

Course Name	Course Code	Semester	T + P	Credit	ECTS
Database Management Systems		4	3 + 0	3	5

Prerequisite Courses	None
----------------------	------

Language of Course	Turkish
Course class	compulsory
Coordinator of Course	
Instructor	
Course Assistant	
Objective of Course	To set up and manage database systems such as Oracle and MSSQL Server,
Course Learning Output	Ability to design physical database The ability to provide security in the database
Course Contents	(DBMS) functions, architecture, data independence, data models, conceptual models, object oriented models and relational data models. Relational schema translation of conceptual schemas, bindings, key types, functional dependencies, multivalued dependency and database design. SQL also; data definition commands, relational query, data editing, SQL usage in applications and updating the designed database. Creating a transaction using SQL, using i, trigger, preparing procedure and function, synchronous control, homogeneous and heterogeneous solutions. File structures, index files, complex (hash) files.

Weeks	Topics
1	Components of database systems, database management system (DBMS) functions, architecture
2	Data independence, data models, conceptual models, object oriented models and relational data models.
3	Relational schema translation of conceptual schemas, bindings, key types, functional dependencies, multivalued dependency and database design.
4	SQL also; data definition commands, relational query, data editing, SQL usage in applications and updating the designed database.
5	Creating a transaction using SQL, efficiency characteristics
6	File structures, index files, complex (hash) files.
7	Protection levels
8	MIDTERM
9	Trigger preparation and use
10	Preparing and using Procedure and Function subprograms
11	Package preparation and use
12	Simultaneous control, homogeneous and heterogeneous solutions
13	Reliability levels
14	Concurrency, faults and solutions
15	FINAL EXAM

General Sufficiency
SQL also; create a database with data definition commands, relational query, data editing, use
References
Yarımağan, Ü., (2000), Database Systems, Akademi Press Oracle, Oracle (9i) - SQL, SQL + Plus, PL / SQL and Database Management, Beta Publishing, 2004, Istanbul McFadden, FR, Hoffer, JA, (1988), Database Management, The Benj. PC Gözdeli, Y., Basic Database Programming with SQL Server.
Assessment
Midterm exam: 40%, Final exam: 60%; Project or homework evaluations can be made at the beginning of the semester.

