

# **Course Syllabus**

1	Course title	Business Data Communications and Networking
2	Course number	1605441
3	Credit hours	3
Č	Contact hours (theory, practical)	3
4	Prerequisites/corequisites	1605215
5	Program title	BA. Management Information Systems
6	Program code	1605
7	Awarding institution	The University of Jordan
8	School	Business School
9	Department	Management Information Systems
10	Course level	
11	Year of study and semester (s)	2022/2023
12	Other department (s) involved in teaching the course	
13	Main teaching language	English
14	Delivery method	□Face to face learning □Blended ■Fully online
15	Online platforms(s)	■Moodle ■Microsoft Teams □Skype □Zoom □Others
16	Issuing/Revision Date	

## 17 Course Coordinator:

Name: Dr.Mohammad Al Nawayseh	Contact hours: Sunday – Thursday 12:00 – 1:00
Office number:	Phone number:
Email: m.nawaiseh@ju.edu.jo	



#### **18 Other instructors:**

Name:
Office number:
Phone number:
Email:
Contact hours:
Name:
Office number:
Phone number:
Email:
Contact hours:

### **19 Course Description:**

Introducing the principles of Data Communications and Networking, the telecommunication systems and the different protocols and computer networks required to know by the business organizations, the foundations extend to coverage of communication concepts, transmission media, signal representation and modulation, packet switching and routing, network topology and architecture, network management and Internet protocols TCP/IP.



3

#### 20 Course aims and outcomes:

A- Aims:

- 1. Independently understand basic computer network technology.
- 2. Understand and explain Data Communications System and its components.
- 3. Identify the different types of network topologies and protocols.
- 4. Enumerate the layers of the OSI model and TCP/IP. Explain the function(s) of each layer.
- 5. Identify the different types of network devices and their functions within a network
- 6. Understand and building the skills of subnetting and routing mechanisms

B- Students Learning Outcomes (SLOs):

Upon successful completion of this course, students will be able to:

	SLO (1)	SLO (2)	SLO (3)	SLO (4)
SLOs				
SLOs of the				
course				
Understand basic				
network				
terminologies,				
including the				
definition of				
networking,				
networked				
applications, hosts,				
network addresses,				
the network core,				
access links, the				
evolution of				
networked				
applications, and				
speed.				
Discuss major				
standards				
architectures,				
especially TCP/IP,				
OSI, and the hybrid				
TCP/IP-OSI				
standards				
architecture.				

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Discuss message			
syntax in general			
and in Ethernet			
frames, IP packets,			
TCP segments, UDP			
datagrams, and			
HTTP request and			
response			
messages.			
Describe signals			
and propagation			
effects.			
Describe			
unshielded			
twisted-pair (UTP)			
wiring and optical			
fiber cabling.			
Describe wireless			
LAN technologies			
and explain radio			
signal propagation:			
frequencies,			
antennas, and			
wireless			
propagation			
problems.			
Describe 802.11			
WLAN operation,			
compare and			
contrast it's			
transmission			
standards.			
Describe Switch			
operations and			
router operations.			



6

## 21. Topic Outline and Schedule:

Week	Lectu re	Торіс	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchron ous / Asynchro nous Lecturing	Evaluatio n Methods	Resources
	1.1	Syllabus		Online	MS/Teams			Textbook
1	1.2	Networking: How We Get Here		Online	MS/Teams		Exam	Textbook
	1.3			Online	MS/Teams		Exam	Textbook
	2.1			Online	MS/Teams		Exam	Textbook
2	2.2			Online	MS/Teams		Exam	Textbook
	2.3			Online	MS/Teams		Exam	Textbook
Week	Lectu		Intended Learning	Learning Methods (Face to	Platform	Synchron ous /	Evaluatio	
	re	Торіс	Outcome	Face/Blended/ Fully Online)		Asynchro nous Lecturing	n Methods	Resources
	re 3.1	Topic Network Standards	Outcome	Face/Blended/ Fully Online)	MS/Teams	Asynchro nous Lecturing	n Methods Exam	Resources
3	re 3.1 3.2	Topic Network Standards	Outcome	Face/Blended/ Fully Online) Online Online	MS/Teams MS/Teams	Asynchro nous Lecturing	n Methods Exam Exam	Resources Textbook Textbook
3	re       3.1       3.2       3.3	Topic Network Standards	Outcome	Face/Blended/ Fully Online)   Online   Online   Online	MS/Teams MS/Teams MS/Teams	Asynchro nous Lecturing	n Methods Exam Exam Exam	Resources Textbook Textbook Textbook
3	re 3.1 3.2 3.3 4.1	Topic Network Standards Network Standards	Outcome	Face/Blended/ Fully Online) Online Online Online Online	MS/Teams MS/Teams MS/Teams MS/Teams	Asynchro nous Lecturing	n Methods Exam Exam Exam Exam	Resources Textbook Textbook Textbook Textbook
3	re 3.1 3.2 3.3 4.1 4.2	Topic Network Standards Network Standards	Outcome	Face/Blended/ Fully Online) Online Online Online Online Online	MS/Teams MS/Teams MS/Teams MS/Teams	Asynchro nous Lecturing	n Methods Exam Exam Exam Exam	ResourcesTextbookTextbookTextbookTextbookTextbookTextbook



