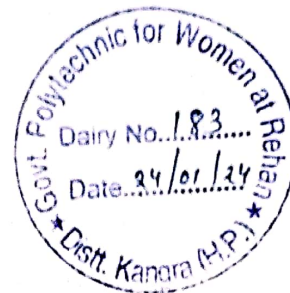


Department of Computer Engg
Govt. Polytechnic for Women Rehan
Distt. – Kangra (H.P.) - 176022



LESSON PLAN

Program Name	Computer Engineering
Subject Name	Wireless Communication & Mobile Computing
Subject Code	CO-17602
Semester	6 th
Subject Co-ordinator Name	Dr. Kulwardhan Singh

Evaluation Scheme

Subject Name	Study scheme (Hrs/Week)		Marks in Evaluation Scheme					
			Internal Assessment			External Assessment		
	Th	Pr	Th	Pr	Total	Th	Pr	Total
Wireless Communication and Mobile Computing	4	4	30	20	50	100	50	150
Text/Reference Books	(i) Wireless Communication: Principle & Practice by Theodore S. Rappaport, Pearson Publication							
	(ii) Mobile Computing: Technology, Applications & Service Creation by Asoke Talukder, Roopa R. Yavagal, TMH Publication							
	(iii) Wireless and Mobile Communication by Manoj K. Shukla & Upena Dalal, Oxford University Press							

Course Outcomes (COs)

CO – 1	To learn the fundamentals of Wireless Communication and Mobile Computing.
CO – 2	To learn the various technologies & systems for wireless communications.
CO – 3	To enable the students to setup a wireless network for home/office use.
CO – 4	To understand the role of OS in mobile devices.

Teaching Plan

Unit No.	Name of Topic	Proposed Date	Actual Date	Remarks
1	Basics of Wireless communication and its applications	29/01/2024 01/02/2024		
	Type of wireless services & challenges	02/02/2024 03/02/2024		
	Electromagnetic Spectrum & ISM Band	05/02/2024 08/02/2024		
	Wireless Communication Types	09/02/2024 12/02/2024 15/02/2024		
	Wireless Transmission Impairment	16/02/2024 17/02/2023		
2	Concept of Bandwidth and signals	17/02/2023 19/02/2024		
	Electromagnetic wave propagation	22/02/2024		

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		23/02/2024		
	Propagation mechanism	26/02/2024 29/02/2024		
	Indoor & outdoor propagation	01/03/2024		
3	Introduction to cellular communication	02/03/2024 11/03/2024		
	Cellular system architecture	14/03/2024 15/03/2024		
	Types of digital cellular system	16/03/2024 18/03/2024		
	GSM network architecture	21/03/2024 22/03/2024		
	Class Test - 1	23/03/2024		
	Generation of Cellular Networks and their features	28/03/2024 30/03/2024		
	4	Basics of WLAN and their applications	01/04/2024 04/04/2024	
Types of WLAN		05/04/2024 06/04/2024		
WLAN problems		08/04/2024 18/04/2024		
Bluetooth, its Applications & Technologies		19/04/2024 20/04/2024		
Class Test - 2		22/04/2024		
5	Introduction to Mobile Computing	25/04/2024		
	Functions of mobile computing	26/04/2024 27/04/2024		
	Middleware & gateways	29/04/2024		
	Mobile computing environment	02/05/2024		
	Mobile computing applications and Services	03/05/2024 04/05/2024		
6	Three tier architecture of mobile computing	06/05/2024 09/05/2024		
	Design considerations for mobile computing	13/05/2024		
	Introduction to CC/PP and various related terminologies	17/05/2024		
	Basics of GPS	18/05/2024		
	Mobile Computing through Internet	20/05/2024		
7	Overview of Android OS	24/05/2024		
	Architecture of Android OS	25/05/2024 27/05/2024		
	Features of Android OS	30/05/2024		
	Revision of important topics	31/05/2024 01/06/2024		

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24/01/2024

Assignments

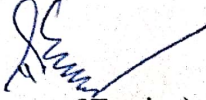
Assignment No	Contents of Syllabus Covered	Proposed Date	Actual Date	Remarks
A-1	Unit-1 and Unit-2	01/03/2024		
A-2	Unit-3 and Unit-4	19/04/2024		
A-3	Unit-5, Unit-6 and Unit-7	27/05/2024		

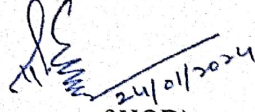
House Test/Class Test

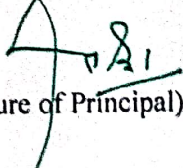
Name of test	Syllabus for Tests	Proposed Date	Actual Date	Remarks
Class Test -1	Unit-1 and Unit-2	23/03/2024		
Class Test -2	Unit-3 and Unit-4	22/04/2024		
House Test - 1	Unit-1, Unit-2, Unit-3, Unit-4 and Unit-5	As per HPTSB Schedule		

Lab Plan

Sr. No.	Name of Practical	Proposed Date		Actual Date		Remarks
		G1	G2	G1	G2	
1	To identify various wireless networking devices and to recognize physical topology in the lab.	03/02/2024	06/02/2024			
		07/02/2024	08/02/2024			
		14/02/2024	13/02/2024			
2	To create WLAN of at least five wireless devices using any simulation tool.	17/02/2024	15/02/2024			
		21/02/2024	20/02/2024			
		28/02/2024	27/02/2024			
3	To setup a WLAN using access point in the Lab.	02/03/2024	05/03/2024			
		06/03/2024	07/03/2024			
		13/03/2024	12/03/2024			
		16/03/2024	14/03/2024			
		20/03/2024	19/03/2024			
		23/03/2023	21/03/2023			
4	To transfer data between two wireless devices (e.g. PC-PC, PC-Smart phone)	27/03/2024	26/03/2024			
		30/03/2024	28/03/2024			
		03/04/2024	02/04/2024			
		06/04/2024	04/04/2024			
5	Data sharing using Bluetooth	10/04/2024	09/04/2024			
		20/04/2024	23/04/2024			
		24/04/2024	25/04/2024			
		01/05/2024	02/05/2024			
6	Case study of Android operating system.	04/05/2024	07/05/2024			
		22/05/2024	09/05/2024			
		25/05/2024	21/05/2024			
		29/05/2024	28/05/2024			


(Signature of Teacher)


(Signature of HOD)


(Signature of Principal)