

SCHEME OF COURSE WORK

Department of Information Technology

Course Details:

COURSE TITLE	APPLICATION DEVELOPMENT TOOLS		
COURSE CODE	15IT1101	L T P C	3 0 0 3
PROGRAM	B.TECH		
SPECIALIZATION	IT		
SEMESTER	IV		
PRE REQUISITES	C++ Programming.		
COURSES TO WHICH IT IS A PRE REQUISITE	N/A		

Course Outcomes (COs):

1	Deploy Android applications on a Handset
2	Use Widgets in Android applications
3	Develop effective GUI on android platform
4	Create multimedia applications on android platform
5	Debug android applications

Course Outcome versus **Program Outcomes** versus Programme Specific Outcomes

Course outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	3						2	2	3	
CO2	3	2	3										2	3	
CO3		3	2	2	2	2						3	2	3	
CO4	2	3	2	2	3							3	2	3	
CO5	2												2	3	

S - Strongly correlated, M - Moderately correlated, Blank - No correlation

Assessment Methods	Assignment / Quiz / Mid-Test
--------------------	------------------------------

Teaching- Learning & Evaluation

Week	Topic/ Contents	CO	Sample questions	Teaching learning strategy	Assessment method & schedule
1	INTRODUCTION TO ANDROID: Installing the Android SDK, Creating Android Virtual Devices, Creating the First Android Project, Using the TextView Control,	CO1	1. Write steps to install sdk. 2. Brief notes on Textview control. 4. What is the purpose of ADB.Explain	Lecture	Assignment-1, Test- 1 Quiz-1
2	Using the Android Emulator, The Android Debug Bridge (ADB), Launching Android Applications on a Handset	CO1		Lecture	Assignment-1, Test- 1 Quiz-1
3	BASIC WIDGETS: Understanding the Role of Android Application Components , Understanding the Utility of Android API ,	CO2	1.Explain different files in android project files. 2. Describe different layout with examples. 3. Write xml code for creating interface for user registration.	Lecture	Assignment-1, Test- 1 Quiz-1
4	Overview of the Android Project Files ,Understanding Activities ,Role of the Android Manifest File, Creating the User Interface, Commonly Used Layouts and Controls, Event Handling,	CO2		Lecture	Assignment-1, Test- 1 Quiz-1
5	Displaying Messages Through Toast, Creating and Starting an Activity, Using the Edit Text Control, Choosing Options with Check Box, Choosing Mutually Exclusive Items Using RadioButtons	CO2		Lecture	Assignment-1, Test- 1 Quiz-1
6	LAYING OUT CONTROLS IN CONTAINERS:	CO3	1.Compare and contrast Relative and Absolute layouts. 2.Difference between a container and control	Lecture	Assignment- 1,2, Quiz-1, Test-1, 2

	Introduction to Layouts, Linear Layout, Relative Layout		3. Write java code for image switcher		
7	Absolute Layout, Using Image View, Frame Layout,	CO3		Lecture	Assignment-2, Test- 2, Quiz-2
8	Test 1				
9	Table Layout, Grid Layout, Adapting to Screen Orientation	CO3		Lecture	Assignment-2, Test- 2, Quiz-2
10	UTILIZING RESOURCES AND MEDIA: Resources, Creating Values Resources, Using Drawable Resources, Switching States with Toggle Buttons ,	CO4	1.Explain various resources that could be defined in resource folder. 2. What is the purpose of values folder.	Lecture	Assignment-2, Test- 2, Quiz-2
11	Creating an Image Switcher Application , Scrolling Through ScrollView,	CO4		Lecture	Assignment-2, Test- 2, Quiz-2
12	Playing Audio, Playing Video, Displaying Progress with ProgressBar, Using Assets	CO4		Lecture	Assignment-2, Test- 2, Quiz-2
13	USING SELECTION WIDGETS AND DEBUGGING: Using List View, Using the Spinner Control, Using the Grid View Control,	CO5	1.Explain ListView. 2.Difference between spinner and listview. 3.Explain fragments.	Lecture	Assignment-2, Test- 2, Quiz-2
14	Creating an Image Gallery Using the View Pager Control, Using the Debugging Tool: Dalvik Debug Monitor Service (DDMS), Debugging Applications,	CO5		Lecture	Assignment-2, Test- 2, Quiz-2
15	Using the Debug Perspective, Dialogs, Fragments	CO5		Lecture	Assignment-2, Test- 2, Quiz-2

16	Practical example programs	CO5		Lecture	Assignment-2, Test- 2, Quiz-2
17	TEST-2				