

Govt. Polytechnic for Women Rehan
Distt. – Kangra (H.P.) - 176022



Program Name	Civil Engineering
Subject Name	Advanced Surveying Lab
Subject Code	CEPC216
Semester	4 th
Subject Teacher Name	Amit Thakur

LESSON PLAN

Sr. No.	Subject Name	Study scheme (Hrs/Week)		Marks in Evaluation Scheme					
				Internal Assessment			External Assessment		
		Th	DCS	Th	Pr	Total	Th	Pr	Total
1.	Advanced Surveying Lab	-	4	-	40	40	-	60	60
Reference Books		(i) Duggal, S. K., Survey I and Survey II (ii) Punmia, B.C.; Jain, Ashok Kumar; Jain, Arun Kumar, Surveying Vol. I and Surveying Vol. II (iii) Kanetkar, T. P.; Kulkarni, S. V., Surveying and Levelling Part I and II,							

Evaluation Scheme

Course Outcomes (COs)

CO-1	To know methods of plane surveying, Theodolite surveying and their uses
CO-2	To learn tacheometric surveying and curve setting.
CO-3	To understand the principles of Electronic Distance Measurement and Total station and their uses.
CO-4	To know the concept of Remote Sensing, GPS and GIS.
CO-5	Find distances and elevations using Tachometer
CO-6	Make measurements using Total Station
CO-7	Locate coordinates of survey stations using GPS

Handwritten signature in green ink.

Practical List	Name of Topic	Proposed Dated		Actual Date		Remarks
		Group-1	Group-2	Group-1	Group-2	
1	Use plane table survey to prepare plans of a plot of seven-sided closed traverse by Radiation Method	29/01/2026 31/01/2026	29/01/2026 31/01/2026			
2	Use plane table survey to prepare plans, locate details by Intersection Method	05/02/2026 07/02/2026	05/02/2026 07/02/2026			
3	Use plane table survey to prepare plans, locate details by Traversing Method.	12/02/2026 19/02/2026	12/02/2026 19/02/2026			
4	Use plane table survey to carry out Survey Project for closed traverse for minimum five sides around a building	21/02/2026 26/02/2026	21/02/2026 26/02/2026			
5	Use transit theodolite to measure Horizontal and Vertical angle by Direct Method.	28/02/2026 05/03/2026	28/02/2026 05/03/2026			
6	Plot the traverse on A1 size imperial drawing sheet for the collected data from preceding Theodolite Survey Project.	07/03/2026 12/03/2026	07/03/2026 12/03/2026			
7	Use Theodolite as a Tacheometer to compute reduced levels and horizontal distances	19/03/2026 28/03/2026	19/03/2026 28/03/2026			
8	Set out a circular curve by Rankine's Method of Deflection Angles.	02/04/2026 04/04/2026	02/04/2026 04/04/2026			
9	Use micro-optic Theodolite to Measure Horizontal angle by Direct Method.	09/04/2026 16/04/2026	09/04/2026 16/04/2026			

10	Use EDM to measure horizontal distance	18/04/2026 23/04/2026	18/04/2026 23/04/2026		
11	Use Total station instrument to measure horizontal distances.	25/04/2026 30/04/2026	25/04/2026 30/04/2026		
12	Use Total station instrument to measure vertical angle.	02/05/2026 07/05/2026	02/05/2026 07/05/2026		
13	Use Total station instrument to carry out Survey Project for closed traverse for minimum five sides.	07/05/2026	07/05/2026		
14	Plot the traverse on A1 size imperial drawing sheet for the collected data from preceding Total Station Survey Project.	21/05/2026	21/05/2026		
15	Use GPS to locate the coordinates of a station.	23/05/2026 28/05/2026	23/05/2026 28/05/2026		

House Test/Class Test

Name of test	Syllabus for Tests	Proposed Date	Actual Date	Remarks
Class Test -1	-	As per HPTSB Academic Schedule		
Class Test -2	-			
House Test - 1	-			

(Signature of Teacher)
Amit Thakur

(Signature of HOD)

Approved 27/1/26
Principal
Govt. Polytechnic for Women
Rehan Distt. Kangra (H.P.)