**Code Louisville - May 2022**

**Data Analysis Pathway - Course 1 Syllabus**

## **Requirements for Completion of Code Louisville**

The following is a list of the requirements for successfully completing Code Louisville.

1. **Complete the Pluralsight Track**

This includes completing all courses and interactive courses. You will be added to the **Data Analysis - Course 1(May 2022)** channel and can see it by clicking “Channels” in Pluralsight. You can also click the links in this document below to go directly to the courses. If you do not see the Channel added in Pluralsight, please contact a staff member to be added. You should complete the Pluralsight courses by your meetup day, as the topics covered may be discussed by your mentors.

**All videos in your assigned channel in Pluralsight must be completed by Sunday, July 17, at 11:59pm ET. You should see a 100% completion for your channel.**

Note: While there is a Pluralsight app, we do not recommend using it, as some courses (such as the interactives and guides) are not available in the app.

1. **Complete a portfolio project**

This project must be completed by **Friday, July 29th at noon** and must fulfill every requirement listed on the [Student Resources Wiki](https://sites.google.com/codelouisville.org/code-louisville-wiki/class-info/project-requirements). You should show your project to a mentor well before the due date to ensure requirements are properly met. A link will be sent out via Slack in the last two weeks of class. **You will ‘turn-in’ your project by completing that survey and providing your GitHub link** **to your project in the last week of class**.

1. **Conduct an informational interview**

Students are required to reach out to people working in their field of interest and conduct an informational interview to learn more about how that person got into the field and to learn more about the industry. Interviews may be done in person or virtual. Once completed, [submit your informational interview using this form](https://docs.google.com/forms/d/e/1FAIpQLSfWGNW6g3OQ9IIuiLNYUkPdCOuWpqZpM0HbxFVyKzQZl8DZyQ/viewform?usp=sf_link).

Here is an article with [tips for conducting an informational interview](https://www.themuse.com/advice/5-tips-for-nonawkward-informational-interviews). For more assistance, reach out to Jenny on Slack @ Jenny Terry.

1. **Attend a job readiness workshop**As Code Louisville is designed to help prepare you for a career in software development or other tech-related careers, you will be required to attend a job readiness workshop. If you are unable to attend any of the offered workshops for whatever reason, you will need to attend a one-on-one meeting with Jenny Terry, our Technical Career Coach, to discuss your resume and what types of career opportunities you might be interested in.

The job readiness workshops will be held virtually from 6:00 pm to 8:00 pm on the following dates:

* Monday, June 27th
* Tuesday, June 28th
* Wednesday, June 29th
* Thursday, June 30th

To register for the workshop, [fill out this form](https://docs.google.com/forms/d/e/1FAIpQLSdCDlVofC22Q9gfDCEIetmQlj4BpdHFjRCh4HSQmyH80eylDg/viewform?usp=sf_link). You are not expected to skip class to attend, so select whichever night works best with your schedule. If you are not able to attend any of the workshops, reach out to Jenny to set up a one-on-one meeting.

1. **Attend your weekly class**

You are highly encouraged to attend every single week, but **more than 3 absences** will result in being removed from the program. You must stay for the duration of class, leaving early may result in an absence. Attendance will be taken virtually through Zoom - it is your responsibility to ensure your attendance is counted. If you finish the Pluralsight track early, you are still required to attend class

**Additional Program Info and Policies**

Students can find program policies, links to the syllabus, project requirements, and other student resources at our Code Louisville wiki site. <https://sites.google.com/codelouisville.org/code-louisville-wiki/program-info/policies>

**Class Expectations**

Weekly class meetups are offered online on the night selected prior to orientation. These meetups will be held via Zoom and a link for your specific class night will be provided in a separate email and over Slack.

Zoom requires you to have a laptop or desktop computer. Chromebooks and Tablets usually will work as well. A microphone and camera are needed to communicate with your mentors and classmates. You will also need a stable internet connection. You are expected to be on camera and to engage with the mentors and other students. Come prepared with questions about the Pluralsight assignments, your project, etc.

Class is **not** a lecture where you watch/listen for 2 hours. There will be some activities and presentations, but each week you are expected to bring questions and work on your projects during class time. Mentors - who are all *volunteer* software development professionals - will be available to answer questions and guide you on your projects.

**Additional Resources**

If you have a barrier that prevents you from being able to participate in or succeed in your class, please let us know. We have connections with Kentuckiana Works (our parent organization) and with other organizations that may be able to help you by providing supportive services. We are here to help you succeed, so please reach out to us.

