

COURSE INFORMATION					
Course Title	Code	Semester	L+P+L Hour	Credits	ECTS
Database Management Systems	CIS 512		3+0+0	3	10

Prerequisites

Language of Instruction	English
Course Level	Master's Degree
Course Type	Elective
Course Coordinator	Assoc. Prof. Dr. Aşkın Demirağ
Instructors	Assoc. Prof. Dr. Aşkın Demirağ
Assistants	
Goals	SQL, manage the database objects, normalization process, data processing, manage the database transactions, using operator to classify data, summarize the results of a query, classify and group the data, revision of view of data, query of multiple tables, using sub-queries, union of multiple queries, management of database users, management of database security.
Content	This course covers the following topics: SQL, managing database objects, the normalization process, manipulating data, managing database transactions, using operators to categorize data, summarizing data results from a query, sorting and grouping data, restructuring the appearance of data, joining tables in queries, using sub-queries, combining multiple queries into one, managing database users, managing database security.

Learning Outcomes	Program Learning Outcomes	Teaching Methods	Assessment Methods
Knows about SQL commands.	7,8	1,2,3,4	A,C
Knows about creating database.	7,8	1,2,3,4	A,E
Learns about database management.	7,8	1,4	A,E
Learns about backup, restore and recovery.	7,8	1, 4	A,E
Learns about performance and security settings.	7,8	1, 4	A,C,E

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Lab Work
Assessment Methods:	A: Testing, B: Presentation C: Homework D: Project E: Laboratory

COURSE CONTENT		
Week	Topics	Study Materials
1	Introduction to Database Architecture	
2	Installation DBCA	
3	Database Instance Networking	
4	Storage Users	
5	Locking	
6	Undo	
7	Auditing, Maintenance.	
8	Midterm	
9	Project Delivery	
10	Backup & Recovery	
11	Backup & Recovery	
12	Moving Data	
13	Presentation	
14	Presentation	

RECOMMENDED SOURCES	
Textbook	DATABASE PROCESSING, David M.Kroenke, David J.Auer, Pearson Education, 12.Edition
Additional Resources	ORACLE Database 11G: Administration Workshop I

MATERIAL SHARING	
Documents	Sample files and documents from www.ogrencisistemi.org web site.
Assignments	
Exams	

ASSESSMENT		
IN-TERM STUDIES	NUMBER	PERCENTAGE
Mid-term	1	60
Quiz	1	20
Homework	1	20
Total		100
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		60

CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE	40
Total	100

COURSE CATEGORY	Expertise/Field Courses
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COURSE'S CONTRIBUTION TO PROGRAM						
No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Information Systems graduates have the knowledge and the skills to design and develop the complete systems for multi-media visual user interface.			X		
2	Information Systems graduates have advanced the knowledge and skills to design, develop and install the application systems for multi-media.		X			
3	Information Systems graduates have the knowledge and the skills to design, develop and apply algorithms and data structures to solve the basic problems of information processing, within the framework of discrete mathematics.	X				
4	Information Systems graduates have the knowledge and the skills to design and develop computer applications, based on user specified requirements, using modern structured development tools and install them on various hardware platforms and deploy their usage.				X	
5	Information Systems graduates have the knowledge and the skills to design and develop computer applications, based on user specified requirements, using modern object-oriented development tools and install them on various hardware platforms and deploy their usage.		X			
6	Information Systems graduates know the logic of computer operating systems, the basic set of system commands, how to control access to system resources by users of different departments and how to monitor the running of jobs in the system.	X				
7	Information Systems graduates have the knowledge and the skills to design and develop data models serving different requirements, database applications that would access and process data using various types of software, including queries, reports and business applications.					X
8	Information Systems graduates have the knowledge and the skills to design and develop business applications that would provide data access, modification and processing for data kept in enterprise database systems.					X
9	Information Systems graduates have the knowledge about computer networks, and have the skills to design, develop and monitor computer networks, how to configure them and how to maintain their performance.		X			
10	Information Systems graduates have the knowledge and the skills to design and develop visual user interfaces for the web, web-based applications for n-tier client/server configurations, how to deploy them in enterprises.		X			

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (Including the exam week: 15x Total course hours)	14	3	42
Hours for off-the-classroom study (Pre-study, practice)	14	5	70
Homework	10	10	100
Quizzes	10	1	10
Midterm	1	10	10
Final	1	10	10
Total Work Load			242
Total Work Load / 25 (h)			9.6
ECTS Credit of the Course			10