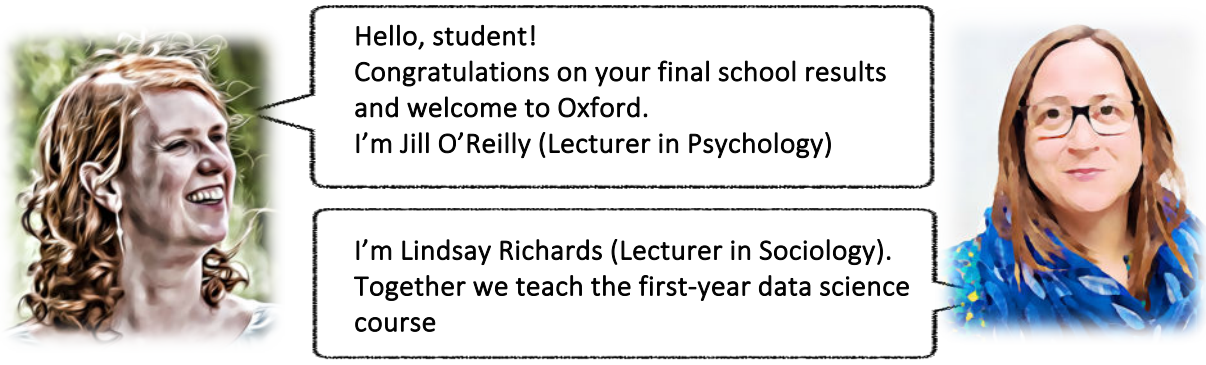


This course is taken by students in Human Sciences (for whom it is called "Quantitative Methods for the Human Sciences), and Biomedical Sciences and PPL (for whom it is called "Introduction to Probability Theory and Statistics"). You will be taught all together (in lectures) and in smaller groups within your degree programme (for tutorials).

We will be working with a coding language called Python. We will use Python to analyse and present data, and to better understand statistical concepts. Outside of academia, Python is one of the most popular languages used by data scientists worldwide and is a great transferable skill to have (it is actually a general purpose coding language and if you get into it, you could use it to develop web apps, control robots and almost anything else you could think of).

Most of you will not have any experience with coding and that's OK. However, you will have a much smoother ride if you do some preparatory work before coming up to Oxford in October. I therefore strongly recommend you work through an online Python Basics course such as the one I suggest below. This should take you a couple of days and if you do it before you come up, whilst you have the time to work at a relaxed pace and enough head space to take it in, you will really benefit.

I am recommending some modules on a website called datacamp.com. All the material I am recommending is free (to you) and runs online – you can do it in any web browser on your laptop or tablet and do not need to install software.

The website gives you hints and can reveal the answer if you get stuck (but try not to do this unless you have to as in coding, you learn by solving problems yourself!)

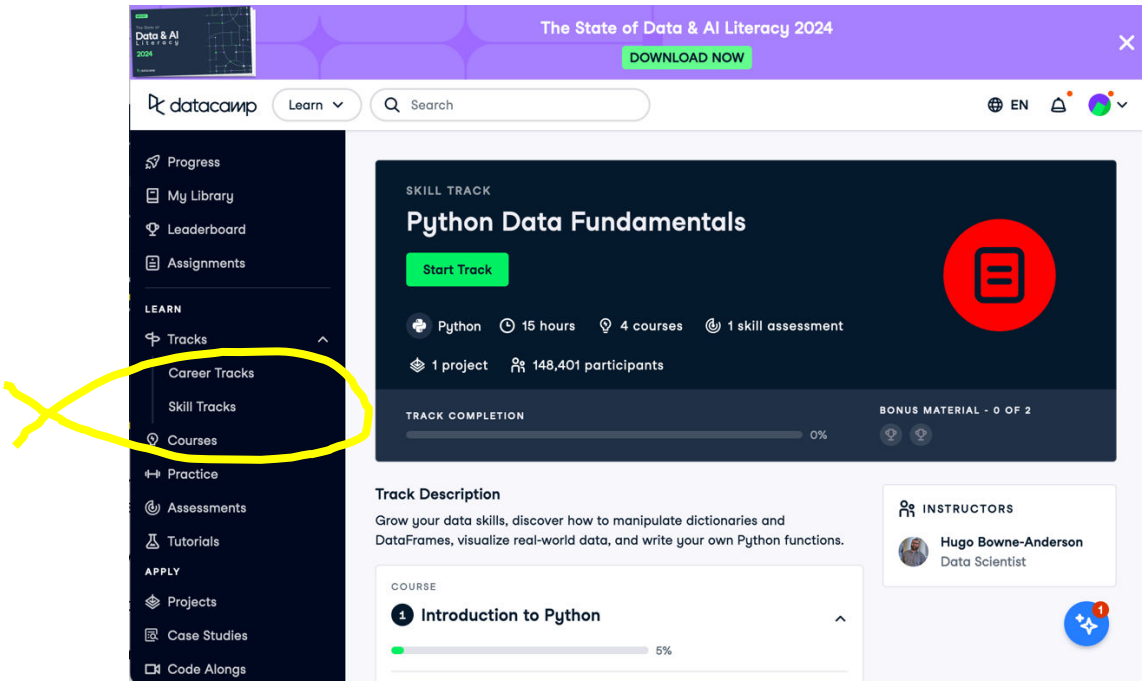
There will be a chance in the first week of term to review the preparatory work (and do a little more prep) with support from me and my team of tutors, so if you do get stuck, don't panic! But I do recommend you work through as much of the material below as you can, in advance.

To get you free access to datacamp, I will need to add your email address to my 'class' on datacamp.com. To do this I need your permission (for data protection reasons). You can sign up via this webform.

Recommended prep work

I recommend a website called datacamp.com.

Create a (free) account and go into "skills tracks → Python"
Select **Python Data Fundamentals**.



Within **Python Fundamentals** there are several "courses". I'm recommending you work through course 1 **(Introduction to Python)** and the first section of course 2 **(Intermediate Python).** That would mean covering the following (free) modules:

Introduction to Python

- Basics
- Lists
- Functions and Packages
- NumPy

Intermediate Python

- Matplotlib

According to datacamp.com, it should take you about 5 hours to work through that material, although I do think it may take longer for people unfamiliar with coding.

I'd recommend doing as many of the activities and assignments within these modules as you can – in coding, you learn by doing.

***

If you enjoy it, or want more practice, DataCamp actually has hundreds of courses on coding, data science and machine learning. You have free access during this course. I encourage you to use this resource to support your learning throughout the academic year, and for extension work.