

LABORATORY ASSIGNMENT /SHEET /JOB /PROJECT ACTIVITY PLANNING (LP)

Academic Year: 2025-26 (ODD)

Date: 15/12/2025

Institute Name: PPCOE, Karjat

MSBTE Code: 61305

Program and Code: Civil Engineering (CE)

Course Code & Abbr.: 312339(SUY)

Course Name: Surveying

Name of Faculty: Miss.Potfode A.D.

Class: CE2K

Semester: 2nd

Scheme: K

Learning Hrs. 30

● Teaching-Learning & Assessment Scheme:

Course Code	Course Title	Abbr	Course Category/s	Learning Scheme					Credits	Assessment Scheme											Total Marks	
				Actual Contact Hrs./Week			SLH	NLH		Paper Duration	Theory				Based on LL & TL				Based on SL			
															Practical							
				CL	TL	LL					FA-TH		SA-TH		Total		FA-PR		SA-PR			SLA
							Max	Min			Max	Min	Max	Min	Max	Min	Max	Min				
312339	SURVEYING	SUY	SEC	3	-	4	1	8	4	3	30	70	100	40	25	10	50#	20	25	10	200	

Abbreviations: CL- Class Room Learning, TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, IKS – Indian Knowledge System, SLA - Self Learning Assessment
Legends: @ Internal Assessment, # External Assessment, ** On Line Examination, @\$ Internal Online Examination

● COURSE LEVEL LEARNING OUTCOMES (COS)

- CO1 - Suggest relevant type of survey required for the given situation.
- CO2 - Undertake cross staff and compass survey for the given field
- CO3 - Undertake survey using Theodolite for preparing a plan of the given terrain.
- CO4 - Determine Reduced Level to prepare Contour maps for the given type of terrain
- CO5 - Prepare the plan using Plane Table Surveying to locate relevant details.

COs, Practical Laboratory Learning Outcome(LLOs) & Mapping:

Pr. No	COs	LLO	Name of Experiments / Assignment / Sheet / Job/ Project Activity	Planned Date A/B/C		Actual date of Performance	Remark
				From	To		
1	CO2	LLO 1.1	*Measure the distance between two intervisible survey stations using chain, tape and ranging rods.	A-	A-	A-	
				B-	B-	B-	
2	CO2	LLO 2.1	*Determine area of open field using chain and cross staff survey.	A-	A-	A-	
				B-	B-	B-	
3	CO2	LLO 3.1	Determine area of irregular field using Digital Planimeter	A-	A-	A-	
				B-	B-	B-	

Pr. No	COs	LLO	Name of Experiments / Assignment / Sheet / Job/ Project Activity	Planned Date A/B/C		Actual date of Performance	Remark
				From	To		
4	CO2	LLO 4.1	*Measure Fore Bearing and Back Bearing of survey lines of open traverse using Prismatic Compass	A-	A-	A-	
				B-	B-	B-	
5	CO2	LLO 5.1	*Measure Fore Bearing and back bearing of a closed traverse of 5 to 6 sides and correct the bearings and included angles.	A-	A-	A-	
				B-	B-	B-	
6	CO3	LLO 6.1	Measure Horizontal angle by using Transit Theodolite by Direct Method	A-	A-	A-	
				B-	B-	B-	
7	CO3	LLO 7.1	*Measure Horizontal angle by using Transit Theodolite by method of Repetition	A-	A-	A-	
				B-	B-	B-	
8	CO3	LLO 8.1	*Measure vertical angle using Transit Theodolite	A-	A-	A-	
				B-	B-	B-	
9	CO2 CO3	LLO 9.1	*Use transit theodolite to carry out Survey Project for closed traverse for minimum 5 sides (Compulsory) .	A-	A-	A-	
				B-	B-	B-	
10	CO4	LLO 10.1	*Determine Reduced Level by Height of Instrument Method	A-	A-	A-	
				B-	B-	B-	
11	CO4	LLO 11.1	*Determine Reduced Level by Rise and Fall Method	A-	A-	A-	
				B-	B-	B-	
12	CO4	LLO 12.1	*Perform Fly Levelling to check levelling work	A-	A-	A-	
				B-	B-	B-	
13	CO4	LLO 13.1	*Profile leveling and cross-sectioning for a road length of 300 m with cross-section at 20 m interval. (Compulsory) .	A-	A-	A-	
				B-	B-	B-	
14	CO4	LLO 14.1	Undertake differential leveling by using dumpy level/Auto Level and leveling staff for Installation of irrigation pipelines	A-	A-	A-	
				B-	B-	B-	
15	CO4	LLO 15.1	Prepare Contour Plan/map using Block Contouring	A-	A-	A-	

Pr. No	COs	LLO	Name of Experiments / Assignment / Sheet / Job/ Project Activity	Planned Date A/B/C		Actual date of Performance	Remark
				From	To		
			for the area of 40m x 40m to draw its contour plan	B-	B-	B-	
16	CO4	LLO 16.1	*Plotting contour map using block contouring method for a area of 100m x 100m with grid of 10m x 10m for given land parcel. (Compulsory) .	A-	A-	A-	
				B-	B-	B-	
17	CO4	LLO 17.1	Prepare Contour plan for control farming using block contouring method	A-	A-	A-	
				B-	B-	B-	
18	CO5	LLO 18.1	*Prepare plans and locate details by using Radiation Method.	A-	A-	A-	
				B-	B-	B-	
19	CO5	LLO 19.1	*Prepare plans and locate details by Intersection Method	A-	A-	A-	
				B-	B-	B-	
20	CO5	LLO 20.1	*Prepare traverse using Plane table Surveying	A-	A-	A-	
				B-	B-	B-	
21	CO5	LLO 20.1	Prepare plan to establish plant nursery	A-	A-	A-	
				B-	B-	B-	

ASSESSMENT METHODOLOGIES/TOOLS

➤ Formative assessment (Assessment for Learning)

- Tests- Two unit tests of 15 marks.
- For laboratory learning 25 marks
- MCQs for COs Assignment
- Midterm Exam
- Self-learning
- Term Work

➤ Summative Assessment (Assessment of Learning)

- End Term Exam Theory
- End semester assessment of 15 marks for laboratory learning.
- End semester assessment of 30 marks through online MCQ examination.
- Micro-project
- Tutorial Performance
- Seminar/Presentation

Miss. Potfode A.D.

(Name & Signature of Faculty)

(Name & Signature of HOD)