OSTIM TECHNICAL UNIVERSITY
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES
MANAGEMENT INFORMATION SYSTEMS DEPARTMENT
COURSE SYLLABUS FORM

MIS 348 Mobile Application Development							
Course Name	**Course Code**	**Period**	**Hours**	**Application**	**Laboratory**	**Credit**	**ECTS**
Mobile Application Development	MIS 348	6	3	1	0	3	3

Language of Instruction	English
Course Status	Elective
Course Level	Bachelor
Learning and Teaching Techniques of the Course	Lecture, Question-Answer, Problem Solving, Application Development

Course Objective
This course aims to enable students to have knowledge about applications that can work on mobile devices, to see the difference between programming with mobile devices and other devices, to recognize software development environments produced for mobile devices, to gain mobile application development experience with teamwork.

Learning Outcomes
Students who are successful in this course; 1. Will learn the requirements of mobile application development, 2. Will be able to design user interface and user experience-oriented mobile applications, 3. Will be able to improve thebase and network connections of mobile applications, 4. They will be able to bring mobile applications to online stores.

Course Outline
This course will begin with an examination of mobile operating systems and mobile platforms, where students will be measured in how familiar they are with mobile platforms. It will be implemented from the second week. The importance of interface design and user experience will be conveyed to the students and interfaces will be designed with this information in mind in the following weeks. Before the semester exam, students will design a lean application that does not include a database and network connection, emphasizing design and ease of use. After the final exam, network connections, database connections and multimedia files and mobile applications will be made functional. In the last course week, it will be explained how to install the developed applications to the online store.

Weekly Topics and Related Preparation Studies		
Weeks	**Topics**	**Preparation Studies**
1	Course Introduction Mobile operating systems and mobile platforms	–Research of Mobile Operating Systems
2	Introduction to Android Studio	–Presentations and Lecture Notes
3	Considerations for Design and Practice	–Presentations and Lecture Notes
4	Interface Development I	–Presentations and Lecture Notes
5	Interface Development II	–Presentations and Lecture Notes
6	Interface Development III	–Presentations and Lecture Notes
7	Sample Application Development	–Presentations and Lecture Notes
8	**MIDTERM EXAM**	
9	Network Connections I	–Presentations and Lecture Notes
10	Network Connections II	– Presentations and Lecture Notes
11	Database Connection I	– Presentations and Lecture Notes
12	Database Connection II	– Presentations and Lecture Notes
13	Graphics and Sound Management	– Presentations and Lecture Notes
14	Uploading the Application to the Online Store	– Presentations and Lecture Notes
15	**FINAL EXAM**	

Textbook(s)/References/Materials:
Textbook: J. Paul Cardle (2017). Android App Development in Android Studio: Manchester Academic Publishers, first edition.
Supplementary References: Neil Smyth (2017). Android Studio 3.0 Development Essentials: CreateSpace Independent Publishing Platform, 8. edition.
Other Materials: https://developer.android.com/ https://flutter.dev/

Assessment		
Studies	**Number**	**Contribution margin (%)**
Attendance		
Lab		
Class participation and performance		
Field Study		
Course-Specific Internship (if any)		
Quizzes / Studio / Critical		
Homework		
Presentation		
Projects	1	20
Report		
Seminar		
Midterm Exam/Midterm Jury	**1**	**30**
General Exam / Final Jury	**1**	**50**
Total		**100**
Success Grade Contribution of Semester Studies		**50**
Success Grade Contribution of End of Term		**50**
Total		**100**

ECTS / Workload Table			
Activities	**Number**	**Duration (Hours)**	**Total Workload**
Course hours (Including the exam week): 16 x totalcourse hours)	16	3	48
Laboratory	5	2	10
Application			
Course-Specific Internship (if any)			
Field Study			
Study Time Out of Class	16	2	32
Presentation / Seminar Preparation			
Projects			
Reports			
Homework			
Quizzes / Studio Review	10	1	10
Preparation Time for Midterm Exams / Midterm Jury	**1**	**20**	**20**
Preparation Period for the Final Exam / General Jury	**1**	**30**	**30**
Total Workload	**(150/30 = 5)**		**150**

Course' Contribution Level to Learning Outcomes						
Nu	**Learning Outcomes**	**Contribution Level**				
		1	**2**	**3**	**4**	**5**
LO1	Learn the requirements for mobile app development.					X
LO2	To be able to design mobile applications focused on user interface and user experience.					X
LO3	To be able to improve databases and network connections of mobile applications.					X
LO4	Ability to bring mobile applications to online stores.					X

	Relationship Between Course Learning Outcomes and Program Competencies (Department of Management Information Systems)					
Nu	**Program Competencies**	**Learning Outcomes**				**Total Effect (1-5)**
		LO1	**LO2**	**LO3**	**LO4**	
1	Recognize and distinguish the basic concepts such as data, information, and knowledge in the field of Management Information Systems and know the processes to be followed for data acquisition, storage, updating, and security.				x	**2**
2	Develop and manage databases suitable for collecting, storing, and updating data.				x	**2**
3	As a result of his/her ability to think algorithmically, and easily find solutions to problems concerning basic business functions.					
4	Learn programming logic, and have information about current programming languages.	x				**1**
5	Be able to use up-to-date programming languages.		x			**2**
6	Be able to take part in teamwork or lead a team using knowledge of project management processes.				x	**3**
7	Know ethical and legal rules, and use professional field knowledge within the scope of ethical and legal rules.					
8	Know the fundamental areas of business administration namely management and organization, production, finance, marketing, numerical methods, accounting, etc., and have the knowledge and skills to work in-depth in at least one of them.		x		x	**3**
9	Be able to solve the problems encountered in the field of internet programming by designing web applications.			x		**2**
10	Develop and manage logistics and supply chain management activities					
11	Adapt his/her theoretical knowledge and the experience he/she will gain through practice at the departments of businesses such as information technologies, R&D, and management to real life.				x	**1**
12	Be able to develop strategies that will provide a competitive advantage with his/her advanced knowledge of management strategies and management					

	functions.					
13	Develop a business idea, commercialize the business idea, and design and manage his/her venture using entrepreneurial knowledge.		x		x	**4**
14	By using English effectively, they can follow, read, write, speak and communicate universal information in the field of management information systems in a foreign language with professional competence.					
Total Effect						**20**

Policies and Procedures
Web page: https://www.ostimteknik.edu.tr/management-information-systems-754
Exams: Exams aim to assess various dimensions of learning, including; is the ability to apply this knowledge in a business environment by distinguishing problems and proposing solutions through knowledge and situation analysis of concepts and theories. Exams may consist of several types, these are; multiple choice, fill-in-the-blank, matching, true-false and open-ended questions.
Assignments: The rules of scientific research ethics are very important when preparing assignments. Students should pay attention to these rules about citation when using sources, reference them appropriately and avoid plagiarism.
Missed exams: Any student who misses an exam must bring an official medical certificate in order to take the make-up exam. A medical report must be obtained from a state hospital.
Projects: While preparing the project, students are expected to prepare their projects with groups of two or three people. When the project is delivered, both the application itself and the steps followed during the development of the application should be reported and delivered.
Attendance: Attendance conditions are announced at the beginning of the semester. Students are generally expected to attend at least 70% of classes each semester.
Objections: If the student finds a material error in his grade, he has the right to appeal to the Faculty or Department. The claim is examined and the student is informed about the result.