

## STA 471 - JMP HANDOUT

JMP in Adel Math Room 222, using Remote Desktop Connection, or <https://apps.nau.edu/>

NOTE: To use the Remote Desktop Service from off campus you must first setup VPN. See <https://nau.edu/its/remote-desktop/> for details. Alternatively, NAU RemoteApps allows current NAU students, faculty, and staff access to licensed applications from a variety of operating systems. When using <https://apps.nau.edu/>, consider various options. e.g., vDesk – Full Desktop or Mathematics and Statistics.

Run JMP Pro 14

Once in JMP, the menu at the top of the screen will contain items such as:

**File Edit Tables Rows Cols DOE Analyze Graph Tools View Window Help**

To input a new data set, click on **File > New > Data Table** at top of screen to open a spreadsheet for data entry purposes)

Variables are entered as columns

Double click on say, “Column 1”, to open Column Info window and type desired name. Modeling type must be **Continuous**, **Ordinal**, or **Nominal**.

Enter the data in the appropriate column

Create new variables by double clicking just to the right of the last existing column (type in desired name at top of column as discussed earlier)

### Pictorial and Numerical Summary of Univariate Data

#### **Analyze**

##### **Distribution**

Double click on column name, then type OK (look at results)

Click on red down arrow next to **Distributions** then **Stack**  
get horizontal layout

NOTE: Diamond in boxplot identifies the sample mean  
and marks the 95% CI for the population mean.  
The interval marked in red identifies the shortest  
50% of the data.

Explore various options by clicking on red down arrow next to  
variable name

## Simple Linear Regression

Enter independent variable (X) and dependent variable (Y) as columns of data

### **Analyze**

**Fit Y by X** (X = independent variable or Factor, Y = dependent variable or response). Click on OK button after selecting X and Y variables.

Click on red down arrow next to “Bivariate Fit of ...” and select  
**Fit line**

Once fitted regression model is chosen, use new red down arrow next to “Linear Fit” to select **Save Residuals**, **Save Predicteds**, and/or **Plot Residuals**

## Transforming Data

After creating a new column in data table, double click top of the new column just above variable name to open the Column Info window

Change column name (if needed), click on black down arrow next to  
**Column Properties** and select **Formula**, then **Edit Formula**

Example: Click Transcendental (then try Log)

Click on name of variable you wish to transform

Click OK and close windows to get back to the spreadsheet to see results

## Other Comments

Use **Help** (in JMP) from menu at top of screen for additional information.

JMP output may be copied and then pasted into MS Word. This will be useful if you want to incorporate the statistical analyses into a document with a narrative. Save \*.jmp files and other files on your own drive.