KINGDOM OF SAUDI ARABIA
IMAM MOHAMMAD IBN SAUD ISLAMIC UNIVERSITY
COLLEGE OF COMPUTER AND INFORMATION SCIENCES
INFORMATION SYSTEMS DEPARTMENT
BACHELOR IN INFORMATION SYSTEMS

المملكة العربية السعودية
جامعة الإمام محمد بن سعود الإسلامية
كلية علوم الحاسب والمعلومات
قسم نظم المعلومات
بكالوريوس نظم المعلومات

SYLLABUS

IS1389: Information Security

CREDIT HOURS	3 credit hours (Lectures: 3)		PREREQUISITE	IS1380

Instructor:
Contact information and office hours
Office No: To be announced (TBA)
Office Hours: TBA
E-mail: _____@imamu.edu.sa

COURSE DESCRIPTION
The target of the course is to introduce topics related to information security. The students will learn about information security terminologies, cryptography techniques, access control algorithms, authentication and security protocols, software flaws, malicious software, information security ethics and laws and information systems security development project.

	COURSE LEARNING OUTCOMES (CLOs)	Aligned SOs
1	**Knowledge and Understanding**	
1.1	Describe information security's importance in our increasingly computer-driven world.	1(I)
1.2	Outline the key concepts of information security terminologies.	1(I)
1.3	Describe the fundamental issues in designing access control models and authentication and security protocols.	1(I)
1.4	List the main characteristics of software flaws and malicious software	1(I)
1.5	State information security ethics & laws.	4(P)
2	**Skills :**	
2.1	Express the main cryptography algorithms.	1(I)
2.2	Plan and organize an information systems security development project.	2(P)
2.3		
2.4		

2.5		
3	**Values:**	
3.1	Work effectively in groups and exercise leadership when appropriate	5(P)
3.2	Communicate effectively in oral and written form	3(P)
3.3		
3.4		
3.5		

TEACHING Strategies
Lectures
Self-Learning

No	List of Topics	Contact Hours	Self-Learning
1	Introduction to Information Security	3	
2	Basic Cryptography	3	
3	Symmetric Key Cryptosystems (RC4 topic is self-learning)	3	2
4	Public Key Cryptosystems	6	
5	Access Control-Authentication /(Fingerprint History topic is self-learning)	3	2
6	Access Control-Authorization	3	
7	Authentication Protocols	3	
8	Security Protocols (WEP is self-learning)	6	1
9	Software Flaws and Malware	3	
10	Information Security Ethics & Laws (self-learning)	3	1
11			
12			
Total		**36**	**6**

TEXT BOOK
Information Security Principles and Practice, 2nd edition, Mark Stamp, Wiley Publications, 2011, ISBN 978-0470626399.

REFERENCES
Information Security: Principles and Practices; Mark S. Merkow, Jim Breithaupt, Published Jun 4, 2014 by Pearson; ISBN-10: 0-7897-5325-1, ISBN-13: 978-0-7897-5325-0 Understanding Cryptography, 1 edition, ChristofPaar; Jan Pelzl, Springer, 2010, ISBN 978-3642041006. Computer Security, 3rd edition, Dieter Gollmann, John Wiley&Sons, 2011, ISBN 978-0470741153.

No	Course Assessment Methods		
	Assessment Method	Due Week	% of Total Assessment
1	Quiz	4	10
2	Assignment	9	10
3	Midterm	7	20
4	Project / Lab Exam	11	20
5	Final Exam	13	40