



Course Description/ Prince Al Hussein bin Abdullah II Faculty of Information Technology

Department of: Information Systems

1. Instructor/ Coordinator

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2. Course Information

Level: 2	Course Title: Computer Network for Business	Course No.: 904221
Class Time: 8:30-9:30	Prerequisite / Co-requisite: 904233	Course Type: Theoretical / Practical
Study Hours: 3	Semester: First	Academic Year : 2022/2023
Type of teaching: <input type="checkbox"/> Face to face <input checked="" type="checkbox"/> Blended (<input checked="" type="checkbox"/> 2:1 <input type="checkbox"/> 1:1 <input type="checkbox"/> 1:2) <input type="checkbox"/> Online		

3. Textbook(s)

Title	Data Communications and Networking
Author	Behrouz Forouzan
Publisher	McGraw-Hill
Year	2013
Edition	5 th edition
Textbook Website	

4. References (books and research published in periodicals or websites)

1-	The TCP/IP Guide, by Charles M. Kozierok, Free online Resource, http://www.tcpiptide.com/free/t_TheTCPIptideIntroductionandGuideToTheGuide.htm
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5. Course Description

This course provides an introduction to the design and analysis of computer communication networks. Topics include application layer protocols, Internet protocols, network interfaces, local and wide area networks, wireless networks, bridging and routing, and current topics.

6. Course Outcomes (CO's)

Upon successful completion of the course, student will be able to: (Use Bloom's Taxonomy Verbs)

CO#		SO
1.	Build an understanding of the fundamental concepts of computer networking.	2
2.	Define and explain reference models and various network protocols.	2
3.	Recognize the fundamental principles of data transmission, including transmission media, signal encoding and modulation and multiplexing	2
4.	Develop the communication, leadership and teamwork skills necessary to work in or lead teams	5

7. Course Contents

Week #	Topic	Chapter
1+2	Introduction <ul style="list-style-type: none"> • DATACOMMUNICATIONS • NETWORKS • THE INTERNET • PROTOCOLS AND STANDARDS 	1
3 - 6	Network Models <ul style="list-style-type: none"> • LAYERED TASKS • THE OSI MODEL • LAYERS IN THE OSI • TCP/IP PROTOCOLS • ADDRESSING 	2
7-10	Data and Signals <ul style="list-style-type: none"> • ANALOG AND DIGITAL • PERIODIC ANALOG SIGNALS • DIGITAL SIGNALS • TRANSMISSION IMPAIRMENT • DATA RATE LIMITS • PERFORMANCE 	3
	Midterm	
11-13	Bandwidth Utilization <ul style="list-style-type: none"> • Frequency Division Multiplexing • Wavelength Division Multiplexing • Time Division Multiplexing • Spread Spectrum 	6
14-15	IP Addressing <ul style="list-style-type: none"> • IP version • IP Classes • IP Masking and Subnet 	

16	Final Exam	
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8. Teaching and learning Strategies and Evaluation Methods

	Evaluation /Measurement Method (Exam/ presentations/ discussion/ assignments)	Learning Activities	Teaching Strategies	Learning Outcomes
1.	In class Questions, Presentation, Quizzes, Exam	<ul style="list-style-type: none"> Shared and Reciprocal questioning Targeted Exercises Group discussion assessments 	<ul style="list-style-type: none"> Active learning Differentiated instruction Personalized learning Convergent and divergent thinking Problem-based learning Media literacy Summative assessment 	Communicate effectively in a variety of professional contexts.
2.	In class Questions, Presentation, Quizzes, Exam	<ul style="list-style-type: none"> Case studies Reflection and Goal-Setting Exercises Group discussion Media content assessments 	<ul style="list-style-type: none"> Inquiry-based learning Problem-based learning Media literacy Summative assessment 	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
3.	In class Questions, Presentation, Participate in class Discussion, Doing quizzes.	<ul style="list-style-type: none"> Case studies Group discussion Online media content Team Project assessments 	<ul style="list-style-type: none"> Project-based learning Peer teaching Problem-based learning Media literacy 	Support the delivery, use, and management of information systems within an information systems environment.

9. Assessment

Distribution of grades	Assessment Time	Methods Used
30	Up to 11/12/2022	Midterm
20	During semester	Couse Work (Quizzes, Assignments, Active Participation)
50	Up to 29/1/2023	Final Exam

**10. Program Educational Objectives (PEOs)
(To be added by the academic department)**

1.	Acquire state-of-the-art knowledge and skills in the field of information systems to identify business problems and propose adequate solutions.
2.	Demonstrate the ability for self-learning of new technologies that allow for lifelong learning, individual growth, and pursuing graduate studies .
3.	Communicate and function effectively and demonstrate effective teamwork skills as a team member and team leader in a professional context
4.	Apply highest standards of professional, ethical, and legal conducts.

11. Student Learning Outcomes for the Program. (SO's)

SO's (1-6)	Science Student Learning Outcomes for the Program
1	Analyze complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2	Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the programs discipline.
3	Communicate effectively in a variety of professional contexts.
4	Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5	Function effectively as a member or leader of a team engaged in activities appropriate to the programs discipline.
6	Support the delivery, use, and management of information systems within an information systems environment

12. Mapping between Student Outcomes and Program Educational Objectives

	SO1	SO2	SO3	SO4	SO5	SO6
PEO1	x	x				x
PEO2	x			x		
PEO3			x		x	
PEO4				x	x	