**Code of Conduct**

All students and mentors are expected to conform to the Code of Conduct (on Zoom and Slack), which can be found here: <https://docs.google.com/document/d/1ZIVRab0JpicfOgCNgoCAZySz71VP2g8p91R8jPMhN8s/edit?usp=sharing>.

Violation of the Code of Conduct may result in being removed from the program at the discretion of Code Louisville staff.

**Zoom Links**

Links are below for when it’s time for your class. Please join prior to 6pm as the mentors will begin right around 6:00. Attendance will be taken, so we ask that you use your real name for your Zoom login name to assist with this. The link below will become active a few minutes before 6pm.

**Use this link to join your class:**

[**https://us02web.zoom.us/j/85163114188?pwd=MWp4QmxRTHp0anFES1VGcElRR0kyZz09**](https://us02web.zoom.us/j/85163114188?pwd=MWp4QmxRTHp0anFES1VGcElRR0kyZz09)

Meeting ID: 851 6311 4188

Password: 058712

The above link **should** automatically log you in. However, if prompted, you may need to enter the Meeting ID and Password.

*If you have not used Zoom before, you can go to this URL and test that your camera and microphone work:* [*https://zoom.us/test*](https://zoom.us/test) *. A camera and mic is not required for orientation, but it will be required for class nights.*

**Free Data Resources**

<https://www.kaggle.com/>

<https://data.gov/>

<https://data.louisvilleky.gov/>

**Weekly Schedule**

*Regular Courses* are marked “**Course Title**” in bold blue text.  
*Interactive Courses* are marked “**Interactive - Course Title**” in bold red text.

*Optional Material* is colored **Pink** below.

Each week, your mentors will go over code presented in the example project found [HERE](https://colab.research.google.com/drive/1riRDLddFwWdfTx7o_a0cVcCD8sOTCaIn#scrollTo=NRTqvQXLb3n3)

