Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Anbar
College: CS & IT
Department: CS & IT
Stage: 4
Instructor name: Dr. Foad Salem
Academic status: Lecturer
Qualification: PhD
Place of work: Karkuk

Course Weekly Outline

Course Name : Object oriented Programming(2 course)

Course Instructor	Dr. Foad Salem Mubarek				
E-mail	Fualku1968@yahoo.com				
Title	OOP				
Course Coordinator	Dr. Foad Salem Mubarek				
Course Objective	Teaching the students the concepts of OOP by using C++ programming				
Course Description	Depending on the oop concepts the student able to create his / her user data unit. This approach facilitates solving the real life problems, so their skills improved.				
Textbook	Object-oriented Programming with C++ , E BALAGURUSAMY, McGraw-Hill				
References					
Course Assessments	TermTests	Laboratory	Quizzes	Project	Final Exam
	25%	15%	5%	5%	50%
General Notes					

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Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Operator Overloading	Exp. 1 with C++	
2		Overloading Unary Operators	Exp. 2	
3		Overloading binary Operators	Exp.3	
4		Inheritance	Exp4	
5		Single Inheritance	Exp5	
6		Multilevel Inheritance	Exp6	
7		Pointers to objects	Exp7	
8		Polymorphism	Exp8	
9		Virtual Function	Exp9	
10		I/O stream	Exp10	
11		Unformatteed I/O operations	Exp11	
12		Files in C++	Exp12	
13		Opening File	Exp13	
14		File Modes	Exp14	
15		Pointers to objects	Exp15	

Instructor Signature: **Dean Signature:**

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University: Anbar
College: CS & IT
Department: computer science
Stage: 2nd
Instructor name: Ali j. Dawood
Academic status: Assist. Prof.
Qualification: Phd computer science
Place of work: Ar Ramadi

Course Weekly Outline

Course Name : Computational theory 2

Course Instructor	Assist. Prof. Dr. Ali Jbaeer Dawood				
E-mail	dralijd@yahoo.com				
Title	Assist. Prof.				
Course Coordinator					
Course Objective					
Course Description	Grammar, Chomsky Normal Form, Greibach Normal Form, LMD & RMD, Ambiguity, Regular language, PDA, TM, PM .				
Textbook	Daniel L. A. Cohen, Introduction of the theory of computation.				
References	-Lewis, H.R. and Papadimitriou, Christos. 1998. Elements of the Theory of Computation. 2nd Edition. Prentice-Hall.				
Course Assessments	TermTests	Laboratory	Quizzes	Project	Final Exam
	Exam1=15% Exam 2=15%		10%	-	60%
General Notes					

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

Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Regular Grammar (RG or FSG)		
2		Context Free Grammar (CFG)		
3		Grammar Generating, LMD & RMD, Parsing tree		
4		Ambiguity in CFG		
5		Chomsky Normal Form		
6		Greibach Normal Form		
7		Push Dawn Automata (PDA) for a^nb^n		
8		Push Dawn Automata (PDA) for $a^nb^nb^na^n$		
9		Tracing in PDA		
10		Turing Machine (TM)		
11		Insert, delette, replace TM subprogram		
12		Post Machine (PM)		
13		PM tracing		
14		Regular language		
15		Regular language		

Instructor Signature:

Dean Signature:

Republic of Iraq
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University: Anbar
College: CS & IT
Department:
Stage: 2nd
Instructor name:Suhail M.Ali
Academic status: teacher
Qualification: Msc
Place of work: Anbar

Course weekly Outline

Course Name :Numerical analysis

Course Instructor	Suhail M. Ali				
E-mail	Suhael1958@yahoo.com				
Title	**Numerical analysis**				
Course Coordinator	15 weeks				
Course Objective	Training students on the Numerical methods to solve mathematical problems that CAN NOT be solved by ordinary methods.				
Course Description	Numerical Methods for Computer Applications				
Textbook	1:Calculas , Thomas ,1990,5th edition 2: The Student Edition of Matlab ' The Language of Technical Computing' Version 5 in 1997.by Duane Hanselman .Prentice-Hall; Inc.				
References	Matlab User's Guide from www.MathWorks .com				
Course Assessments	TermTests	Laboratory	Quizzes	Project	Final Exam
	As (30 %)	(15%)	(5%)	----	50%
General Notes					

Republic of Iraq
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University: Anbar
College: CS & IT
Department:
Stage: 2nd
Instructor name:Suhail M.Ali
Academic status: teacher
Qualification: Msc
Place of work: Anbar

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	8-2-2016	Sol of Non linear eq. Iteration Method	Matlab sol.1	
2	15-2	ex	ex	
3	23-2	Sol of Non linear eq.Newton's Method	Matlab sol.2	
4	2-3	ex	ex	
5	9-3	Ex on Method 1 &2 together	ex	
6	16-3	Numerical integration trapezoidal M.	Matlab sol N.I	
7	23-3	Ex	ex	
8	30-3	Ex	ex	
9	6-4	Sol of Diff. Eq. Euler M (1)	Matlab sol Diff. Eq.	
10	23-4	Ex	ex	
11	30-4	Ex	ex	
12	7-5	Sol of Diff. Eq. Euler M (2) improved	Sol of Dif. Eq Matlab	
13	13-5	Ex	ex	
14	20-5	Ex	ex	
15	27-5	Review	Review	
16	5-6	exams	exams	

Instructor Signature: **Dean Signature:**

Course Weekly Outline

Republic of Iraq
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University: Anbar
College: CS & IT
Department: computer science
Stage: second
Instructor name: Falath Mansuor
Academic status: Assist.Instructor
Qualification: Computer Science.Mster
Place of work: Anbar University

Course Weekly Outline

Course Name :Second Course

Course Instructor	فلذ منصور محمد				
E-mail	falathm@yahoo.com falath2@gmail.com				
Title	Computer theory				
Course Coordinator					
Course Objective	Give the student computer theores				
Course Description	Give student good understand about computer theories and how they used to get optimal solution to our problems				
Textbook	Introduction to Algorithms Second Edition				
References					
Course Assessments	TermTests	Laboratory	Quizzes	Project	Final Exam
	(20%)	(10 %)	(10 %)	(10 %)	(50%)
General Notes					

Republic of Iraq
The Ministry of Higher Education
& Scientific Research

University: Anbar
College: CS & IT
Department:: computer science
Stage: second
Instructor name: Falath Mansour
Academic status: Assist.Instructor
Qualification: Computer Science.Mster
Place of work: Anbar University

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1		Basic Concepts in Algorithmic Analysis		
2		Introduction to Algorithm		
3		The Big-O Notation		
4		Linear Search Problem		
5		Binary Search Problem		
6		Sorting & Searching , Goal of Sorting , Sorting Steps		
7		،Bubble Sort		
8		Quick Sort, Merge Sort		
9		حل اسئلة ومشاكل متعلقة بالفصل		
10		Insertion Sort		
11		Selection Sort		
12		Graph Algorithms		
13		Searching Graphs		
14		Depth search		
15		first search-		

Course Weekly Outline

Instructor Signature: **Dean Signature:**

Republic of Iraq
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University: Anbar
College: CS & IT
Department: Information Systems
Stage: Third Class
Instructor name: Dr. Raed I Hamed
Academic status: Doctor
Qualification: Computer science Ph.D.
Place of work: CS & IT

Course Weekly Outline

Course Name : Database Management System

Course Instructor	Dr. Raed Ibraheem Hamed				
E-mail	Raed_inf@yahoo.com				
Title	Database Management System				
Course Coordinator					
Course Objective	After finishing the program students are expected to have mastered the knowledge and skills to carry out the following analytical tasks: MSA students will build and deploy analytical models across organizations that fit the underlying organizational needs and the analytical problem(s) identified				
Course Description	Developing and managing efficient and effective database applications requires understanding the fundamentals of database management systems, techniques for the design of databases, and principles of database administration.				
Textbook	Database Management Systems, Third Edition Raghu Ramakrishnan, Johannes Gehrke ISBN: 0-07-246563-8 Publisher: McGraw-Hill Higher Education Pub. Date: 2003				
References	**Fundamentals of Relational Database Management Systems**, By S. Sumathi and S. Esakkirajan, SpringerVerlang, 2010, ISBN 978-3-642-08012-8; eISBN 978-3-540-48399-1. (referred to below as S&E)				
Course Assessments	TermTests	Laboratory	Quizzes	Project	Final Exam
	40%	15%	5%		40%
General Notes					

Republic of Iraq
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University: Anbar
College: CS & IT
Department: Information Systems
Stage: Third Class
Instructor name: Dr. Raed I Hamed
Academic status: Doctor
Qualification: Computer science Ph.D.
Place of work: CS & IT

Course Weekly Outline

Week	Date	Topics Covered	Lab. Experiment Assignments	Notes
1	**18/1/٢٠١6**	Introduction to database management systems		Chapter1
2	**25 /1/٢٠١6**	- Basic concepts Database Modeling		Chapter2
3	**2/2/٢٠١6**	The Relational Data Model Conceptual Design: Mapping Relational Model		Chapter2
4	**9/2//٢٠١6**	Database administration – Transaction Management – Concurrency ContolObject		Chapter2
5	**16/2/٢٠١6**	Distributed and Cloud Databases		Chapter3
6	**23/2/٢٠١6**	Relational Commands, Embedded SQL, Stored Procedures, Triggers		Chapter3
7	**30/2//٢٠١6**	Exam Review Functional Dependencies,		Chapter
8	**6/3//٢٠١6**	Normalization		Chapter4
9	**13/3/٢٠١6**	Database administration		Chapter5
10	**20/3 /٢٠١6**	ER Model and Conceptual Design The Relational Model and SQL DDL		Chapter6
11	**27/3/٢٠١6**	Relational Algebra and Relational Calculus		Chapter7
12	**4/4/ ٢٠١6**	Physical Database Design, Database Tuning		Chapter8
13	**11/4/٢٠١6**	Schema Refinement, Functional Dependencies, Normalization		Chapter8
14	**18/4/٢٠١6**	Security and Authorization		Chapter9
15	**25/4/٢٠١6**	A Typical Relational Optimizer		Chapter10

Instructor Signature: **Dean Signature:**