Amman Al-Ahliyyah University Department of Information Science Internet Technology 31181 (3 Credit Hours) Second Semester 2003/2004

Course Schedule: Sec. 1: 9.00 – 10.30 Mon, Wed, Room 1204.

Instructor: Dr. Ezz Hattab (ezz@softlab.ntua.gr)

Off. Hours: 10.00 – 11.00 Sunday, Tuesday, Thursday, Office 413.

<u>Text</u>: Raymond Greenlaw, Ellen Hepp, In-line/On-line Fundamentals of the Internet and the world wide web, McGraw-Hill, 2nd ed., 2002

References: 1. Douglas Comer, Internetworking with TCP/IP, Fourth Edition, Prentice Hall, 2000 (ISNB: 0-13-018380-6)

2. John R. Levine, Internet Secrets, IDG Books World, ISBN (0-7645-3239-1)

3. Riyad Al-Sayed, (HTML) , 2001

4. Michael Miller, Online Search Secrets, 2000

5. Lecture Note

Goal of the Course:

This course is intended to give the student an overview of the Internet technology. At the course completion, students will understand the fundamentals of Internet platforms, they will be able to configure the basic internet services, design basic web sites, develop secure techniques, searching tools and searching engines.

Student Learning Objectives:

Upon the completion of this course, students should be able to:

- 1. Understanding Web Platform and Protocols.
- 2. Implementing client-server roles.
- 3. Publishing over the Web.
- 4. Critique approaches to security issues.
- 5. Discussing security threats, including viruses, worms, Trojan horses, and denial ofservice attacks.
- 6. Understanding domain name servers, domain registers, ISPs, and related concepts.
- 7. Presenting Multimedia in terms of audio, video, graphics, color, and others.
- 8. Improving personal productivity concepts through Web authoring.
- 9. Learning to evaluate, select, and implement different communication options within an organization.

Study Plan-Course Description:

Credit Hours: 3

Prerequisite: 31212

Internet connectivity (i.e. IP Addressing and Management Schemes, Domain Name Resolution, etc.), Basic Internet services (i.e. FTP, Telnet, Mail and HTTP), Web design (i.e. HTML), Web searching (i.e. Search engines design and implementation, pages optimization to generic search engines), Privacy and Security Topics.

<u>Ou</u>	tline of the Material:	Classes	
1.	Defining the Internet, How does the Internet works,		
	the architecture of TCP/IP suite.	(Ch3)	6
2.	IP addressing and domain names, Name Resolution,		
	Domain Name Servers, Domain Name System (DNS)	(Ch3, 1.4, 5)	3
3.	Basic Internet services: Telnet, FTP, Remote login	(Ch6, 1.25, 1.26)	6
4.	Fundamentals of Electronic Mail, the World Wide Web,	(Ch1, Ch2, Ch4,	6
	HTML introduction.	1.27, 1.28)	
5.	Basic HTML, Web Design Principles, Basic components		
	of a Web Page.	(Ch7, 1.28, 2.19)	3
6.	Advanced HTML (Frames, HTML Forms, CGI Scripts)	(Ch9)	6
7.	Searching the World Wide Web (search engine,		
	Directories, search strategies).	(Ch5)	3
8.	Privacy and security (Encryption Schemes,	` ,	
	Digital Signature, Firewalls).	(Ch14, 1.32, 2.36)	3
9.	Multimedia, IP-Telephony and signaling protocols.	(Ch13, 5)	6
	Total Number of Classes		42

Teaching/Learning Methodology:

- 1. Lectures.
- 2. Some handouts.
- 3. Assignments and computational activities.

Evaluation:

1.	First Exam:	21 / 3 / 2004	20%
2.	Second Exam:	2 / 5 / 2004	20%
3.	Sharing, Activities & Assignments		10%
4.	Final Exam	1/6/2004	50%