| **Week** | **Dates** | **Pluralsight Assignments (try and complete by day of class that week)** |
| --- | --- | --- |
| 0 | 5/3 & 5/4 | Orientation Get started on week 1 videos below |
| First Pluralsight videos are assigned. Look at each week below to see what you should have completed by class time. | | |
| 1 | 5/9 - 5/12 | **Complete by your class night:**  [**Core Python: Getting Started**](https://app.pluralsight.com/library/courses/getting-started-python-core/table-of-contents) (~4h 6min)  [**Installing Anaconda**](https://docs.anaconda.com/anaconda/install/index.html) **(**Optional, if you have an IDE you like more, but a pretty standard choice. Make sure you can run Python code before the first class!). |
| First night of meetups. Zoom information is above.  We will explain more about class and expectation, meet your mentors, learn more about you, and get your computer up and ready to do some software development. | | |
| 2 | 5/16 - 5/19 | [**GitHub: Getting Started**](https://app.pluralsight.com/library/courses/ff40abd2-2630-4c30-b1c0-d9f6498bb5fc) (~1h 48min) **(ONLY FIRST 4 MODULES)**  [**Create a Git Repository**](https://app.pluralsight.com/guides/create-a-git-repository) (~10min)  [**Getting Started with Git**](https://app.pluralsight.com/library/courses/getting-started-git/table-of-contents) (~2h 03min)  Optional but useful: [UNIX Commands for Beginners](https://ubuntu.com/tutorials/command-line-for-beginners#1-overview)  Optional: [Common git commands](https://github.com/WillTirone/CodeLouisville_Examples/blob/main/git%20commands.pdf) |
| Mentors will lead a demonstration on Git and GitHub and why it’s such a critical tool for a developer to learn | | |
| 3 | 5/23 - 5/26 | **INTERACT -** [**Python: Variables, Data Types, and Conditionals**](https://app.pluralsight.com/library/courses/python-variables-data-types-conditionals/table-of-contents) (~32min)  **INTERACT -** [**Python: Using Lists, Dictionaries, Loops, Files, and Modules**](https://app.pluralsight.com/library/courses/python-lists-dictionaries-loops-files-modules/table-of-contents)  (~1h)  [Using Jupyter Notebook](https://realpython.com/jupyter-notebook-introduction/) (30 m. read, RealPython article)  [Knowledge Check 1](https://colab.research.google.com/drive/1oRdniVHLdRQcg1sgHN68jVmWEUad2sER?usp=sharing) (1 hr.) |
| **Student Check - In** | | |
| 4 | 5/30 - 6/2 | [(more!) Loops and iteration](https://www.youtube.com/watch?v=6iF8Xb7Z3wQ&list=PL-osiE80TeTskrapNbzXhwoFUiLCjGgY7&index=7)(10 m., YouTube video) Seeing things twice from different people can be very helpful.  [Functions](https://www.youtube.com/watch?v=9Os0o3wzS_I&list=PL-osiE80TeTskrapNbzXhwoFUiLCjGgY7&index=8) (21 m., YouTube video)  [Importing Data: Python Data Playbook](https://app.pluralsight.com/library/courses/python-importing-data-playbook/table-of-contents) (~1h 35min) |
| Start reaching out to tech professionals for informational interviews and report them on the form linked in this syllabus. | | |
| 5 | 6/6 - 6/9 | [Classes series](https://www.youtube.com/playlist?list=PL-osiE80TeTsqhIuOqKhwlXsIBIdSeYtc) (1h 30 min, YouTube Video)  [Modules](https://www.youtube.com/watch?v=CqvZ3vGoGs0&list=PL-osiE80TeTskrapNbzXhwoFUiLCjGgY7&index=9) (22 m., Youtube Video)  Make sure you code along with the videos, try to spend ~10 or so hours this week making example classes and trying to use them! The idea of classes will take a while to stick. |
| Pick a project idea to work on and bring to class and watch the above youtube videos. | | |
| 6 | 6/13 - 6/16 | [**Matplotlib Basic Usage**](https://matplotlib.org/stable/tutorials/introductory/usage.html#sphx-glr-tutorials-introductory-usage-py) (2 hr. Read, matplotlib.org guide ) Some of the best tutorials in programming are found from the maintainers of the tool itself! Matplotlib has some great tutorials on their website! The rest are located [here](https://matplotlib.org/stable/tutorials/index.html).  [**Build Your First Visualizations w/ Python**](https://app.pluralsight.com/library/courses/build-first-data-visualization-matplotlib/table-of-contents)(1 h. 8 min)  [Knowledge Check 2](https://colab.research.google.com/drive/1W0xUmX-pIP0ik99-jXzX3KJh8DIcqipu?usp=sharing) (1 hr.) |
| Don’t forget to conduct an informational interview and submit it on the form linked in this syllabus.  **Wireframes/Mockups/Project Brief - Due** | | |
| 7 | 6/20 - 6/23 | [**Core Python: Introspection**](https://app.pluralsight.com/library/courses/core-python-introspection/table-of-contents) (~30min)  [**Core Python: Numeric Types, Dates, and Times**](https://app.pluralsight.com/library/courses/core-python-numeric-types-dates-times/table-of-contents) (~56min)  [Python For Data Analysts](https://app.pluralsight.com/guides/python-for-data-analysts) (16 m. read)  [PEP 8](https://peps.python.org/pep-0008/) (optional, but this is the formatting and style guide of Python. 45 m. read, but bookmark it and take a look when you have free time!) |
| You should have started your project by now and be incorporating some of the things learned in Pluralsight into it. | | |
| 8 | 6/27 - 6/30 | [**Unit Testing with Python**](https://app.pluralsight.com/library/courses/using-unit-testing-python/table-of-contents) (~2h 50min) |
| Last week of assigned videos! | | |
| 9 | 7/4 - 7/7 | No more Pluralsight assigned but keep working on some optional videos if you can. Turn your focus toward your projects!  [First Contribution guide on GitHub](https://github.com/firstcontributions/first-contributions) (Optional, if you’ve ever been curious about contributing to open-source projects, this guide is so great and will help solidify your knowledge of git)  [Knowledge Check 3](https://colab.research.google.com/drive/1DnJ_R321BIzlWyb8JocKhZNhfwzZ79vA?usp=sharing) (1 hr.) |
| **Student Check - In**  Continue to work on your projects, make sure videos are done by now. If you missed the Job Readiness workshops, reach out to Jenny to schedule a one-on-one meeting. | | |
| 10 | 7/11 - 7/14 | Work on your projects! |
| Reminder again to get your informational interview in before the end of the session!  **All videos in your assigned channel in Pluralsight must be completed by Sunday, July 17, at 11:59pm ET. You should see a 100% completion for your channel.** | | |
| 11 | 7/18 - 7/22 | Work on your projects! |
| Test your project with someone else’s computer to ensure you haven’t missed anything that will prevent it from passing the requirements.  Have a mentor review your project to ensure it meets the requirements. | | |
| 12 | 7/25 - 7/29 | **Last week! Projects are due by Friday** |
| All Projects due no later than July 29th at 12:00 (noon), sharp. Complete the form emailed out to turn in your project.  All requirements, including Pluralsight, informational interviews, and job readiness workshops must be completed and submitted as appropriate. | | |
| 13+ | August | Prepare for the second course in your pathway! |