# **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 20-30 hours to complete. You may spend more or less time on each part, depending on your background and how familiar you already are with these topics.

Please complete these tasks **before your first day** so that you and your computer will be prepared for class!

Sincerely,

*GA* + the DS Instructional Team

#### WHAT CAN I EXPECT?

Your onboarding tasks include two **required** and two **optional** tutorials to help you review core data science skills, including statistics, python, git, and the command line. These modules are accompanied by a set of multiple-choice exercises that 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 instructor know!

#### STEP 1: REVIEW 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 should also <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 <u>Anaconda</u>.

#### **STEP 2: COMPLETE REQUIRED TASKS**

10 - 15 hrs

Complete the following two 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>
  - o Bonus: <u>Additional Practice</u>

#### II. Python

- Get Up to Speed: <a href="Python Syntax">Python Syntax</a>
  - o Bonus: <u>Additional Practice</u> (Exercises 1-20)

#### **STEP 3: COMPLETE OPTIONAL TASKS**

5 - 10 hrs

If you've sped through Step 2, the best thing for you to do is to get familiar with Git and the command line. Try to get through both of these tutorials before moving on to Step 4.

I. Git

- Get Up to Speed: Git Tutorial
  - o Bonus: Additional Practice

### **DATA SCIENCE 2.1**

### III. Command Line

• Get Up to Speed: <u>Command Line Overview</u>

o Bonus: Additional Practice

#### **STEP 4: 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.

# **Data Science Onboarding Exercises**

#### **STEP 5: EXPLORE OPTIONAL 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 <u>Project Euler problems</u>.
- 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 your learning experience.