Program Introduction

Welcome to Data Science!



Agenda

- Your campus DS Team
- Course Structure
- Day-to-day expectations
- Program tools
- Assessment details
- Setting yourself up for success

Your DS Squad

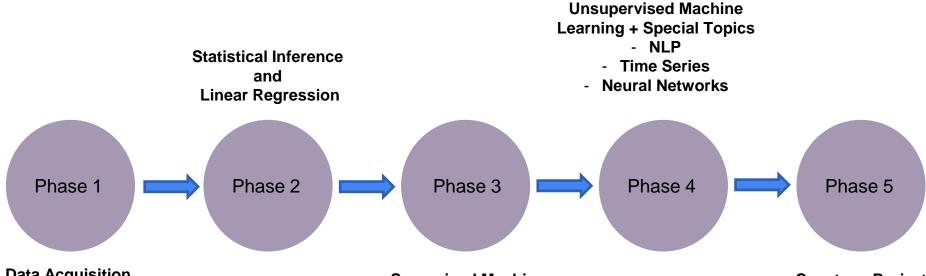


Praveen Gowtham



Brendan Hutchinson

Course Structure



Data Acquisition,
Manipulation
And
Visualization

Supervised Machine Learning: General Principles and Regression/Classification **Capstone Project**

Day-to-Day Expectations: The Anatomy of a Phase



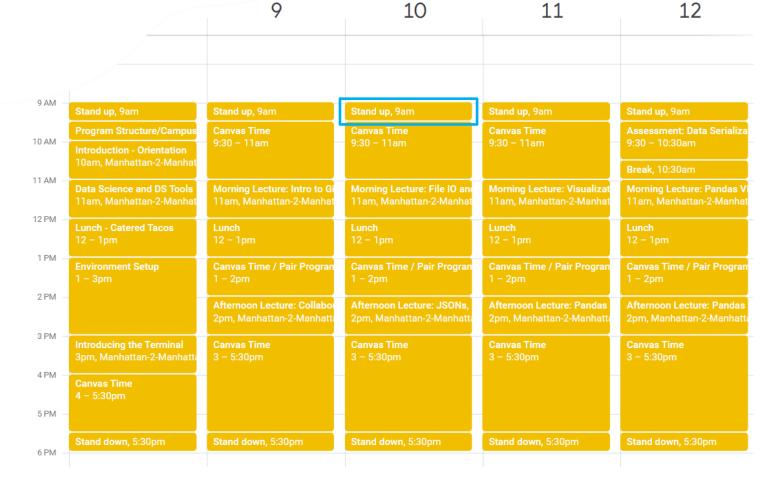
Weeks 1 & 2

"The Normal Weeks"

	MON	TUE	WED	THU	FRI
OMETON	8	9	10	11	12
GMT-04					
8 AM -					
9 AM -	Stand up, 9am	Stand up, 9am	Stand up, 9am	Stand up, 9am	Stand up, 9am
	Program Structure/Campus	Canvas Time	Canvas Time	Canvas Time	Assessment: Data Serializa
10 AM —	Introduction - Orientation	9:30 - 11am	9:30 - 11am	9:30 – 11am	9:30 - 10:30am
	10am, Manhattan-2-Manhat				Break, 10:30am
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12 PM —	Lunch - Catered Tacos 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 – 1pm
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4 PM —	Canvas Time 4 – 5:30pm				
5 PM -					
6 PM —	Stand down, 5:30pm	Stand down, 5:30pm	Stand down, 5:30pm	Stand down, 5:30pm	Stand down, 5:30pm

Weeks

"Stand ups"



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Stand Ups



We will check in and check out every day.

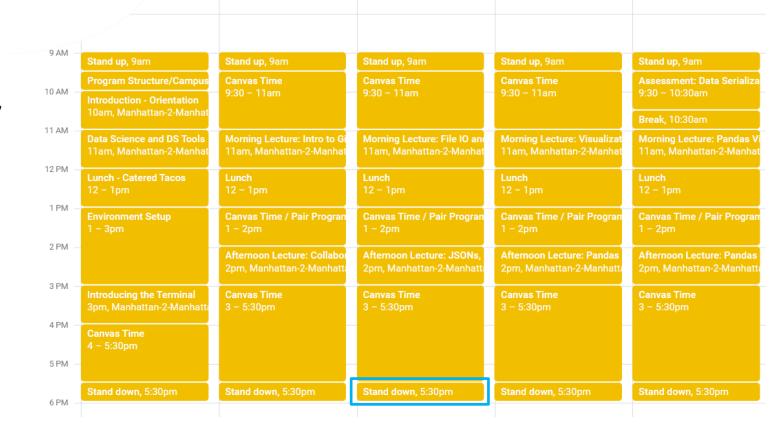
We take attendance! (refer to attendance policy)

Stand ups will include:

- Attendance
- Communicating events and deadlines

Weeks

"Stand downs"



WED

10

THU

11

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12

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9

Stand Downs



We will check in and check out every day.

