



University/Academy: Arab Academy for Science and Technology & Maritime Transport

Faculty/Institute: College of Computing and Information Technology

Program: Information Systems

**Form No. (12)
Course Specification**

1- Course Data

Course Code: IS371	Course Title: E-Business Fundamentals	Academic Year/Level: Year 3 / Semester 6
Specialization: Information Systems	No. of Instructional Units: 2 hrs lecture 2 hrs lab	Lecture:

2- Course Aim	This course introduces and defines the concepts of e-business and e-Commerce models, for both B2C and B2B firms and introduces the basic business concepts required for understanding of e-Commerce firms including industry structure, value chain, CRM, firm strategy, and Social and Ethical issues . The course covers the technology infrastructure for e-Business/e-Commerce, e-Payment Systems, e-Commerce Marketing Communications, secure transactions, and on-Line Services and Communities.
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3- Intended Learning Outcome:

a- Knowledge and Understanding	Students will be able to demonstrate knowledge of: K14. The principles and techniques of database management systems, management, data mining, geographical information systems, multimedia, application development, business process management, enterprise systems, human-computer interaction, object-oriented analysis and design, e-technologies, multimedia, image processing, information and infrastructures security and computer graphics techniques. K20. Types and alternatives of global information systems architectures, and their differences in terms of service and cost consequences, and their implications for the organizational support needed. Define e-commerce. •Difference between e-commerce and e-business. • Identify features of e-commerce technology. •Describe the major types of e-commerce. •Understand the visions and forces behind the E-commerce I. •Understand the successes and failures of E-commerce I. Identify several factors that will define the E-commerce II era. •Identify the major themes underlying the study of e-commerce. •Identify the major academic disciplines contributing to e-commerce research. •Identify the key components of e-commerce business models.
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- Describe the major B2C business models.
- Describe the major B2B business models.
- Recognize business models in other emerging areas of e-commerce.
- Understand key business concepts and strategies applicable to e-commerce.
- Define Internet.
- Define packet switching.
- Define TCP/IP and The TCP/IP Architecture and Protocol Suite.
- Define Routing Internet Messages.
- Define Domain Names, DNS, and URLs.
- Identify Client/Server Computing.
- Define Cloud Computing.
- Define The Hourglass Model of the Internet.
- Define Internet Network Architecture.
- Define Fiber Optics and the Bandwidth.
- Identify E-mail and Instant Messaging.
- Define Search Engines.
- Define Streaming Media and Cookies.
- Explain the process that should be followed in building an e-commerce Web site.
- Describe the major issues surrounding the decision to outsource development and/or hosting.
- Identify and understand the major considerations involved in choosing server and e-commerce merchant server software.
- Understand the issues involved in choosing the most appropriate hardware for an e-commerce site
- Identify additional tools that can improve Web site performance.
- Understand the scope of e-commerce crime and security problems.
- Describe the key dimensions of e-commerce security.
- Understand the tension between security and other values.
- Identify the key security threats in the e-commerce environment.
- Describe how various forms of encryption technology help protect the security of messages sent over the Internet.
- Identify the tools used to establish secure Internet communications channels.
- Identify the tools used to protect networks, servers, and clients.
- Understand The Internet Audience and Consumer Behavior.
- Identify A General Model of Consumer Behavior.
- Identify The Online Purchasing Decision.
- Identify The Consumer Decision Process and Supporting Communications.
- Define Data Mining and Personalization.
- Define Customer Relationship Management (CRM) Systems.
- Identify the Mass Market-Personalization Continuum.
- Define Marketing Communications
- Identify Online Advertising types.
- Understand Online Advertising Placement Methods.
- Identify Sponsorships and Referrals.
- Identify types of E-mail Marketing and the Spam Explosion.
- Define types of Social Marketing.
- Define Behavioral Targeting.
- Understanding ethical, social, and political issues in e-commerce.
- Understand Privacy and information rights.
- Define Intellectual Property Rights.
- Define Public Safety and Welfare.

