this course, students will be able to:	الذهنية:
b1. Develop computing algorithms and to analyze their properties.	
b2. Formulate some of real problems using knowledge representation.	
b3. Utilize fuzzy logic to deal with uncertainty.	
b4. Analyze, interpret and model real problems using statistical learning theory	
techniques.	
c- Professional and Practical Skills	ج ـ المهارات المهنية الخاصة بالمقرر:
On completing this course, students will be able to:	الخاصة بالمقرر:
c1. Apply basic probability theory to machine learning problems.	
c2. Implement and apply search techniques.	
c3. Implement, apply and systematically evaluate machine learning techniques.	
c4. Develop algorithms to solve different problems.	
d- General and Transferable Skills	د ـ المهارات العامة :
On completing this course, students will be able to:	
d1. Design agent-based intelligent system.	
d2. Apply acquired knowledge to solve real situations in Artificial Intelligence(AI).	
d3. Deal with current advances in Artificial Intelligence	
Introduction to Artificial intelligence	٤ محتوى المقرر:

Fuzzy logic part2 Fuzzy logic part3 Fuzzy logic part4  - Lectures: 2 Hours per week (2H/W)  - Practical: 2 Hours per week (2H/W)  - Final exam as normal students, only skeletal disabilities are allowed in the faculty of science.  - Fuzzy logic part4  - Fuzzy l	<ul> <li>Intelligent Agents part1</li> <li>Intelligent Agents part2</li> <li>Intelligent Agents part3</li> <li>Solving Problems by Searching part1</li> <li>Solving Problems by Searching part2</li> <li>Introduction to Statistical Learning theory part1</li> <li>Introduction to Statistical Learning theory part2</li> <li>Introduction to Statistical Learning theory part3</li> <li>introduction to Statistical Learning theory part4</li> <li>Fuzzy logic part1</li> </ul>				
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10- http://tutorial.math.lamar.edu/sitemap.aspx	1				

## (أ) مصفوفة المعارف والمهارات المستهدفة من المقرر الدراسي

المحتويات للمقرر	اسبوع الدراسة	المعارف الرئيسية	مهارات ذهنية	مهارات مهنیة	مهارات عامة
Introduction to Artificial intelligence	1				
Intelligent Agents part1	2				
Intelligent Agents part2	3				
Intelligent Agents part3	4				
Solving Problems by Searching part1	5				
Solving Problems by Searching part2	6				
Introduction to Statistical Learning theory part1	7				
Introduction to Statistical Learning theory part2	8				
Introduction to Statistical Learning theory part3	9				
introduction to Statistical Learning theory part4	10				
Fuzzy logic part1	11				
Fuzzy logic part2	12				
Fuzzy logic part3	13				
Fuzzy logic part4	14				

أستاذ المادة: د./محمود محمد أحمد عبد اللطيف

رئيس مجلس القسم العلمي: ا.د./ مجدى الياس فارس