



Al-AI Bayt University
Prince Hussein bin Abdullah Faculty of Information Technology
Computer Science

Course Syllabus

Course Title	Database management system	Course Code	901331
Coordinator	Dr. Mofleh AL diabat	Prerequisite(s)	901240
E-mail	moflehd@aabu.edu.jo	Credit Hours	3
Course Is	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Elective		

Course Description:

This course covers the following topics: the technical approach to database design: Database Models (Hierarchical, Network, Object-Oriented, and Relational), Database Modeling (Entities and Relationships, Normalization), Database Manipulation (SQL), The application of database technology to the business environment (through many business-related examples, particularly in Marketing), The management issues raised by deployment of database technology (Security, Concurrency, Back-up and Recovery), Emerging database technology (Data Warehousing and Data Mining with business examples).

Course Learning Outcomes (CLO):

By the end of this course, students should be able to:

- Discuss the various types of databases technology
- Draw an Entity Relational diagram for any given scenario and design a schema for the relational database.
- Normalize the given database tables
- Gain a knowledge about various databases and their specifications and properties.
- The students are expected to be able for designing small business database
- The student will learn the various types of computer database models
- Be able to outline the architecture of a database system,

Tentative Topics Covered	
Week No	Topic
1+2	Introduction to Database Systems and Database Architecture: Definition of data, databases, data models, database levels, and database languages.
3+4	Database System Concepts and Architecture
5+6	The Relational Data Model and Relational Database Constraints
7+8+9	Basic SQL
10+11	Data Modeling Using the Entity-Relationship (ER) Model
12+3	The Enhanced Entity-Relationship (EER) Model
14+15	Relational Database Design by ER- and EER-to-Relational Mapping

Textbook(s)			
Title	Fundamentals of Database Systems		
Author(s)	Elmasri & Navathe	Publisher	Addison Wesley
Edition	Sixth	Year	2011

References	
Book Titles (Author(s), Title, Edition, Publisher, Year)	Website URL(if available)
1- Elmasri & Navathe, "Fundamentals of Database Systems", Addison Wesley.	
2- Thomas Connolly and Carolyn Begg, "Database Systems, A Practical Approach to Design, Implementation, and Management", Addison Wesley, Fourth Ed.	
3- An Introduction to Database Systems, by C.J. Date, Addison-Wesley.	
4- An Advanced Course in Database Systems: Beyond Relational Databases, Suzanne W Dietrich and Susan D. Urban	
5- Database Systems Concepts", Silberschatz, Korth and Sudarshan, 4 th Ed.	

Evaluation	
Assessment Tool	Marks
- First Exam	20
- Second Exam	20
- Assignments (Reports, Quiz, Seminar, Tutorial, etc.) - Discipline, presence and participation	0
- Lab	10
- Final Examination	50