Republic of Iraq
The Ministry of Higher Education &
Scientific Research

University: Anbar
College: CS & IT
Department: Computer networks systems
Stage: 2
Instructor name:
Academic status:
Qualification:
Place of work:

Course Weekly Outline

Course Name: Data Structures

Course Instructor	Maha Mahmood				
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Title	Teacher				
Course Coordinator	Maha Mahmood				
Course Objective	1- Learning different data structures 2- Understand why this data structure is better than the other one. 3- Learning how to choose the best data structure for your algorithm. 4- learn how to deal with your problem, building its algorithm and fitting the best data structures to it.				
Course Description	This course covers all data structure types. It starts with defining algorithms and their complexity from the time and space prospection. Then, a list of data structure and their description is presented. The course describes every data structure in detail. In addition to that, it gives the reason to why we need this data structure and where to use it. This course includes many projects that give more understanding to the data structure studied. These projects talks about real life problems that we ask student to use one of the data structure that has been presented in the course to solve it.				
Textbook	Introduction to Algorithm, third Edition, Thomas H. Cormen Algorithms, fourth edition, Robert Sedgewick and Kevin Wayne				
References	Introduction to Algorithm, third Edition, Thomas H. Cormen Algorithms, fourth edition, Robert Sedgewick and Kevin Wayne				
Course Assessments	Term Tests	Laboratory	Quizzes	Project	Final Exam
	%20	%10	%5	%15	%50
General Notes					

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Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Introduction for data structure Introduction		
2		Learn the basic principles		
3		Learn the array in different domination Array Data structure	Accountant application using arrays	
4		Learn stack and its operation		
5		Learn one of the stack application	Student information system using stack	
6		Learn Queue and its operation		
7		. Learn circular Queue and its operation		
8		Review for Pointer &Structure		
9		exam		
10		Learn Linked list representation		
11		Learn Linked list operations		
12		Learn Doubly Linked list representation		
13		Learn Doubly Linked list operations		
14		second semester exam		
15		review		

Instructor Signature:

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