Prerequisites

In order to be successful in this course you will need to know how to program in Python. This course is part of a specialization and the expectation is that you have completed the first course, Introduction to Data Science in Python.

Week by week

In **week one** you will be introduced to the principles of data visualization. This week's assignment asks that you carefully read Alberto Cairo's work, Graphics Lies, Misleading Visuals. You will locate and identify a visual that displays misleading information. You will interpret the features of the visual in order to identify the mechanism(s) that is/are used by the "encoder" to mislead the "decoder." For each mechanism that you identify, you will explain how it was used to mislead.

In **week two** you will delve into basic charting. For this week's assignment, you will work with real world CSV weather data. You will manipulate the data to display the minimum and maximum temperature for a range of dates and demonstrate that you know how to create a line graph using matplotlib. Additionally, you will demonstrate procedure of composite charts, by overlaying a scatter plot of record breaking data for a given year.

In **week three** you will explore charting fundamentals. For this week's assignment you will work to implement a new visualization technique based on academic research. This assignment is flexible and you can address it using a variety of difficulties - from an easy static image to an interactive chart where users can set ranges of values to be used.

In **week four**, then everything starts to come together. Your final assignment is entitled "Becoming a Data Scientist." This assignment requires that you identify at least two publicly accessible datasets from the same region that are consistent across a meaningful dimension. You will state a research question that can be answered using these data sets and then create a visual using matplotlib that addresses your stated research question. You will then be asked to justify how your visual addresses your research question.

Enrollment Options

Coursera has made the decision to make Specializations available by monthly subscription. This means you can choose to pay a monthly fee to access all of the courses in a specific Specialization. The Applied Data Science with Python specialization will be switching to this subscription model in April 2017 once the third course in the specialization launches.

Coursera's switch to monthly subscriptions comes with another change -- for those learners who choose the "Audit Only" enrollment, you will no longer be able to submit assignments for grades nor see answers for those assignments. You will still have access to all the course materials but you will not be graded on your work, nor see answers to graded assignments.

For further information on the different enrollment options for Coursera courses, please visit the Enrollment Options Help page. If you have feedback about the enrollment options shared on the Enrollment Options page, you can share your thoughts with Coursera in this survey.

Grading and Assignments

The lectures will provide you with some guidance for completing assignments, but you will need to take initiative and look beyond assignment instructions in order to be successful. You'll need to know how to ask questions in the discussion forums of your peers, and seek out new information through web searches and Stack Overflow. Be sure to also check out the Additional Python Resources.

If you are not sure what kind of output is required, or think there is a need for more clarity, please head to the course discussion forums. Note that some assignments and in video quizzes may not be mobile friendly.

Some assignments allow you to download and view your fellow learner's code and/or data. If you want to look at the learner's code, we recommend that you open it through the Jupyter notebook system on the Coursera platform as that will be more secure. Please ensure that all data you share is publicly available, since you will be sharing these data with other learners.

WEEK #	PERCENTAGE OF FINAL GRADE	PASSING THRESHOLD
1	25%	73%
2	25%	73%
3	25%	70%
4	25%	73%