الجامعة : جامعة بغداد
الكلية : تربية بنات
القسـم :الحاسبات
المرحلة : الثانية
اسم المحاضر الثلاثي : عفاف بديع جميل
اللقب العلمي : مدرس
المؤهل العلمي : دكتوراه
مكان العمل : جامعة بغداد- تربية بنات- قسم الحاسبات

جدول الدروس الاسبوعي

الاسم	عفاف بديع جميل
البريد الالكتروني	afafbad@yahoo.com
اسم المادة	ذكاء اصطناعي
مقرر الفصل	
اهداف المادة	Learn how to automate of intelligent behavior towards machine translation, AI is a part of Computer Science and it applies the principles of CS such as data structures used in knowledge representation, the algorithms needed to apply that knowledge and the languages and programming techniques used in their implementation.
التفاصيل الاساسية للمادة	Knowledge Representation, Proposition and Predicate Logic and Theorem Proving (Resolution), Semantic Networks, Production Rules, Frames and Scripts, Prolog Programming, Lists, arithmetic Expressions, Backtracking and cuts, Negation as Failure, Simple Examples for Applications, Space search and Problem Reduction: State Space search (depth-First Search, Breadth-first search, Directed Searches and the A*), Problem Reduction, Expert Systems: Function and structure of Knowledge-Based Systems, Forward and Backward Chaining, Handling Uncertainty, User Interfaces (why, How, What If), Expert systems Shells, An Example of a Commercial System Shell.
الكتب المنهجية	"Artificial Intelligence Structures and Strategies for Complex Problem Solving", George F. Luger, William A. Stubblefield, 3rd ED., 1997. "Prolog Programming for AI", Ivan Bratko, 3rd ED., 2001
المصادر الخارجية	Lectures from Internet

	الامتحان النهائي	المشروع	الامتحانات اليومية	المختبر	الفصل الدراسي الاول والثاني
تقديرات الفصل	مثلاً۵۰%	–	مثلاً۵%	مثلاً۵%	مثلاً ٤۰%
معلومات اضافية					

الجامعة : جامعة بغداد
الكلية : تربية بنات
اسم القسم : الحاسبات
المرحلة : الثانية
اسم المحاضر الثلاثي : عفاف بديع جميل
اللقب العلمي : مدرس
المؤهل العلمي : دكتوراه
مكان العمل : جامعة بغداد – تربية بنات – قسم الحاسبات

جدول الدروس

الاسبوعي

الملاحظات	المادة العملية	المادة النظرية	التاريخ	الاسبوع
	Prolog programming Language	AI Introduction, Definition, scientific Goals of AI, Intelligent Agent.		١
	Write a Program in Prolog Language	AI Applications, Programming, Generic Techniques Development,		٢
	Family Tree	Logic, Syntax and Semantics, Predicates, Connectives, Constants,		٣
	Family Tree	Functions, Variables and Quantifiers.		٤
	Family Tree	Translating From English to First Order Logic (FOL).		٥
	Family Tree	Exam 1		٦
	Solving Problems in Prolog	Translating From FOL to English, Logic Representation: Horn Clauses, Atomic Sentence, Literal, Clause.		٧
	Solving Problems in Prolog	Production Rule representations.		٨
	Solving Problems in Prolog	Knowledge Representation in Natural Language.		٩
	Solving Problems in Prolog	Equivalences and Rewrite Rules: Commutativity, Associativity		١٠
	Solving Problems in Prolog	Negation, De Morgan's Laws, Contraposition and Other equivalences,		١١
	Solving Problems in Prolog	Common Identities.		١٢
		Exam 2		١٤
	Solving Problems in Prolog	Unary Predicate: Converting Unary Predicates to Binary		١٥

