GGPlot Class Reflections

**Lesson 2-Components**

**What was your level of comfort with the lesson/application?**

I was very comfortable with the commands and skills covered in this lesson, from reading/saving as .CSV file, to plotting a scatterplot in ggplot. I knew how to set custom x and y tick marks and how to specify a plot title. I am sure as the course advances, plot components will get more challenging.

**What areas of the lesson/application confused or still confuses you?**

Not many in this lesson

**What is a way you can apply the material in this lesson towards your research or area of study?**

Absolutely. For my data, I create a lot of boxplots and a few scatterplots to showcase, for example, microbial community Shannon diversity vs. individual’s age, and using the code we created will come in handy. The code we created is more clean, structured, and easier to modify/navigate, which will save me many headaches down the road. Having the code written this way will also help me diagnose and solve R errors more quickly.

**What are some things you would like to learn related to, but not covered in, this lesson?**

What are the other components of mapping, besides aes (aesthetics)

Why certain mapping aesthetics go under geom\_point vs in ggplot

plotData = **ggplot**( data=deaths ) +

**geom\_point**(mapping=aes(x=time, y=accdeaths))

How to access a data file (.csv or .txt) directly from a URL

**Lesson 3-Plot Styles**

**What was your level of comfort with the lesson/application?**

I felt slightly more overwhelmed during this lesson compared to the previous, but it was very fun. The ggplot code is getting more busy, but the different components are making more sense now! I was able to follow along and complete the lesson and the application just fine.

**What areas of the lesson/application confused or still confuses you?**

In axis.title.x=element\_text(size=14, color="black",face="bold"); are there other parts instead of element\_text? Couldn’t ggplot have been designed so that we wouldn’t need to add element\_text to every single axis title/label component?

**What is a way you can apply the material in this lesson towards your research or area of study?**

Yes, for all of the plots I make, I have to set the shape, colors, and sizes of all of the text in the plot. I mostly always set the color of the x and y axis to black, but I do bold them and make the font large. I also have done scatter plots with regression lines but did not know how to change the color or shading of line. Now, I know and will use that code. Something important I learned is to set theme\_bw() before modifying the theme later; I have not done this in the past and it has caused much frustration.

**What are some things you would like to learn related to, but not covered in, this lesson?**

Which other ggplot components need to be in a certain order? For example, theme\_bw() needs to be set before theme(). Are there other ggplot components that need to be set in a certain order?

Center Plot title

Adding confidence intervals or standard errors to the regression line

Set dashed lines to denote upper and lower limits on y-axis