QF05/0408-4.0 E	Course Plan for Bachelor program - Study Plan Development and Updating Procedures/ Management Information Systems Department

Study plan No.	Business		**University Specialization**		Management Information Systems	
Course No.	0506435		**Course name**		Information Security	
Credit Hours	3		**Prerequisite/ Co-requisite**		0506435	
Course type	MANDATORY UNIVERSITY REQUIREMENT	UNIVERSITY ELECTIVE REQUIREMENTS	FACULTY MANDATORY REQUIREMENT	Support course family requirements	✓ Mandatory requirements	Elective requirements
Teaching style	**Full online learning**		**Blended learning**		✓ **Traditional learning**	
Teaching model	**1 Synchronous: 1 asynchronous**		**2 face to face : 1 asynchronous**		✓**2 Traditional**	

Faculty member and study divisions' information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**
1				**Blended**	**2:1**

Brief description

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

Learning resources

Course book information (Title, author, date of issue, publisher ... etc.)	Principles of Information Security, M. E. Whitman, & H. J. Mattord , Course Technology 2016.			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	Information Security Principles and Practices, M. Merkow, &J. Breithaupt, Prentice Hall, 2006.			
Supporting websites				
The physical environment for teaching	✓ Class room	labs	Virtual educational platform	Others
Necessary equipment and software				
Supporting people with special needs				
For technical support				

Course learning outcomes (S= *Skills, C= Competences K= Knowledge,)*

No.	Course learning outcomes	The associated program learning output code

	Knowledge	
K1	The student shall be able to understand the principles of computer system security.	**MK1**
K2	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.	**MK3**
K3	The student shall be able to understand what are the common threats faced today	**MK2**
K4	The student will understand the basic and advanced techniques when designing a secure system.	**Mk4**
	Skills	
S1	Develop skills to use certain Microsoft Excel tool functions and techniques in analyzing data.	**MS1**
S2	Develop teamwork and presentation skills	**MS2**
S3	Oral communication skill	**MS3**
C1	Building a Foundation for understanding the broader field of information security.	**MC1**
C2	Examine the various threats facing organization and present methods for ranking these threats that organizations can use when they begin their security planning process.	**MC2**
C3	- Define 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. - 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.	**MC3**
C4	Examine some of the mathematical techniques that comprise cryptosystem, comparing traditional symmetric encryption systems with more modern asymmetric encryption systems, and also examine the role of asymmetric system as the foundation of public-key encryption system.	**MC4**

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
Midterm exam		**30%**		
Participation / practical applications		**0**		
Asynchronous interactive activities		**30%**		
Final exam		**40%**		

Note 1: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Note 2: According to the Regulations of granting Master's degree at Al-Zaytoonah University of Jordan, 40% of final evaluation goes for the final exam, and 60% for the semester work (examinations, reports, research or any scientific activity assigned to the student).

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
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	Lecture	TextBook:8-15 Ref:2-8
2	**Information Security Principles of success** - Why security is needed - Secure software development	Lecture	TextBook: 37-72 Ref:19-32
3	**Information Security Principles of success** - Security Professional and the organization - Information security: Is it an art or a science.	Lecture	TextBook:31-23
4	**Managing IT Risk** - An overview of risk management - Risk identification - Risk Assessment	Lecture	TextBook:116-143 Ref:27-29
5	**Managing IT Risk** - Risk control strategies - Quantitative versus qualitative risk control Practices - Business Continuity Planning and Disaster Recovery Planning	Lecture	TextBook:144-159
6	**Professional, legal, and ethical issues in IS** - Introduction to Law and Ethics in IS - Security Policies set the stage for success - Four types of Policie	Lecture	TextBook:87-89 Ref: 59-65
7	**Professional, legal, and ethical issues in IS** - Four types of Policies - Who is responsible for security	Lecture	Ref: 66-70 Ref: 80

	- Development and Management of security policies		
8	**Cryptography** - Foundations of cryptology - Applying cryptography to IS - Basic terms and concepts - Strength of cryptosystems - Examining digital cryptography	Lecture	Textbook:337-362
9	**Cryptography** - Cipher Methods - Cryptographic Algorithm - Cryptographic Tools	Lecture	TextBook:362-378
10	**Cryptography** - Protocols for secure communications - Attacks on cryptosystems	Lecture	TextBook:378-379 Ref:229-246
11	**Telecommunication, Network, and Internet** - Network and Telecommunication security - The open system interconnection (OSI) references - Protecting TCP/IP network	Lecture	Ref:257-259 TextBook:237-242
12	**Basic Security Infrastructures** - Firewalls	Lecture	Textbook:242-269
13	**Basic Security Infrastructures** - Intrusion Detection Systems	Lecture	TextBook:270-274
14	**Practice**	Lecture	TextBook:8-15 Ref:2-8
15	**Project**	Lecture	TextBook: 37-72 Ref:19-32
16	**project**		

*** Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.**
**** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.**

Schedule of asynchronous interactive activities (in the case of e-learning and blended learning)

Week	Task / activity	Reference	Expected results
1	Selected tasks\ activities will be provided to students	Will be provided to students	
2	Selected tasks\ activities will be provided to students	Will be provided to students	
3	Selected tasks\ activities will be provided to students	Will be provided to students	
4	Selected tasks\ activities will be provided to students	Will be provided to students	
5	Selected tasks\ activities will be provided to students	Will be provided to students	
6	Selected tasks\ activities will be provided to students	Will be provided to students	

7	Selected tasks\ activities will be provided to students	Will be provided to students	
8	Selected tasks\ activities will be provided to students	Will be provided to students	
9	Selected tasks\ activities will be provided to students	Will be provided to students	
10	Selected tasks\ activities will be provided to students	Will be provided to students	
11	Selected tasks\ activities will be provided to students	Will be provided to students	
12	Selected tasks\ activities will be provided to students	Will be provided to students	
13	Selected tasks\ activities will be provided to students	Will be provided to students	