



ST ALOYSIUS COLLEGE (AUTONOMOUS)
Institute of Management and IT - AIMIT

POST GRADUATE DEPARTMENT OF BUSINESS ADMINISTRATION

Syllabus for SPSS add on course

Course Duration: 30 Hours

Introduction: Samples and the Population, Scale of Measurement, Independent and Dependent Variables, Data Access.

Data Checking : Viewing a Few Cases, Minimum, Maximum and Number of Valid Cases, Identifying Inconsistent Responses, When Errors are Discovered, SPSS Missing Values Option Describing Categorical Data: Frequency Tables and Bar Charts, Standardizing the Chart Axis, Pie Charts

Comparing Groups (Categorical Data): A Basic Two-Way Table, Chi-Square Test of Independence, Requesting the ChiSquare Test, Different Tests for independence, Association Measures Available within Crosstabs, Graphing Cross Tabulation Results, Three-Way Tables, Extensions

Exploratory Data Analysis: Interval Scale Data: Frequency Tables and Histograms, Exploratory Data Analysis, Options with Missing Values, Measures of Central Tendency, Variability Measures, Confidence Band for Mean, Shape of the Distribution, Stem & Leaf Plot ,Box & Whisker Plot, Saving an Updated Copy of the Data

Mean Differences Between Groups I: (Simple Case)Logic of Testing for Mean Differences, Sample Size, Exploring the Different Groups, T- Test, Displaying Mean Differences, Paired T Test, Normal Probability Plots

Mean Differences between Groups II: (One Factor ANOVA) Logic of Testing for Mean Differences, Factors, Exploring the Data, Running One-Factor ANOVA, One-Factor ANOVA Results, Post Hoc Testing of Means, Graphing the Results.

Mean Differences between Groups III: (Two Factors ANOVA): Logic of Testing and Assumptions, How Many Factors? Interactions, Exploring the Data, Two-Factor ANOVA, the

ANOVA Table, Observed Means, Presenting the Results Bivariate Plots and Statistics: Reading the Data, Exploring the Data, Scatter plots, Correlations

Introduction to Regression : Introduction and Basic Concepts, The Regression Equation and Fit Measure, Residuals and Outliers, Assumptions, Simple Regression, Multiple Regression, Residual Plots ,Multiple Regression Results, Residual and Outlier Results ,Summary of Regression Results, Stepwise Regression, Stepwise Regression Results, Stepwise Summary.

Books for Reference

- IBM SPSS Essentials: Managing and Analyzing Social Sciences Data, 2nd Edition, John Wiley and Sons.
- Data Analysis Using SPSS, Sage Publishing.