# **DATA SCIENCE**

# **Onboarding Tasks**

Congratulations on joining the part-time Data Science course at General Assembly!

We're really excited that you're joining the General Assembly community. In order to ensure your success in the course, we've created the following onboarding tasks that will take most students between 15-20 hours to complete. Depending on your background and how familiar you are with these topics, you may spend more or less time on each part.

Please complete these tasks **before your first day** so that you and your computer will be prepared for class. In the meantime, feel free to reach out with any questions (or just to say hi)!

*GA* + the DS Instructional Team

### WHAT CAN I EXPECT?

Your onboarding tasks include four *required* tutorials to help you review statistics, Python, git, and the command line. These modules are accompanied by a set of multiple-choice exercises to help you self-assess whether you've fully grasped the fundamentals. *Please complete these exercises before your first day of class*.

# If you find yourself thinking...

"This stuff is way too easy, is this course actually going to challenge me?"

The purpose of these tasks is to make sure that everyone starts the course on the same page. If you are speeding through this material, you're in a great place to start the course! Don't worry, our course ramps up fast!

"This stuff is way too hard, am I going to be able to keep up?"

That's why we suggest these tasks in the first place - so you can get up to speed! We'll be reviewing many of these concepts in our first week as well, so you'll have multiple chances to fully catch up. If you're still having trouble, let your producer know!

## **STEP 1: INSTALL REQUIRED TECHNOLOGY**

To complete these tasks, you'll need to create an account with <u>Khan Academy</u> and <u>Code</u> <u>Academy</u>. Additionally, before the course starts, you will need to <u>create a Github account</u>. Go ahead and take 5 minutes to create these, if you haven't already.

Next, read through our <u>tech guide</u> for a complete list of all the tools and resources we'll be using in our class. At the very minimum, you will need to install:

- Anaconda Python
  - Follow the installation instructions for Python 2.7 for your computer. (e.g. "Mac Install). Note: There is a Python 3, which has significant differences from 2.7 and is not "industry standard." We will be using Python 2.7.
  - Mac only: Test that Anaconda and Python were installed correctly by opening a
    Terminal window and entering ipython notebook In a few moments, your
    browser should open to a window titled Jupyter. If this works, you may close
    window, and shutdown the notebook server.
  - If your installation is not complete or you have questions about it, please plan to arrive to the first class at least 30 minutes early so the TAs can help you get set up.
- Git

# **STEP 2: COMPLETE REQUIRED TUTORIALS**

12 - 35 hrs

Complete the following modules. If you've already done them in the past, try reviewing the "bonus" activities instead. Remember, the more time you spend familiarizing yourself with these concepts, the better prepared you'll be for success in this course!

#### I. Statistics

• Get Up To Speed: <u>Probability & Statistics</u>
Bonus: Additional Practice

#### II. Python

• Get Up to Speed: <u>Python Syntax</u>
Bonus: <u>Additional Practice</u> (Exercises 1-20)

#### III. Git

• Get Up to Speed: Git Tutorial

Bonus: Additional Practice

### IV. Command Line

• Get Up to Speed: Command Line Overview

Bonus: Additional Practice

# **STEP 3: SUBMIT THESE REQUIRED EXERCISES**

1-2 hrs

Once you have completed Steps 2 (and 3), please click on the link below. Follow the directions in the On-boarding Exercise form to submit your answers. \*Question 8 will ask: 'Do you want to do the optional exercises for Git and the Command Line?' Please click 'yes' to answer these questions. The resources above will help you prepare for these exercises.

# **Data Science Onboarding Exercises**

### **STEP 4: EXPLORE ADDITIONAL MATERIALS**

1 hr - however long you want!

Up for a challenge? These advanced exercises and resources will help you sharpen your mathematical and programming wits.

### **Bonus Materials**

- Try some Project Euler problems
- Read <u>Chapters 1-6 in "Think Stats"</u> (and try some exercises)
- Get comfortable with examples of <u>technical documentation</u>
- Review <u>fundamental Git concepts</u>
- Supplement <u>your learning experience</u> with a Data Science from Scratch textbook. General Assembly students save 50% on ebooks and video training, and 40% on print books. Use discount code ASSEMBLY.