**Assignment 03 – Matplotlib**

EMSE 6574 – Programming Analytics

Due **Sunday, November 18th by 11:59pm**

Notes:

* All code should follow the [PEP 8 Style Guide for Python](https://www.python.org/dev/peps/pep-0008/)
* Assignment should be submitted using jupyter notebooks
  + File name should follow “{Your Name} – Assignment\_XX\_Submission”
  + Each Task should be contained in its own cell
  + Each Task should be properly commented
  + Each Task should print out the answer to the Task if appropriate (Ex. Task 2)
  + Sample submission can be found on blackboard under the “outline” section
  + **Not following these standards may result in lost points**

**Assignment:**

In class we covered a variety of different methods to visualize data. For this week your assignment is to use the provided dataset and graph them utilizing the following methods:

* ax.hist()
* ax.plot() – line graph
* ax.scatter()
* ax.bar()
* ax.pie()
* ax.boxplot()

For each of these graph types you must:

* Create at least graph of the given type
* Use at least one formatting option (color, scale, x/ylim, etc)
* Use at least one parameter optionthat was not covered in class.
  + **Example:** For ax.hist() we used the normed and cumulative parameters, but did not use stacked, orientation, weights, etc.
  + **Note:** This is not required for **ax.plot()** and **ax.bar()**.

For this assignment you will most likely need to reference the matplotlib documentation - [https://matplotlib.org/contents.html](https://matplotlib.org/contents.html%20).