

Ministry of Higher Education & Scientific Research

University of Anbar

College of Computer Science  
and Information Technology

Computer Networks Systems Department



كلية علوم الحاسب وتكنولوجيا المعلومات

وزارة التعليم العالي والبحث العلمي

جامعة الأنبار

كلية علوم الحاسب وتكنولوجيا المعلومات

قسم أنظمة شبكات الحاسوب

## Department of Computer Networks Systems

### Course Description Form

**Course Title:** Database Management Systems (DBMSs)

**Course Code:**

**Semester:** I

**Level:** B.Sc.

**Class:** 3<sup>rd</sup>

**Academic Year:** 2022/2021

**Course Instructor:** Dr. Waleed Khalid Hassan

**Academic status:** Lecturer

**Place of work:** College of Computer Science and Information Technology  
- IS Dept.

**Credit Hours:** 2 hours

**Instructor Office Hours:** Monday

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**Mobile Number:** 07827771143

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## Lecture Schedule:

Weeks	Topics
Week 1	Introduction to Database Management System
Week 2	View of Data, Data Abstraction, Instances and Schemas
Week 3	Data Models, Database Architecture
Week 4	Database Languages: DDL, DML
Week 5	Conceptual Database Design - Entity Relationship(ER) Modeling
Week 6	Relational Data Model, Type of Keys
Week 7	Relational Algebra
Week 8	Relational calculus, Tuple Relational Calculus, Examples
	<b>Midterm Exam</b>
Week 9	Domain Relational Calculus, Examples of DRC Queries
Week 10	SQL, the form of a basic SQL query + Examples (1)
Week 11	SQL, the form of a basic SQL query + Examples (2)
Week 12	Schema Refinement
Week 13	Decompositions
Week 14	Functional Dependencies
Week 15	Normalization