

# *SOC 4930/5050: Week 02, Lecture 02B Functions*

## *Quick Reference*

*Christopher Prener, Ph.D.*

*September 4<sup>th</sup>, 2017*

### *Packages*

- tidyverse
  - ggplot2

### *Basic Template*

```
ggplot2::ggplot(data = dataFrame) +  
  geom(mapping = aes(aesthetic),  
        stat = statistics,  
        position = position,  
        ) +  
  coordinateFunction +  
  facetFunction
```

### *Geometric Objects*

#### *Area Plot*

This geom must be paired with an initial ggplot function call.

```
geom_area(mapping = aes(aesthetic), stat = "bin")
```

### *Aesthetics*

#### *Add One Color*

Use fill for bar plots and histograms, and color for point-based plots like scatter plots.

```
geom(mapping = aes(aesthetic, color = "colorText"))
```

#### *Add Color Based on Additional Variable*

```
geom(mapping = aes(aesthetic, color = colorVar))
```

## *Position Adjustments*

### *Dodge*

```
geom(mapping = aes(aesthetic, fill = colorVar),  
      position = "dodge")
```

### *Jitter*

```
geom(mapping = aes(x = var1, y = var2, color = colorVar),  
      position = "jitter")
```

## *Coordinate Systems*

### *Flip x and y Axes*

```
geom(mapping = aes(aesthetic)) +  
  coord_flip()
```