



RAAJDHANI ENGINEERING COLLEGE, BHUBANESWAR

DEPARTMENT OF CIVIL ENGINEERING

LESSON PLAN

2023-2024

Discipline: Civil Engineering	Semester: 6 th	Name of the Teaching Faculty: Dr. Dattatreya Tripathy
Subject: Land Survey-II	No. Of Days/Week Class Allotted-5	Session: March 2024- Aug 2024

Week	Class/Day	Theory/Practical Topics	References
1st	1st	Principles, stadia constants determination	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Stadia tacheometry with staff held vertical and with line of Collimation horizontal or inclined	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Numerical problems	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Elevations and distances of staff stations	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Numerical problems	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
2nd	1st	compound, reverse and transition curve	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Purpose & use of different types of curves infield	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Elements of circular curves, numerical problems	https://www.youtube.com/playlist?list=PL3MO67

			NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Preparation of curve table for setting out	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Setting out of circular curve by chain and tape and by Instrument angular methods(i) offsets from long chord	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
3rd	1st	(ii) successive bisection of arc, (iii) offsets from tangents, (iv) Offsets from chord produced	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	(v) Rankine's method of tangent angles	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Obstacles in curve ranging – point of intersection inaccessible	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Quiz Test and Discussion-01	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Basics on scale and basics of map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
4th	1st	Fractional or Ratio Scale, Linear Scale, Graphical Scale	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	What is Map, Map Scale and Map Projections	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Maps Convey Location and Extent	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Maps Convey characteristics of features	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g

	5th	Maps Convey Spatial Relationship	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo81WITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
5th	1st	Classification of Maps	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo81WITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Physical Map, Topographic Map, Road Map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo81WITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g

	3rd	Political Map, Economic & Resources Map, Thematic Map, Climate Map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	INDIA MAP SERIES-Open Series map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Defense Series Map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
6th	1st	Map Nomenclature	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Quadrangle Name, Latitude, Longitude, UTM's, Contour Lines	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Magnetic Declination, Public Land Survey System, Field Notes	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Quiz test and Discussion-02	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Aerial Photography	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
7th	1st	Film, Focal Length, Scale, Types of Aerial Photographs (Oblique, Straight)	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Photogrammetry	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Classification of Photogrammetry, Aerial Photogrammetry, Terrestrial Photogrammetry	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Photogrammetry Process	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g

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	5th	Acquisition of Imagery using aerial and satellite platform, Control Survey	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
8th	1st	Geometric Distortion in Imagery Application of Imagery and its support data	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Orientation and Triangulation, Stereoscopic Measurement	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	DTM/DEM Generation, Ortho Image Generation	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Modern Surveying Methods-	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Principles, features and use of (i) Micro-optic theodolite, Digital theodolite	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
9th	1st	Working principles of a Total Station of survey points relative to Total Station position using trigonometry and triangulation.	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Previous Year Question Paper Discussion	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Quiz Test and Discussion-03	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Basics of GPS, DGPS and ETS	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	GPS:-Global Positioning	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
10th	1st	Working Principle of GPS, GPS Signals,	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd

			https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Errors of GPS, Positioning Methods	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8lWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	DGPS:-Differential Global Positioning System	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8lWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g

	4th	Base Station Setup-Rover GPS Setup,Download,Post-Process and Export GPS data	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Sequence to down load GPS data from flash cards Sequence to Post-Process GPS data	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
11th	1st	Sequence to export post process GPS data Sequence to export GPS Time tags to file	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	ETS:-Electronic Total Station	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Distance Measurement Angle Measurement,Levelling	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Determining position,Referencene works	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Errors and Accuracy	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
12th	1st	Revision	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Basics of GIs and map preparation using GIs	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Components of GIS	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Integration of Spatial	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Attribute Information	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g

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13th	1st	Three Views of Information System	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Data base or Table View, Map View and Model View	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Spatial Data Model	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Attribute Data Management and Meta data Concept	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Question paper Discussion-02	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
14th	1st	Prepare data and adding to Arc Map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Organizing data as layers	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Editing the layers.	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Switching to Layout View	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	5th	Change page orientation.	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
15th	1st	Removing Borders.	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	2nd	Adding and editing map in formation.	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8IWITwQQd

			https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	3rd	Finalize the map	https://www.youtube.com/playlist?list=PL3MO67NH2XxL_jS8K-gyg_Yo8lWITwQQd https://www.youtube.com/playlist?list=PLwdnzlV3ogoXXrcA8w6rrYmXfq3uU4R7g
	4th	Revision Exercise-01	
	5th	Revision Exercise-02	
	4th	Revision Exercise-03	