

**WILMINGTON UNIVERSITY
COLLEGE OF TECHNOLOGY
BASIC COURSE INFORMATION**

COURSE TITLE: Python for Data Science

COURSE NUMBER: CSC 419

I. MAJOR INSTRUCTIONAL OBJECTIVES:

Goal A: Apply Python Basic Principles

A-1: Use variables and data types in programming

A-2: Apply python basics to data frames

Goal B: Analyze Data in Python to Perform Statistical Tests

B-1: Perform statistical tests to determine if populations are different (tests: incomplete data sets, merges and joins, comparison)

B-2: Develop statistical tests to describe relationships (correlation and regression tests)

Goal C: Create Data Science Visualizations

C-1: Generate static, animated, and interactive visualizations

C-2: Produce distribution charts (scatter plots, box plots, histograms and specialized visualizations)

C-3: Create and share documents that contain live code, equations, visualizations, and other multimedia resources.

II. CLASS PARTICIPATION:

Students are expected to attend class and participate actively and in a positive way. Questions and relevant observations are encouraged and enrich the experience of the entire class. Computers in the classrooms are intended to be used as tools to enhance the students' learning experience. Instant messaging, gaming, emailing, and surfing the web are distractions to the student, the surrounding students, and the instructor and constitute inappropriate behavior. Students are ethically obliged to avoid these and similar practices.