Republic of Iraq

The Ministry Of Higher Education

& Scientific Research



University: Diyala College: Engineering Department: Computer Stage: Second Lecturer name: Tafer taha Qualification: master Place of work: Computer Dept.

Course Instructor	Tafer taha				
E-mail					
Title	Data Structur	re			
Course Coordinator	Tafer taha				
	Introduction	, Array Conce	pt, List, Stack	and Queue, L	ink Structures
Course Objective	Graph and Tree, & Sorting				
	Data Struct	ures, Algorithr	ns, and Progr	amming Style	Using C by
Course Description	James F. Korsh and Leonard J. Garrett				
	Data Structures, Algorithms, and Programming Style Using Pascalextbooklanguage by Essam Al-Saffar				Using Pascal
Textbook					
			&		
	Programming Basics by Pascal Programming Language, by N.K. Al-				
	Abady				
			, ibad y		
Course Accessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
Course Assessments	As(۳۰%)	As(\.%)	As(\.∕.)	-	As(ه٠٪)
General Notes					

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Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
١	22/09/2015	1-1 Data Structures Definition		
		۱-۲ Types of Data Structures		
		۱-۳ Selection of Data		
۲	۳ • / • ۹/۲ • ۱ ٤	۲-۱ Array Concept		
		۲-۲ Representation of one- Dimensional Array		
٣	• ٧/١ • /٢ • ١ ٤	۲-۳ Representation of Two-Dimensional Array		
		۲-۳-۱ Row – Wise		
		۲-۳-۲ Column -Wise.		
٤	1 5/1 •/7 • 1 5	۲-٤ Representation of Three and Four -Dimensional Array		
0	71/1./7.12	۳.۱ Linear List		
		۳.۲ Types of Linear List		
		۳.۳ Stack		
٦	۲۸/۱۰/۲۰۱٤	^Ψ . ^٤ Array Representation of Stack		
		۳.۰ Stack Algorithms		
		۳.٦ Stack Subprogram		
٧	• \$/11/7 • 1 \$	۳. ^۷ Record Representation		

		۳. ^۸ Stack Application.	
		۳.۹ Queue	
٨	11/11/7 • 1 5	 ". \• Array Representation of Queue "- \) Queue's Algorithms 	
٩	17/11/2015	۳-۱۲ Queue's Subprograms	
		۳-۱۳ Record Representation of Queue's	
١.	70/11/7.12	۳-۱٤ Queue Applications	
))	• ۲/۱۲/۲ • ۱ ٤	۳-۱۰ Circuit Queue (CQ)	
۲۱	•9/17/7•12	^ゲ - ¹ Touble Ended Queue	
18	17/17/7・12	٤-١ Storage Allocation	
		٤-۲ Sequential Storage Allocation	
١٤	۲۳/۱۲/۲۰۱٤	٤-٣ Dynamic Storage Allocation	
10	۳۰/۱۲/۲۰۱٤	٤-٤ Pointers	
١٦	•7/•1/٢•10	Term Exam	
1 V	17/02/2010	۲۵۱۲ – Year break ٤-٥ Linked List	
		5 J Linked Stock	
١٨	72/07/7010	٤-۷ Linked Stack ٤-۷ Linked Queue	
14	7 £/• 7/7 • 10	٤- ۲ Linked Stack ٤-۲ Linked Queue ٤-۸ Circular Linked List	
14	7 2/ • 7/7 • 10	٤- ۲ Linked Stack ٤- ۲ Linked Queue ٤- ۸ Circular Linked List ٤. ۹ Double linked List	
1 1 1	Y £/. Y/Y . 10 . W/. W/Y . 10	۲-۹ Linked Stack ۲-۹ Linked Queue ۲-۹ Circular Linked List ۲-۹ Double linked List ۲-۱ Graph	
14	Y E/. Y/Y . 10 . W/. W/Y . 10	۲-۹ Linked Stack ۲-۹ Linked Queue ۲-۸ Circular Linked List ۲-۹ Double linked List ۲-۱ Graph ۲-۹ Tree structure	
۱۸ ۱۹ ۲۰	Y £/. Y/Y . 10 . Y/. Y/Y . 10	 ٤- ٢ Linked Stack ٤- Υ Linked Queue ٤- Λ Circular Linked List ٤. ٩ Double linked List ٥- ٦ Graph ٥- ٢ Tree structure ٥- ٣ Binary Tree 	
۱۸ ۱۹ ۲۰	Y E/. Y/Y . 10 . W/. W/Y . 10	 2- Y Linked Stack 2-Y Linked Queue 2-A Circular Linked List 2-A Circular Linked List 2-A Double linked List	
۱۸ ۱۹ ۲.	Y £/. Y/Y . 10 . T/. T/Y . 10 1./. T/Y . 10	 2- Y Linked Stack 2-Y Linked Queue 2-A Circular Linked List 2-A Circular Linked List 2-Y Double linked List 2-Y Graph 2-Y Tree structure 2-Y Binary Tree 2-Y Other Types Tree 2-0 Tree Traversing 	
۱۸ ۱۹ ۲. ۲۱ ۲۲	Y £/. Y/Y . 10 . T/. T/Y . 10 1./. T/Y . 10 IV/. T/Y . 10 Y £/. T/Y . 10	 ٤- ۲ Linked Stack ٤- Υ Linked Queue ٤- Λ Circular Linked List ٤. ٩ Double linked List ٥- ١ Graph ٥- ٢ Tree structure ٥- ٣ Binary Tree ٥- ٤ Other Types Tree ٥- ٥ Tree Traversing ٥- ٦ Trees Representation 	

۲ź	• ٧/• ٤/٦ • ١ 0	°-^ Binary Tree	
70	1 2/ • 2/7 • 10	۰-۹ Representation of Arithmetic Expression using Binary Tree	
77	71/•2/7•10	o-1. Tree Transformation	
۲۷	71/.2/7.10	o-11 Binary Search Tree	
۲۸	.0/.0/7.10	٦.١ Heap Sort	
29	17/.0/7.10	٦.۲ Selection Sort	
۳.	19/.0/7.10	Program applications	
۳١	11/0/10	Program applications	
۳۲	• 7/• 7/7 • 10	End Term Exam	

INSTRUCTOR Signature:

Dean Signature: