Course Weekly Outline

Course Lecturer	Asst. Lecturer. Athraa Qays Obaid	
e-mail	athra.qais@sa-uc.edu.iq	
Title	Security of computers and networks	
Course Coordinator		
Course Objective	The general goal of the course is to understand the basic principles of various encryption and decryption algorithms, as well as cryptanalysis methods.	
Course Description	This course description provides a brief introduction to computer and network security systems, particularly focusing on techniques for protecting information systems. Topics include security attacks, mechanisms, services, data encryption, key management and distribution, user authentication, and communication system security.	
Textbook	William Stalling," cryptography and network security principles and practice ", 6th ed., 2015, Pearson.	
References	Google Scholar (e.g., academic papers, journal articles, etc.).	

Course Assessment	Term Exam	Project	practical	Quizzes and Attendance	Final Exam
	10	0	5	5	60

General Notes		

Republic of Iraq
The Ministry of Higher Education and
Scintific Resrearch
Supervision and Scientific Evaluation
Bodya

College : Shatt Al- Arab University
College
Department : Computer Technology
Engineering
Stage: Fourth
Lecturrer Name: Athraa Qays Obaid
Academic Status: Lecturer
Qualification: Lecturrer at : Shatt Al-
Arab University College

Week	Date	Topics Covered	Number of Hours	Notes
1-3	18/9/2024	• Basic concepts of encryption and decryption	6	
4	9/10/2024	• Caesar cipher and the affine cipher	2	
5-6	16/10/2024	• Monoalphabetic substitution ciphers	4	
7	30/10/2024	• Transposition ciphers	2	
8	6/11/2024	• Playfair cipher	2	
9	13/11/2024	• Polyalphabetic ciphers	2	
10-13	20/11/2024	• Vigenère cipher	8	
14-16	4/12/2024	• Permutation cipher	6	
17	18/12/2024	• Euclidean method	2	
18-19	25/12/2024	• Application of encryption methods using symmetric key	4	
20-22	8/1/2025	• Application of encryption methods using public key	6	
23-27	22/1/2025	• Application of sender authentication methods	10	
28	5/2/2025	• Application of email protection methods	2	
29-30	12/2/2025	• Introduction to operating system protection methods	4	

Lecturer signature   **Head of Department Signature**