

Vocational School / Computer Programming

2024 - 2025 Academic Year

DATABASE PROGRAMMING II

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
DATABASE PROGRAMMING II	BPR1214988	Spring Semester	4+0	4	6
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Required				
Course Coordinator	Lect. Beyza KOYULMUŞ				
Name of Lecturer(s)	Lect. Duran KÜÇÜKLER				
Assistant(s)					
Aim	The objectives of the course are to make the students understand the concept of database and that the database is the basic element of a software, and to introduce the SQL language effectively to the students and to introduce the platforms to use this language.				
Course Content	This course contains; Information about the course,What is a Database? What are Database Types (SQL, MySQL, Oracle, NoSql, Redis),Data Definition Language (DDL) expressions,Data Manipulation Language (DML) statements,Transaction Control (TCL) expressions,Normalization rules and ACID Principles,Subqueries and join expressions,View queries and union expressions,Variables,Functions, Stored Procedures,Stored Procedures,Tigers,Database backup,Database project design.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Learns database concept and file systems			17, 9	A, E	
Schematically builds the entity relational model for any software			17, 9	A	
Makes queries on the database with SQL language			17, 9	A, E	
C# uses SQL language embedded in languages such as VB			17, 9	A, E	
Designs web-based database applications			17, 9	A, E	
Teaching Methods	17: Experimental Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Information about the course				
2	What is a Database? What are Database Types (SQL, MySQL, Oracle, NoSql, Redis)				
3	Data Definition Language (DDL) expressions				
4	Data Manipulation Language (DML) statements				
5	Transaction Control (TCL) expressions				
6	Normalization rules and ACID Principles				
7	Subqueries and join expressions				
8	View queries and union expressions				
9	Variables				
10	Functions, Stored Procedures				
11	Stored Procedures				
12	Tigers				
13	Database backup				
14	Database project design				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
Lecture Presentations[1] Database Mangement Systems, R. Ramakrishnan, J.Gehrke, Second Edition – Mc Graw Hill. [2] Database System Concepts, A. Silberschatz