Lesson Plan

Name of Faculty : Vikram Singh Bhambhu, Assistant Professor
Discipline : ECE
Semester: 7th
Subject : Wireless Communication (PCC-ECE403 -T)
Lesson Plan Duration: 15 weeks
Work Load (Lectutre/Practical) per week (in hours):Lectures-03

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Week	Theory		Actual Covered
	Lecture Day	Topic (Including Assignment/Test)	
1st	1	Introduction to Generation of Wireless communication systems.	
	2	1G, 2G	
	3	3G,4G,5G	
2nd	4	Paging system, wireless local loop	
	5	Bluetooth	
	6	Introduction to frequency band in wireless communication.	
3rd	7	Applications of wireless communication	
	8	The Cellular concept	
	9	Frequency Reuse	
4th	10	Basic theory of hexagonal cell layout	
	11	Frequency Management and Cha Call Control nnel Assignment	
	12	Call drops	
5th	13	hand off	
	14	types of handoff	
	15	Method to improve capacity	
6th	16	Call Control	
	17	Mobility Management and location Tracing	
7th	19	Models for Path loss: Free space propagation,	
	20	Okumura model,	
		Longley-Rice model	
	21	Hata model, PCS extension to Hata model	
8th	22	Partition loss modelling	
	23	Log distance path loss model	
9th	24	Ericsson multiple breakpoint model	
10th	25	Concept of coherence bandwidth	
	26	coherence time & Doppler spread	
	27	Types of fading: Flat fading	
11th	28	frequency selective fading	
	29	fast fading, slow fading	
	30	Diversity techniques in mobile radio	
12th	31	Multiple Access Techniques used in Mobile Wireless Communications: FDMA,	
	32	TDMA ,CDMA	
	33	SSMA, cellular CDMA & its capacity	
13th	34	Rake receiver	
	35	GSM Architecture, channels, RF specifications	
14th	36	IS-95 standard: architecture, channels, RF specifications	
15th	37	LTE,	
	38	5G Technology: Basic architecture/ block diagram	
	39	RF specifications, applications	