PH 36X: Computational Physics Lab Sequence
2024-25

You will work on course assignments using the operating system on your computer (or on a laptop from the cart). Keep in mind:

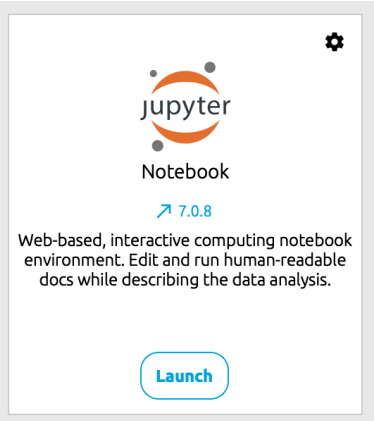
- You will have to submit your assignments through Canvas by uploading the file from your computer.
- Your files will be stored locally, meaning they will only exist on your machine and not accessible through the internet, unless you choose to store on a cloud service like Google Drive or OneDrive.
- If you are using a cart laptop, I **strongly** recommend trying to use the same one each time, and keep your files in a cloud folder in case you need to switch machines.

There are **several** ways to work in Python notebooks. One is Anaconda, which we tried to use on the first day of class. There are also other options that work just as well. Instructions for using VS Code and Google Colab are included further below.

Regardless of which option you choose, you will still need to begin each class by downloading the .ipynb file from the day's assignment on Canvas.

Option 1: The Anaconda distribution

1. Go to the Anaconda Download webpage: https://www.anaconda.com/download/success
2. Scroll down to select the download for your operating system (i.e., Windows, macOS, Linux) for your computer.
3. Follow the online documentation to install Anaconda for your specific operating system: https://docs.anaconda.com/anaconda/install/.
    - Note: If you are on Mac or Windows, you've already done Step 1, which is downloading the installer.
4. Once installed, open the application **Anaconda-Navigator**.
    - Note: At startup you might be prompted to login in your account. Just close this window. You do not need to create an account.
5. Launch **Jupyter Notebook** by clicking on the **Launch** button (pictured below).
    - Note: You can also choose to launch Jupyter Lab for a different file management interface.
6. A new window should open in your browser. From here, you can browse your computer directories and files, and open Python notebook files (.ipynb) to work on them.



Option 2: Visual Studio Code

1. Head to the VS Code download page: https://code.visualstudio.com/download
2. Select the download link for your operating system. This should download the .zip file you need to install VS Code. It should also take you to a new page with more information about using VS Code on your computer.
3. From your downloads, open the .zip file. This should install VS Code automatically into your computer. You may need to agree to terms and conditions.
4. Open the newly created Visual Studio Code application.
5. From here, you can open .ipynb files and work on them.

Option 3: Google Colaboratory

1. Log into your personal Google account.
    - Note: You must use your personal account instead of your OSU account, because OSU is shutting down access to many Google services (including Colab) as it phases out our Google accounts.
2. Follow this link to Colaboratory on the Google Workspace Marketplace: https://workspace.google.com/marketplace/app/colaboratory/1014160490159
3. Install Colaboratory onto your Google account.
4. Head to your Google Drive, and drag your downloaded .ipynb file into it.
5. Double-click on the .ipynb file to begin working. If that does not work right away, right click on the .ipynb file. Move your mouse to "Open with" and click "Google Colaboratory."