# **Topic Outline: Matplotlib Graphics**

Revised: March 1, 2016

#### Materials

- Today's handouts: this outline, book chapter, code practice, stickers
- All posted on *Topic list & links* page of website (except the stickers).

#### **Preliminaries**

- Tools and buzzwords
  - Packages, import, dataframe, csv files, series, columns, index, API.
- What is this?
  - Objects and methods
  - Function returns
  - {'Chase': 'Coleman', 'Spencer': 'Lyon'}
- Start Spyder and open new file bootcamp\_class\_pandas1.py in your Data\_Bootcamp directory

### Pandas 1: Data input

We'll follow the book chapter.

- Packages
- Importing packages
- Reading internet files
- Properties of dataframes
- Working with variables
- Dataframe methods
- Reading files from your computer
- Examples: Penn World Table, World Economic Outlook, PISA education data, UN population data and projections, income by college major
- APIs: FRED, World Bank, Fama-French equity returns
- Review
  - Put red sticker on, replace with green when done

# Examples

If time permits, we'll go through some examples of economic and financial data and its properties. It's an IPython notebook that you can view on the GitHub repo: the Code/IPython directory, file bootcamp\_examples.ipynb.

## After class

- Required
  - Code Practice #3
- Recommended (always)
  - Write: After class, write down everything you remember without using your notes
  - Review: Reread the chapter and fill in anything you missed.