KINGDOM OF SAUDI ARABIA

MINISTRY OF EDUCATION

SHAQRA UNIVERSITY

(045)

COLLEGE OF COMPUTING AND INFORMATION TECHNOLOGY

Shaqra University

المملكة العربية السعودية

وزارة التعليم

جامعة شقراء

(٠٤٥)

كلية الحاسب الآلي وتقنية المعلومات

Internet Technology (تقن 304)

Course Description

This course presents the Internet from a dynamic workplace perspective. Reflects on how emerging technologies will empower society to do more with the Internet. Covers core Internet technologies, Web page design and authoring, computational thinking, networking fundamentals, and technology planning.

Course Objective

By the completion of the course the students should be able to

1. Define terms related to the Internet.
2. Describe how the Internet is changing the world.
3. Understand how computers are connected to the Internet.
4. Demonstrate the ability to use the World Wide Web.
5. Understand and apply Internet Etiquette.
6. Understand how Web pages are designed and created.
7. Demonstrate an ability to create basic Web pages with HTML.
8. Understand societal issues and emerging technologies.

References
Required:

1. The_Internet_for_Dummies, John R. Levine,12th edition.
2. How The Internet Works, The EDRi papers, 3rd ed
3. Internet Control Message Protocol, J.B. Postel

Recommended:

1. New Perspectives on Computer Concepts- Essentials 5th Edition ISBN: 0-619-16164-7 © 2003
2. Your Interactive Guide to the Digital World Gary B. Shelly and Misty E. Vermaat ISBN: 1-111-53048-3/978-1-111-53048-8 © 2012

Prerequisite: Computer Skills   (130 تقن)

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Evaluation Method:

Percentage	Description
15%	Test I
15%	Test II
20%	Project
10%	Quizzes
40%	Final
100%	Total

Weeks	Topic Name	Sub Topic	Reading Chapter
1	**Introduction**	- What is the Internet? - What are the major Internet tools and services? - A brief history of the Internet - How the Internet works.	Chapter 1
2&3	**Internet part I:**	- The technology of the Internet (TCP/IP, HTTP, DNS, URL, ISPs). - The user view of the Internet (www, FTP, email, newsgroups). - Problems with the Internet.	Chapter 2
4&5	**Internet part 2:**	(Latency, legacy system, security, speed). - Internet Governance. - Types of Internet connection (DSL, cable, wireless). - Internet hardware (hub, switch, router, wires).	Chapter 5

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Weeks	Topic Name	Sub Topic	Reading Chapter
6		**Test 1**	
7&8	**Internet security**	• Properties of a security service: confidentiality, authentication, integrity, non- repudiation, access control and availability. • Security attacks: interruption, interception, modification, fabrication. • The concepts of passive and active attack.	Chapter 8
9&10	**Web programming**	• Introductory of CSS ,java script, and php	Chapter 10
11	**Distribution 1:**	• Distribution (Openness, heterogeneity, resource sharing, resource access and scalability). • Distribution and its problems: (latency, integrity and security). • Message passing for distributed systems	Chapter 12
12		**Test 2**	
13 & 14	**Distribution 2:**	• (POP3 as an example of a message passing technology. • The event based paradigm. • The concept of a distributed broadcaster and distributed	Chapter 13

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Weeks	Topic Name	Sub Topic	Reading Chapter
		listener. *Implementation using objects bus and hub and spoke architectures	
15	Final Examination		