



**PARVATHANENI BRAHMAYYA
SIDDHARTHA COLLEGE OF ARTS & SCIENCE**
Autonomous
Siddhartha Nagar, Vijayawada-520010
Re-accredited at 'A+' by the NAAC

22ANVAP201: STATISTICAL DATA ANALYSIS - JASP
(Jeffrey's Amazing Statistics Program)

Course Code	22ANVAP201	Course Delivery Method	Classroom / Blended Mode
Credits	2	CIA Marks	15
No. of Lecture Hours / Week	4	Semester End Exam Marks	35
Total Number of Lecture Hours	45	Total Marks	50
Year of Introduction: 2024-25	Year of offering:2024	Year of Revision: NIL	Percentage of Revision: NIL
Course Focus	<i>Employability</i>	Entrepreneurship	Skill Development.

CO-1 Understanding of Statistical Concepts through JASP

CO-2 Develop skills in conducting various types of statistical analyses using JASP, including t-tests, ANOVAs, regression analysis, chi-square tests, and Bayesian statistics.

CO-3 Effectively communicate the results of their analyses, both orally and in written reports.

CO-4 Accurately presenting statistical findings and conclusions.

CO-5 Exploring more advanced topics and methods in statistics and data analysis.

Contribution of Course Outcomes towards achievement of Program Outcomes & Strength of correlations (H-High, M-Medium, L-Low)

		PO1	PO2	PO3	PO4	PO5	PO6	PO7
22ANVAP 201	CO1	2						3
	CO2		3					2
	CO3			2				3
	CO4	2						3
	CO5	2						2

List of Experiments
Syllabus (3 hours per week)

Chapter No	Syllabus and Experiments	No of Hours
1	Diagrams and Graphs	3
2	Computation of measures of Central Tendency and Dispersion	3
3	Testing for normality	4
4	Linear Correlation and Regression	5
5	Logistic Regression	6
6	Multiple Correlation and regression analysis	6
7	t-Test for significance of single mean, difference means and paired t-test	6
8	Chi-Square test for independence of attributes and goodness of fit.	6
9	Analysis of Variance (ANOVA) – One way and Two way.	6

Reference books for JASP

1. Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences. United Kingdom: L. Erlbaum Associates.
2. Loerts, H., Lowie, W., Seton, B. (2020). Essential Statistics for Applied Linguistics: Using R Or JASP. United Kingdom: Macmillan Education UK.
3. Halter, C. P. (2018). Exploring Statistical Analysis Using JASP: Volume Three Frequentist & Bayesian Approaches. Germany: Independently Published.
4. Halter, C. P. (2018). Bayesian Statistical Analysis Using Jasp: Volume Two Bayesian Approaches. (n.p.): Independently Published.

Evaluation Pattern for Laboratory Courses

(A) Semester –End Examination (Practical Examination) – Max Marks: 35

Evaluation Procedure

(i) Experiments (Exam & Execution) 25 Marks

(ii) Viva 10 Marks

(B) Continuous Assessment 15 MARKS

15 marks for the continuous assessment (Day to day work in the laboratory shall be evaluated for 15 marks by the concerned laboratory teacher based on the regularity/record/viva). Laboratory teachers are mandated to ensure that every student completes 80%-90% of the lab assessments.

TOTAL: (A)+(B) = 50 Marks