

Liam's Lab Data Science Course Syllabus
Summer 2021, May 28 – Current

Lecture: Saturdays, 10 AM – 12 PM @ secret Lab Hideout

Office Hours: Tuesday nights, 7 PM – 8 PM

Homework: Weekly, due Thursday 12:00 AM

Course objective: data analyst role in SQL/Python.

May 28

Content: ETL, back-end, front-end, pipeline, machine learning, data cleaning, pre-processing, database, data ingestion, UI/UX design, framework.

Objective: knowing how data science, data analyst, data engineering fit in to the larger picture of an “application” or “software”.

June 05

Content: “algorithms & data structures”. Data types in Python: list, set, string, dictionary, tuple. Iteration & for loops, concept of counters. Downloading Jupyter notebook & Anaconda. F-string, .format(), concatenation.

Objective: Knowing what a data structure is, how algorithms use data structures. What are the data types of python? How do I run code in Python?

June 12

Content: indexes: printing out an index and a value of different data types. Using enumerate. F-string, .format(), concatenation.

Objective: understanding that Python is zero-indexed, and all the different ways we can print out index-value pairs.

Homework: due Thursday, June 17

June 19

Content: while loops, functions (return vs. yield).

Objective: understanding how to write a function, inputs & outputs. The difference between return and yield.