Course Description Form

1. Course Name:
Mobile application design
2. Course Code:
CSSP3216
3. Semester / Year:
2nd \2025
4. Description Preparation Date:
1\2\2025
5. Available Attendance Forms:
form
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hoers
7. Course administrator's name (mention all, if more than one name)
Name: Teaba wala aldeen khairi Email: teaba.w.khairi@uotechnology.edu.iq
8. Course Objectives

Course Objectives	• **Learning about mobile app design** • **Marketing the app** • **Basic Android and IOS sys**
9. Teaching and Learning Strategies	
Strategy	A-Knowledge and Understanding A1: Enable the student to know and understand the theoretical principles of windows programming and turn them into programming functions for implementation. A2: The student describes how to build all programming interfaces in windows systems using the functions designated for that. A3: Enable the student to know and understand the practical applications of window programming. A4: To Impart the skills needed to develop windows applications, Student will learn how to design windows and various components of windows, keyboard events, graphics and text, file handling. B- Subject-specific skills B1:Logical thinking B2: Giving the students tasks to design different models by using advanced programming languages to motivate the students to acquire skills.

	C- Thinking Skills C1:Ability to work in teams C2:Ability to solve problems and think collectively D- General and Transferable Skills (other skills relevant to employability and personal development) D1:Using theoretical and practical tools in the design and implementation of interfaces to create interaction between the user and the computer. D2: Using modern tools of communication to interact with the work team to solve a specific problem D3: The ability to manage time while working as a team

10. Course Structure (Theoretical part)

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	Theoretical 2	1,3,5,6,7	Introduction to mobile applications Embedded systems Market and business drivers for mobile applications Publishing and delivery of mobile applications Requirements gathering and validation for mobile applications	Face to face Lectures	Attendance answering discussion questions
2	Theoretical 2	1,3,5,6,7	- Basics of embedded systems design - Embedded OS Design constraints for mobile applications, both hardware and software related	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
3	Theoretical 2	1,3,5,6,7	- Architecting mobile applications - User interfaces for mobile applications - touch events and gestures - Achieving quality constraints performance, usability, security, availability and	Face to face lectures (Videos + Notes)	Attendance answering discussion questions

			modifiability		
4	Theoretical 2	1,3,5,6,7	– Designing applications with multimedia and web access capabilities – Integration with GPS and social media networking applications	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
5	Theoretical 2	1,3,5,6,7	– Accessing applications hosted in a cloud computing environment – Design patterns for mobile applications.	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
6	Theoretical 2	1,3,5,6,7	– Establishing the development environment – Android architecture – Activities and views – Interacting with UI – Persisting data using SQLite	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
7	Theoretical 2	1,3,5,6,7	– Packaging and deployment Interaction with server side applications	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
8	Theoretical 2	1,3,5,6,7	Using Google Maps, GPS and Wifi Integration with social media applications	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
9	Theoretical 2	1,3,5,6,7	Introduction to Objective C iOS features UI implementation Touch frameworks Data persistence using Core Data and SQLite	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
10	Theoretical 2	1,3,5,6,7	Location aware applications using Core Location and Map Kit Integrating calendar and address	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
11	Theoreti		book with social media application.	Face to	Attendance

	cal 2	1,3,5,6,7		face lectures (Videos + Notes)	answering discussion questions
12	Theoreti cal 2	1,3,5,6,7	Mid exam	Face to face lectures (Videos + Notes)	Quiz
13	Theoreti cal 2	1,3,5,6,7	Using Wifi iPhone marketplace	Face to face lectures (Videos + Notes)	Attendance answering discussion questions
14	Theoreti cal 2	1,3,5,6,7	Discussion and question	Face to face lectures	Questions
15	Theoreti cal 2	1,3,5,6,7	Exam	Face to face lectures	Evaluation

Course Structure (Practical part)

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	Practical 2	1,3,5,6,7	Introduction to dart and flutter functions	Practical Implemen tation (Video + Notes)	Attendance + practical Implementatio
2	Practical 2	1,3,5,6,7	Introduction to dart	Practical Implemen tation (Video + Notes)	Attendance + practical Implementatio
3	Practical 2	1,3,5,6,7	Main screen and band removal	Practical Implemen tation (Video + Notes)	Attendance + practical Implementatio
4	Practical 2	1,3,5,6,7	Text and alignment of text , background	Practical Implemen tation (Video +	Attendance + practical Implementatio

			colors	Notes)	
5	Practical 2	1,3,5,6,7	Size box and text	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
6	Practical 2	1,3,5,6,7	Container and text	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
7	Practical 2	1,3,5,6,7	Container and text , object and size box	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
8	Practical 2	1,3,5,6,7	Main bar and Icons	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
9	Practical 2	1,3,5,6,7	Main bar and text	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
10	Practical 2	1,3,5,6,7	Mid lab exam	Exam	Attendance
11	Practical 2	1,3,5,6,7	Stateless widget	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
12	Practical 2	1,3,5,6,7	State full widget	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
13	Practical 2	1,3,5,6,7	Widget examples and implementation	Practical Implementation (Video + Notes)	Attendance + practical Implementatio

14	Practical 2	1,3,5,6,7	Report project discussion	Practical Implementation (Video + Notes)	Attendance + practical Implementatio
15	Practical 2	1,3,5,6,7	Report project discussion	Practical Implementation (Video + Notes)	Attendance + practical Implementatio

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

The final exam	evaluation	laboratory grade	second midterm exam
60	**10**	**15**	**15**

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Jeff McWherter and Scott Gowell, "Professional Mobile Application Development", Wrox, 2012 2. Charlie Collins, Michael Galpin and Matthias Kappler, "Android in Practice", DreamTech, 2012
Main references (sources)	1. James Dovey and Ash Furrow, "Beginning Objective C", Apress, 2012 2. David Mark, Jack Nutting, Jeff LaMarche and Frederic Olsson, "Beginning iOS 6 Development: Exploring the iOS SDK", Apress, 2013
Recommended books and references (scientific journals, reports...)	Android Enterprise | Android
Electronic References, Websites	Android Enterprise | Android