	Solving Problems in Prolog	Conjunctive Normal Form (CNF).		١٦
عطلة نصف السنة				
	Solving Problems in Prolog	Conceptual Graph: Propositional Nodes, Negation Conceptual Graph, Universally Quantifier Representation.		١٧
	Solving Problems in Prolog	Conversion of Conceptual Graph into FOL (WFF).		١٨
	Solving Problems in Prolog	Conversion of Conceptual Graph into FOL (WFF).		١٩
	Solving Problems in Prolog	Generalization and Specification of Conceptual Graph.		٢٠
	Solving Problems in Prolog	Generalization and Specification of Conceptual Graph.		٢١
	Solving Problems in Prolog	Semantic Networks,		٢٢
	Solving Problems in Prolog	Exam 1		٢٣
	Solving Problems in Prolog	Frames, Search Techniques: Depth First Search		٢٤
	Solving Problems in Prolog	Breadth First Search.		٢٥
	Solving Problems in Prolog	Heuristic Search: Hill Climbing, Best First Search, A* Algorithm.		٢٦
	Solving Problems in Prolog	Expert system (ES): Introduction, Architecture, ES's Applications, Machine Learning.		٢٧
	Solving Problems in Prolog	Control Strategy: Backward and Forward.		٢٨
	Review	Review		٢٩
	Exam	Exam2		٣٠
		Solving Problem		٣١
		Solving Problem		٣٢

توقيع العميد :   توقيع الاستاذ :

Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Baghdad University
College: Education for Women
Department: Computer Science
Stage: second Stage
Lecturer name: Afaf Badie
Academic Status: Lecturer
Qualification: Ph. D
Place of work:Baghdad
University/ Education for
Women/CS Dept.

Course Weekly Outline

Course Instructor	JAVA Programming Language
E_mail	afafbad@yahoo.com
Title	AI
Course Coordinator	Afaf Badie Jamil
Course Objective	**Learn how to automate of intelligent behavior towards machine translation, AI is a part of Computer Science and it applies the principles of CS such as data structures used in knowledge representation, the algorithms needed to apply that knowledge and the languages and programming techniques used in their implementation.**
Course Description	**Knowledge Representation, Proposition and Predicate Logic and Theorem Proving (Resolution), Semantic Networks, Production Rules, Frames and Scripts, Prolog Programming, Lists, arithmetic Expressions, Backtracking and cuts, Negation as Failure, Simple Examples for Applications, Space search and Problem Reduction: State Space search (depth-First Search, Breadth-first search, Directed Searches and the A*), Problem Reduction, Expert Systems: Function and structure of Knowledge-Based Systems, Forward and Backward Chaining, Handling Uncertainty, User Interfaces (why, How, What If), Expert systems Shells, An Example of a Commercial System Shell.**
Textbook	**Artificial Intelligence Structures and Strategies for Complex Problem Solving, George F. Luger, 3rd ED., 1997.** **Prolog Programming for AI, Ivan Bratko, 3rd ED., 2001**
References	**Lectures from Internet**

Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As (20%)	As (5%)	As (5%)	----	As (50%)

General Notes	

Course weekly Outline

week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		AI Introduction, Definition, scientific Goals of AI, Intelligent Agent.	Prolog programming Language	
2		AI Applications, Programming, Generic Techniques Development,	Write a Program in Prolog Language	
3		Logic, Syntax and Semantics, Predicates, Connectives, Constants,	Family Tree	
4		Functions, Variables and Quantifiers.	Family Tree	
5		Translating From English to First Order Logic (FOL).	Family Tree	
6		Exam 1	Family Tree	
7		Translating From FOL to English, Logic Representation: Horn Clauses, Atomic Sentence, Literal, Clause.	Solving Problems in Prolog	
8		Production Rule representations.	Solving Problems in Prolog	
9		Knowledge Representation in Natural Language.	Solving Problems in Prolog	
10		Equivalences and Rewrite Rules: Commutativity, Associativity	Solving Problems in Prolog	
11		Negation, De Morgan's Laws, Contraposition and Other equivalences,	Solving Problems in Prolog	
12		Common Identities.	Solving Problems in Prolog	
13		Exam 1		
14		Unary Predicate: Converting Unary Predicates to Binary Predicates, Skolemization, Unification.	Solving Problems in Prolog	

