



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

LESSON PLAN

Program Name	Civil Engineering
Subject Name	Basic Surveying Lab
Subject Code	CEPC215
Semester	3 rd
Subject Teacher Name	Amit Thakur

Evaluation Scheme

Sr. No.	Subject Name	Study scheme (Hrs/Week)		Marks in Evaluation Scheme					
				Internal Assessment			External Assessment		
		Th	pr	Th	Pr	Total	Th	Pr	Total
1.	Minor Project	-	4+4 (8)	-	40	40	-	60	100
Reference Books		Punmia, BC, Arun Kumar, Surveying I							
		Basak, N. N., Surveying and Levelling							
		Arora K R, Surveying Vol. I							
		Bhavikatti, S. S., Surveying and Levelling							

Course Outcomes (COs)

CO – 1	To understand types of surveying works required
CO – 2	To know the type of method and equipment to be used for different surveys
CO-3	To know the use and operational details of various surveying equipment. •

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CO-3

To know the use and operational details of various surveying equipment. •

Lab Plan


Sr.No	Name of Practical	Proposed Date		Actual Date		Remarks
		G1	G2	G1	G2	
1	Measure distance between two survey stations using chain, tape and ranging rods when two stations are inter-visible	03/08/2024 07/08/2024	02/08/2024 05/08/2024			
2	Determine area of open field using chain and cross staff survey.	14/08/2024 17/08/2024	09/08/2024 12/08/2024			
3	Measure Fore Bearing and Back Bearing of survey lines of open traverse using Prismatic Compass.	21/08/2024 24/08/2024 28/08/2024 31/08/2024	16/08/2024 19/08/2024 23/08/2024			
4	Measure Fore Bearing and back bearing of a closed traverse of 5 or 6 sides and correct the bearings and included angles for the local attraction	04/09/2024 07/09/2024	30/08/2024 02/09/2024 06/09/2024			
5	Undertake Survey Project with chain and compass for closed traverse for minimum 5 sides around a building	11/09/2024 18/09/2024	09/09/2024 13/09/2024			
6	Plot the traverse on A1 size imperial drawing sheet for data collected in Survey Project mentioned at practical No.6	21/09/2024 25/09/2024 28/09/2024	16/09/2024 20/09/2024 23/09/2024 27/09/2024			
7	Undertake simple levelling using dumpy level/ Auto level and levelling staff	05/10/2024 09/10/2024	30/09/2024 04/10/2024 07/10/2024			
8	Undertake differential levelling and determine Reduced Levels by Height of instrument method and Rise and fall method using dumpy level/Auto Level and levelling staff	16/10/2024 19/10/2024 23/10	11/10/2024 14/10/2024			

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9	Undertake fly levelling with double check using dumpy level/ Auto level and levelling staff	26/10/2024 30/10/2024	18/10/2024 21/10/2024			
10	Undertake Survey Project with Levelling instrument for Profile levelling and cross- sectioning for a road with cross-section.	02/11/2024 06/11/2024	25/10/2024			
11	Plot the L-section with minimum 3 cross-sections on A1 size imperial sheet for data collected in Survey Project mentioned at practical No.11.	16/11/2024	01/11/2024 04/11/2024			
12	Undertake Survey Project for plotting contour map using block contouring method for a block of 150m x 150m with grid of 10m x 10m.	20/11/2024 23/11/2024	08/11/2024 18/11/2024			
13	Plot the contours on A1 size imperial drawing sheet for data collected in Survey Project mentioned at practical No.13.	27/11/2024	22/11/2024 25/11/2024 29/11/2024			
14	Measure area of irregular figure using Digital planimeter.	30/11/2024	02/12/2024			


(Signature of Teacher)
Er. Amit Thakur

Approved


(Signature of HOD)

Principal
Govt. Polytechnic for Women
Rehan Distt. Kangra (H.P.)