

JMP Software: Data Exploration

Course Contents

Introduction

- introducing JMP features
- exploring user-assistance options
- accessing data and opening different types of files in JMP
- understanding modeling types
- introducing the Table panel, Columns panel, and Rows panel

Data Exploration and Manipulation

- using the Columns and Rows menus
- creating new columns
- creating new tables
- using the Tabulate option to create summary tables

Graphical Data Exploration

- exploring relationships with a continuous Y variable
- using the Graph Builder
- mapping with the Graph Builder
- exploring relationships with a categorical Y variable

Reporting and Presenting Results

- creating a JMP journal
- using a journal for presentations
- saving and sharing results

Course Contents

Introduction to Statistics

- reviewing populations and samples
- exploring data with descriptive statistics and graphs
- generating and understanding confidence intervals
- understanding statistical hypothesis tests

Comparing Means

- analyzing a one-sample t -test
- analyzing paired data
- comparing two independent groups using a t -test

Analysis of Variance

- fitting one-way ANOVA models with two levels
- fitting one-way ANOVA models with more than two levels
- performing multiple comparisons
- examining ANOVA assumptions
- fitting N-way ANOVA models
- analyzing power and sample size

Simple Linear Regression

- using scatterplots and correlation statistics
- performing simple linear regression
- fitting polynomial regression models

Multiple Regression

- performing multiple regression
- performing multiple regression with interactions
- performing stepwise regression

Regression Diagnostics

- examining model assumptions
- discovering multivariate outliers
- investigating collinearity