



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

Faculty	Business	Department	Management Information System
Course number	0506435	Course title	Information Security
Number of credit hours	3	Pre-requisite/co-requisite	Networks for Business

This course objective is to define security and there solution techniques. It was created based on a common body of knowledge (CBK) that many security related individuals have a massed over years. The CBIT is continually updated to stay current in the rapidly changing atmosphere of information security

Course goals and learning outcomes	
Goal 1	Foundation for understanding the broader field of information security.
Learning outcomes	The student shall be able to understand the principles of computer system security
Goal 2	Examines the business drivers and technological security needs.
Learning outcomes	The student shall be able to know what are the foundation theory behind information security including operating system security, network security, s/w security and web security
Goal 3	Examines the various threats facing organization and present methods for ranking these threats that organizations can use when they begin their security planning process.
Learning outcomes	The student shall be able to understand what are the common threats faced today
Goal 4	Defining risk management as the process of identifying, assessing, and reducing risk to an acceptable level and implementing effective control measures to maintain that level of risk.
Learning outcomes	The student shall be able to understand and measure the risk faced an organization, and will compute the risk and the methods of redusing.
Goal 5	Present a number of widely accepted security models and frameworks. Examines best business practices and standards of due care and due diligence, and offers an overview of the development of security policy.
Learning outcomes	The student will understand the basic and advanced techniques when designing a secure system
Goal 6	Understand the major components, scope, and target audience for each of the levels of security policy.
Learning outcomes	This goal will make the students know the polices of security such as Biba and BLP
Goal 7	Understanding of the underlying foundations of modern cryptosystems.
Learning outcomes	The student shall be understand the foundational cryptography, RSA and Cryptographic hash function
Goal 8	Examines some of the mathematical techniques that comprise cryptosystem, comparing traditional symmetric encryption systems with more modern asymmetric



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	encryption systems, and also examine the role of asymmetric system as the foundation of public-key encryption system.
Learning outcomes	Some methods of encryption and decryption will be apply and perform
Goal 9	Understand the various definitions and categorization of firewall technologies and the architectures under which firewall may be deployed.
Learning outcomes	Common hacking techniques, firewall technologies in Unix security
Goal 10	Understand the concept of the intrusion, and the technologies necessary to prevent, detect, react, and recover from intrusion. Understand types of intrusion detection and prevention systems (IDPSs)
Learning outcomes	Understand use authentication, cybercrime and computer crime
Textbook	Principles of Information Security, M. E. Whitman, & H. J. Mattord , Course Technology 2016.
Supplementary references	Information Security Principles and Practices, M. Merkow, &J. Breithaupt, Prentice Hall, 2006.

Course timeline				
Week	Number of hours	Course topics	Pages (textbook)	Notes
01	1 1 1	Overview of Information Security(IS) The history of IS What is Security Components of an IS Approaches to IS implementation The security system Development Cycle	TextBook:8-15 Ref:2-8	1
02	1 1 1	Information Security Principles of success Why security is needed Secure software development	TextBook: 37-72 Ref:19-32	2و1
03	1 1 1	Information Security Principles of success Security Professional and the organization Information security:Is it an art or a science	TextBook:31-23	
04	1 1 1	Managing IT Risk An overview of risk management Risk identification Risk Assessment	TextBook:116-143 Ref:27-29	3و2
05	1 1 1	Managing IT Risk Risk control strategies Quantitative versus qualitative risk control Practices Business Continuity Planning and Disaster Recovery Planning	TextBook:144-159	



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06	1 1 1	Professional, legal, and ethical issues in IS Introduction to Law and Ethics in IS Security Policies set the stage for success Four types of Policies	TextBook:87-89 Ref: 59-65	4
07	1 1 1	Professional, legal, and ethical issues in IS Four types of Policies Who is responsible for security Development and Management of security policies	Ref: 66-70 Ref: 80	
08	1 1 1	Cryptography Foundations of cryptology Applying cryptography to IS Basic terms and concepts Strength of cryptosystems Examining digital cryptography	Textbook:337-362	4
09	1 1 1	Cryptography Cipher Methods Cryptographic Algorithm Cryptographic Tools	TextBook:362-378	
10	1 1 1	Cryptography Protocols for secure communications Attacks on cryptosystems	TextBook:378-379 Ref:229-246	
11	1 1 1	Telecommunication, Network, and Internet Network and Telecommunication security The open system interconnection (OSI) references Protecting TCP/IP network	Ref:257-259 TextBook:237-242	4
12	1 1 1	Basic Security Infrastructures Firewalls	Textbook:242-269	5
13	1 1 1	Basic Security Infrastructures Intrusion Detection Systems	TextBook:270-274	
14	1 1 1	Practice		
15	1 1 1	Project		
16	1 1 1	project		

Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	Practical (clinical) course evaluation methods	Semester students' work = 50% (Reports, research, quizzes, etc.) Final exam = 50%
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Approved by head of department		Date of approval	
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Extra information (to be updated every semester by corresponding faculty member)

Name of teacher	Dr. Muna F. Alsammaraie	Office Number	
Phone number (extension)	127	Email	mona.s@zug.edu.jo
Office hours			