	<ul style="list-style-type: none"> •Identify the major Trends in Online Retail. •Explain the Retail Sector and Industry. •Define E-commerce Retail. •Identify E-tailing Business Models. •Identify Industry Consolidation and Integrated Financial Services. •Define Online Banking and Brokerage. •Identify Online Career Services. •Define Online Publishing Industry. •Identify Online Entertainment Industry. <p>Identify types of Social Networks and Online Communities.</p> <ul style="list-style-type: none"> •Explain the types of Online Auctions. •Identify E-commerce Portals. •Identify B2B E-commerce and Supply Chain Management. •Identify different type of Net Marketplaces. •Define Net Marketplaces. •Define Private Industrial Networks.
<p>b- Intellectual Skills</p>	<p><u>By the end of the course, the student acquires high skills and an ability to understand:</u></p> <p>I10. Define traditional and nontraditional information systems problems, set goals towards solving them, and. observe results</p> <p>I14. Select the suitable tools, methods and techniques for modeling, analyzing IS, establishing criteria, and verify solutions.</p> <p>I16. Solve IS problems with pressing commercial, time, and industrial constraints.</p> <p>Analyze the impact of e-marketplaces on organizations and industries.</p> <ul style="list-style-type: none"> • Analyze the impact of e-marketplaces on organizations and industries. • Gain a good connection between E-commerce technology, E-commerce strategy, and marketing. •Evaluate the architecture of websites. • Distinguish between different design approaches. •Apply to plan one’s own design approach. •Analyze on-going trends in security threats and countermeasures. • Gain a good connection between E-commerce technology, E-commerce strategy, and marketing. <ul style="list-style-type: none"> • Compare different type of internet marketing strategies. • Gain a good connection between E-commerce technology, E-commerce strategy, and marketing. • Compare different type of internet marketing Communications. •Analyze principles used to determine right and wrong courses of action. •Ability to appeal to higher authorities to ensure laws applied Correctly. • Explain and assess the electronic finance evolution in financial industries. • Analyze the Viability of Online Firms. •Analyze the Difference Between Social Networks and Portals. •Compare different types of Social Networks and Their Business Models. •Analyze trends in Supply Chain Management and Collaborative Commerce. •Insight on Technology: RFID Autoidentification: Making Your Supply Chain Visible.

<p>c- Professional Skills</p>	<p><u>By the end of the course the student will have the ability to:</u></p> <p>P12. Plan and manage an information systems project from inception to final implementation and cut-over</p> <p>P14.Specify, design, and implement computer-based systems.</p> <p>P15. Apply the principles of effective information acquisition, information management, organization, and information-retrieval to text, images, sound, and video.P16.</p> <p>P19.Perform independent information acquisition and management, using the scientific literature and Web sources. Identify Concept of the packet Switching , The TCP/IP Architecture and Protocol Suite and Routing Internet Messages.</p> <ul style="list-style-type: none"> • Use the creative thinking and creative in the face of the various administrative positions. •Apply appropriate practical techniques to basic website design, navigation, and construction. • Design systems and evidence of the various work. • Participate in a multi-skilled design team in the development and evaluation of interactive systems, communicating with team. • Use the creative thinking and creative in the face of Building the System. • Use different search engines. •Experiment the laws and ethics in Virtual Worlds. • Experiment the effective use of financial services in a business context and to be able to prepare reports and make presentations. •Use Google and YouTube Together: Can Google Monetize YouTube? •Insight on Technology: Social Operating Systems: Facebook vs. Google. •Insight on Society: Dynamic Pricing: Is This Price Right? •Implement a Case Study: Siemens Clicks with Click2procure.
<p>d- General Skills</p>	<p>Students will be able to:</p> <p>G1. Demonstrate the ability to make use of a range of learning resources and to manage one's own learning.</p> <p>G7. Show the use of general computing facilities.</p> <p>Ability to generate, analyzes, present and interpret data.</p> <ul style="list-style-type: none"> • Ability for critical thinking, reasoning and reflections. • Manage the user needs in a website. • Select Team Working Skills through participating in collaborative projects. •Seller and Consumer Behavior at Auctions.

4- Course Content	1	Understand the difference between e-Business and e-Commerce,
	2	Understand the models of e-Commerce
	3	Identify and implement the steps of building e-Commerce web site
	4	Recognize the e-commerce infrastructure
	5	Be familiar with the e-Payment Systems
	6	Understand the e-commerce Marketing concepts
	7	Understand the requirements and methods of e-Commerce secure transactions
	5- Teaching and Learning Methods	
Lectures, Labs, Projects, Individual study & self-learning.		
6- Teaching and Learning Methods for Students with Special Needs		
<ul style="list-style-type: none"> • Students with special needs are requested to contact the college representative for special needs (currently Dr Hoda Mamdouh in room C504) • Consulting with lecturer during office hours. • Consulting with teaching assistant during office hours. • Private Sessions for redelivering the lecture contents. • For handicapped accessibility, please refer to program specification 		
7- Student Assessment:		
a- Procedures used:	Exams and Individual Projects	
b- Schedule:	Week 7 exam Week 12 exam Week 16 Final exam	
c- Weighing of Assessment:	7 th week exam 30% 12 th week exam 20% Lab work 10% Final exam 40%	
8- List of References:		
a- Course Notes	From the Moodle on www.aast.edu	
b- Required Books (Textbooks)	E- Commerce: Business Technology, Society, KENNETH, LAUDON, PEARSON 5ED. 2009	
c- Recommended Books	None	
d- Periodicals, Web Sites, ..., etc.		

Course Instructor:

Head of Department:

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