Data Science

Instructor

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Office Location

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Office Hours

4 pm – 5 pm, Mondays

Course Overview

Data Science (Teams Code: uh6fveq)

We are going to try to develop practical data science abilities and programming skills for data science projects in this course. Python is preferred as the programming language for the applications of this course.

Required Text

Introduction to Data Science, Springer, *L. Igual - S. Segui*

Data Science Concepts and Practice, Morgan Kaufmann, *V. Kotu – B. Deshpande*

Course Materials

• Python 3.x (Anaconda is preferred)

• Jupyter Notebook from Anaconda

• Pycharm from JetBrains / Microsoft Visual Studio Code

• PC with a Linux distro or a Linux terminal in Windows 10/11.

Course Schedule

Week	Subject	Week	Subject
01	Basic Concepts in Python	08	Supervised Learning with Scikit-learn
02	IPython and Jupyter Notebook	09	Supervised Learning with Scikit-learn (cont.)
03	Data Preprocessing with Numpy	10	Unsupervised Learning with Scikit-learn
04	Matrix Operations with Numpy	11	Introduction to Neural Networks
05	2d Data Visualization with Matplotlib	12	Introduction to Neural Networks (cont.)
06	3d Data Visualization with Matplotlib	13	Student Presentations
07	Regression with Numpy	14	Student Presentations