

Lecture Plan
Department of Planning, School of Planning and Architecture, Vijayawada

Name of Course: Surveying and Photogrammetry (BPLN106)

Programme & Sem: **Bachelor of Planning (UG), Semester One**
 Course Duration: July 30th to Nov 14th, 2017
 Course Coordinator: Ms. Shakthe S, Assistant Professor., Dept. of Planning (shakthe@spav.ac.in)
 Number of Credits: 03
 Total Periods/Week: 03 (see timetable for details)
 Internal Assessment: 50 (minimum pass marks 50%)
 End Evaluation: 50 (minimum pass marks 50%) – Written Exam.
 Total Marks: 100 (to be converted to CGPA credit pattern as per regulations)

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)	Session Mode (Optional)	References / Suggested Readings
Week 01 (Starting July 30)	Fundamentals of Surveying: Definitions, classifications, use, objectives and basic principles of surveying; Classifications of measurements and units, concepts of scales, maps and plan and use of conventional symbols and Compass Surveying.	Lecture	1. Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-I' Laxmi Publication. 2016. (BOOK) 2. 2. C. Venkatramaiah, 'Textbook of Surveying'. Universities Press. 1994. (BOOK)
Week 02 (Starting Aug 06)	Plain table surveying and Computations of areas, Levelling and Contouring.	Lecture	
Week 03 (Starting Aug 13)	Internal Assessment – I (Aug 16 – Aug 21) : Time – Bound Closed Book Test		
Week 04 (Starting Aug 20)	Conventional Surveying Methods Definition, application, advantages and disadvantages, Principles; Instruments used.	Lecture	3. Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-I' Laxmi Publication. 2016. (BOOK) 4. C. Venkatramaiah, 'Textbook of Surveying'. Universities Press. 1994. (BOOK)
Week 05 (Starting Aug 27)	Steps in chain survey, Definition of framework of survey, survey lines, survey stations, base line, tie line, check line.	Lecture	
Week 06 (Starting Sep 03)	Field Work (Sep 01 – Sep 09)		
Week 07 (Starting Sep 10)	Ranging and chaining a survey line; Plotting chain survey to prepare a plan.	Lecture	5. Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-I' Laxmi Publication. 2016. (BOOK) 6. Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain,
Week 08 (Starting Sep 17)	Contemporary Surveying Methods: Digital Planimeter, Total station &	Lecture	

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	Global Positioning System		'Surveying Volume-III (Higher Surveying)' Laxmi Publication. 2017. (BOOK)
Week 09 (Starting Sep 24)	Internal Assessment – II (Sep 24 – Sep 28) : Time – Bound Closed Book Test		
Week 10 (Starting Oct 01)	Differential Global Positioning System. Photogrammetry: Photogrammetry as an alternative tool for surveying; Introduction to aerial remote sensing and aerial photographs, classification.	Lecture	7. Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-III (Higher Surveying)' Laxmi Publication. 2017. (BOOK)
Week 11 (Starting Oct 08)	Principles of stereoscopic vision; Basic instruments - stereo-pair, pocket and mirror stereoscopes, parallax bars.	Lecture	
Week 12 (Starting Oct 15)	Dussehra Break		
Week 13 (Starting Oct 22)	Internal Assessment – III (Oct 22 – Oct 26) : Assignment		
Week 14 (Starting Oct 29)	Principles of photogrammetry, Measurement of heights and depths; Introduction to digital photogrammetry.	Lecture	8. Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-III (Higher Surveying)' Laxmi Publication. 2017. (BOOK) 9. C. Venkatramaiah, 'Textbook of Surveying'. Universities Press. 1994. (BOOK)
Week 15 (Starting Nov 05)	Applications: Applications in urban and regional planning; Laboratory exercises	Lecture & Field work	
Week 16 (Starting Nov 12)	Laboratory exercises	Lecture & Field work	
November 14	End of Class work		

Note:

1. Any other closed holidays as declared by SPAV shall supercede 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.