

Annexure-I

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT SYLLABUS

Title of Course	"Statistical Data Analysis using SPSS"		
Credit	Theory: 1	Practical: 1	Total: 2
	Total Teaching hours = 45 (15 theory + 30 practical)		
Course Content	Unit – 1 Introduction to SPSS, Data Management and Data Transformation -Introduction to SPSS and its applications -SPSS interface and data editor -Variable types and measurement scales -Data entry, coding and validation -Data management (sorting, selecting, splitting, merging files) -Data transformation (compute, recode, rank, categorize, transpose) -Handling missing values and importing/exporting data Unit – 2 Descriptive Statistics and Graphical Presentation of Data -Frequency distributions and descriptive statistics -Measures of central tendency and dispersion -Skewness and kurtosis -Cross-tabulation and exploratory data analysis -Graphical presentation of data Unit – 3 Parametric Statistical Analysis -Assumptions of parametric tests -One-sample, Independent-sample and Paired-sample t-tests -One-way ANOVA -Repeated Measures ANOVA -Two-way ANOVA -Correlation Analysis (Pearson's correlation) -Regression Analysis (Simple, Multiple, Partial and Curve Estimation) Unit – 4 Non-Parametric Statistical Analysis, Case Study and Project -Introduction to non-parametric tests -One-sample non-parametric tests (Sign Test, Wilcoxon Signed Rank Test) -Two independent sample tests (Mann-Whitney U Test) -k Independent Sample Tests (Kruskal-Wallis Test) -Two Related Sample Tests -k Related Sample Tests (Friedman Test) -Chi-square Test (Goodness-of-fit and Independence) -Selection of appropriate statistical test -Interpretation and report writing		
Reference Books	1. Field, A. (2024). Discovering Statistics Using IBM SPSS Statistics (6th ed.). Sage Publications. ISBN: 9781529630008 (Print), 9781529668728 (eBook). 2. George, D., & Mallery, P. (2023). IBM SPSS Statistics 30 Step by Step: A Simple Guide and Reference (18th ed.). Routledge. ISBN: 9781032454375 3. Salcedo, J. (2023). IBM SPSS Statistics for Data Analysis and Visualization. Packt Publishing. ISBN: 9781804618042.		

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4. IBM Corporation. (2023). IBM SPSS Statistics 29 Brief Guide (Version 29). IBM Corporation.
5. Wagner, W. E. (2020). Using IBM SPSS Statistics for Research Methods and Social Science Statistics (8th ed.). Sage Publications. ISBN: 9781544371320.
6. McCormick, K., & Salcedo, J. (2023). SPSS Statistics for Data Analysis and Visualization. Packt Publishing. ISBN: 9781804618042.
7. Kumar, R. (Latest Edition). Statistical Methods Using IBM SPSS. New Age International Publishers. ISBN: 9788177084573.
8. Elliott, A. C., & Woodward, W. A. IBM SPSS by Example: A Practical Guide to Statistical Data Analysis (2nd ed.). Sage Publications. ISBN: 9781483319049.
9. Pallant, J. (2020). SPSS Survival Manual (7th ed.). Open University Press / McGraw-Hill Education. ISBN: 9781760875466.
10. Stehlik-Barry, K. (2021). Data Analysis with IBM SPSS Statistics. Packt Publishing. ISBN: 9781839097454.
11. Carver, R. H., & Nas'h, J. G. Doing Data Analysis with SPSS (Version 18.0). Cengage Learning.
12. Gonk, B. C. How to Use SPSS: A Step-by-Step Guide to Analysis and Interpretation. Routledge.

Teaching
Methodology

Lectures, Demonstrations, Hands-on practical session in SPSS, Case studies, Quiz, project work

Evaluation
Method

Internal Assessment : 50 Marks
External Assessment : 50 Marks

Patel

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