

**Introduction to Statistical Analysis with SPSS**

**Course Number:** SPSS-102  
**Duration:** 2 days

**Overview**

This Introduction to Statistical Analysis with SPSS training course teaches attendees statistical techniques and when to apply them. Students learn how to set up the analysis using SPSS®, interpret the results, explore and summarize data, graphically display the results, and more.

**Prerequisites**

All students must have taken [Introduction to SPSS](file:////training/spss-introduction) and [Data Management & Manipulation with SPSS](file:////training/spss-data-management-and-manipulation) or have equivalent experience.

**Materials**

All SSPS training attendees receive an extensive library of SPSS examples to take with them following the training.

**Software Needed on Each Student PC**

This class uses SPSS Statistics 25 or newer but is appropriate to SPSS Statistics 19 and newer. Attendees are assumed to have their own copy of the software.

**Objectives**

* Look at several statistical techniques
* Discuss assumptions made by each method
* Set up the analysis using SPSS
* Interpret the results
* Apply various statistical techniques to explore, analyze, and summarize data
* Understand when and why to use these various techniques
* Investigate and test underlying relationships
* Graphically display the results using SPSS

**Outline**

* Introduction to Statistical Analysis
* Principles of Research Design and Process
* Data Cleaning and Preparation: Using the Add-on Data Preparation Module
* Describing Categorical Data
* Summarizing Continuous Data
* Measures of Central Tendency and Dispersion
* Checking the Form of Distribution
* Probability and Inferential Statistics
* Comparing Categorical Variables
* Measures of Association
* Mean Differences between Groups: T Test
* Bivariate Plots and Correlations
* Introduction to Regression
* Mean Differences Between Groups: One-Factor ANOVA
* Introduction to Multiple Regression