**STT 811**

**In-Class Assignment 19**

1. For the airline passengers dataset
   1. Import the data
   2. Convert it into a time series
   3. Create the autocorrelation and partial autocorrelation panels. Comment on how the seasonality is observed
   4. Perform a decomposition of the time series, trying both additive and multiplicative. Which one “looks” better?
2. For the oil gas dataset
   1. Import the data
   2. Convert the oil and gas data into 2 separate time series (what is the seasonality frequency?)
   3. Perform a decomposition on the oil data. How strong is the seasonality?
   4. Create a scatterplot of gas vs. oil (oil on x axis). How correlated are they?