

**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: August 01 to Nov 16, 2018  
 Course Coordinator: Mr. Valliappan AL., Assistant Prof., Dept. of Planning (valliappan.al@spav.ac.in)  
 Number of Credits: 03  
 Subject Category: Core Theory  
 Total Periods/Week: 3 (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 (starting Aug 01)	Statistics - its uses and limitations, statistical data and sources of data	Lecture.	1. Gupta S.C., 'Fundamentals of Statistics'. Himalaya Publishing House, Delhi. (BOOK)
Week 2 (starting Aug 13)	Assessment 1: Time Bound Test		
Week 3 (starting Aug 20)	Methods and tools of data collection; formulation of tools of data collection; design of survey formats.	Lecture.	2. Giri P K & Banerjee., 'Introduction to Statistics'. Academic Publishers, Delhi. (BOOK)
Week 4 (Starting Aug 27)	Sampling data coding and validation, classification and tabulation of data; presentation of data(diagrammatic, tabular, graphical)	Lecture	3. <a href="http://www.organizationalresearch.com/publicationsandresources/a_handbook_of_data_collection_tools.pdf">http://www.organizationalresearch.com/publicationsandresources/a_handbook_of_data_collection_tools.pdf</a> 4. <a href="http://www.sagepub.in/upm-data/43350_4.pdf">http://www.sagepub.in/upm-data/43350_4.pdf</a>
Week 5 (Starting Sept 03)	Field Work (September 03-07)		
Week 6 (starting Sep 10)	Frequency distribution; measures of central tendency and dispersion;	Lecture	
Week 7 (Starting Sep17)	Correlation - Simple correlation, Karl Pearson's and Spearman's correlation	Lecture	
Week 8 (Starting Sep 24)	Assessment: I- Time bound Test		
Week 9 (Starting October 01)	Introduction to probability; discrete random variable and probability distribution	Lecture	5. Ash Robert B., 'Basic Probability Theory' Dover Publications, New york.
Week10 (Starting October 08)	Continuous random variable and probability distribution, probability density function.	Lecture	6. Veerarajan T., 'Probability-Statistics and Random Processes, India
Week 11 (Starting October 15)	Dussera Vacation (Oct 15 - Oct 19)		
Week 12 (Starting Oct 22)	Assessment – 3 (from October 22-26-): Time bound Test		

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Week 13 (Starting Oct 29)	Binomial distribution; poisson distribution; Normal Distribution	Lecture	7. Triola Mario F., 'Essentials of Statistics', Pearson Education Limited.
Week 14 (Starting Nov 05)	Chain base index numbers and cost of living index numbers.	Lecture	8. Sharma A.K., 'Textbook of Elementary Statistics', Discovery Publishing House, India.
Week 15 (Starting Nov 12)	Linear Regression Analysis; Regression least square method; Two stage. Confidence limits; Tests of significance.	Lecture	9. Chatterjee Samprit and Hadi Ali S., 'Regression Analysis by Example' Wiley Publication, New Jersey. 10. <a href="http://2012books.lardbucket.org/books/beginning-statistics/s14-04-the-least-squares-regression-i.html">http://2012books.lardbucket.org/books/beginning-statistics/s14-04-the-least-squares-regression-i.html</a> 11. Smithson M., 'Confidence Intervals', Sage Publications, New Delhi.
Nov 16	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.