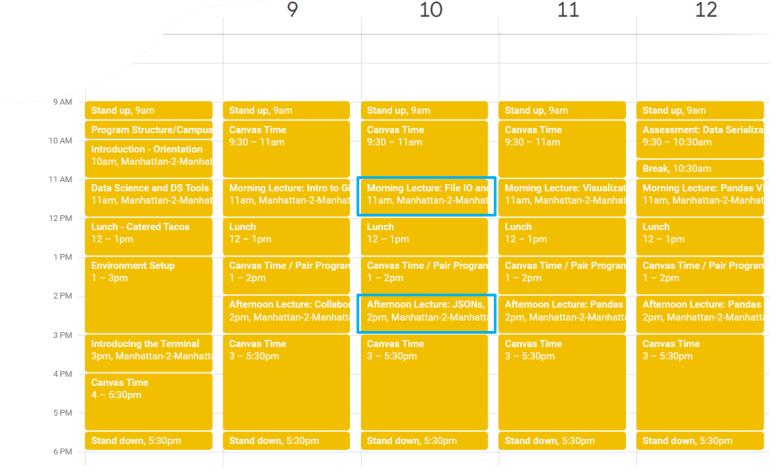
We take attendance! (refer to attendance policy)

Stand downs will include:

- Light concept questions
- Bite size Python/SQL challenges
- General concerns/feedback

Weeks

"Lectures"



WED

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Lectures

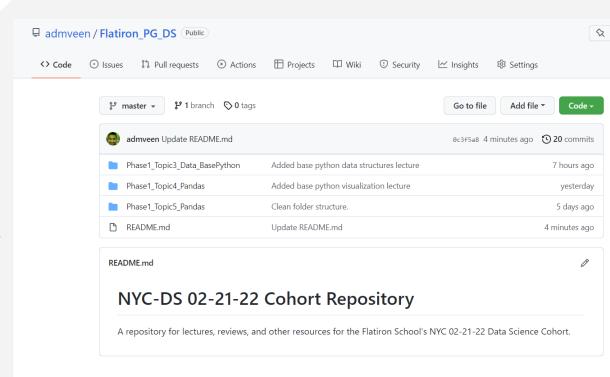
Plan to:

- Ask questions. Participate.
- Take notes.
- Code along when appropriate.

Cohort Git Repository

AKA where to find lecture content!

We will go over how to access materials from this repository in Week 1.



Weeks 1 & 2

Pair Programming

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Pair Programming



Pair programming helps you practice verbalizing what you want to accomplish prior to writing code.

It also allows you to view a peer's coding style and approach to problems.

Driver:

- Loads up the lab and shares screen
- Responds to instructions provided by Navigator and enters code into cells

Navigator:

- Instructs the Driver on the approach to take to solve the problem / complete the lab
- Suggests code implementation

Half time driver/ Half time navigator

Weeks 1&2

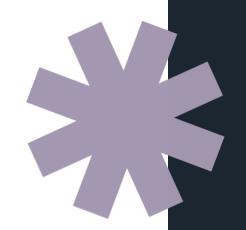
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4.514	12 – 1pm	12 – 1pm	12 – 1pm	12 – 1pm	12 – 1pm
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	4 – 5:30pm				
5 PM —					
	Stand down, 5:30pm	Stand down, 5:30pm	Stand down, 5:30pm	Stand down, 5:30pm	Stand down, 5:30pm
6 PM —					

Canvas Time

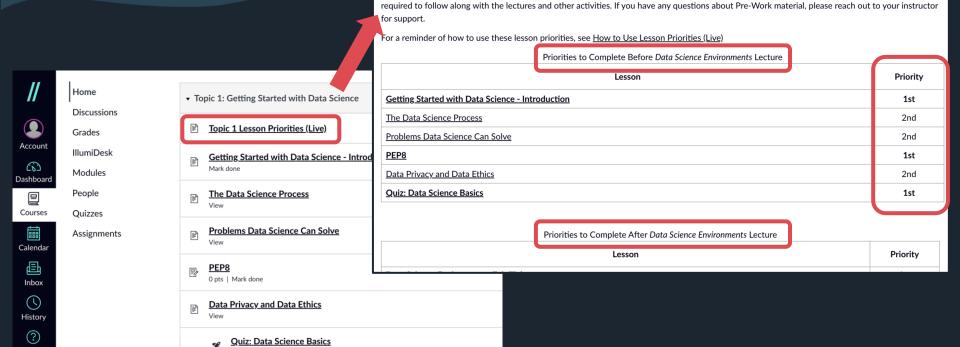


- Canvas is where the curriculum/individual lessons are located
- Priority Lessons: **do not** try to do every single lesson. LOT OF CONTENT!!!
- Quizzes on Canvas: checks for understanding. **NOT** official assessments, but reference for yourself.



