

BIOS-584 Python Programming (Non-Bios Student)

Week 01 – Install Jupyter Notebook

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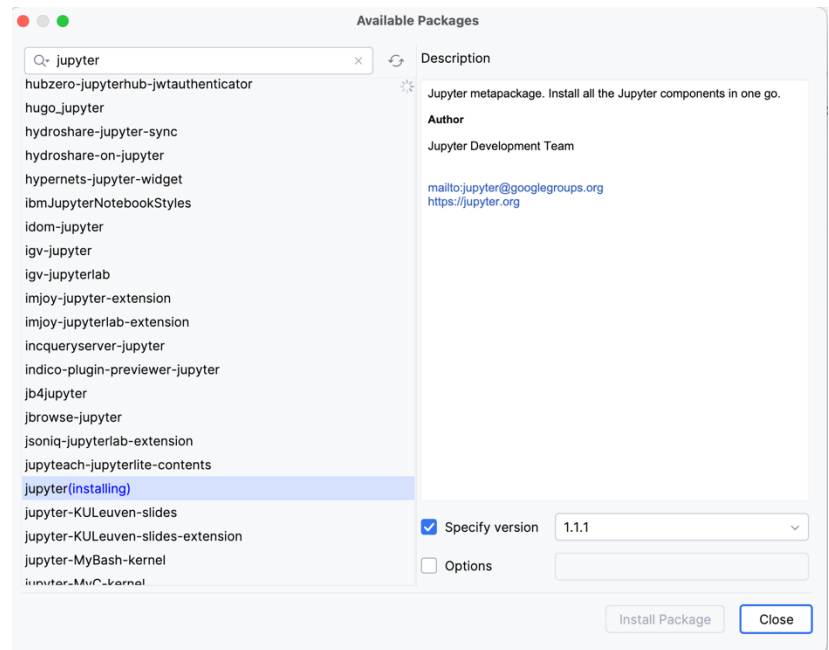
Tutorial on Jupyter Notebook

Jupyter Notebook

- Unfortunately, Jupyter notebook is no longer free when you open from PyCharm.
- We will launch it from the terminal.

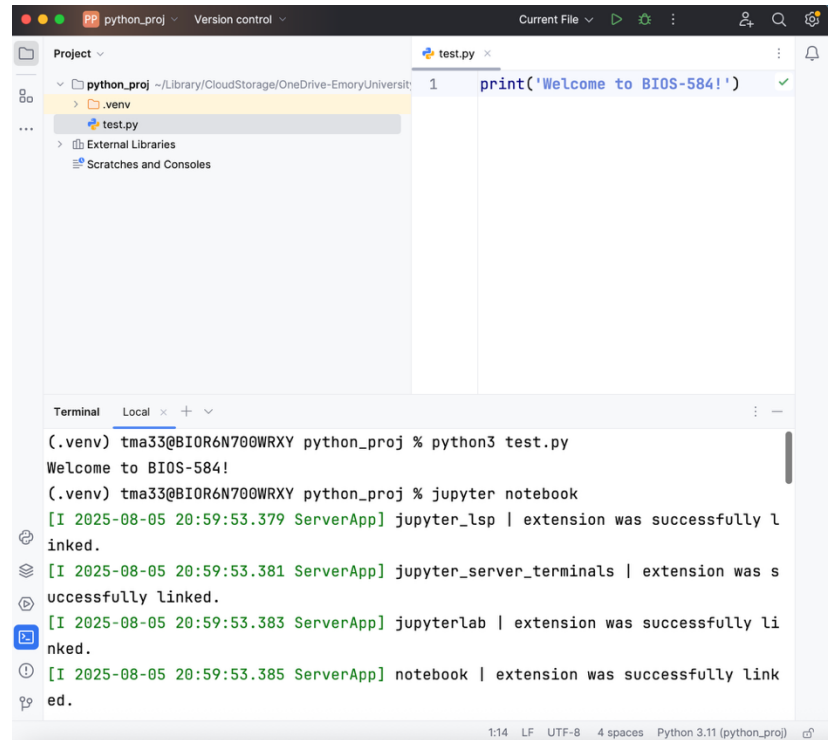
Step 1: Install Package

- As shown previously, install “jupyter”
 - Many dependent packages will be installed simultaneously
 - It may take a few minutes



Step 2: Launch in the Terminal

- Open Terminal inside PyCharm
- Type
 - jupyter notebook
- It will show a lot of jargon and jump to the jupyter notebook page



