QF05/0408-4.0 E	Course Plan for Bachelor program - Study Plan Development and Updating Procedures/ Management Information Systems Department

Study plan No.	Business		**University Specialization**		Management Information Systems	
Course No.	0506314		**Course name**		Data Transmission for Business	
Credit Hours	3		**Prerequisite/ Co-requisite**		0506111	
Course type	MANDATORY UNIVERSITY REQUIREMENT	UNIVERSITY ELECTIVE REQUIREMENTS	FACULTY MANDATORY REQUIREMENT	Support course family requirements	✓ Mandatory requirements	Elective requirements
Teaching style	**Full online learning**		✓ **Blended learning**		**Traditional learning**	
Teaching model	**1 Synchronous: 1 asynchronous**		✓ **2 face to face : 1 asynchronous**		**2 Traditional**	

Faculty member and study divisions' information (to be filled in each semester by the subject instructor)

Name	Academic rank	Office No.	Phone No.	E-mail	
Division number	**Time**	**Place**	**Number of students**	**Teaching style**	**Approved model**
1				**Blended**	**2:1**

Brief description

Business Data Communications. The study of the movement of information (data) from one device to another by means of electrical, optical, radio or satellite transmission systems. This course will introduce the architecture, concepts, terminology, design, and management issues related to the modern environment of networking and data communications. Various types of networks and communication systems, protocols, regulatory issues and policies will be explored.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc.)	Business Communication: Process & Product. Guffey, M. and Loewy, D. Cengage Learning; 9th edition, 2017. ISBN: 978-1305957961.			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	1. Business Data Communications and Networking. Jerry F. G., Alan Dennis, and Alexandra D.; 12th edition. 2015. 2. Technical Communication. Markel, M. Bedford/St. Martin's 2012. 3. The Essential of Business Communication. Guffey, M. Thomson; 7th edition. 2007.			
Supporting websites				
The physical environment for teaching	Class room	✓ labs	✓ Virtual educational platform	Others
Necessary equipment and software				
Supporting people with special needs				
For technical support				

Course learning outcomes (S= *Skills, C= Competences K= Knowledge,)*

No.	Course learning outcomes	The associated program learning output code
	Knowledge	
K1	Understand the effective of business communication that create effective business environment	**MK1**
K2	The student will be able to apply team work skills ethically in the work place.	**MK3**
K3	The student will be able to publicly present work effectively to business audience	**MK2**
	Skills	
S1	The student will be able to apply team work skills ethically in the work place.	**MS1**
S2	Understand how to create various effective business documents	**MS2**
	Competences	
C1	The student will be able to apply team work skills ethically in the work place.	**MC1**
C2	The student will be able to publicly present work effectively to business audience	**MC2**

Mechanisms for direct evaluation of learning outcomes

Type of assessment / learning style	Fully electronic learning	Blended learning	Traditional Learning (Theory Learning)	Traditional Learning (Practical Learning)
Midterm exam		**30%**		
Participation / practical applications		**0**		
Asynchronous interactive activities		**30%**		
Final exam		**40%**		

Note 1: Asynchronous interactive activities are activities, tasks, projects, assignments, research, studies, projects, work within student groups ... etc, which the student carries out on his own, through the virtual platform without a direct encounter with the subject teacher.

Note 2: According to the Regulations of granting Master's degree at Al-Zaytoonah University of Jordan, 40% of final evaluation goes for the final exam, and 60% for the semester work (examinations, reports, research or any scientific activity assigned to the student).

Schedule of simultaneous / face-to-face encounters and their topics

Week	Subject	learning style*	Reference **
1	**Introduction to Data Communication** - Data communication Networks - Network components, Types.	Lecture	Chapter 1
2	**Introduction to Data Communication** - Network Models - OSI Model - Internet Model	Lecture	Chapter 1
3	**Introduction to Data Communication** - Network Standards - Future Trends in Networking	Lecture	Chapter 1
4	**Application Layer** - Application Architectures - Host Base , client-base , client-server Choosing Architecture	Lecture	Chapter 2
5	**Application Layer** - Word wide web , how it works - Inside HTTP E-Mail , how it works	Lecture	Chapter 2
6	**Application Layer** - List Serve - Instant Messaging - FTP - Telnet - Video Conferencing	Lecture	Chapter 2
7	**Physical Layer** - Circuits - Circuit Configuration - Data flow	Lecture	Chapter 3
8	**Physical Layer** - Multiplexing - Communication Media - Media selection	Lecture	Chapter 3
9	**Data Link Layer** - Media access control - Error Control	Lecture	Chapter 4
10	**Data Link layer** - Error prevention - Error detection	Lecture	Chapter 4
11	**Transport and Network Layers** - Message transmission using layers - Transport and Network Layer protocols	Lecture	Chapter 5
12	**Transport and Network Layers**	Lecture	Chapter 5

	- Transmission Control Protocol (TCP) - Internet Protocol (IP)		
13	**Transport and Network Layers** - Transport layer functions	Lecture	Chapter 5
14	**Transport and Network Layers** - Segmentation - Session management - Connection-Oriented Messaging	Lecture	Chapter 5
15	**Transport and Network Layers** - Connectionless Messaging - Quality of Service	Lecture	Chapter 5
16	**Final Exam**		

*** Learning styles: Lecture, flipped learning, learning through projects, learning through problem solving, participatory learning ... etc.**
**** Reference: Pages in a book, database, recorded lecture, content on the e-learning platform, video, website ... etc.**

Schedule of asynchronous interactive activities (in the case of e-learning and blended learning)

Week	Task / activity	Reference	Expected results
1	Knowing what is the Network components, Types.		
2	Writing the Future Trends in Networking Types as Examples		
3	Why using Networking Types.		
4	Examples to Network Models types.		
5	Network Models types, How it works..		
6	Creating and using Network Models types in an example.		
7	Choosing Architecture in an Application Layer		
8	Presenting E-Mail techniques, how it works. Examples		
9	Designing Circuits, Circuit Configuration in an Application Layer.		
10	Data flow in an Application Layer. How it works. Examples		
11	What is the types of Multiplexing		
12	Writing the types of Guided Media.		
13	Writing the types of Wireless Media		
14	How DSL Transmit data		
15	What is the deferent between Analog and Digital Transmission and give an example.		
16	How Analog and Digital Transmission work.		