

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 or CTEC 270

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:

- To pass the course, student must achieve a course average of 70% or above.
- Students must have access to a computer (not mobile device), Microsoft Office, and the Internet to complete the assignments. Computer, software, and the Internet are

available to students on campus during scheduled computer lab times and in the Learning Commons located in the BPCC Library.

- Students are required to use BPCC's LMS and are encouraged to use the BPCC Library to research topics and employment opportunities.

Course Grading Scale:

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

Attendance Policy:

Each student is expected to attend class regularly; excessive unexcused absences constitute grounds for suspension. Refer to the student handbook for [Attendance Policy](#).

Course Fees: This course is accompanied with an additional non-refundable fee for supplemental materials, laboratory supplies, software licenses, certification exams and/or clinical fees.

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.

Coordinator for SECTION 504 AND ADA
Angie Cao, Student and Disability Services Specialist
Disability Services, F-254
6220 East Texas Street
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Phone: 318-678-6511
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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
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Bossier City, LA 71111
Phone: 318-678-6056

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