Lesson Priorities

Canvas IT



Topic 1 Lesson Priorities (Live)

If you have not completed all of the content from Pre-Work, you should do so as soon as possible. Proficiency with the content from the Pre-Work is

Individual Check Ins



Check in with your instructor(s) or your coach!

Discuss your understanding, review labs or checkpoints, and otherwise check in on your progress through the program.

Sign up for 1:1s using **appointment slots.**

One check in (15 min.) per week with Praveen.

Program Tools



Canvas



Programmatic Content:

- Cohort Calendar
- Program resources and information
- Surveys



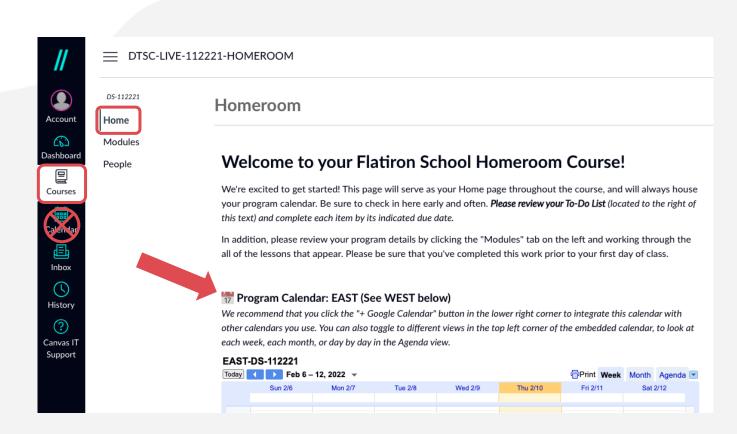
Textbook and Workbook:

- Lessons
- Labs
- Quizzes (not graded!)

Plus: Access Illumidesk & Pair with a TC

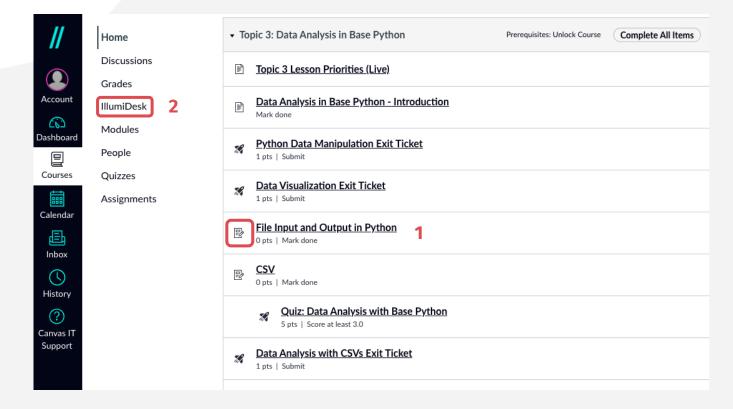
Homeroom

Accessing the Calendar

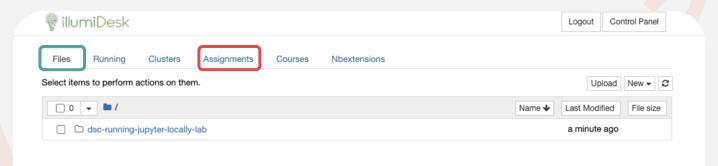


Phase Course

Accessing IllumiDesk



Navigating IllumiDesk



Files

Every Jupyter Notebook opened through an assignment link from Canvas lives in your **Files tab**, and will save your work

Assignments

All of our Checkpoints and Code Challenges will be conducted in IllumiDesk, and you'll be able to access both the assessment and feedback through the **Assignments tab**.

Accessing Labs

Every lesson and lab is stored on GitHub - it's also where you can find lab solutions!

We'll teach you how to easily download GitHub repositories soon so, should you do labs locally or in IllumiDesk?

Short answer: **both!** Each method has their pros and cons.

Advantages of Working Locally



- Practice using Git / GitHub → in-demand skills!
- Forking labs on GitHub contributes to a robust, 'green' commit history
- Content is more accessible after the program
- More 'real world'

Advantages of Working on IllumiDesk



- Ease of use
- No environment issues
- Fully integrated into Canvas

Assessment Details



Weeks 1&2

Blog Posts

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GMT-04					
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11 AM —	Break, 10:30am	Break, 10:30am		Break, 10:30am	Phase I Code Challenge 10:30am – 12pm
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4 PM —					3:30 – 4:30pm
5 PM —		Career Works			
6 PM —	Stand down, 5:30pm	Stand down, 5pm, https://	Stand down, 5:30pm	Stand down, 5:30pm	

Blog Posts



Building a web presence demonstrating your data science chops is **essential** in the job search.