		Half-year Break		
17		Conceptual Graph: Propositional Nodes, Negation Conceptual Graph, Universally Quantifier Representation.	Solving Problems in Prolog	
18		Conversion of Conceptual Graph into FOL (WFF).	Solving Problems in Prolog	
19		Conversion of Conceptual Graph into FOL (WFF).	Solving Problems in Prolog	
20		Generalization and Specification of Conceptual Graph.	Solving Problems in Prolog	
21		Generalization and Specification of Conceptual Graph.	Solving Problems in Prolog	
22		Semantic Networks,	Solving Problems in Prolog	
23		Exam 1	Solving Problems in Prolog	
24		Frames, Search Techniques: Depth First Search	Solving Problems in Prolog	
25		Breadth First Search.	Solving Problems in Prolog	
26		Heuristic Search: Hill Climbing, Best First Search, A* Algorithm.	Solving Problems in Prolog	
27		Expert system (ES): Introduction, Architecture, ES's Applications, Machine Learning.	Solving Problems in Prolog	
28		Control Strategy: Backward and Forward.	Solving Problems in Prolog	
29		Review	Review	
30		Exam2	Exam	
31		Solving Problem		
32		Solving Problem		

Instructor Signature: **Dean Signature:**

الجامعة : جامعة بغداد
الكلية : تربية بنات
القسم :الحاسبات
المرحلة : الثانية
اسم المحاضر الثلاثي : عفاف بديع جميل
اللقب العلمي : مدرس
المؤهل العلمي : دكتوراه
مكان العمل : جامعة بغداد- تربية بنات- قسم الحاسبات

جدول الدروس الاسبوعي

الاسم	**عفاف بديع جميل**	
البريد الالكتروني	afafbad@yahoo.com	
اسم المادة	**لغة البرمجة جافا**	
مقرر الفصل		
اهداف المادة	**حل المسائل باستخدام لغة البرمجة جافا عن طريق بناء constructers واستعمال classes, objects, methods**	
التفاصيل الاساسية للمادة	**Introduction to Java, History of Java, The Java Programming Language, Running Programs in Java, The Java Platform, Java Program Execution, Types of Java Programs, Writing Simple Application, Writing Simple Applet, Data Types, Final Variables, Binary Arithmetic Operators, Unary Arithmetic Operators, Relational and Conditional Operators, Shift and Logical Operators, Shortcut Assignment Operators, The if/else Statements, The switch Statement, The while and do-while Statements , The for Statement, The break Statement, The continue Statement, Declaring Classes, Member Variables and Methods, Class Constructors, Creating Objects, Declaring a Variable to refer to an Object, Instantiating a Class, Initializing an Object, Using Objects, Referencing an Object's Variable, Calling an Object's Methods, Cleaning Up Unused Objects, The Garbage Collector, Finalization, Using Methods, Static Methods, Argument Promotion and Casting, Scope of Declarations, Method Overloading, Declaration and Creation, Using Arrays, The Enhanced for Statement, Passing Arrays to Methods, Multidimensional Arrays, Variable-Length Argument List, this Reference, Composition, Enumeration, Superclass and Subclass, Constructors and Finalizers in Subclasses, Three-Level**	

Superclass Methods from Subclass Objects, Using Superclass , References with Subclass Variables, Abstract Classes and Methods	
JAVA how to program 6th ED, H. M. Deitel, P. J. Deitel, 2002	الكتب المنهجية
Lectures from Internet	المصادر الخارجية

الامتحان النهائي	المشروع	الامتحانات اليومية	المختبر	الفصل الدراسي الاول والثاني	تقديرات الفصل
مثلا٥٠%	–	مثلا٥%	مثلا٥%	مثلا٤٠%	
					معلومات اضافية

