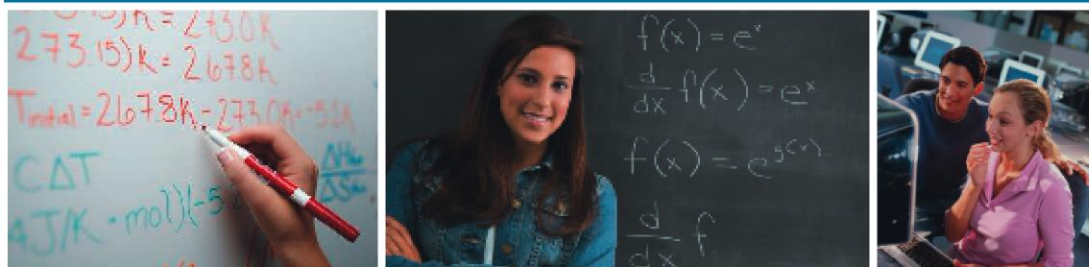


Learning Statistics Through SPSS Course



Building Through Learning...

Program Overview

Every functional area of business needs to collect data to gain insight into projections for the future to fit information for decision making. Many people probably think a statistician is someone who figures averages, well it is not. Statistics is the science comprising rules and procedures for collecting, describing, analyzing and interpreting numerical data. The applications of statistics are evident everywhere. The use of statistical methods has undergone a dramatic change as computers have entered the research environment. Sophisticated computer software allows users merely to specify the type of analysis desired and input the necessary data.

In addition to the academic degree programs and the training development programs, the Regional IT Institute's range of business includes training consultation, RITI alumni association and researches, projects and theses' outcomes. From that scope RITI figured it was necessary to provide the researchers, decision makers and managers, whose jobs requires to draw a valid conclusion from a statistical report, with this

course for furnishing them an effective tool that serves the research needs, and helps them analyze their research results.

Content

This course is designed to provide participants with a solid background of statistics supported by the major applications of SPSS along with an insight of statistical functions that are performed by professional statisticians, all the classes of this course are conducted in a state of art computer lab to enhance the practical nature of the course.

The main outlines of this course are as follows:

Introduction

- Samples and the Population.
- Level of Measurement, Independent and Dependent Variables.
- Access to Various Sources of Data (primary & secondary sources).

The Influence of Sample Size

- Precision of Percentages, Precision of Means.
- Sample Size and Precision.
- Types of Statistical Errors, Statistical Significance and Practical Importance.

Data Checking

- Viewing a Few Cases.
- Minimum, Maximum and Number of Valid Cases.
- Identifying Inconsistent Responses.
- SPSS Missing Values Option.

Describing Categorical Data & Bivariate Plots and Statistics

- Frequency Tables and Bar Charts, Standardizing the Chart Axis.
- Pie Charts, Scatterplots & Correlations.

Comparing Groups: Categorical Data

- A Basic Two-Way Table & Chi-Square Test of Independence.
- Why is the Significance Criterion Typically Set at .05?
- Association Measures Available within Crosstabs, Graphing Cross Tabulation Results.

Exploratory Data Analysis: Interval Scale Data

- Exploratory Data Analysis.
- Measures of Central Tendency and Variability Measures.
- Confidence Band for Mean.
- Shape of the Distribution, Stem & Leaf Plot, Box & Whisker Plot.

Mean Differences between Groups

- Logic of Testing for Mean Differences.
- Assumptions, Sample Size & Exploring the Different Groups.
- T Test & Paired T Test.
- Displaying Mean Differences.
- One-Factor ANOVA.
- The Bad News - Homogeneity.
- Post Hoc Testing of Means.
- Graphing the Results.

Introduction to Regression

- The Regression Equation and Fit Measure.
- Residuals and Outliers.
- Assumptions, Simple Regression, Multiple Regression.
- Summary of Regression Results & Stepwise Regression.

Key Benefits

Upon the completion of this program you will gain:

- The know-how of statistical functions.
- The capability to perform statistical analyses.
- A comprehensive vision that allows taking the right decision based on correct results.

Participants' Profile

This program is aimed to individuals who need to have a solid background of statistics and research and perform data or statistical analysis using SPSS for Windows. The course is targeted at participants from any subject area. Basic knowledge of using windows is considered a prerequisite for this course.

Instructors' Profile

This program is conducted by qualified instructors who have remarkable history with statistics, research, and data analysis and a long experience teaching and using SPSS on a daily basis. All instructors will maintain the practical nature of the course by using brief presentations, group discussions and case studies through the course.

Practical Information

Location: Regional IT Institute Premises.

Duration: 32 hours.

Schedule: Twice a week from 18:00 to 22:00.

Registration Requirements: Registration form and 2 photos.

For Information and Registration Regional IT Institute

Training Development Programs

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