الرقم: ٦٦/١٨٨٣١ التاريخ: ١٤٤٤/٠٥/١١ عدد المرفقات: *

هيئة تقويم التعليم والتدريب
Education & Training Evaluation Commission

اعتماد NCAAA T4 2020

Course Specifications

Course Title:	Information Security
Course Code:	IT 422
Program:	Information Technology
Department:	Information Technology
College:	Colleague of Computer and Information Sciences
Institution:	Majmaah University

الرقم: ٦٦/١٨٨٣١ التاريخ: ١٤٤٤/٠٥/١١ عدد المرفقات: *

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A. Course Identification

1. Credit hours: **3(3,0,1)**
2. Course type **a.** University ☐ College ☐ Department ☒ Others ☐ **b.** Required ☒ Elective ☐
3. Level/year at which this course is offered: Level 8/ Fourth year
4. Pre-requisites for this course (if any)**:** IT 341: Data Transmission and Computer Networks
5. Co-requisites for this course (if any)**:**

6. Mode of Instruction (mark all that apply)

No	Mode of Instruction	Contact Hours	Percentage
1	**Traditional classroom**	**44**	**100%**
2	**Blended**		
3	**E-learning**		
4	**Distance learning**		
5	**Other**		

7. Contact Hours (based on academic semester)

No	Activity	Contact Hours
1	**Lecture**	**29**
2	**Laboratory/Studio**	
3	**Tutorial**	**15**
4	**Others** (specify)	
	Total	**44**

B. Course Objectives and Learning Outcomes

1. Course Description The topics related to this course are listed in the section: course content.
2. Course Main Objective This course addresses aspects of information security. Topics include objectives of information security systems, Components of an Information System, The Security Systems Development Life Cycle, types of threats and attacks, Ethics and Information Security, overview of Risk Management, Risk Identification, Risk Assessment, Risk Control Strategies, Security Technology: Firewalls and VPNs, Intrusion Detection and Prevention Systems, and Other Security Tools , Cryptography, Cryptographic Tools, Protocols for Secure Communications, Attacks on Cryptosystems, Physical Security, and other security issues.

3. Course Learning Outcomes

	CLOs	Aligned PLOs
1	**Knowledge and Understanding**	
1.1	CLO2: Aware of the important of security, policies and procedures and knowledge of Computer Forensic	K1
1.2	CLO3: Aware of the security threats and how to mitigate them	K1
1.3	CLO5: Understand the different types of cryptography and its applications	K1
2	**Skills :**	
2.1	CLO1: Design, implement security solutions to protect information	S2
2.2	CLO4: Be able to design secure network	S1
2.3		
2...		
3	**Values:**	
3.1		
3.2		
3.3		
3...		

C. Course Content

No	List of Topics	Contact Hours
1	Introduction to Information Security	4
2	Threats and attacks	4
3	Risk management	4
4	Security planning	4
5	Network Security I	4
6	Network Security II	4
7	Scanning and Analysis Tools	8
8	Cryptology	4
9	Physical security	4
10	Security and Personal	4
Total		44

D. Teaching and Assessment

1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.0	**Knowledge and Understanding**		

Code	Course Learning Outcomes	Teaching Strategies	Assessment Methods
1.1	CLO2: Aware of the important of security, policies and procedures and knowledge of Computer Forensic	Classroom Teaching	Test, Mid Exam, Final Exam
1.2	CLO3: Aware of the security threats and how to mitigate them	Classroom Teaching	Test, Mid Exam, Final Exam
1.3	CLO5: Understand the different types of cryptography and its applications	Classroom Teaching	Test, Mid Exam, Final Exam
2.0	**Skills**		
2.1	CLO1: Design, implement security solutions to protect information	Lab based assiognment/Project& Exercise Teaching	Lab Based Assignments, Lab Test, Mid Exam, Final Exam, Mini Project.
2.2	CLO4: Be able to design secure network	Classroom & Exercise Teaching	Lab Based Assignments, Lab Test, Mid Exam, Final Exam, Mini Project.
…			
3.0	**Values**		
3.1			
3.2			
…			

2. Assessment Tasks for Students

#	Assessment task*	Week Due	Percentage of Total Assessment Score
1	Tests(2)	Week 4, Week 12	10%
2	Mid Term Exam	Week 8	20%
3	Exercise	Every Week	10%
4	Lab Based Assignments/ Mini Project Presentation	Week 8,week 14	20%
5	Final Exam	Week 16	40%

***Assessment task** (i.e., written test, oral test, oral presentation, group project, essay, etc.)

E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice :

Each student is allotted to an academic advisor for guidance and counselling

F. Learning Resources and Facilities

1.Learning Resources

Required Textbooks	Principles of Information Security, Michael E. Whitman and Herbert J. Mattord, 5th ed., Thomson/Cengage Learning, 2016
Essential References Materials	
Electronic Materials	Web References and downloads: http://lms.mu.edu.sa
Other Learning Materials	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	Classroom
Technology Resources (AV, data show, Smart Board, software, etc.)	PC or Laptop with Windows/Linux, Smart Board, Projector
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	Internet Connection

G. Course Quality Evaluation

Evaluation Areas/Issues	Evaluators	Evaluation Methods
Test/Quiz/Mid Term/ Final Exam assessment (Extent of achievement of course learning outcomes)	Course instructor	Direct
Course Survey in the middle of the semester and at the end of the semester (Effectiveness of teaching and assessment)	Students	Indirect
Extent of achievement of course learning outcomes	Students	Indirect
Final Exam Answer Scripts Verification	Peer faculty members	Review (Direct)

Evaluation areas (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)
Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)
Assessment Methods (Direct, Indirect)

H. Specification Approval Data

Council / Committee	

الرقم: ٦٦/١٨٨٣١ التاريخ: ١٤٤٤/٠٥/١١ عدد المرفقات: *

Reference No.	
Date	