College of Engineering & Applied Sciences

CSPB 3022

Introduction To Data Science With Probability And Statistics
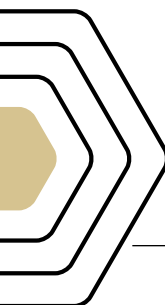
Class Notes

University Of Colorado

2024

Week 1: (1/15 - 1/21)

Data Science Lifecycle, Python And Pandas

1.0.1 Assigned Reading

The reading assignment for this week is:

- Learning Data Science: Chapter 1

- Python For Data Analysis: Chapter 5

1.0.2 Piazza

Must post / respond to two Piazza posts. (1/23/24)

1.0.3 Lectures

The lecture videos for this week are:

- Course Overview $\approx$ 54 **min**.

- Pandas Part 1 $\approx$ 54 **min**.

- Pandas Part 2 $\approx$ 54 **min**.

- Python Walkthrough $\approx$ 47 **min**.

- Learning to Use Jupyter Notebooks $\approx$ 9 **min**.

- Using Markdown In Jupyter Notebooks $\approx$ 11 **min**.

- Writing Mathematics In Jupyter Notebooks $\approx$ 16 **min**.

- Beginning Python $\approx$ 44 **min**.

- Python - Basic NumPy $\approx$ 18 **min**.

- Quick Calculus Refresher $\approx$ 21 **min**.

The lecture notes for this week are:

- Course Overview Data Science Lifecycle

- Pandas Part 1

- Pandas Part 2

- LaTeX

1.0.4   Assignments

The assignment for this week is:

- The assignment for this week is **Data Science Lifecycle, Python And Pandas**. (1/23/24)

1.0.5   Quiz

The quizzes for this week are:

- Math Concept Quiz • Finalized Math Concept Quiz (1/30/24)

1.0.6   Chapter Summary