

1-1_setup

May 25, 2020

1 Learning objectives

1. Learn about Digital Humanities and D-Lab at Berkeley
2. Syllabus overview
3. Software installations
4. Download course materials
5. Open a Jupyter Notebook

2 Welcome to DIGHUM 101!

This class is part of the [Digital Humanities at Berkeley Summer Minor for summer 2020](#).

[Click here to learn more about the Digital Humanities at Berkeley.](#)

[Visit the D-Lab website.](#)

3 Installations check

3.0.1 1. Python

[Click here to download Python 3.7 Anaconda distribution](#). Scroll down and click “Download”.

3.0.2 2. GitBash (Windows users only)

Download and install [GitBash](#). Mac users do not need to perform this step because they already have access to the Bash language through the built-in “Terminal” application.

3.0.3 3. GitHub:

[Create a free GitHub account here](#)

3.0.4 4. bCourses

[Keep our bCourses site link handy!](#)

3.0.5 5. Other software

Remember that you have access to some really productive software through your @berkeley email address at [Software @ Berkeley](#).

4 Syllabus

The syllabus can be found on the “Files” tab linked above along with the syllabus legal agreements, selected readings, and other resources.

5 Download course materials

1. Visit <https://github.com/dlab-berkeley/dighum101-2020>
2. Open Terminal (Mac) or GitBash (Windows) and type

```
git clone git@github.com:dlab-berkeley/DIGHUM101-2020.git
```

If this does not work, simply click the green “Clone or Download” button, click “Download Zip”, and then extract this .zip file someplace familiar such as your home folder or Desktop

6 Why learn Python?

1. What is a programming language?

A [programming language](#) is a way to give instructions to a computer.

2. What is Python?

[Python](#) is a programming language!

3. What is (are) data?

"[Data is \(are\) a set of values](#) of subjects with respect to qualitative or quantitative variables."

4. Why learn to program?

To think like a programmer means that you train to become a code detective, a resourcesful Google searcher, and believe that all problems have at least one solution.

- *Practical Efficiency*: Although the initial learning curve can be frustrating, learning to program can save you lots of time doing basic tasks that you would otherwise have to do by hand.
- *New Tools*: Some things are literally impossible to do by hand and computers open the door to new tools and methods, with programming as the way to interact with them.
- *New Data*: Programming knowledge is required to access the wealth of new data in the 21st Century from [APIs](#), websites, and social media.
- *Better Science*: This combination of efficiency, tools, and data has the ability to better create transparency, reproducibility, and collaboration that can lead to better science.

7 Open A Jupyter Notebook

7.0.1 From the command line

- Open Terminal (Mac users) or GitBash (Windows users) type the words jupyter notebook

7.0.2 Via Anaconda Navigator

- Mac: type Anaconda Navigator into your “Spotlight Search” (command + spacebar or click the magnifying glass in the upper right of your screen).
- Windows: type Anaconda Navigator into the search bar in the lower left of your screen.

You should see a window like the one below. Click “Launch” under Jupyter Notebook:

8 Navigating the course materials

You should then see a screen like the one below in your web browser and that displays your file structure. This is notebook 1-1_setup.ipynb. Try to navigate the file structure to wherever you saved the course materials (I recommend your Desktop). Open this notebook to practice!

NOTE: You do need an Internet connection to download the course materials. However, you do not need an internet connection to work in a Jupyter Notebook - it is simply running in your web browser.

9 Save and exit

To properly shut down a Jupyter Notebook, first save your work by:

- Pressing command + s (Mac) or control + s (Windows)
- Clicking the disk icon in the upper left corner of your notebook (or File -> Save as...)

Then,

- Click File -> Close and Halt
- Open “1-2_JN-markdown.ipynb”

NOTE: if your [kernel](#) freezes and your notebook stops working you can restart it by clicking Kernel -> Restart. If this does not work, save your work and restart your computer.