

ONE PAGE COURSE OVERVIEW

Course Title: D207– Exploratory Data Analysis

Course Description: Exploratory Data Analysis covers statistical principles supporting the data analytics life cycle. Students in this course compute and interpret measures of central tendency, correlations, and variation. The course introduces hypothesis testing, focusing on application for parametric tests, and addresses communication skills and tools to explain an analyst's findings to others within an organization.

Competencies:

- a. Data Interpretation
- b. Conducting Parametric Testing

Performance Assessment (PA): Task covering the above competencies and involving:

- a. Interprets central tendency, correlations, and variations to inform organizational decisions.
- b. Conduct parametric hypothesis testing.

Tools and Techniques: Python or R. (Students can choose).

Resources:

- a. **Text:** Bruce, P. A. (2020). Practical Statistics for Data Scientists, 50 Essential Concepts Using R and Python. Sebastopol, CA: O'Reilly Media, Incorporated. ISBN: 978-1492072942
- b. **Text:** Griffiths, D. (2009). Headfirst statistics. Sebastopol, CA: O'Reilly Media.
- c. LinkedIn Learning Videos.
- d. Knowledge Check: Interactive labs (R and Python), multiple choice questions, etc.