

SYLLABUS

GENERAL INFORMATION

Course Title:	CompTIA DataSys+
Code:	DS0-001
Contact Hours:	40
Academic Term:	TBA

COURSE DESCRIPTION

The CompTIA DataSys+ course is designed to introduce participants to the fundamentals of data systems management, focusing on the skills needed to manage and maintain complex data systems effectively. This course explores database administration, data storage solutions, data system troubleshooting, and performance optimization. Upon completion of this course, students will have a deep understanding of the backend operations that support data-intensive applications and will be prepared to sit for the CompTIA DataSys+ certification exam. This certification is ideal for aspiring data administrators, IT professionals, and anyone interested in the technical aspects of data systems management.

GENERAL OBJECTIVES

Upon successful completion of this course, students should be able to:

- Understand the architecture and management of modern data systems.
- Implement and manage data storage solutions.
- Monitor and optimize data system performance.
- Troubleshoot common issues in data systems.
- Ensure data integrity and security.
- Apply best practices in database administration and data recovery.

COURSE CONTENT

- Lesson 1: Understanding Database Types and Structures
- Lesson 2: Recognizing Standards and Commands
- Lesson 3: Running Scripts for Data and Data Systems
- Lesson 4: Explaining the Impact of Programming on Database Operations
- Lesson 5: Understanding Database Planning and Design
- Lesson 6: Implementing, Testing, and Deploying Databases
- Lesson 7: Monitoring and Reporting on Database Performance
- Lesson 8: Understanding Common Data Maintenance Processes
- Lesson 9: Understanding Governance and Regulatory Compliance
- Lesson 10: Securing Data
- Lesson 11: Securing Data Access
- Lesson 12: Securing the Database and Server
- Lesson 13: Classifying Types of Attacks
- Lesson 14: Planning for Disaster Recovery
- Lesson 15: Implementing Backup and Restore Best Practices

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., Bishop, D., & Miranda, T. (2023). The Official CompTIA DataSys+ Guide (DS0-001) eBook. CompTIA Inc., Downers Grove, Illinois.
ISBN: 978-1-64274-495-8

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.