

Getting Started with Computers and Excel

I. Computer Facilities

- a. MC 447/446 Hours: Mon-Thurs 7:30am-11:00pm (10:00pm summers), Fri 7:30am-5:30pm, Sat-Sun 10:00am-5:30pm
- b. RT 403 Hours: Mon-Thur 7:30am-10:15pm, (9:15pm summers) Friday 7:30am-4:45pm, Sat 9:00am-5:45pm, Sun noon-5:45pm (closed Sundays in summers)
- c. Main Floor Library – near Reference Desk

II. Software Needed for Course

a. World Wide Web Browser

- i. Netscape Navigator or Internet Explorer
- ii. Go to <http://academic.csuohio.edu/holcombj/>
- iii. Adobe Acrobat Reader
 1. Go to <http://www.adobe.com/prodindex/acrobat/readstep.html> and then click the text that says, “Get Acrobat Free”
 2. Links on web page and directions on how to do that.

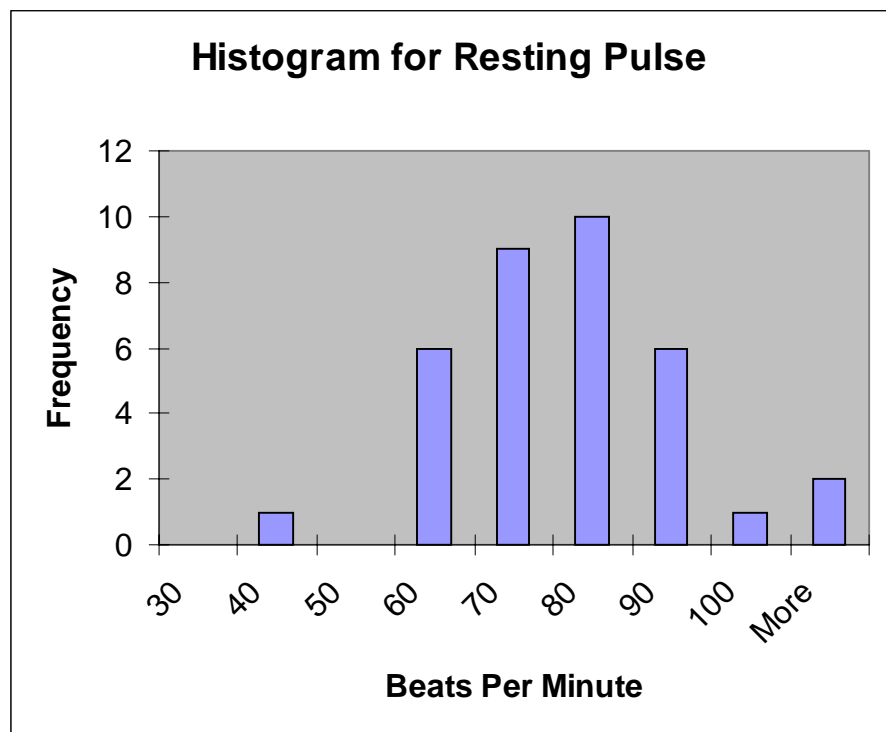
b. Word Processing Software

- i. Can use MS-Word, MS-Works, WordPerfect, etc.
- ii. MS-Office 2000 (which includes Word and Excel is available in the CSU Bookstore for \$10.00 (yes that is American Dollars!). Just have your current CSU ID, go to the Software Office, sign an agreement, and you are all set.

c. Spreadsheet – MS-Excel

- i. **Installing the Data Analysis ToolPak** To install the analysis Toolpak, open Excel (97 or 2000) is fine, and click on **Tools\Add-Ins** and then click on the boxes for **Analysis ToolPak** and **Analysis Toolpak – VBA**. Then click **OK**. Two things could happen here. It could install the Toolpak without a problem, or it might ask you to insert the CD-ROM. I believe there will be no problem in the computer labs in MC 447 or the Library. At home, you may need to locate your MS-Office CD.
- ii. **Using Excel to create a Histogram**
 1. Download Class survey data from Class website
 - a. Click on [\(http://academic.csuohio.edu/holcombj/mth147/\)](http://academic.csuohio.edu/holcombj/mth147/)
 - b. Click Notes for Class
 - c. Click on **Excel File of Student Survey Data for Spring 2001**
 - d. When it ask to open or Save to Disk, do either, but do remember to Save the data at some point at a location that you can remember. (The name of the file is **stud_survey_s2001.xls**)

2. Create your intervals (bins) in a column to the right of the data (for resting pulse, might want to count by 10's). **Note that Excel uses a right end point rule.**
3. Click on **Tools/Data Analysis** and then **Histogram** and then **OK**.
4. Now make sure cursor is blinking in the **Input Range** box and then highlight the column of data for which you want to create a histogram. (You can click the top of the column).
5. Now click the cursor inside the **Bin Range** box and then highlight the cells for which you just typed in your intervals.
6. Click the **Labels** box.
7. Then click the **Chart Output** box, and then hit **OK**
8. Grab the bottom of the Histogram and drag it down to make it bigger. Then click the right mouse button and select **Chart Options**. Add a title, and label axes. You can also click on **Legend** and click the **Show Legend** box so that it is empty.
9. The Histogram is now ready to be cut and pasted into your Word Processor.



10. Before constructing another histogram, make sure you click on the **Sheet1** tab at the bottom the Worksheet.

iii. Summaries for Discrete Variables

1. Click on **Data/Pivot Table and Pivot Chart Report**
2. The first screen of the Wizard tell you want an Excel List and a Pivot Table, so click **Next**
3. Generally the next screen will ask, “Where is the data you want to use?” and the data from **Sheet1** will already be highlighted, so hit **Next**.
4. The next screen asks, “where do you want to put the Pivot Table?” and putting it in a New Worksheet is fine. Then click **Layout** (not **Next**.)
5. Drag the variable of interest over to the **ROW** section (**caffeine**) and then drag the **Count** variable over to the **Data section**, then click **OK**.
6. Then click **Finish** from the Wizard.
7. In a new Worksheet will be your table. You can modify the labels of the categories to be more descriptive.
8. Use the formula feature to calculate the percents. In the cell to the right of the count type = and then the formula for the percent. (In the case of **caffeine**, type =9/35). Do the same for the next cell.
9. Then highlight table and copy/paste it into your Word Processor.

caffeine	Total	
Yes	9	0.257143
No	26	0.742857
Grand Total	35	

iv. Calculating Summaries for Continuous Variables

1. Make sure **Sheet1** is the active sheet.
2. Click on **Tools/Data Analysis/Descriptive Statistics/OK**
3. In the **Input Range** box, click the column you want to summarize.
4. Click the **Labels in the First Row box**
5. Click the **Summary Statistics** box.
6. If you get a message that “Input Range contains non-numeric data”, you probably forgot to click the **Labels** box.
7. You obtain output like this:

<i>height</i>	
Mean	68.1857143
Standard Error	0.65500199
Median	69
Mode	65
Standard Deviation	3.87504405
Sample Variance	15.0159664
Kurtosis	-0.94867661
Skewness	-0.26592911
Range	14
Minimum	60
Maximum	74
Sum	2386.5
Count	35

8. With this output, we then in your Word Processor create a summary table that looks like:

Variable	Mean	Median	Standard Deviation	Min	Max
Height	68.12	69	3.88	60	74