

**Vocational School / Computer Programming**

**2023 - 2024 Academic Year**

**IOS PROGRAMMING**

**Syllabus**

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
IOS PROGRAMMING	BPR2260410	Spring Semester	1+2	2	5
<b>Prerequisites Courses</b>					
<b>Recommended Elective Courses</b>					
<b>Language of Instruction</b>	Turkish				
<b>Course Level</b>	Short Cycle (Associate's Degree)				
<b>Course Type</b>	Elective				
<b>Course Coordinator</b>	Lect. Beyza KOYULMUŞ				
<b>Name of Lecturer(s)</b>	Lect. Kerim ÇAĞLAR				
<b>Assistant(s)</b>					
<b>Aim</b>	The aim of this course is to introduce iOS application development techniques using Objective-C and Swift programming languages, modern techniques, application architectures and open source software.				
<b>Course Content</b>	This course contains; IOS 10, Xcode 8, Objective-C, Swift 3, macOS demos and more general information about vehicles, Swift fundamentals, closures, extensions, protocols, etc., Information about MVC and other application development structures and how to use them with Swift first application, View controller and app life cycles, iOS patterns, delegation, notifications, KVO, Storyboard and auto-layout, Lists with Table view and Collection view, Networking, Debugging, Universal apps, Core Location, maps and location services, Core Location, maps and location services, Multi-threading, Animations and view controller transitions..				
<b>Course Learning Outcomes</b>			<b>Teaching Methods</b>	<b>Assessment Methods</b>	
Understands Swift basics			10, 6, 9	A, E, F	
Uses the latest software development tools and services from Apple.			11, 13, 14, 2, 3, 6, 8	A, E, F	
Defines the application lifecycle			6, 8, 9	A, E, F	
Provides animations and view controller transitions			2, 6, 9	A, E, F	
Develops modern application			2, 6, 8, 9	A, E, F	
<b>Teaching Methods</b>	10: Discussion Method, 11: Demonstration Method, 13: Case Study Method, 14: Self Study Method, 2: Project Based Learning Model, 3: Problem Based Learning Model, 6: Experiential Learning, 8: Flipped Classroom Learning, 9: Lecture Method				
<b>Assessment Methods</b>	A: Traditional Written Exam, E: Homework, F: Project Task				
<b>Lecture Schedule</b>					
<b>Sequence</b>	<b>Topics</b>	<b>Preliminary Preparation</b>			
1	IOS 10, Xcode 8, Objective-C, Swift 3, macOS demos and more general information about vehicles.				
2	Swift fundamentals, closures, extensions, protocols, etc.				
3	Information about MVC and other application development structures and how to use them with Swift first application				
4	View controller and app life cycles.				
5	iOS patterns, delegation, notifications, KVO.				
6	Storyboard and auto-layout.				
7	Lists with Table view and Collection view.				
8	Networking.				
9	Debugging.				
10	Universal apps.				
11	Core Location, maps and location services.				
12	Core Location, maps and location services.				
13	Multi-threading.				
14	Animations and view controller transitions.				
<b>Evaluation Methods</b>		<b>Weight(%)</b>			
Midterm Exam		40			
General Exam		60			

<b>Resources</b>
Lesson Notes