الجامعة : جامعة بغداد
الكلية : تربية بنات
اسم القسم : الحاسبات
المرحلة : الثانية
اسم المحاضر الثلاثي : عفاف بديع جميل
اللقب العلمي : مدرس
المؤهل العلمي : دكتوراه
مكان العمل : جامعة بغداد – تربية بنات – قسم الحاسبات

جدول الدروس

الاسبوعي

الملاحظات	المادة العملية	المادة النظرية	التاريخ	الاسبوع
	Introduction to JAVA	History of Java , The Java Programming ,Language, Running Programs in Java		١
	Write Simple Java Program	The Java Platform , Java Program Execution, Types of Java Programs, Writing Simple Application,		٢
	Solving Homework	Writing Simple Applet, Data Types, Final Variables,		٣
	Print Statement	Binary Arithmetic Operators, Unary Arithmetic ,Operators, Relational and Conditional Operators		٤
	If and for Statements	Shift and Logical Operators, Shortcut Assignment Operators		٥
		Exam 1		٦
	Switch Statement	if/else Statements, The switch Statement		٧
	While and do while Statements	The while and do-while Statements		٨
	Break and continue Statements	The for Statement, The break Statement		٩
	Break and continue Statements	The continue Statement		١٠
	Solving Problems	Declaring Classes		١١

		Methods		
	Solving Problems	Class Constructors		١٣
	Solving Problems	Creating Objects, Declaring a Variable to refer to an Object		١٤
		Review		١٥
		Exam 2		١٦
	عطلة نصف السنة			
	Using Constructers	Instantiating a Class, Initializing an Object, Using Objects, Referencing an Object's Variable,		١٧
	Application the Theoretical Text	Calling an Object's Methods, Cleaning Up Unused Objects, The Garbage Collector, Finalization		١٨
	Application the Theoretical Text	Using Methods, Static Methods, Argument Promotion and Casting		١٩
	Application the Theoretical Text	Scope of Declarations Method, Overloading		٢٠
	Application the Theoretical Text	Declaration and Creation, Using Arrays, The Enhanced for statement		٢١
	Application the Theoretical Text	Passing Arrays to Methods, Multidimensional Arrays		٢٢
		Exam 1		٢٣
	Application the Theoretical Text	Variable-Length Argument List		٢٤
	Application the Theoretical Text	this Reference		٢٥
	Application the Theoretical Text	Composition, Enumeration		٢٦
	Application the Theoretical Text	Superclass and Subclass		٢٧
	Application the Theoretical Text	Constructors and Finalizers in Subclasses		٢٨
	Application the Theoretical Text	Three-Level inheritance HierarchyProtected member		٢٩
	Application the	Invoking a Superclass		٣٠

				٣١
	Exam	Using Superclass , references with Subclass Variables, Abstract Classes and Methods		
		Exam 2		٣٢

توقيع الاستاذ :   **توقيع العميد :**

Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Baghdad University
College: Education for Women
Department: Computer Science
Stage: second Stage
Lecturer name: Afaf Badie
Academic Status: Lecturer
Qualification: Ph. D
Place of work:Baghdad
University/ Education for
Women/CS Dept.

