School of Business and Management Sciences / Management Information Systems (English)

2023 - 2024 Academic Year

DATA BASE and DATA BASE MANAGEMENT SYSTEMS

Syllabus

Course Description					
Name	**Code**	**Semester**	**T+A Hour**	**Credit**	**ECTS**
DATA BASE and DATA BASE MANAGEMENT SYSTEMS	MIS3112177	Fall Semester	3+0	3	4

Prerequisites Courses	
Recommended Elective Courses	
Language of Instruction	English
Course Level	First Cycle (Bachelor's Degree)
Course Type	Required
Course Coordinator	Assist.Prof. Kevser ŞAHİNBAŞ
Name of Lecturer(s)	Lect. Nada A. M. MISK
Assistant(s)	
Aim	To comprehend the basic terms and concepts of database. Relational data model, table data structure, relational algebra operations, basic SQL and advanced SQL queries, ODBC, programming of stored procedures and functions, triggering and developing database applications
Course Content	This course contains; Introduction to Database Management System,Relational Model Database Model,Database design-ER Data Model,SQL-Data definition language, Data update language,SQL-SELECT Query,SQL-Data manipulation language-INSERT,UPDATE,DELETE,SQL-Query-Set operations, UNION, INTERSECT, EXCEPT,Midterm,SQL-JOIN,SQL-GROUP BY, HAVING,SQL-Sorgulama-Subquery,SQL-Triggers,SQL-Stored Procedure,SQL-Index, View.

Course Learning Outcomes	**Teaching Methods**	**Assessment Methods**
1. will be able to learn database concept and file systems.	6	A
1.1. Defines the concept of data.	14, 6	A
1.2. Lists file systems.	6	A
2. will be able to understand the advantages of database management system.	6	A
2.1. Defines atomicity.	6	A
2.2. Simultaneous access explorations.	6	A
2.3. Explains data security.	6	A
2.4. Explores the ease of finding data in the framework of DB.	6	A
3. will be able to schematically set up the relational model for any software.	6	A
3.1. Lists the basic properties of the relational database.	6	A
3.2. Explains the concepts of relationship and key.	6	A
4. Will be able to query on the database in SQL language.	6	A
4.1. Performs add, delete, update operations with SQL commands.	6	A
4.2. Explains the operators and tasks used in the SQL.	6	A
4.3. Applies the filtering operations on the data.	6	A
4.4. Uses interrogation inside.	6	A
5. Will be able to use SQL language in languages such as C #, VB.	6	A
5.1. Runs the SQL Server services.	6	A
5.2. Develops views.	6	A
6. will be able to design web based database applications.	6	A
6.1. Inserts database connection.	6	A
6.2. Designs own functions.	6	A
7. will be able to look at the whole software with the database.	14, 6	A
7.1. Develops advanced SQL commands.	6	A

Teaching Methods	14: Self Study Method, 6: Experiential Learning
Assessment Methods	A: Traditional Written Exam

Lecture Schedule

Sequence	**Topics**	**Preliminary Preparation**
1	Introduction to Database Management System	
2	Relational Model Database Model	
3	Database design-ER Data Model	
4	SQL-Data definition language, Data update language	
5	SQL-SELECT Query	
6	SQL-Data manipulation language-INSERT,UPDATE,DELETE	
7	SQL-Query-Set operations, UNION, INTERSECT, EXCEPT	
8	Midterm	
9	SQL-JOIN	
10	SQL-GROUP BY, HAVING	
11	SQL-Sorgulama-Subquery	
12	SQL-Triggers	
13	SQL-Stored Procedure	
14	SQL-Index, View	

Evaluation Methods	**Weight(%)**
Midterm Exam	40
General Exam	60

Resources
Database Management Systems, R. Ramakrishnan, J.Gehrke, Third Edition – Mc Graw Hill. Second Edition: https://xuanhien.files.wordpress.com/2011/04/database-management-systems-raghu-ramakrishnan.pdf Reading List: 1. Database Systems: A Practical Approach to Design, Implementation, and Management, 6th edition, Thomas Connolly, Carolyn Begg 2. Database Mangement Systems, R. Ramakrishnan, J.Gehrke, Third Edition – Mc Graw Hill. 3. Database System Concepts Avi Silberschatz, Henry F. Korth, S. SudarshanSeventh Edition, 2019 4. Veritabanı Sistemleri Dersi: Teoriden Pratiğe, N. ERCİL-ÇAĞILTAY ve G. TOKDEMİR, 2010 5. Veritabanı kavramı ve MS-SQL uygulamaları, Telciler, Coşkun, yazar, 2013