
Form: **Course Syllabus**	**Form Number**	EXC-01-02-02A
	Issue Number and Date	2/3/24/2022/2963 05/12/2022
	Number and Date of Revision or Modification	2023/10/15
	Deans Council Approval Decision Number	265/2024/24/3/2
	The Date of the Deans Council Approval Decision	2024/1/23
	Number of Pages	06

1.	**Course Title**	Database
2.	**Course Number**	1605131
3.	**Credit Hours (Theory, Practical)**	3 hours
	Contact Hours (Theory, Practical)	3 hours weekly
4.	**Prerequisites/ Corequisites**	None
5.	**Program Title**	Management Information Systems (MIS)
6.	**Program Code**	05
7.	**School/ Center**	Business School
8.	**Department**	Management Information System
9.	**Course Level**	Third year
10.	**Year of Study and Semester (s)**	First semester (2025/2026)
11.	**Program Degree**	Bachelor
12.	**Other Department(s) Involved in Teaching the Course**	None
13.	**Learning Language**	English
14.	**Learning Types**	☒Face to face learning ☐Blended ☐Fully online
15.	**Online Platforms(s)**	☐Moodle ☒Microsoft Teams
16	**Issuing Date**	
17.	**Revision Date**	

18. Course Coordinator:

Name: Prof.Rand Aldmour	**Contact hours**: S,M,T 11:30-12:30
Office number: 24288	**Phone number**:
Email: Rand.aldmour@ju.edu.jo	

19. Other Instructors:

20. Course Description:

As stated in the approved study plan.

The course introduces students to the fundamental concepts of database systems. It begins with data management, integrity, and security, then progresses to the principles of **Entity-Relationship (ER) modeling**, focusing on components, cardinality, and participation constraints.

Students will gain hands-on experience in **mapping ER models to relational models**, developing both conceptual and logical design skills.

The course also covers **database normalization** (1NF, 2NF, and 3NF) to ensure data consistency and efficiency.In the practical part, students will learn **SQL commands**, including Data Definition Language (DDL) and Data Manipulation Language (DML), to create, alter, and manage relational databases.
By the end of the course, students will be able to design, implement, and manage efficient and secure databases using modern tools and SQL environments.

21. Program Intended Learning Outcomes: (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

PLO's	***National Qualifications Framework Descriptors***		
	Competency (C)	**Skills (B)**	**Knowledge (A)**
5	☐	☐	☒
7	☐	☒	☐

* Choose only one descriptor for each learning outcome of the program, whether knowledge, skill, or competency.

22. Course Intended Learning Outcomes: (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

Course ILOs #	The learning levels to be achieved						Competencies
	Remember	**Understand**	**Apply**	**Analyse**	**Evaluate**	**Create**	
1.	x	x					
2.		x	x	x			
3.			x	x			
4.			x	x			
5.		x	x	x	x	x	

23. The matrix linking the intended learning outcomes of the course -CLO's with the intended learning outcomes of the program -PLOs:

PLO's * / CLO's	1	2	3	4	5	Descriptors**		
						A	B	C
PLO 5	x	x	x			x		
PLO 7				x	x		x	x

***Linking each course learning outcome (CLO) to only one program outcome (PLO) as specified in the course matrix.**

****Descriptors are determined according to the program learning outcome (PLO) that was chosen and according to what was specified in the program learning outcomes matrix in clause (21).**

24. Topic Outline and Schedule:

Week	Lecture	Toxpic	ILO/s Linked to the Topic	Learning Types (Face to Face/ Blended/ Fully Online)	Platform Used	Synchronous / Asynchronous Lecturing	Evaluation Methods	Learning Resources
1	1.1	Database Introduction	CLO 1	**Face to Face**	M.T	**Synchronous /**		All material and recorded videos available on MT
	1.2	Key Fields	CLO 1					
	1.3	Assignment	CLO 1					
2	2.1	ER model Components	CLO 2					
	2.2	ER model Components	CLO 2					
	2.3	ER model Components	CLO 2					
3	3.1	Cardinality Relationship	CLO 2					
	3.2	Participation Constraints	CLO 2					
	3.3	ER Scenarios 1	CLO 2					
4	4.1	ER Scenarios 2	CLO 2					
	4.2	ER Revision	CLO 2					
	4.3	Mapping Regular Entity Types	CLO 3					
5	5.1	Mapping weak Entity Types	CLO 3					
	5.2	Mapping of Binary Relation Type	CLO 3					
	5.3	Mapping of Multivalued Attributes	CLO 3					
6	6.1	Mapping Relationships	CLO 3					
	6.2	Mapping Exercise	CLO 3					
	6.3	Mapping Exercise	CLO 3					
7	7.1	Mapping Exercise	CLO 3					
	7.2	Mapping Exercise	CLO 3					
	7.3	Normalization (A transitive dependency)	CLO 3					
8	8.1	First Normal Form (1NF)	CLO 3					
	8.2	Second Normal Form (2NF)	CLO 3				Exam and Assignment	

