Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
GE206	DATABASE MANAGEMENT	2.00	1.00	0.00	3.00	4.00

Course Detail

Course Language	: English
Qualification Degree	: Bachelor
Course Type	: Compulsory
Preconditions	: Not
Objectives of the Course	: The aim of this lesson is to give basic knowledge of database systems and to provide a broad base for learning data definition, data modelling, database design and implementation.
Course Contents	: This course introduces data modelling techniques with entity-relational model and creating database objects by using SQL language.
Recommended or Required Reading	: First Course in Database Systems, A, 3/E" by Jeffrey D. Ullman and Jennifer Widom
Planned Learning Activities and Teaching Methods	: Weekly lectures, Exams, Project preparation.
Recommended Optional Programme Components	: none
Instructors	: Dr. Öğr. Üyesi Serkan Karakış
Instructor's Assistants	: none
Presentation Of Course	: Asynchronous online.
En Son Güncelleme Tarihi:	: 6/27/2024 1:41:37 PM

Course Outcomes

Upon the completion of this course a student :

1 Develop an analytical database approach to a real-world situation .

2 Construct a data model and logical database design.

3 Translate a database model into real database.

4 Find and correct data anomalies.

5 Design queries to manipulate data.

6 Design queries to extract meaningful information from a database.

Preconditions

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Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods	Course Learning Outcomes
1.Week	*Course Introduction					
2.Week	*Database Design: Relations					
3.Week	*Database Design: Entity-Relationship Model					
4.Week	*Database Design: Cardinality					
5.Week	*Database Design: Subclasing, ISA, Weak Entity					
6.Week	*Database Design: Functional Dependencies					
7.Week	*Introduction to MsSQL (Microsoft SQL Server 2022 Developer) Software and SQL - DQL (Data Query Language)					
8.Week	*Midterm Exam					
9.Week		*Database Construction and Usage: SQL - DDL (Data Definition Language) and DML (Data Manipulation Language)				
10.Week		*Database Construction and Usage: SQL Queries and Relational Algebra				
11.Week		*Database Construction and Usage: SQL Queries, String Comparisons, Aggregations, Built-in Functions				
12.Week		*Database Construction and Usage : SQL Queries, Grouping, Join				
13.Week		*Database Construction and Usage : Stored Procedure and Functions				
14.Week		*Database Construction and Usage : Triggers				
15.Week	*Final Exam					

Assesment Methods %

1 Midterms : 40.000

2 Final : 60.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload
Final / Final	1	2.00	2.00
Derse Katılım / Attending lectures	14	3.00	42.00
Ders Öncesi Biresysel Çalışma / Individual study before lecture	14	3.00	42.00
Ders Sonrası Biresysel Çalışma / Individual study after lecture	14	1.00	14.00
Proje / Project	1	8.00	8.00
Final Sınavı Hazırlık / Preparation for final	1	8.00	8.00
		Total :	116.00
	Sum of Workload / 30 (Hour) :		4
		ECTS :	4.00

Program And OutcomeRelation

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11
L.O. 1	4	5	0	0	4	0	0	0	0	0	0
L.O. 2	4	5	4	0	0	0	0	0	0	0	0
L.O. 3	4	5	4	0	0	0	0	0	0	0	0
L.O. 4	4	5	0	0	4	0	0	0	0	0	0
L.O. 5	4	5	0	0	4	0	0	0	0	0	0
L.O. 6	4	5	0	0	4	0	0	0	0	0	0