

# Stat 142 (Time Series Analysis)

## Laboratory Exercise No. 1

1. Find an interesting time series from the website of the Philippine Statistics Authority or other statistical agencies. The series must have at least 50 time points (preferably monthly, quarterly or yearly). Provide a brief description of the data.
2. Generate and describe the time series plot. Identify and explain what components are clearly visible in the plot.
3. Generate lags of the series up to  $k = 4$ . Add these lags into the data frame and then print the data frame up to the 15th row.
4. Generate the first and second differences and add these into the data frame and then print the data frame up to the 15th row.