	Hashemite University Prince Al-Hussein bin Abdullah II Faculty for Information Technology Department of Computer Science and Applications	

Course Syllabus

Year: 2018-2019 **Semester: (2)**

Course No.	Course Title	Designation	Prerequisite	Co-requisite	Credit Hours Lectures /Lab.
151001321	Internet Protocols	Elective	151001320	-	3 / 0

Instructor Name	E-mail	Office No.	Office ext.	Office Hours
Dr. Mohammad Bsoul	mbsoul@hu.edu.jo	234	4573	Sun, Tue, Thur (11-12) Mon, Wed (12:15-12:45)

Coordinator's Name:	Dr. Mohammad Bsoul

Course Description	Continuation of Computer Networks. Introduces elements of the protocols in TCP/IP protocol suite, including IP, ARP, RARP, ICMP, UDP, TCP, SCTP, RIP, OSPF, BGP, BOOTP, and DHCP.

Learning References:

1- Textbook (s):
1. TCP/IP Protocol Suite, Behrouz A. Forouzan, 4th ed., McGraw-Hill, 2010.
2- References:
1. Internetworking With TCP/IP Volume 1: Principles Protocols, and Architecture, Douglas E Corner, 6th edition, 2013.
2. Data Communications and Networking, Behrouz Forouzan, 5th ed., McGraw-Hill, 2013.
3. Computer Networks and Internets, Douglas E. Comer, 6th ed., Prentice-Hall, 2015.

Course Intended Learning Outcomes (ILOs)

Upon successful completion of this course, students are expected to achieve the following learning outcomes:

Course ILOs	Program ILOs	Teaching and Learning Method	Assessment Method
1- Explain Classful and Classless addressing, and Subnetting and Supernetting.	CIS-2	Lectures	Exam
2- Explain routing in IP protocol.	CIS-2	Lectures	Exam
3- Describe different protocols in the TCP/IP protocol suite.	CIS-1	Lectures	Exam
4- Write a program that represents the behavior of a well-known protocol.	CIS-1	Assignment	Assignment

Course Schedule:

Topic Details	Course ILO number	Reference	No. of Weeks	Contact hours*
IP Addresses: Classful Addressing	1	Ch4	1	3
IP Addresses: Classless Addressing	1	Ch5	1	3
Delivery, Forwarding and Routing of IP Packets	2	Ch6	2	6
ARP and RARP	3	Ch7	1	3
Internet Protocol (IP)	3	Ch8	2	6
Internet Control Message Protocol (ICMP)	3	Ch9	2	6
User Datagram Protocol (UDP)	3	Ch11	1	3
Transmission Control Protocol (TCP)	3	Ch12	2	6
Stream Control Transmission Protocol (SCTP)	3	Ch13	2	6
Unicast Routing Protocols (RIP, OSPF and BGP)	3	Ch14	1	3
Total			**15**	**45**

Assessment Methods and Grading System:

Assessment method	Grade	Comments
First Exam	25%	Covers Chapters 4, 5, 6, and 7
Second Exam	25%	Covers Chapters 8, 9, 11, and 12
Assignment	10%	TBA
Final Exam	40%	Covers all topics that were discussed during the semester
Total	100%	