Syrian Arab Republic		الجمهورية العربية السورية
Ministry of Higher Education		وزارة التعليم العالـــي
Syrian Virtual University		الجامعة الافتراضية السورية

Course Definition:

1- Basic Information:

Course Name	Computer Security
Course ID	CSR
Contact Hours (Registered Sessions)	15
Contact Hours (Synchronized Sessions)	15
Mid Term Exam	2
Exam	2
Registered Sessions Work Load	15
Synchronized Session Work Load	30
Credit Hours	3

2- Pre-Requisites:

Course	ID
Computer Security	

Course General Objectives:

Security threats to important and personal information are realistic and allow to ignore them is no longer acceptable, because the damage is inevitable. This course aims at identifying the security vulnerabilities in computer systems and threats encountering them, explaining methods of protecting stored and transferred data, and developing and using security tools and mechanisms to detect and respond to security problems.

3- Intended Learning Outcomes (ILO):

Code	Intended Learning Outcomes
ILO1	Compare between threats and choose appropriate security objectives
ILO2	Compares the methods of protecting data during storage and transmission
ILO3	Use security tools to detect security vulnerabilities and threats
ILO4	Creates security solutions for computer applications

4- Course Syllabus (18 hours of total synchronized sessions)

Session #	Topics
1	Basics of computer security
2	Cryptography
3	Access Control
4	IP security Architecture
5	SSL, FW, IDS
6	Wireless Cellular Net Security
7	LAN security
8	DB security
9	Statistical DB security
10	Malware

5- Assessment Criteria (Related to ILOs)

ISC	Interactive Synchronized Collaboration	Ex	Exams		Rpt	Reports
PF2F	Presentations and Face-to-Face Assessments	PW	Practice Work			

ILO Code	ILO	Intended Results	Assessment Type				
			ISC	PW	Ex	PF2F	Rpt
ILO1	Compare between threats and choose appropriate security objectives		✓		✓		

ILO2	Compares the methods of protecting data during storage and transmission		✓		✓			
ILO3	Use security tools to detect security vulnerabilities and threats			✓				✓
ILO4	Creates security solutions for computer applications			✓				✓

6- Practice Tools:

Tool Name	Description
system.security.cryptography	A set of classes that enable the user to use symmetric and public-key ciphers, MAC, Digital Signature, and hash functions.

7- Main References

- **Textbook: SVU's CSR content**

- D. Gollmann, **Computer Security**, 3rd Edition, Wiley, 2010.

8- Additional References

- L. Brown and W. Stallings, "Computer Security: Principles and Practice," 3rd Edition, Pearson, 2014.

- M. Bishop, **Introduction to Computer Security**, Addison- Wesley, 2005.

- W. Stallings, **Network Security essentials** (3rd Edition), Prentice-Hall ,2007.

- F. Piper and S. Murphy, **Cryptography: A Very Short Introduction (Very Short Introduction)**, Oxford University Press, 2002.