QF05/0408-4.0 E	**Course Plan for Bachelor program - Study Plan Development and Updating Procedures/ Management information systems Department**

Study plan No.	2022/2021	**University Specialization**		MIS	
Course No.		**Course name**		**Cloud Computing in Business**	
Credit Hours	3	**Prerequisite/ Co-requisite**		0506221	
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	☑ 1 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

Brief description

The course covers several topics in cloud computing, including introduction to cloud concepts, virtualization technologies, architectures, networking, cloud resource management, programming models in clouds, cloud storage systems, and security issues on clouds.

Learning resources

Course book information (Title, author, date of issue, publisher ... etc.)	IBM - The Definitive Guide to Cloud Computing, by Realtime Publishers, 2010, Edition 1.			
Supportive learning resources (Books, databases, periodicals, software, applications, others)	Use cases by IBM.			
Supporting websites	https://www.realtimepublishers.com			
The physical environment for teaching	☐ Classroom	☑ labs	☑ Virtual educational platform	☐ Others
Necessary equipment and software	Google Docs, Microsoft Office 365 Google IBM Cloud AWS Cloud Alibaba Cloud			
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 main concepts of cloud computing	MK1
K2	Understand cloud infrastructure from the consumer and producer views	MK1
K3	Understand the various cloud service delivery and deployment models	MK2
K4	Understand different cloud computing platforms, storage systems and tools	MK2
K5	Understand the main economics values and main risks of implementing cloud computing services	MK1
K6	Understand the main issues in cloud security	MK3
Skills		
S1	Develop teamwork and presentation skills	MS2
S2	Oral communication skill	MS1
S3	Develop a solid background and awareness about the role of cloud computing in Business	MS2
Competences		
C1	Understand the main concepts of cloud computing	MC1
C2	Describe cloud infrastructure from the consumer and producer views	MC1
C3	Identify the various cloud service delivery and deployment models	MC2
C4	Aware about various cloud computing platforms, storage systems and tools	MC1
C5	Understand the main economics values and the main risks of implementing cloud computing services	MC2
C6	Know about the main issues in cloud security	MC2
C7	Develop group work and presentation skills	MC1

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 **
1-3	Cloud computing definitions, main concepts and virtualization	**Lecture**	Pages in a Book YouTube
4 – 5	Cloud computing infrastructures, platforms, tools and main vendors	**Lecture** **learning through projects, learning through problem solving**	Pages in a Book
6-8	Cloud computing service models, deployment models and usage scenarios	**Lecture** **learning through projects, learning through problem solving**	Pages in a Book
	Mid Exam		Pages in a Book
9-11	Data centers	**Lecture**	Pages in a Book
12-13	Economics and benefits analysis	**learning through projects, learning through problem solving**	Pages in a Book
14	Cloud computing implementation issues including privacy and security issues	**learning through projects, learning through problem solving participatory learning**	Pages in a Book
15	Revisions and students' presentations		Pages in a Book
16	**Final Exam**		Pages in a Book

* **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	Provide various definitions for Cloud Computing by Business and Education	Search Engines Books	Report
2	Define the main concepts of Cloud Computing.	Search Engines Books	Report
3	What are the Advantages and disadvantages of Cloud computing in business?	Search Engines Books	Report
4	Examples (From industry) of Cloud Computing Infrastructure.	Search Engines Books	Report about the existing Infrastructure, tools, and vendors
5	Examples (From industry) of Cloud Computing tools, and main vendors.	Search Engines Books	Report about the existing Infrastructure, tools, and vendors
6	Provide examples about the service and deployments models.	Search Engines Books	Provide real examples from industry about the

			service and deployments models
7	Provide a comparative analysis about the types of deployment and service model.		Table and Comparative Analysis
8	Provide a critical analysis of strengths and advantages of cloud computing in current business era.		Report
	Mid Exam		
9	Provide an example about the biggest Data Center in world from 2015-2021 and the storage capacity of the selected centers.	Search Engines Books	Report
10	Review the Google Data Center		Report
11	What are the data center requirements.		Report
12	Market Benefits for Cloud Computing	Search Engines Books Industry Websites ex: AWS and IBM	Report
13	Economic Analysis for Cloud Computing	Search Engines Books Industry Websites ex: SAS, Google, and IBM	Report
14	Discuss and provide real examples about the Cloud implementation issues including privacy and security issues.	Search Engines Books Industry Websites ex: AWS and IBM	Report
15	Provide solutions for Cloud implementation issues including privacy and security issues.	Search Engines Books Industry Websites ex: AWS and IBM	Report
16	Provide some examples related to cloud computing issues during COVID 19 Pandemic.	Search Engines Books Industry Websites ex: Mckinsey, and IBM	Report