

SAS Enterprise Guide for Data Analysis (One Day)

Date :

Session I : 20 December 2006

Session II : 21 December 2006

Venue: ??

Audience

This course is designed for lecturers or professors who are interested to use SAS (Statistical Analysis Software) in their teaching and research.

Course Description

This one day course focuses on how to access, manage, summarize, and present data using SAS Enterprise Guide. The course teach student how to navigate the menu-driven interface of SAS Enterprise Guide to accomplish tasks such as accessing local SAS and Excel tables and remote relational databases; creating user-defines formats; managing; manipulating; and joining data using the SQL query builder; generating descriptive statistics, tabular summary reports, and ActiveX graphs; and automating and scheduling tasks. This course also will cover the statistical analysis task on the following key areas: statistical inference, analysis of variance, multiple regression, categorical data analysis, and logistic regression. You learn to construct graphs to explore and summarize data, construct confidence intervals for means, test hypotheses, apply multiple comparison techniques in ANOVA, assess and correct co linearity in multiple regression, use diagnostic statistics to identify potential outliers in multiple regression, use chi-square statistics to detect associations among categorical variables, and fit a multiple logistic regression model.

Prerequisites

This course is designed for lecturers who are new to SAS and have some basic statistic background. This is not a statistics course but the course focus on how to perform statistical analysis using SAS Enterprise Guide.

Course Contents

Getting Started

- Introduction to SAS Enterprise Guide

Working with Data in a Project

- introduction to tabular data
- accessing local data
- accessing remote data
- importing text files
- editing tables in the Data Grid (self-study)

Getting Started with Tasks

- introduction to task dialogs
- creating a listing report
- creating a frequency report
- creating a two-way frequency report
- using variable parameters in tasks

Creating Simple Queries

- introduction to the Query task
- selecting columns and filtering rows
- creating new columns with an expression
- creating new columns by recoding values
- joining tables
- joining tables including non-matching rows

Creating Summarized Output

- generating summary statistics
- creating and applying custom formats
- creating a tabular summary report
- creating a graph
- interacting with an ActiveX graph (self-study)

Working with Results and Automating Projects

- customizing the output style
- combining results
- updating results

Analysis of Variance

- performing one-way ANOVA
- performing multiple comparisons
- performing two-way ANOVA with and without interactions

Regression

- producing scatter plots
- producing correlations
- fitting a simple linear regression model
- understanding the concepts of multiple regression
- building and interpreting models

Regression Diagnostics

- examining residuals
- investigating influence and co linearity

Categorical Data Analysis

- describing categorical data
- producing frequency tables
- examining tests for general and linear association
- understanding the concepts of logistic regression

Software Addressed

This course addresses the following software product(s): SAS Enterprise Guide