

Detailed Course Description - Course Plan Development and Updating Procedures/ Computer Science Department	QF01/0408-3.0E
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Faculty	Science & Information Technology	Department	Computer Science
Course number	122483	Course title	E-commerce and its security
Number of credit hours	3	Pre-requisite/co-requisite	Information Security

The course describes the basic infrastructure that required to perform electronic commerce transactions. The various categories of e-commerce Web site and different models of payment systems available over the internet is also described. During this course, students are familiarized with various stages, producers and considerations related to planning, designing, hosting, and launching the Web site. In the second part of this course, the various legal and security issues involved in e commerce transactions will be described. The students will be familiarized with various needed methods and techniques to protect systems and make them more secure.

Course goals and learning outcomes	
Goal 1	Understanding the main concepts of e-commerce infrastructure and how launching a new online business.
Learning outcomes	1.1. Providing the basic knowledge of impact modern technology such as the internet on appearing the e-commerce transactions. 1.2. Familiarized with the needed steps for transforming the organization in to the e-business activities. 1.3. Ability to design, create and manage Web sites for transforming to e-commerce and e-business transactions.
Goal 2	Presenting and describing the characteristics of electronic payment systems types.
Learning outcomes	2.1. Cite the needs for different types of payment systems and using various kinds of payments such as (credit cards, e-checks, mobile payments, smart cards,,etc). 2.2. Familiarized with the risk of using electronic payments in transactions and ability to evaluate this risk. 2.3. Ability to use different types of e-payment methods to perform electronic transaction in the internet world.
Goal 3	Understanding the E-Commerce Security issues and Fraud Protection
Learning outcomes	3.1. Familiarized with security Terminology, threats, Attacks and attackers, Vulnerable areas and security requirements. 3.2. providing the knowledge with technical and non-technical attack 3.3. be able to apply the information assurance model and defense strategy (Access

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	Control, Encryption, and PKI, etc.) for defending system and applying business continuity plan.
Goal 4	Understand the foundations for legal and ethical issues in EC
Learning outcomes	4.1. Providing knowledge about intellectual property law and understand its adjudication. 4.2. be able to describe the needs to protect both buyers and sellers. 4.3. Ability to encounter privacy and free speech issues and their challenges.
Textbook	1. - Textbook: Electronic Commerce: managerial and social networks perspective 8 th Edition. Efraim Turban , David King and others. Pearson.2015. ISBN-13: 978-3319100906 ISBN-10: 3319100904 2. - Electronic commerce 12 edition. Gary Schneider . 2016. ISBN-13: 978-1305867819, ISBN-10: 1305867815
Supplementary references	1.- E-Commerce 2017 (13th Edition) 13th Edition, Kenneth C. Laudon (Author), Carol Guercio Traver . 2.- How To Get Away With E-Commerce Fraud, 2017, Edoardo Fiorentini. 3.- E-Commerce 2016: Business, Technology, Society (12th Edition), Kenneth C. Laudon , Carol Guercio Traver .

Course timeline

Week	Number of hours	Course topics	Pages (textbook)	Notes
01	1 1 1	Introduction to E-commerce: Electronic Commerce: Definitions and Concepts. The Electronic Commerce Field: Classification, Content, and a Brief History. The Digital World: Economy, Enterprises, and Society. Electronic Commerce Business Models.		
02	1 1 1	Getting into E-Commerce and Starting a New Online Business: PLANNING ONLINE BUSINESSES, funding a new online businesses, Adding E-Commerce Initiatives		

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		or Transforming to an E-Business, Building or Acquiring a Website		
03	1 1 1	Building or Acquiring a Website. Website Hosting and Obtaining a Domain Name, Content Creation, Delivery, and management. Website Design		
04	1 1 1	Providing E-Commerce Support Services, Opening a Webstore. Electronic Commerce Payment Systems: The Payment Revolution, Using Payment Cards Online, Smart Cards, Stored-Value Cards.		
05	1 1 1	E-Micropayments, E-Checking, Mobile Payments, B2B Electronic Payments		
06	1 1 1	E-Commerce Security and Fraud Protection: The Information Security Problem, Basic E-commerce Security Issues and Landscape (Basic security Terminology, the threats, Attacks and attackers, Vulnerable areas and security requirements.		
07	1 1 1	The Defense: Defenders, strategy and methods. Technical Attack Methods: From Viruses to Denial of Service (malicious code, viruses, worms, Trojans)		
08	1 1 1	Non-technical methods from phishing to spam.		
09	1 1 1	The Information Assurance Model and Defense Strategy, The Defense I: Access Control, Encryption, and PKI, The Defense		
10	1 1 1	II: Securing E-Commerce Networks, The Defense III: General Controls, Internal Controls, Compliance, and Other Defense Mechanisms.		
11	1 1 1	Continue II: Business Continuity, Disaster Recovery, Security Auditing, and Risk Management, Implementing Enterprise wide E-Commerce Security		
12	1 1 1	E-Commerce: Regulatory, Ethical, and Social Environments: Ethical Challenges and Guidelines (ethical principles and guide lines, e-commerce ethical issues, privacy rights and protection).		
13	1 1	Privacy protection by information technologies and protection by ethical principles: electronic		

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	1	discovery(e-discovery, Types of Data E-Discovery, cyber bullying)		
14	1 1 1	Protection Buyers and Sellers: Electronic and digital signature		
15	1 1 1	Reviewing and assignments discussions		
16	1 1 1			

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	Mohammad Al Rawajbeh	Office Number	317
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Office hours			