



योजना तथा वास्तुकला विद्यालय, विजयवाड़ा
School of Planning and Architecture, Vijayawada
An Institute of National Importance, Ministry of Education, Govt. of India

Department of Planning,
Lecture Plan, Odd Semester, AY 2024-25

Name of Course: Bachelor of Planning (B Plan)

Subject Name:	Surveying and Photogrammetry (BPLN 106)
Year & Sem:	II-year, III semester
Course Duration:	Aug 16, 2024 to Nov 2, 2024
Course Coordinator:	Dr. M N V Pavan Kumar & Sandeep P
Number of Credits:	03
Subject Category:	TC
Total Periods/Week:	03 (See Time Table for details)
Internal Assessment	50
End Evaluation	50
Total Marks	100
Total No. of Internal Assessment & Mode	Three (Internal Assessment 1 (Exam/Assignment), Mid Semester (Written Exam), Internal Assessment 2 (Exam/Assignment))

Subject Objective: To acquire proficiency in basics of Geoinformatics covering the topics related to surveying, remote sensing, photography, photogrammetry and GPS technologies.

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Unit and Assignment
Week 1 (22 Aug)	Definitions, classifications, use, objectives and basic principles of surveying; Classifications of measurements and units, concepts of scales	Unit 1: Fundamentals of Surveying
Week 2 (29 Aug)	maps and plan and use of conventional symbols; Chain surveying and compass surveying.	
Week 3 (5 Sept)	plain table surveying and computations of areas, levelling and contouring.	
Week 4 (12 Sept)	Definition, application, advantages and disadvantages, Principles: Instruments used, steps in chain survey:	Unit 2: Conventional Surveying Methods Assignment 1- (15 Marks)
Week 5 (19 Sept)	Definition of framework of survey, survey lines, survey stations, base line, tie line, check line;	
Week 6 (26 Sept)	Ranging and chaining a survey line; Plotting chain survey to prepare a plan.	
1-7 Oct	Mid- Semester Assessment week	20 Marks
Week 9 (10 Oct)	Digital planimeter, total station, Global Positioning System, Differential Global Positioning System.	Unit 3: Contemporary Surveying Methods (Guest Lecture on from Industry Expert)



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Week 10 (17 Oct)	Photogrammetry as an alternative tool for surveying: Introduction to aerial remote sensing and aerial photographs, classification: Principles of stereoscopic vision: Basic instruments - stereo-pair.	Unit 4: Photogrammetry
Week 11 (24 Oct)	pocket and mirror stereoscopes, parallax bars: Principles of photogrammetry. Measurement of heights and depths: Introduction to digital photogrammetry.	
Week 12 (31 Oct)	Applications Applications in urban and regional planning; Laboratory exercises.	Unit 5: Applications Assignment 2- (15 Marks)

Reference books:

1. Bannister A. and Raymond S (1992), *Surveying*, ELBS, New Delhi.
2. Kanetkar T.P (1994), *Surveying and Levelling*, Vols. I and II, United Book Corporation. Pune.
3. Punmia B.C (1989), *Surveying*. Vols. I, II and III, Laxmi Publications. New Delhi.
4. Wilfried Linder (2009), *Digital Photogrammetry: A Practical Course*, Springer Science & Business

Note:

1. Any other closed holidays as declared by SPAV shall supersede the above lecture plan. Holidays shown above may alter as per Notice from time to time.
2. Assessment Sessions may be re-scheduled, with prior intimation.
3. Reading lists provided is not exhaustive and is subject to addition – students are advised to follow progression of class to keep abreast of the new reading lists, if any.