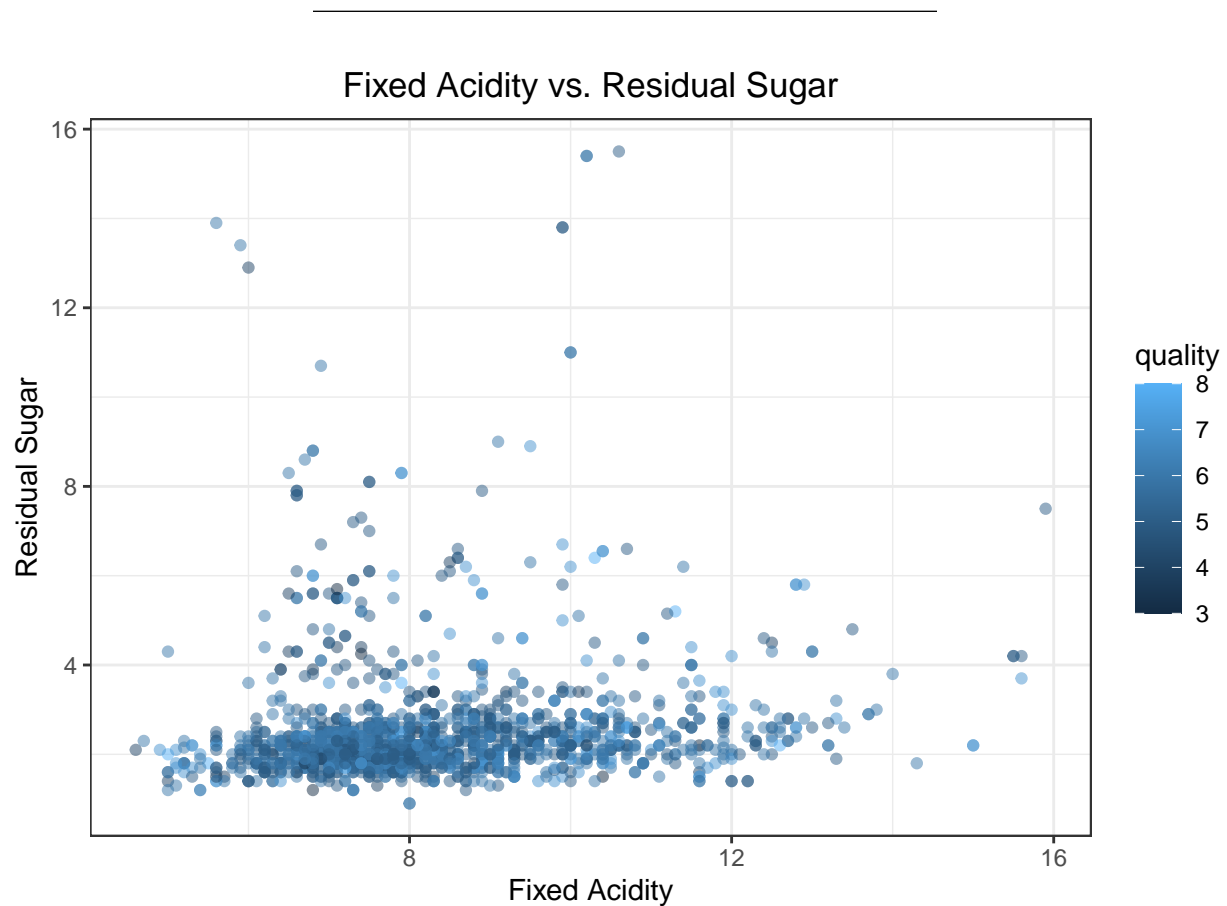


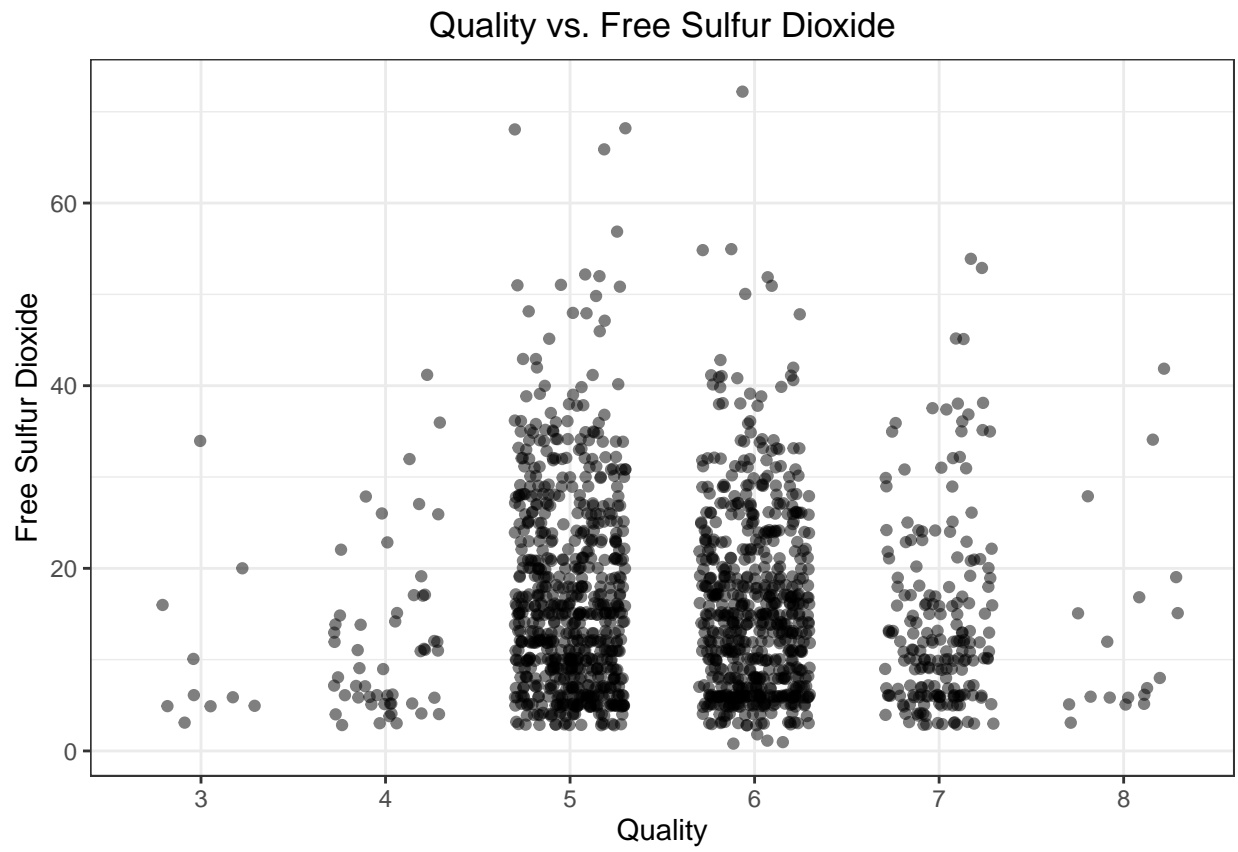
## CM580A3: Plotting Wine Data with ggplot()