	8.3	Third Normal Form (3NF)	CLO 3					
9	9.1	Normalization Exercises	CLO 3					
	9.2	Data Types	CLO 4					
	9.3	Constraints	CLO 4					
10	10.1	DDL Commands (Create)	CLO 4					
	10.2	DDL Commands (Alter)	CLO 4					
	10.3	DDL Commands (Drop)	CLO 4					
11	11.1	DMl Commands (Insert)	CLO 4					
	11.2	DMl Commands (Update)	CLO 4					
	11.3	DMl Commands (Delete)	CLO 4					
12	12.1	DML Commands (Select)	CLO 5					
	12.2	DML Commands (Select)	CLO 5					
	12.3	DML Commands (Select)	CLO 5					

25. Evaluation Methods:

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

Evaluation Activity	**Mark wt. (%)**	**CLO 1**	**CLO 2**	**CLO 3**	**CLO 4**	**CLO 5**	**CLO 6**
First Exam (Mid–Term – Design)	30	X	X	X			
Second Exam (Theory)	10				X		
Final Exam	50	X	X	X	X	X	
Class Work (Participation / Assignments)	—	X	X				
Projects / Reports (Implementation Project)	10					X	
Research / Working Papers	—						
Field Visits	—						

Practical and Clinical	—						
Performance / Completion File	—						
Presentation / Exhibition	—						

*** According to the instructions for granting a Bachelor’s degree.**

****According to the principles of organizing semester work, tests, examinations, and grades for the bachelor’s degree.**

Mid-term exam specifications table*

No. of questions/ cognitive level						No. of questions per CLO	Total exam mark	Total no. of questions	CLO/ Weight	CLO no.
Create %10	Evaluate %10	analyse %10	Apply %20	Understand %20	Remember %30					
		x		x	x	1	10	1	33%	2
		x		x	x	2	10	1	33%	3
		x		x	x	3	10	1	33%	3

Final exam specifications table

No. of questions/ cognitive level						No. of questions per CLO	Total exam mark	Total no. of questions	CLO Weight	CLO no.
Create %10	Evaluate %10	analyse %10	Apply %20	Understand %20	Remember %30					
		x		x	x	5	15	5	15%	1
		x		x	x	7	25	7	%25	2
		x		x	x	6	25	6	%25	3
		x			x	5	20	5	%20	4
		x		x	x	2	15	2	%15	5

26. Course Requirements:

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

27. Course Policies:

A- Attendance policies: Students are expected to attend all scheduled lectures and lab sessions regularly. Absences exceeding **15%** of total contact hours without valid justification will result in course withdrawal according to university regulations. Active participation in lectures and discussions is strongly encouraged.

B- Absences from exams and submitting assignments on time:

Make-up exams will only be allowed with a valid excuse approved by the instructor and the department. Assignments and projects must be submitted before the announced deadlines; late submissions may result in grade deduction or non-acceptance unless prior arrangements have been approved.

C- Health and safety procedures: Students should adhere to all university safety protocols within classrooms and computer labs, including proper use of equipment and immediate reporting of any hazards. Eating and drinking in labs is prohibited. Emergency exits and procedures must be followed at all times.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Academic honesty is mandatory. Any form of cheating, plagiarism, falsification of data, or inappropriate behavior will result in disciplinary action according to the **University of Jordan's Code of Conduct**. Group work must reflect individual contribution, and plagiarism software may be used to verify originality.

E- **Grading policy:**

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

28. References:

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

B- Recommended books, materials, and media:

29. Additional information:

Name of the Instructor or the Course Coordinator: Prof.Rand Aldmour	Signature: …………..……………….	Date: ……..…………
Name of the Head of Quality Assurance Committee/ Department …………………………………………………..	Signature: …………..……………….	Date: ……..…………
Name of the Head of Department …………………………………………………..	Signature: …………..……………….	Date: ……..…………
Name of the Head of Quality Assurance Committee/ School or Center …………………………………………………..	Signature: …………..……………….	Date: ……..…………
Name of the Dean or the Director …………………………………………………..	Signature: …………..……………….	Date: ……..…………