SYLLABUS

GENERAL INFORMATION

Course Title:	CompTIA Data+
Code:	DA0-001
Contact Hours:	40
Academic Term:	TBA

COURSE DESCRIPTION

The CompTIA Data+ course is specifically designed to provide participants with a solid foundation in data analytics, emphasizing the practical application of data analysis to support organizational decision-making. This course covers the fundamentals of data concepts, statistical methods, data processing, and the use of analytics tools. It prepares students to effectively interpret and present data, crucial for roles in data analysis, business analysis, and data-driven decision-making. Upon completion of this course, students will be prepared to sit for the CompTIA Data+ certification exam, which validates competency in data analytics as a pathway to a career in data science.

GENERAL OBJECTIVES

This course will enable students to:

- Understand basic concepts of data analytics and data science.
- Learn to process data sets, ensuring data quality and accuracy.
- Utilize statistical methods to analyze collected data.
- Gain proficiency in data visualization techniques to effectively communicate data insights.
- Explore data analytics tools and software to support data-driven decisions.
- Develop skills to interpret and present complex data to stakeholders.

COURSE CONTENT

Lesson 1: Identifying Basic Concepts of Data Schemas

Lesson 2: Understanding Different Data Systems

Lesson 3: Understanding Types and Characteristics of Data

Lesson 4: Comparing and Contrasting Different Data Structures, Formats, and Markup Languages

Lesson 5: Explaining Data Integration and Collection Methods

Lesson 6: Identifying Common Reasons for Cleansing and Profiling Data

Lesson 7: Executing Different Data Manipulation Techniques

Lesson 8: Explaining Common Techniques for Data Manipulation and Optimization

Lesson 9: Applying Descriptive Statistical Methods

Lesson 10: Describing Key Analysis Techniques

Lesson 11: Understanding the Use of Different Statistical Methods

Lesson 12: Using the Appropriate Type of Visualization

Lesson 13: Expressing Business Requirements in a Report Format

Lesson 14: Designing Components for Reports and Dashboards

Lesson 15: Distinguishing Different Report Types

Lesson 16: Summarizing the Importance of Data Governance

Lesson 17: Applying Quality Control to Data

Lesson 18: Explaining Master Data Management Concepts

EVALUATION CRITERIA

Criteria	Grade Total
Mid-Term Exam	100
Final Exam	100
Quizzes	100
Assessment	100
Laboratories	100
Total	**500**

Assignments are due in class on the designated day. Late submissions will incur a penalty of one letter grade per day late, unless previously discussed and approved for extension.

EDUCATIONAL RESOURCES

Hunt, R.E. (2022). The Official CompTIA PenTest+ Guide (PT0-002). CompTIA Inc., Downers Grove, Illinois.
ISBN: 978-1-64274-395-1

NOTES

- **Reasonable Accommodation:** Any student needing accommodation should make a request at the beginning of the course or as soon as possible thereafter.

- **Academic Integrity:** Honesty, fraud, plagiarism, and other forms of academic misconduct are violations of the institution's policies and may result in disciplinary action, including suspension or expulsion.