

060010716/040250116 - Android Application Development**Integrated M.Sc.(IT) Semester - 7****M.Sc.(IT) Semester - 1****Lesson Plan**

Unit	Unit Name	Sub Unit	Topics	No. Of Lectures	Reference Chapter/ Additional Reading	Teaching Methodology
1	Advanced Designing Interface	1.1	Layouts: LinearLayout, RelativeLayout, TableLayout, ScrollView	1	WM#3 Page No: 106 – 109, 116 - 123	Power Point Presentation and Demonstration
		1.2	Activity and Intent	1	WM#1, Page No:36 - 42 WM#1, Page No:53 - 57, 59 - 68	
		1.3	WebView, SearchView	2	WM#5, Page No:243 - 249 https://developer.android.com/reference/android/widget/SearchView	
		1.4	SeekBar, RatingBar	2	https://developer.android.com/reference/android/widget/SeekBar https://developer.android.com/reference/android/widget/RatingBar	
		1.5	Gallery, ImageSwitcher, GridView	3	WM#5, Page No:219 - 234	
		1.6	Fragments	1	WM#1, Page No:69 - 73	
2	Graphics and Multimedia	2.1	Drawing on the Screen	2	LS#9 Page No: 205 – 210	Power Point Presentation and Demonstration
		2.2	Working with Text	2	LS#9 Page No: 210 – 212	
		2.3	Working with Bitmaps	2	LS#9 Page No: 212 – 214	
		2.4	Working with Shapes	2	LS#9 Page No: 214 – 221	
		2.5	Playing Audio and Video	1	RM#15 Page No: 623 - 632	
		2.6	Recording Sound with Audio Track	2	RM#15 Page No: 640 - 643	
		2.7	Using Intents to capture picture and record video	2	RM#15 Page No: 646 - 653	
3	Working with Data Storage	3.1	User Preferences	2	WM#6 Page No: 251 - 259	Power Point Presentation and
		3.2	Content Provider	2	WM#7 Page No: 293 - 302	
		3.3	Database Management	2	WM#6 Page No: 273 - 285	

			through SQLite			Demonstration
		3.4	Persisting Data to Files: Internal and External Storage	2	WM#6 Page No: 263 – 271	
4	Advanced Application Development	4.1	Send Message using SmsManager	1	WM#8 Page No: 321 – 332	Power Point Presentation and Demonstration
		4.2	Telephony API	1	http://developer.android.com/reference/android/telephony/TelephonyManager.html	
		4.3	Working with Notification	1	WM#2 Page No: 98 – 103	
		4.4	Standard Broadcast Actions: ACTION_BOOT_COMPLETED, ACTION_PACKAGE_ADDED, ACTION_PACKAGE_REMOVED, and ACTION_SHUTDOWN	2	http://developer.android.com/reference/android/content/Intent.html	
5	Developing Android Services	5.1	Create and Destroy Services	1	WM#11 Page No: 429 – 444	Power Point Presentation and Demonstration
		5.2	Performing Long Running Tasks in Service	2		
		5.3	Performing Repeated Task in Service	2		
		5.4	Executing Asynchronous Task on Separate Threads using IntentService	2		
6	Android Web Services	6.1	Introduction to JSON	1	WM#10 Page No: 393 - 416	Power Point Presentation and Demonstration
		6.2	JSON Elements	1		
		6.3	JSON Parsing	1		
		6.4	JSON Parsing using Volley	2		
		6.5	Introduction to Networking Libraries and Tracking Tools	1	https://www.raywenderlich.com/184995/android-networking-tutorial-getting-started-2 https://code.tutsplus.com/tutorials/an-introduction-to-loopj-cms-26781	

Textbook:

Wei-Meng Lee - Beginning Android 4 Application Development - Wiley India Pvt Ltd [WM]

Reto Meier – Professional Android 4 Application Development – Wiley [RM]

Reference book:

Lauren Darcey, Shane Conder – Android Wireless Application Development – Pearson [LS] Raksha Shende - Mobile Computing for Beginners - Shroff Publishers & Distributors Pvt. Ltd. [RS] Mark L Murphy - Beginning Android - Wiley India Pvt Ltd.

Sayed Y Hashimi and Satya Komatineni - Pro Android - Wiley India Pvt Ltd.

Rick Rogers, John L., Zigurd M., Blak M. – Android Applications Development – O'Reilly Mark G. – Learning Android – O'Reilly