

Vocational School / Computer Programming

2023 - 2024 Academic Year

OBJECT ORIENTED PROGRAMMING

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
OBJECT ORIENTED PROGRAMMING	BPR2114993	Fall Semester	4+0	4	7
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. Mustafa Çağın ARSLAN				
Assistant(s)					
Aim	The aim of this course is to teach object oriented programming and to provide students with the ability to think analytically, analyze problems and design software.				
Course Content	This course contains; Introduction to Object Oriented Programming - UML (Unified Modeling Language) ,Classes and Objects - Encapsulation and data hiding,Inheritance and Polymorphism,Abstraction and Interfaces,Object Oriented Analysis and Design,Exception Processing,Collections and Generics, File Processing and Input/Output Operations,Design Patterns,Graphical User Interface (GUI) Programming,Software Development Principles,Introduction to advanced OOP concepts,Project development using OOP principles,Project development using OOP principles.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
Defines a unified modeling language			12, 2, 9	A, E, F, G	
Performs object-oriented analysis and design			2, 6, 9	A, E, F	
Performs file processing and input/output operations			2, 6, 9	A, F	
Knows the principles of software development			12, 2, 6, 9	A	
Develop projects using OOP principles			2, 9	A, F	
Teaching Methods	12: Problem Solving Method, 2: Project Based Learning Model, 6: Experiential Learning, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, E: Homework, F: Project Task, G: Quiz				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	Introduction to Object Oriented Programming - UML (Unified Modeling Language)				
2	Classes and Objects - Encapsulation and data hiding				
3	Inheritance and Polymorphism				
4	Abstraction and Interfaces				
5	Object Oriented Analysis and Design				
6	Exception Processing				
7	Collections and Generics				
8	File Processing and Input/Output Operations				
9	Design Patterns				
10	Graphical User Interface (GUI) Programming				
11	Software Development Principles				
12	Introduction to advanced OOP concepts				
13	Project development using OOP principles				
14	Project development using OOP principles				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources	
Lesson Notes	