

Bossier Parish Community
College Master Syllabus

Course Prefix and Number: CTEC 274

Credit Hours: 3-3-0

Course Title: Data Analytics

Course Prerequisites: CTEC 108

Textbook(s): CompTIA Integrated CertMaster Learn Labs for Data+ (DA0-001), ISBN: 978-1-64274-397-5 and CompTIA CertMaster Labs for Data+ (DA0-001); ISBN: 978-1-64274-399-9

Course Description: This course provides instruction on collecting, analyzing, and reporting on data that can drive priorities and lead business decision making. This includes, but is not limited to, mining data, manipulating data, visualizing and reporting data, applying basic statistical methods, and analyzing complex data sets. This class will help students gain the skills required for the nationally recognized CompTIA Data+ certification exam.

Learning Outcomes:

At the end of this course, the student will:

- A. identify basic concepts of data schemas and dimensions;
- B. use appropriate visualization techniques to properly design a report or dashboard;
- C. understand and execute data mining and data manipulation techniques;
- D. apply key analytical and statistical techniques related to data analysis; and
- E. summarize and utilize data quality control, governance, and management concepts.

To achieve the learning outcomes the student will or will be able to:

(The letter designations at the end of each statement refer to the learning outcome(s).)

1. identify basic concepts of data schemas and dimensions (A);
2. compare and contrast different data types (A);
3. compare and contrast common data structures and file formats (A);
4. translate business requirements to form a report (B);
5. use appropriate design components for reports and dashboards (B);
6. use appropriate methods for dashboard development (B);
7. explain data acquisition concepts (C);
8. execute data manipulation techniques (C);
9. explain common reasons/techniques for cleansing and profiling datasets, data manipulation, and query optimization (C);
10. explain and apply appropriate statistical methods (D);
11. summarize types of analysis and key analysis techniques (D);
12. identify common data analytics tools (D);
13. summarize data governance concepts (E);
14. apply data quality control concepts (E); and
15. explain master data management concepts (E).

Course Requirements:

1. The student must successfully complete the course with an average of 70% or above on the combined learning outcomes.
2. Each student is expected to attend classes regularly; excessive unexcused absences

constitute grounds for suspension (refer to the student handbook for attendance policies).

3. Each student must have access to a reliable Internet connection to complete online assignments.

Course Grading Scale:

90 – 100 = A
80 – 89 = B
70 – 79 = C
60 – 69 = D
0 – 59 = F

Attendance Policy: The college attendance policy is available at <https://www.bpcc.edu/current-students/student-handbook/introduction>

Course Fees: This course is accompanied with an additional fee for supplemental materials.

Nondiscrimination Statement: Bossier Parish Community College does not discriminate on the basis of race, color, national origin, gender, age, religion, qualified disability, marital status, veteran's status, or sexual orientation in admission to its programs, services, or activities, in access to them, in treatment of individuals, or in any aspect of its operations. Bossier Parish Community College does not discriminate in its hiring or employment practices.

Title VI, Section 504, and ADA Information

Angie Cao, Student and Disabilities Services Specialist

Student Services, F-254

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6511

Email: acao@bpcc.edu

Hours: 8:00 a.m. - 4:30 p.m. Monday - Friday, excluding holidays and weekends.

Equity/Compliance Coordinator

Teri Bashara, Director of Human Resources

Human Resources Office, A-105

6220 East Texas Street

Bossier City, LA 71111

Phone: 318-678-6056

Hours: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.