7

	5 1	Physical Layer Propagation	Online	MS/Teams	Exam	Textbook
5	5.1					
	5.2		Online	MS/Teams	Exam	Textbook
	5.3		Online	MS/Teams	Exam	Textbook
	6.1	Physical Layer Propagation	Online	MS/Teams	Exam	Textbook
0	6.2		Online	MS/Teams	Exam	Textbook
	6.3		Online	MS/Teams	Exam	Textbook
7	7.1	Switched Wired Networks	Online	MS/Teams	Exam	Textbook
,	7.2		Online	MS/Teams	Exam	Textbook
	7.3		Online	MS/Teams	Exam	Textbook
8	8.1	Switched Wired Networks	Online	MS/Teams	Exam	Textbook
0	8.2		Online	MS/Teams	Exam	Textbook
	8.3		Online	MS/Teams	Exam	Textbook
	9.1	Wireless Network	Online	MS/Teams	Exam	Textbook
9	9.2		Online	MS/Teams	Exam	Textbook
	9.3		Online	MS/Teams	Exam	Textbook
	10.1	Wireless Network	Online	MS/Teams	Exam	Textbook
10	10.2		Online	MS/Teams	Exam	Textbook
	10.3		Online	MS/Teams	Exam	Textbook



	11.1	TCP/IP Internetworking	Online	MS/Teams	Exar	n Textbook
11	11.2		Online	MS/Teams	Exar	n Textbook
	11.3		Online	MS/Teams	Exar	n Textbook
10	12.1	TCP/IP Internetworking	Online	MS/Teams	Exar	n Textbook
12	12.2		Online	MS/Teams	Exar	n Textbook
	12.3		Online	MS/Teams		Textbook
	13.1		Online	MS/Teams		Textbook
13	13.2		Online	MS/Teams		Textbook
	13.3		Online	MS/Teams		Textbook
	14.1		Online	MS/Teams		Textbook
14	14.2		Online	MS/Teams		Textbook
	14.3		Online	MS/Teams		Textbook
	15.1		Online	MS/Teams		Textbook
15	15.2		Online	MS/Teams		Textbook
	15.3		Online	MS/Teams		Textbook

### 22 Evaluation Methods:

Opportunities to demonstrate achievement of the SLOs are provided through the following assessment methods and requirements:

Evaluation Activity	Mark	Topic(s)	SLOs	Period (Week)	Platform
Quizzes	10				



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Midterms	30		
Assignments	10		
Projects/Case studies			
Final	50		
Total	100		

### 23 Course Requirements

(e.g: students should have a computer, internet connection, webcam, account on a specific software/platform...etc):

### 24 Course Policies:

- A- Attendance policies:
- B- Absences from exams and submitting assignments on time:
- C- Health and safety procedures:
- D- Honesty policy regarding cheating, plagiarism, misbehavior:
- E- Grading policy:



F- Available university services that support achievement in the course:

#### 25 References:

A- Required book(s), assigned reading and audio-visuals:

Business Data Networks and Telecommunications, Eighth Edition for Raymond R.Panko and Julia L.Panko, Pearson Education

B- Recommended books, materials, and media:

#### 26 Additional information:

Name of Course Coordinator: Dr.Mohammad Al Nawayseh Signature: Date:
Head of Curriculum Committee/Department: Signature:
Head of Department: Signature:
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Head of Curriculum Committee/Faculty: Signature:
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Dean: Signature: