DSO 559

Business Analytics with Python

Section – 033-16271R

Professor

Jonathan Gomez

Email

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When

Monday/Wednesday from 3:30 – 4:50

Office

BRI 303 C

Units

3 units

WHY TAKE THIS COURSE?

Data analytics are a critical component to any organization's decision-making process. However, business leaders are often blind to the challenges and tradeoffs in an analytics project. This course will help motivated students with no prior programming experience to develop an understanding for the data analytics pipeline.

COURSE OBJECTIVES

Upon successful completion, students will be able to:

➢ Use Python to explore data and derive business insights.

➢ Identify and implement various data modeling techniques.

➢ Effectively communicate business insights for various key stakeholders with varying levels of technical expertise.

➢ Act as a bridge for inter-disciplinary collaboration.

KEY CONCEPTS

➢ Data preparation in Python

➢ Exploratory data analysis with Pandas

➢ Machine learning with Scikit-Learn

➢ Analytical reasoning through modern statistical techniques

➢ Discover companies that have incorporated analytics into their core business

COURSE DESCRIPTION

This course will familiarize students with the nuts and bolts of analyzing and modeling data in Python. The primary goal of the course is to offer a guide to the parts of the Python programming language and its data oriented ecosystem of tools that are commonly used in data science and analytics. Students will progressively learn how to use data analytics, through Python, to derive insights and generate value. Learning will be conducted through coding exercises motivated by IBM, Twitter, Uniswap, Zillow, and others.