ESOGÜ Mathematics and Computer Sciences Department
COURSE INFORMATION FORM

SEMESTER	Fall

COURSE CODE	821615010	COURSE NAME	Database Management Systems

SEMESTER	WEEKLY COURSE PERIOD			COURSE OF			
	Theory	Practice	Labratory	Credit	ECTS	TYPE	LANGUAGE
5	3	0	0	3	5	COMPULSORY ( ) ELECTIVE (X)	Turkish

COURSE CATAGORY		
Mathematics	Computer	Social Science
	X	

ASSESSMENT CRITERIA

MID-TERM	Evaluation Type	Quantity	%
	1st Mid-Term	1	50
	2nd Mid-Term		
	Quiz		
	Homework		
	Project		
	Report		
	Others (………)		
FINAL EXAM		1	50

PREREQUIEITE(S)	None
COURSE DESCRIPTION	The concept and the installation of SQL server, database creation, data types and tables, query the data with Transact-SQL, SQL functions, backup, security, XML, CLR, ADO.NET.
COURSE OBJECTIVES	The aim of the course is to introduce the concepts and techniques involved in the basic topics listed in this lecture and to develope the skills in database design and query applying those concepts and techniques.
ADDITIVE OF COURSE TO APPLY PROFESSIONAL EDUATION	Gain the ability database design and implement database changes in the environment.
COURSE OUTCOMES	Give basic information about the database, database development policies, query, issues such as design and use of tools to gain basic knowledge and skills.
TEXTBOOK	Yaşar Gözüdeli, Yazılımcılar için SQL Server 2008 ve Veritabanı Programlama, Seçkin Yayıncılık, 5. baskı, 2010.
OTHER REFERENCES	1- Selçuk Özdemir, SQL Server 2008 R2, Kodlab Yayıncılık, 2. baskı, 2011. 2- Elmasri R., Navathe S.B., Fundamentals of Database Systems, Fourth Edition, Addison-Wesley, 2004.
TOOLS AND EQUIPMENTS REQUIRED	Server for database and personal computers.

COURSE SYLLABUS

WEEK	TOPICS
1	SQL Server Concept and Installation
2	Database Design
3	Data Types
4	Tables
5	Data Querying
6	Data Querying
7	SQL Functions
8	Midterm
9	Backup
10	Security
11	XML
12	CLR
13	ADO.NET
14	Database Applications
15	Project Presentation
16,17	Final Exam

NO	PROGRAM OUTCOMES	3	2	1
1	The ability to apply knowledges of Mathematics and Computer Sciences,	X		
2	To have sufficient theoretical and practical knowledge of Mathematics at international level,		X	
3	The ability of describing, modelling and solving of mathematical problems at Mathematics and related subjects,		X	
4	The skill to solve and design a problem process in accordance with a defined target,		X	
5	Skills to analyze data, interpret and apply to other datum and using these data on computer,	X		
6	The skill to use the modern techniques and computational tools needed for mathematical applications,	X		
7	The skill to make team work within the discipline and interdisciplinary,		X	
8	The ability to improve oneself by following the developments on other modern, scientific and technological subjects as well as Mathematics and Computer Sciences,		X	
9	The skill to communicate orally and in written way, in a clear and concise manner by having individual work skills and ability to independently decide and analytical thinking,		X	
10	The skill to have professional and ethical responsibility,		X	
11	The skill to have consciousness for quality issues and scientific research,		X	
12	The skill to be sensitive to environmental issues related with problems and development of living area and consistent in the social relations,		X	
13	Ability to solve problems in the working life faced to find an appropriate algoritms via mathematical modeling and to write computer programs,	X		
14	The skill to developed design of software systems at different complex levels,	X		
15	The credence of necessity of life-long learning and ability to apply the formation long-life learning.		X	
1:None. **2**:Partially contribution. **3**: Completely contribution.				

Instructor(s): Prof. Dr. Bülent SAKA

Signature: **Date:** 29.08.2022