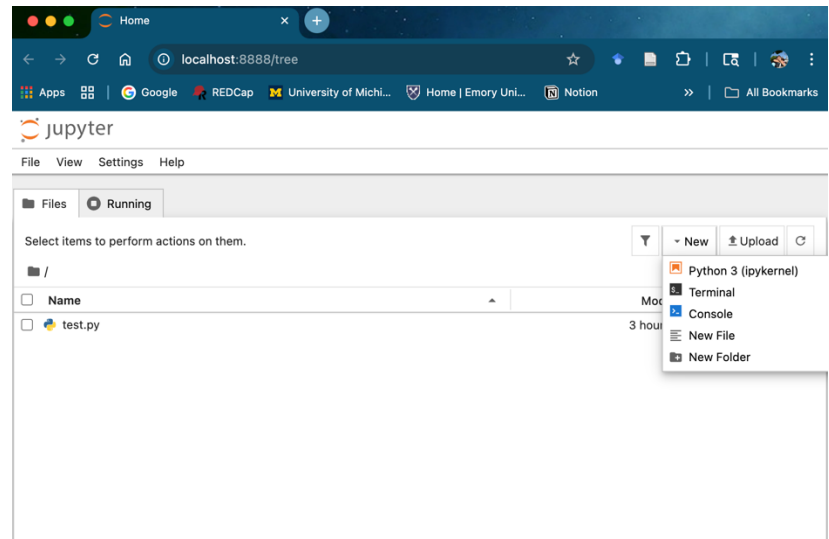
The screenshot shows the PyCharm IDE interface. The top toolbar includes buttons for 'Run' (a green play icon) and 'Debug' (a green bug icon). The 'Project' view on the left shows a file tree with 'python_proj' containing '.venv' and 'test.py'. The editor window displays 'test.py' with the code `print('Welcome to BIOS-584!')`. The 'Terminal' window at the bottom shows the following output:

```
(.venv) tma33@BIOR6N700WRXY python_proj % python3 test.py
Welcome to BIOS-584!
(.venv) tma33@BIOR6N700WRXY python_proj % jupyter notebook
[I 2025-08-05 20:59:53.379 ServerApp] jupyter_lsp | extension was successfully l
inked.
[I 2025-08-05 20:59:53.381 ServerApp] jupyter_server_terminals | extension was s
uccessfully linked.
[I 2025-08-05 20:59:53.383 ServerApp] jupyterlab | extension was successfully li
nked.
[I 2025-08-05 20:59:53.385 ServerApp] notebook | extension was successfully link
ed.
```

The status bar at the bottom indicates the file encoding is UTF-8, using 4 spaces for indentation, and the Python interpreter is Python 3.11 (python_proj).

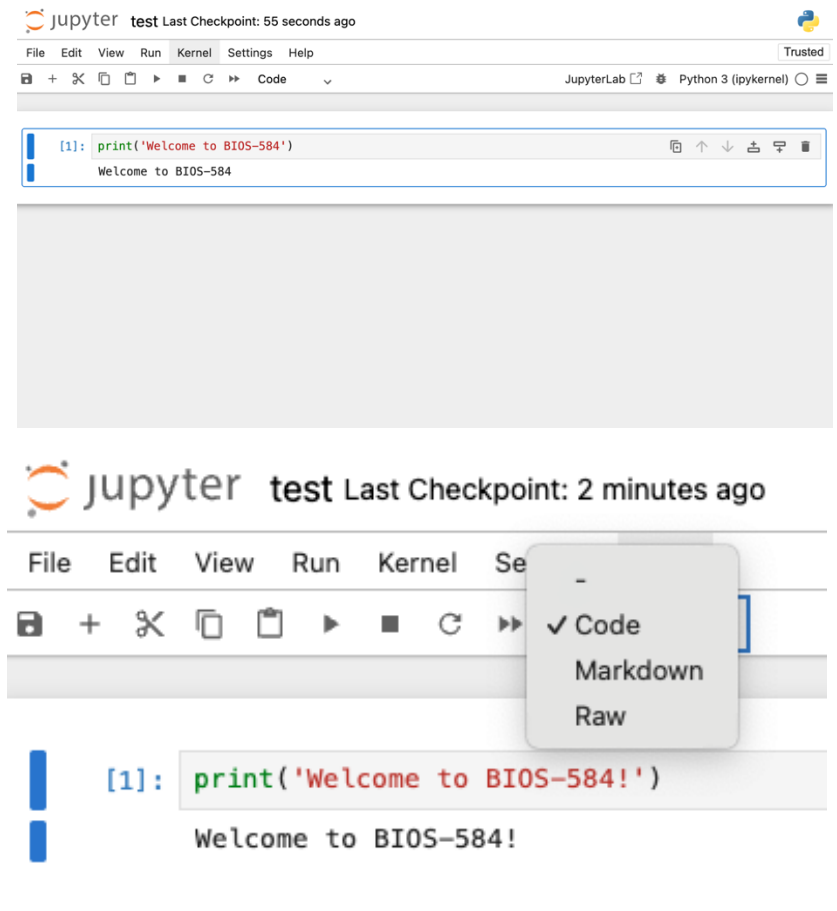
Step 3: Set up ipykernel

- You will see the page on the right
- File -> New -> Notebook
- Select Python 3 (ipykernel)
- You will create a new Untitled page.
- You can start working on the Jupyter notebook.



Step 4: Work on Jupyter Notebook

- Rename it as test.ipynb
- Fill in the blanks
- You can select different types for each chunk:
 - Code,
 - Markdown,
 - Raw.



Step 5: Close Jupyter Notebook

- Close the Jupyter notebook page
- Go to the PyCharm Terminal, type Ctrl + C to terminate the Jupyter Notebook command.
 - Type “y” to confirm

```
Shut down this Jupyter server (y/[n])? y
[C 2025-08-05 21:06:38.729 ServerApp] Shutdown confirmed
[I 2025-08-05 21:06:38.730 ServerApp] Shutting down 5 extensions
[I 2025-08-05 21:06:38.730 ServerApp] Shutting down 1 kernel
[I 2025-08-05 21:06:38.731 ServerApp] Kernel shutdown: 601b9b4e-180e-4a1d-8790-fde342e8372b
```


Cheatsheet

- https://media.datacamp.com/legacy/image/upload/v1676302533/Marketing/Blog/Jupyterlab_Cheat_Sheet.pdf

Questions?