

# DATA SCIENCES AND OPERATIONS

SPRING 2023 SEMESTER

**DSO 459** — *Business Analytics with Python*

*Section – 16335*

**Professor**

*Austin Pollok*

**Email**

*pollok@marshall.usc.edu*

**When**

*Mon/Wed, 4:00 PM – 5:50 PM*

**Office**

*BRI 307 J*

**Units**

*4.0*



## WHY TAKE THIS COURSE?

Motivated undergraduate students with little or no prior programming experience who would like to develop essential competencies in Python's data analytics and modeling tools. These skills are foundational for every business manager in today's data-rich economy.

## COURSE OBJECTIVES

Upon successful completion, students will be able to:

- Perform data exploratory analysis in Python
- Model business operations as Python programs
- Formulate and communicate Python programming-based business solutions and data analytics insights to stakeholders from different functional areas and act as a bridge for inter-disciplinary collaboration

## KEY CONCEPTS

- Python and Jupiter notebook
- Business analytics tools in Python
- Data in Python
- Functions and packages
- Automating mundane tasks
- Data visualization
- Data modeling with Python

## COURSE DESCRIPTION

This course is concerned 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 library ecosystem and tools that will equip you to become an effective data analyst. Students will be provided with the python code to get started and will be encouraged to add or change the code to make it their own. Business use cases for this course are taken from a variety of business fields, including operations, accounting, economics, marketing, e-commerce, finance, etc.