**Plot Two Continuous Variables Against Each Other Using Wine Data**

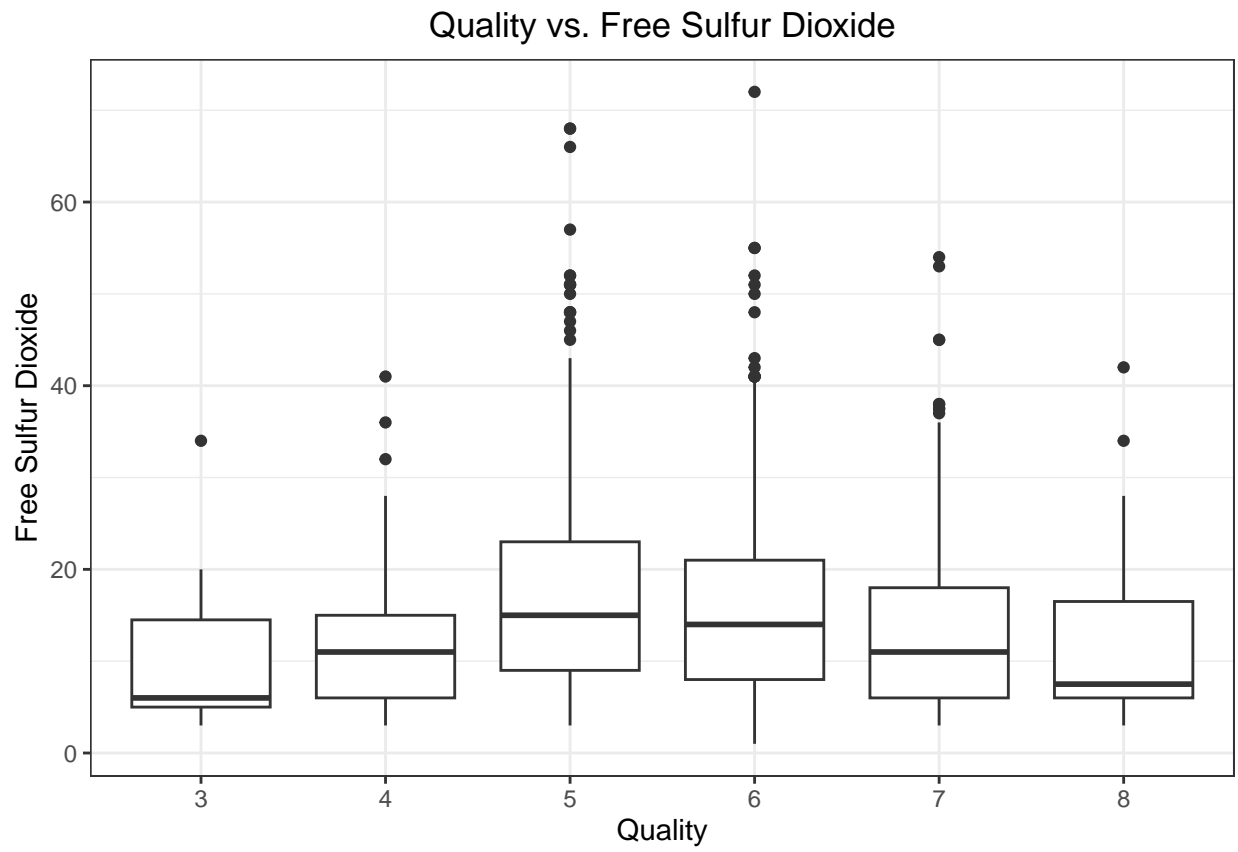


**Plot Wine Quality on the X-axis and Any Continuous Variable on the Y-axis**

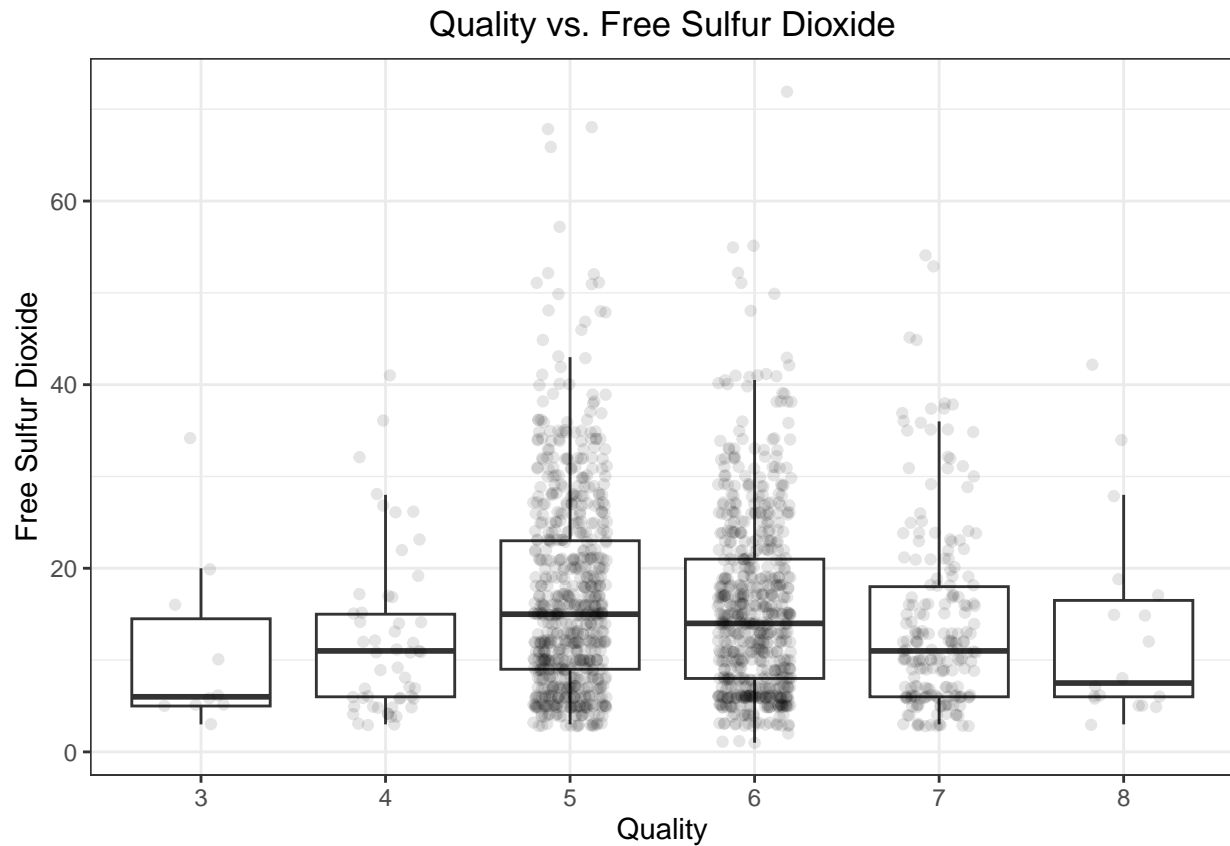
As a Scatter Plot



As a Boxplot



As a Scatterplot and Boxplot



## Appendix

```
library(tidyverse)
library(knitr)

vid <- read_csv("US_COVID_Vacc_by_StateTerr.txt")

wine <- read_csv("winequality-red.csv")
####
#01#
####
wine %>%
  rename(fixed_acidity = "fixed acidity",
         residual_sugar = "residual sugar") %>%
  ggplot() +
  geom_point(aes(x = fixed_acidity, y = residual_sugar, color = quality),
            alpha = .5) +
  labs(x = "Fixed Acidity", y = "Residual Sugar",
       title = "Fixed Acidity vs. Residual Sugar") +
```

```

theme_bw() +
theme(plot.title = element_text(hjust = 0.5))

####
#02#
####
wine %>%
  rename(free_sulfur_dioxide = "free sulfur dioxide") %>%
  ggplot() +
  geom_jitter(aes(x = as.factor(quality), y = free_sulfur_dioxide),
