**Instructions for Installing Python 3 and Jupyter Notebooks**

Welcome to Psych 123 / CogSci 131!

In this course, we will be programming using Python 3 via Jupyter Notebooks. Jupyter creates a web browser-based, user-friendly interface for programming in Python.

For this class, we strongly recommend using Anaconda Navigator for Python and Jupyter.

If you would like to use Anaconda Navigator, follow the instructions below. **Note that it does not matter whether you already have Python installed on your machine or not if you choose to use Anaconda**; Anaconda will set up Python 3 for its own use. If you already have an old version of Anaconda installed which is running an older Python version, you may need to delete that installation before following the instructions below.

**ANACONDA NAVIGATOR INSTRUCTIONS: RECOMMENDED APPROACH**

1. Go to <https://www.anaconda.com/products/individual> and scroll down until you see the section titled “Anaconda Installers”
2. Choose the graphical installer for your operating system and download it.
   1. If you are on a Windows machine and don’t know if you have a 32-bit or 64-bit OS, follow the instructions in the box below to find out which Anaconda installer you need:

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1. Double-click the Anaconda Navigator graphical installer that you just downloaded to run it on your machine. Allow all default installation options. If the installer asks you if you want to install PyCharm, you may select Yes or No. We won’t be using PyCharm in this class.
2. Once your Anaconda install is complete, you will automatically have a nice interface to start Jupyter notebooks, as shown below. (But don’t skip step 5 below where we add on extra packages we’ll need!!)
   1. Open Anaconda Navigator. Make sure ‘Home’ is highlighted on the left. You should see a menu similar to the one below, which has a box for Jupyter Notebook. (You may not have the other programs shown below; that’s expected!)

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* 1. When you click “Launch” under Jupyter Notebook, a Jupyter Notebook directory will launch in your default web browser. From there, you can open a saved notebook or create a new one as shown in the image below.

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You can navigate to a saved Jupyter Notebook here

You can create a new Jupyter Notebook here (select Python under dropdown)

1. For this class, we will need a few specific packages installed. Anaconda will help us with this.
   1. Open Anaconda Navigator. On the left, just underneath “Home”, click on “Environments”. This enables you to set Anaconda up differently for different purposes or classes. The packages we will use in this class are all packages I want to use all the time, so I’ll install them in my root environment.

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* 1. Go to “Not installed” packages (see red circle in right of image above), and wait for Anaconda to show a list. Find ‘matplotlib’, ‘seaborn’, ‘numpy’, ‘pandas’, and ‘scipy’, and check the box next to each of them. Then at the bottom right of the screen, click “Apply” (green button) to install these packages.

***Congratulations! You should now be ready to use Jupyter notebooks with Python 3!***

**IF YOU ALREADY USE PYTHON 3 AND DO NOT WANT TO USE ANACONDA**

If you already use Python 3, and you don’t want to use Anaconda, there are a few options to install Jupyter notebooks and required dependencies for this class. The easiest way is to use pip to install.

1. Pip itself should already be installed if you are using Python 3. Not sure if you have pip installed? Open the bash terminal (Mac) or CMD prompt (Windows) and type “which pip”, then press enter. If you have pip installed, the directory will appear. Pip is installed by default with Python 3.
2. With pip installed:
3. Open a bash terminal (Mac) or CMD prompt (Windows), and type the following command, then press enter:

python -m pip install --user numpy scipy matplotlib ipython jupyter pandas notebook seaborn

1. If you have any issues installing Jupyter notebook or any of the packages, see the following documentation:
2. Jupyter: see <https://jupyter.org/install>
3. Matplotlib: see <https://matplotlib.org/users/installing.html>
4. Seaborn: see <https://seaborn.pydata.org/installing.html>
5. Numpy: see <https://numpy.org/install/>
6. Scipy: see <https://www.scipy.org/install.html>
7. Pandas: see <https://pandas.pydata.org/pandas-docs/stable/getting_started/install.html>
8. Once the install is complete, each time you want to access Jupyter notebooks using this approach, you will open a bash terminal (Mac) or CMD prompt (Windows) and type “jupyter notebook”, then press enter. This will launch a Jupyter notebook directory in your default browser, as above for the Anaconda launch.

Type this into bash or CMD:



Loads this in browser:

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You can navigate to a saved Jupyter Notebook here

You can create a new Jupyter Notebook here (select Python under dropdown)

For other forms of installation, including using conda, homebrew, or other installation coordinators, please consult the individual installation links above before reaching out with questions.

If you still have questions, we are happy to help you with your install!

You can e-mail GSI Jennifer Senta at [jsenta@berkeley.edu](mailto:jsenta@berkeley.edu) for assistance with your Python and Jupyter setup.