Semester Lecture Plan

Name of the college: Government College of Arts, Science and Commerce, Sanquelim - Goa		
Name of Faculty: Bhakti Gawas	**Subject: Computer Science**	
Paper code: CSC-241 Mobile App Development	**Program/Course: T.Y.B.Sc.**	**Division:**
Academic year: 2025 - 2026	**Semester: V**	**Total Lectures: 50**

Course Objectives:

1. **Introduce mobile application development for the Android platform using XML and Java/Kotlin.**
2. **Understand the different components for building the Android App.**
3. **Develop applications that will run on Android phones and tablets.**

Course Learning Outcome:

On completion of the course, students will be able to:

1. **Course outcomes, evaluation scheme, prerequisite shall be discussed at the beginning.**
2. **The lecture method need not be only a traditional lecture method, but alternative effective teaching methods could be adopted to attain the outcomes. You may use**
3. **Video/Animation to explain various concepts.**
4. **Collaborative, Peer, Flipped Learning, etc.**
5. **Ask at least three HOT (Higher-Order Thinking) questions in the class, which promotes critical thinking.**
6. **Give an assignment based on one of the Course Outcomes.**
7. **Introduce Topics in manifold representations.**
8. **Show the different ways to solve the same problem and encourage the students to come up with their own creative ways to solve them.**
9. **Mini-project can be given to test the application of the concepts learnt.**

Month	Lectures From:	To:	No. of lectures allotted	Topic, Subtopic to be covered	Learning outcome	ICT Tools	Reference books
July	14/07/2025	19/07/2025	4	a. Explore Android Studio IDE b. Set up a device or emulator for running the app	1. Identify the features and components of the Android Studio Integrated Development Environment (IDE) 2. Navigate the Android Studio workspace including project structure, code editor, and layout editor	Laptop, LCD Projector, PowerPoint Presentation	1. Dawn Griffiths and David Griffiths, Head First Android Development: A Brain-Friendly Guide, Shroff/O'Reilly; Second edition, 2017.
July/August	21/07/2025	26/07/2025	4	Demonstrate the use of different layouts: Linear, Relative, Constraint d. Use of basic views (EditText, TextView, Button,	1. Design user interfaces using LinearLayout, RelativeLayout, and ConstraintLayout. 2. Implement **TextView** for displaying static text and **EditText** for user input.		

				RadioButton, Checkboxes)			
	28/07/2025	02/08/2025	2	Event Handling (using listeners) (Calculator app, TicTacToegame)	1. Apply event handling to capture button clicks for digits and operations.		
August	04/08/2025	09/08/2025	4	ListView layout design, Load listView with Data, Load different views in ListView, ListView events, Add or Remove items to the listView.			
August	11/08/2025	16/08/2025	4	b. Design GridView Layout, Load gridView with data			
August	18/07/2025	23/07/2025	4	c. Recycler view (Restaurant App)			

August	25/08/2025	01/09/2025	00	Ganesh Chaturthi Vacation			
September	02/08/2025	06/09/2025	4	Display a message using Custom Toast b. Intents (Implicit and Explicit)-launch an activity,			
September	02/08/2025	06/09/2025	4	Intents (Implicit and Explicit)-launch an activity, passing data between activity, display a web page, dial a contact, send message etc.)			
September	08/09/2025	13/09/2025	4	Web services - HTTP calls, JSON and XML,			
September	15/09/2025	20/09/2025	4	HTTP calls and JSON read			

September	15/09/2025	20/09/2025	4	SQLite database – CRUD operations on a SQLlite Database (Contact list app, notes app)			
September	22/09/2025	27/09/2025	4	SQLite database – CRUD operations on a SQLlite Database (Contact list app, notes app)			
September/October	29/09/2025	04/10/2025	4	Firebase Realtime Database to build a mobile system			