              width = .3, alpha = .5) +
  labs(x = "Quality", y = "Free Sulfur Dioxide",
       title = "Quality vs. Free Sulfur Dioxide") +
  theme_bw() +
  theme(plot.title = element_text(hjust = 0.5))

####
#03#
####
wine %>%
  rename(free_sulfur_dioxide = "free sulfur dioxide") %>%
  ggplot() +
  geom_boxplot(aes(x = as.factor(quality), y = free_sulfur_dioxide)) +
  labs(x = "Quality", y = "Free Sulfur Dioxide",
       title = "Quality vs. Free Sulfur Dioxide") +
  theme_bw() +
  theme(plot.title = element_text(hjust = 0.5))

####
#04#
####
wine %>%
  rename(free_sulfur_dioxide = "free sulfur dioxide") %>%
  ggplot() +
  geom_boxplot(aes(x = as.factor(quality), y = free_sulfur_dioxide),
              outlier.shape = NA) +
  geom_jitter(aes(x = as.factor(quality), y = free_sulfur_dioxide),
              width = .2, alpha = .1) +
  labs(x = "Quality", y = "Free Sulfur Dioxide",
       title = "Quality vs. Free Sulfur Dioxide") +
  theme_bw() +
  theme(plot.title = element_text(hjust = 0.5))

```