To help you do so, you will be required to write **4 blog posts**: 1 for each phase (except Capstone).

Blog posts will be due on **second Monday** of the phase.

We will **present** our blogs to each other during stand downs after the blog post due dates.

That's right first blog post is due next week!

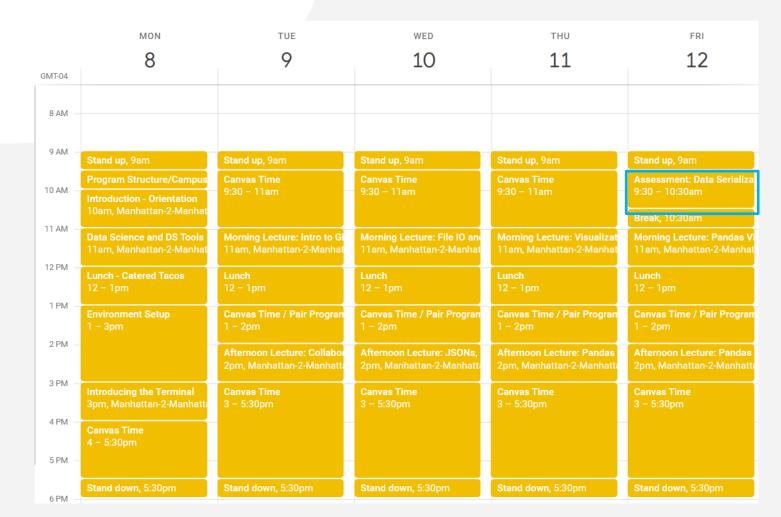
First blog post topic: Why did you decide to learn data science?

Potential elements to include:

- Your past educational or career experience
- How you learned about data science
- Any particular data science-related projects that you find especially exciting
- How you chose Flatiron School
- What you're hoping to do with data science in the future

Weeks 1 & 2

Checkpoints



Checkpoints



Mini-assessments that occur about twice per week to check your understanding and key proficiencies.

You will have **1 hour** to complete the checkpoint.

Checkpoints give you a chance to practice coding in a time-boxed session without the pressure - these assessments are not used to judge whether you progress through the program!

Weeks 1 & 2

Code Challenges

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12 PM -					
121101	Lunch	Lunch	Lunch	Lunch	Lunch
	Lunch 12 – 1pm	Lunch 12 – 1pm	Lunch 12 - 1pm	Lunch 12 - 1pm	Lunch 12 – 1pm
1 PM —					
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Code Challenges



End-of-phase challenges that simulate real-world workflows or technical interviews.

This will feel just like the checkpoints, but you will have **1 hour 30 minutes** to complete the code challenge.

This is one place where no collaboration is allowed. We encourage you to ask instructors questions, but these are **your own work**.

Graded Assignment Protocol

- Assessments are open book
 (ok to reference labs, lectures, and Google)
- No copy and pasting code
- No screen sharing or messaging with peers during assignments
- Exit break out room after submission

Evaluating Student Progress

In order to advance through the program, we need to know that you have **mastered the essentials.**

If you do not pass the code challenge, you will have the opportunity to demonstrate your readiness to move on through the completion of a graded, solo project.

The final pass/not pass assessment happens at the end of each phase.

Week 3

Project Week



Projects



Either solo or in groups, you will **tackle real problems** to develop projects you can showcase to potential employers.

Your project will consist of both **technical** and **non-technical deliverables**.

Project presentations are a chance to gain experience presenting your findings to a non-technical audience.

The requirements for each project will be outlined in the rubric, which we will go over during the project launch.

Setting Yourself Up for Success



Personal Empowerment Protocol

This is an important framework in general for debugging / working through problems.

Reading errors, looking up problems, and collaborating with peers are **essential** skills.

Get practice with them before asking us!

PERSONAL EMPOWERMENT PROTOCOL

 $/\!\!/$

- 1. READ THE ERROR
- 2. GOOGLE THE PROBLEM
- 3 ASK A NEIGHBOR
- 4. ASK A TEACHER

Giving Feedback: C - A - S - K



Consensual

If someone isn't in a good space to receive feedback, it won't stick and it won't help.

Actionable

Outline ways to change or act on the feedback, instead of saying something vague like "this is bad".

Specific

Give examples when you can, to anchor your feedback in a real way to the experience you had which prompted the feedback.

Kind

The goal is to help someone improve, not to belittle others.

Any Questions?