Course Weekly Outline

Course Instructor	JAVA Programming Language
E_mail	afafbad@yahoo.com
Title	JAVA Programming Language
Course Coordinator	Afaf Badie Jamil
Course Objective	Learn How to Write Programs in JAVA
Course Description	**Introduction to Java, History of Java, The Java Programming Language, Running Programs in Java, The Java Platform, Java Program Execution, Types of Java Programs, Writing Simple Application, Writing Simple Applet, Data Types, Final Variables, Binary Arithmetic Operators, Unary Arithmetic Operators, Relational and Conditional Operators, Shift and Logical Operators, Shortcut Assignment Operators, The if/else Statements, The switch Statement, The while and do-while Statements , The for Statement, The break Statement, The continue Statement, Declaring Classes, Member Variables and Methods, Class Constructors, Creating Objects, Declaring a Variable to refer to an Object, Instantiating a Class, Initializing an Object, Using Objects, Referencing an Object's Variable, Calling an Object's Methods, Cleaning Up Unused Objects, The Garbage Collector, Finalization, Using Methods, Static Methods, Argument Promotion and Casting, Scope of Declarations, Method Overloading, Declaration and Creation, Using Arrays, The Enhanced for Statement, Passing Arrays to Methods, Multidimensional Arrays, Variable-Length Argument List, this Reference, Composition, Enumeration, Superclass and Subclass, Constructors and Finalizers in Subclasses, Three-Level Inheritance Hierarchy, Protected Members, Invoking a**

	Classes and Methods				
Textbook	**JAVA how to program 6th ED, H. M. Deitel, P. J. Deitel, 2002**				
References	Internet				
Course Assessment	Term Tests	Laboratory	Quizzes	Project	Final Exam
	As (20%)	As (5%)	As (5%)	----	As (50%)
General Notes					

Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University:Baghdad University
College:Education for Women
Department: Computer Science
Stage: Second Stage
Lecturer name:Afaf Badie
Academic Status:Lecturer
Qualification:Ph. D.
Place of work:Baghdad
University/Education for
Women/CS Dept.

Course weekly Outline

week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		History of Java , The Java Programming ,Language, Running Programs in Java	**Introduction to JAVA**	
2		The Java Platform , Java Program Execution, Types of Java Programs, Writing Simple Application,	**Write Simple Java Program**	
3		Writing Simple Applet, Data Types, Final Variables,	**Solving Homework**	
4		Binary Arithmetic Operators, Unary Arithmetic ,Operators, Relational and Conditional Operators	**Print Statement**	
5		Shift and Logical Operators, Shortcut Assignment Operators	**If and for Statements**	
6		**Exam 1**		
7		if/else Statements, The switch Statement	**Switch Statement**	
8		The while and do-while Statements	**While and do while Statements**	
9		The for Statement, The break Statement	**Break and continue Statements**	
10		The continue Statement	**Break and continue Statements**	
11		Declaring Classes	**Solving Problems**	
12		Member Variables and Methods	**Solving Problems**	
13		Class Constructors	**Solving Problems**	
14		Creating Objects, Declaring a Variable to refer to an Object	**Solving Problems**	

16		Exam 2	Exam	
Half-year Break				
17		Instantiating a Class, Initializing an Object, Using Objects, Referencing an Object's Variable,	**Using Constructers**	
18		Calling an Object's Methods, Cleaning Up Unused Objects, The Garbage Collector, Finalization	**Application the Theoretical Text**	
19		Using Methods, Static Methods, Argument Promotion and Casting	**Application the Theoretical Text**	
20		Scope of Declarations Method, Overloading	**Application the Theoretical Text**	
21		Declaration and Creation, Using Arrays, The Enhanced for statement	**Application the Theoretical Text**	
22		Passing Arrays to Methods, Multidimensional Arrays	**Application the Theoretical Text**	
23		Exam 1		
24		Variable-Length Argument List	**Application the Theoretical Text**	
25		this Reference	**Application the Theoretical Text**	
26		Composition, Enumeration	**Application the Theoretical Text**	
27		Superclass and Subclass	**Application the Theoretical Text**	
28		Constructors and Finalizers in Subclasses	**Application the Theoretical Text**	
29		Three-Level inheritance HierarchyProtected member	**Application the Theoretical Text**	
30		Invoking a Superclass Methods from Subclass Objects	**Application the Theoretical Text**	
31		Using Superclass , references with Subclass Variables, Abstract Classes and Methods	**Exam**	
32		Exam 2		