

# **Course Syllabus**

1	Course title	Enterprise Systems Management				
2	Course number	1605728				
3	Credit hours	3				
5	Contact hours (theory, practical)	3				
4	Prerequisites/corequisites	-				
5	Program title	MA Business Informatics				
6	Program code	1605				
7	Awarding institution	The University of Jordan				
8	School	School of Business				
9	Department	Management Information Systems				
10	Course level	2 <sup>nd</sup> year				
11	Year of study and semester (s)	First term 2021/2022				
12	Other department (s) involved in teaching the course	-				
13	Main teaching language	English				
14	Delivery method	XFace to face learning  Blended  Fully online				
15	Online platforms(s)	□Moodle □Microsoft Teams □Skype □Zoom □Others				
16	Issuing/Revision Date					
17 Co	ourse Coordinator:					

Name: Dr. Laila Dahabiyeh	Contact hours: Sun-Thur 12-1
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### **18 Other instructors:**

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

# **19 Course Description:**

As stated in the approved study plan.

This course provides in-depth coverage about some of the most pressing and contemporary issues in digital technologies. It will introduce and discuss hot topics in enterprise digital technologies. These are: cloud computing, internet of things, and artificial intelligence. Throughout the course, we will discuss the architecture of these technologies, how they are used by businesses and ethical issues rising from using them.



## 20 Course aims and outcomes:

# A- Aims:

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- introduce students to digital technology trends and providing in-depth coverage of their types and uses.

- Discuss case studies on the adoption of cloud computing, IoT and AI.

- Identify and evaluate the ethical consequences related to digital technologies and how to address them.

B- Students Learning Outcomes (SLOs):

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

	PLO (1)	PLO (2)	PLO (3)	PLO (4)
SLOs				
SLOs of the				
course				
1. Explain new			X	Х
digital				
technological				
trends				
2. Compare			X	Х
between the				
different types of				
digital				
technologies				
3. Evaluate the			X	Х
costs and benefits				
of digital				
technology				
adoption				
4. Analyze the			X	Х
ethical				
consequences				
related to				
technology				
adoption.				



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# 21. Topic Outline and Schedule:

Week	Lecture	Торіс	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
1	1.1	Introduction + cloud computing	SLO1+2	Face-to-face		Sync.	Presentat ion + essay + exams	Check references section
	1.2							
	1.3							
2	2.1	Cloud computing	SLO1+2	Face-to-face		Sync.	Presentat ion + essay + exams	
	2.2							
	2.3							
Week	Lecture	Торіс	Intended Learning Outcome	Learning Methods (Face to Face/Blended/ Fully Online)	Platform	Synchronous / Asynchronous Lecturing	Evaluation Methods	Resources
3	3.1	Cloud computing	SLO2+3	Face-to-face		Sync.	Presentat ion + essay + exams	Case studies
	3.2							
	3.3							
4	4.1	ІоТ	SLO1+2	Face-to-face		Sync.	Presentat ion + essay + exams	
	4.2							
	4.3							



	<b>7</b> 1				Sync.	Presentat ion +	
5	5.1	IoT	SI 01-4	Face-to-face		essay +	
	5.2	101	SL01-4				
	5.2						
	5.5				Same a		Diaguag
					Sync.	Presentat	ion
	6.1					ion +	paper +
6		IoT	SLO1-4	Face-to-face		exams	study
	6.2						
	6.3						
	7.1	AI	SLO1+2	Face-to-face	Sync.		
7	7.2						
	7.3						
					Sync.	Presentat	
	8.1	Mid-term				essay +	
8		exam		Face-to-face		exams	
	8.2						
	8.3						
					Sync.	Presentat	Discuss
	9.1					essay +	ion
9	0.2	AI	SL01-4	Face-to-face		exams	paper
	9.2						
	9.3						
	10.1				Sync.	Presentat ion +	
10	10.1	AI	SL 01-4	Face-to-face		essay +	
	10.2		5101-4				
	10.2						

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	10.3						
11	11.1	AI+ Ethics	SLO4	Face-to-face	Sync.	Presentat ion + essay + exams	
	11.2						
	11.3						
12	12.1	Ethics	SLO4	Face-to-face	Sync.	Presentat ion + essay + exams	Case study
	12.2						
	12.3						
	13.1	Presentation		Face-to-face	Sync.	Presentat ion	
13	13.2						
	13.3						
	14.1	Presentation		Face-to-face	Sync.	Presentat ion	
	14.2						
	14.3						
	15.1						
15	15.2						
	15.3						



## 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
Presentation	10	Open	SLO1-4	Weeks 13,14 or throughout the term	On campus
Essay	20		SLO1-4	Week 13	E-learning
Mid-term exam	30		SLO1-3	Week 8	On campus
Final exam	40	All topics covered	SLO1-4	Week 16	On campus

## 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:

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#### 25 References:

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

### **Cloud Computing:**

1. Castro, P., Ishakian, V., Muthusamy, V. and Slominski, A., 2019. The rise of serverless computing. *Communications of the ACM*, *62*(12), pp.44-54.

2. Hwang, K., Dongarra, J. and Fox, G.C., 2013. *Distributed and cloud computing: from parallel processing to the internet of things*. Morgan kaufmann.

3. Maresova, P. and Kacetl, J., 2015. Cloud computing in the public sector–Case study in educational institution. *Procedia-Social and Behavioral Sciences*, *18*2, pp.341-348. ----- **Case study** 

4. Tripathi, S. and Nasina, J., 2017. Adoption of cloud computing in business: A multi-case approach to evaluate the fit-viability model (FVM). *International Journal of Business and Information*, *12*(1), pp.39-64.

5. Varghese, B. and Buyya, R., 2018. Next generation cloud computing: New trends and research directions. *Future Generation Computer Systems*, *79*, pp.849-861.

#### Internet-of-Things:

1. Aleisa, N. and Renaud, K., 2017, January. Privacy of the Internet of Things: a systematic literature review. In *Hawaii International Conference on System Sciences 2017* (pp. 5947-5956).

2. Chahal, R.K., Kumar, N. and Batra, S., 2020. Trust management in social Internet of Things: A taxonomy, open issues, and challenges. *Computer Communications*, *150*, pp.13-46.

3. Sicari, S., Cappiello, C., De Pellegrini, F., Miorandi, D. and Coen-Porisini, A., 2016. A security-and qualityaware system architecture for Internet of Things. *Information Systems Frontiers*, *18*(4), pp.665-677. ------**Discussion paper** 

**4. Bai, G.,** Zhao, L. and Wang, Z.E., 2018. Advantech: evolution of its IoT ecosystem strategy. *Emerald Emerging Markets Case Studies*. ------ **Case study** 

#### **Artificial Intelligence:**

1. Taulli, T., 2019. Artificial Intelligence Basics: A Non-Technical Introduction. 1<sup>st</sup> ed.

2. Stahi, B.C., 2021. Artificial Intelligence for a Better Future: An Ecosystem Perspective on the Ethics of AI and Emerging Digital Technologies. 1<sup>st</sup> ed.

3. Marcus, G., 2018. Deep learning: A critical appraisal. *arXiv preprint arXiv:1801.00631.* ------ Discussion paper

4. Automated healthcare App. Princeton University ------ Case study



B- Recommended books, materials, and media:

## 26 Additional information: