



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

Faculty	Business	Department	Management Information System
Course number	0506221	Course title	Database Management Systems
Number of credit hours	3	Pre-requisite/co-requisite	Advanced Management Information Systems

This course is designed for an introductory text in database management. It represents a theoretical & practical framework of modeling data in the organization, designing logical relational database, and using within business organization.

	Course goals and learning outcomes
Goal 1	Explain growth and importance of databases and advantages of the databases approach compared to conventional file processing.
Learning outcomes	1.1 Knowing the databases and its importance. 1.2 Knowing limitations of conventional file processing. 1.3 Knowing advantages of databases.
Goal 2	Understand system development life cycle (SDLC) and prototyping approach
Learning outcomes	2.1 Understanding each phase of system development life cycle. 2.2 Understanding each phase of prototyping. 2.3 Knowing the differences between system development life cycle and prototyping.
Goal 3	Learn how to model data in the organization.
Learning outcomes	3.1 Knowing Business rules. 3.2 Knowing importance of data modeling. 3.3 Being able to modeling data in the organization.
Goal 4	Know how to build Entity-Relationship (E-R) diagram
Learning outcomes	4.1 Being able to write good names and definitions for entities, relationships, and attributes. 4.2 Distinguish between unary, binary, and ternary relationships. 4.3 Being able to draw E-R diagrams for common business situations.
Goal 5	Ability to model enhanced entity-relationship (EER) Diagrams, recognize when to use supertype/subtype relationship in data modeling.
Learning outcomes	5.1 Using the supertype/subtype relationships. 5.2 Develop supertype/subtype hierarchies for realistic business situations. 5.3 Converting E-R diagram into EER diagram.
Goal 6	Ability to transform an E-R (or EER) diagram to logically equivalent set of relations.
Learning outcomes	6.1 Learning how to convert from E-R (or EER) diagram to logically equivalent set of relations.
Goal 7	Describe and understand Normalization and its steps.
Learning outcomes	7.1 Creating tables with entity and relational integrity constraints. 7.2 Using normalization to convert anomalous tables to well-structured relations.
Goal 8	Understand the client / server database environment.
Learning outcomes	8.1 Listing advantages of client/server architecture. 8.2 Distinguishing between file server, database server, 3-tier, and n-tier approaches.



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

Goal 9	Describe data warehousing, distributed databases, and object- oriented data modeling.
Learning outcomes	9.2 Knowing data warehouse. 9.2 Explaining advantages and risks of distributed databases. 9.3 Describing phases of object-oriented development life cycle.
Goal 10	Create database tables with constraints and use SQL queries.
Learning outcomes	10.1 Define a database using SQL data definition language. 10.2 Write single table queries using SQL. 10.2 Establish referential integrity using SQL.
Textbook	1- Hoffer Jeffery A. & Others (2013), Modern Database Management, N J Pearson–Prentice Hall, 11th edition. 2- Oracle University, Introduction to Oracle: SQL, Volume 1, 2.
Supplementary references	1- Introduction to Oracle, ITCC 2- Oracle 8, A Beginner's Guide, Oracle press.

Course timeline				
Week	Number of hours	Course topics	Pages (textbook)	Notes
01	1 1 1	Database Fundamentals: - Data, Metadata, DBMS, Disadvantages of file processing, . - Database Approach. - Advantages of the database approach.	40-47	1
02	1 1 1	Range of Database Application: - Evolution of Database Systems. - Components of the database model. -Database development process. -Database development within IS.	48-69	1
03	1 1 1	Basic Database analysis: - The E-R Model. - Modeling the Roles of the organization - E- R Modeling Examples.	95-135	2
04	1 1 1	Advanced Database Analysis: - The Enhanced E-R Model. - Representing supertypes and subtypes. Specifying constraints in supertype/ subtype Relationships. - Three –schema Architecture for database development.	151-179	2
05	1 1 1	Relational Database Design - Logical Database Design: - The Relational Data model. - Transforming ERD into Relations	193-216	3
06	1 1	Normalization: -Introduction to Normalization.	216-226	4



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

Detailed Course Description - Course Plan Development and Updating Procedures/ Management Information System Department	QF05/0408-3.0E
--	-----------------------

	1	- Steps in Normalization.		
07	1 1 1	Database Applications: - Client / server Database. - Distributed Databases. - Object-oriented Databases.	374-391 553-550 561-554	6 ، 5
08	1 1 1	Introduction to SQL * plus.	281-298	7
09	1 1 1	Oracle SQL * plus.	26-20	7
10	1 1 1	Oracle SQL * plus.	20-26	7
11	1 1 1	Oracle SQL * plus.	9-34	7
12	1 1 1	Synonyms, indexes.	11-26	7
13	1 1 1	Advanced Queries.	2-14	7
14	1 1 1	Structure, Expression & Statement.		7
15	1 1 1	PL/ SQL -Oracle form Builder	20-40	7
16	1 1 1	Advanced PL/SQL	327-345	7

Theoretical course evaluation methods and weight	Participation = 10% First exam 20% Second exam 20% Final exam 50%	Practical (clinical) course evaluation methods	Semester students' work = 50% (Reports, research, quizzes, etc.) Final exam = 50%
---	--	---	---

Approved by head of department		Date of approval	
---	--	-------------------------	--



"الريادة والأبداع في الأعمال"
"Entrepreneurship and
Innovation in Business"

جامعة الزيتونة الأردنية
Al-Zaytoonah University of Jordan
كلية الأعمال
Faculty of Business



"عراقة وجودة"
"Tradition and Quality"

**Detailed Course Description - Course Plan Development and Updating Procedures/
Management Information System Department**

QF05/0408-3.0E

Extra information (to be updated every semester by corresponding faculty member)

Name of teacher	Dr. Qeethara La-Shayea	Office Number	260
Phone number (extension)	142	Email	drqeethara@zuj.edu.jo
Office hours	9-10 9:30:10:30		