STA 311 Statistical Computing and Data Management

Instructor: Cheng Peng, Ph.D.
Department of Mathematics
West Chester University
West Chester, PA 19383

Office:25 University Avenue, RM 111 Phone: 410-436-2369



SAS Statistics Graphic PROCEDURES

- Overview of SAS Statistical Graphic Procedures
- ☐ High Quality Plots with PROC SGPLOT
- Distribution Plots
 - Histogram
 - Density plot
 - Box-plot
 - Scatter plot
- Categorical Plots
 - Bar-chart
- PROC SGPIE –preproduction version!



ODS Graphics Overview

- ODS Graphics introduces a whole new way of generating highquality graphs using SAS.
- With just a few lines of code, you can add sophisticated graphs to the output of existing statistical procedures or create standalone graphs.
- ☐ The SGPLOT procedure produces a variety of graphs including bar charts, scatter plots, and line graphs.
- ☐ This week, we learn how to produce several types of graphs using PROC SGPLOT.
- ☐ If time permits, we also learn how to create paneled graphs by converting PROC SGPLOT to PROC SGPANEL.



Overview of PROC SGPLOT

- ☐ PROC SGPLOT produces many types of graphs.
- ☐ In fact, this one procedure produces 16 different types of graphs.
- ☐ PROC SGPLOT creates one or more graphs and overlays them on a single set of axes.



Working Data Set: Sashelp.cars

- ☐ Cars.sas7bdat is as SAS data set coming with the base SAS in library **Sashelp**.
- We can simply access this data set using Sahelp.cars
- You can also download a copy of this data and save it in a local folder that SAS can access.



Distribution Plots: Histogram

Plots for This Week

- 1 Histograms
- 2 Bar charts
- 3 Scatter Plots
- 4 Density Curves
- 5 Box-plots
- 6 Simple Linear Regression Lines

Please see the examples code for all above statistics graphics!

