

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

Name of Course: Quantitative Methods for Planning (BPLN105)

Programme & Sem: **Bachelor of Planning (UG), Semester One**

Course Duration: July 27th to December 2017

Course Coordinator: Mr. Valliappan AL., Assistant Prof., Dept. of Planning
(valliappan.al@spav.ac.in)

Number of Credits: 03

Total Periods/Week: 03 (See Time Table 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 basic proficiency in statistical techniques*

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode (Optional)	References / Suggested Readings
Week 1 (July 27)	Statistics - its uses and limitations, statistical data and sources of data	Lecture.	Gupta S.C., 'Fundamentals of Statistics'. Himalaya Publishing House, Delhi. (BOOK)
Week 2 (July 31- Aug 04)	Methods and tools of data collection; formulation of tools of data collection; design of survey formats.	Lecture.	Giri P K & Banerjee., 'Introduction to Statistics'. Academic Publishers, Delhi. (BOOK)
Week 3 (Aug 7-11)	Sampling data coding and validation, classification and tabulation of data; presentation of data(diagrammatic, tabular, graphical)	Lecture	http://www.organizationalresearch.com/publicationsandresources/a_handbook_of_data_collection_tools.pdf http://www.sagepub.in/upm-data/43350_4.pdf
Week 4 (Aug 14-18)	Assessment – 1 Time bound Test		http://www. statslc.com/ https://www.professorserna.com/
Week 5 (Aug 21-25)	Frequency distribution; measures of central tendency and dispersion;	Lecture	
Week 6 (August 28- Sep 01)	Correlation - Simple correlation, Karl Pearson's and Spearman's correlation	Lecture	
Week 7 (Sep 04)	Field Work		
Week 8 (Sep 11-15)	Introduction to probability; discrete random variable and probability distribution	Lecture	Ash Robert B., 'Basic Probability Theory' Dover Publications, New york.
Week 9 (Sep 18-22)	Assessment – 2: Time-bound Test		Veerarajan T., 'Probability-Statistics and Random Processes, India
Week 10 (Sep	Continuous random variable and	Lecture	

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25-29)	probability distribution, probability density function.		
Week 11 (Oct 02-06)	Binomial distribution; poisson distribution; Normal Distribution		Triola Mario F., 'Essentials of Statistics', Pearson Education Limited.
Week 12 (Oct 09-13)	Chain base index numbers and cost of living index numbers.	Lecture	Sharma A.K., 'Textbook of Elementary Statistics', Discovery Publishing House, India.
Week 13 (Oct 16-20)	Linear Regression Analysis;	Lecture	Chatterjee Samprit and Hadi Ali S., 'Regression Analysis by Example' Wiley Publication, New Jersey.
Week 14 (Oct 23-27)	Assessment – 3 Time bound Test		
Week 15 (Oct 30 – Nov 03)	Linear Regression	Lecture	http://2012books.lardbucket.org/books/beginning-statistics/s14-04-the-least-squares-regression-i.html
	Regression least square method; Two stage regression analysis.	Lecture	
	Confidence limits; Tests of significance	Lecture	Smithson M., 'Confidence Intervals', Sage Publications, New Delhi.
	Finalisation of Internal Marks		

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.