

Vocational School / Computer Programming

2024 - 2025 Academic Year

IOS PROGRAMMING

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
IOS PROGRAMMING	BPR2160410	Fall Semester	1+2	2	5
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	Short Cycle (Associate's Degree)				
Course Type	Elective				
Course Coordinator	Lect. Beyza KOYULMUŞ				
Name of Lecturer(s)	Lect. Beyza KOYULMUŞ				
Assistant(s)					
Aim	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.				
Course Content	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..				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
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	
Teaching Methods	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				
Assessment Methods	A: Traditional Written Exam, E: Homework, F: Project Task				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
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.				
Evaluation Methods		Weight(%)			
Midterm Exam		40			
General Exam		60			

Resources
Lesson Notes