Bossier Parish Community College Master Syllabus

Course Prefix and Number: CTEC 264

Credit Hours: 3-3-0

Course Title: Advanced Cloud Computing

Course Prerequisites: CTEC 263

Textbook(s): None

Course Description: This course provides a detailed overview of advanced cloud computing concepts and current cloud computing technologies. This overview includes, but is not limited to, the design, implementation, and administration of cloud computing models. Students will be introduced to current tools to analyze, troubleshoot, and protect cloud computing resources.

Learning Outcomes:

At the end of this course, the student will:

- A. describe various cloud resources, aspects of design, and business value;
- B. define and design secure cloud applications and architectures;
- C. interpret and select high-performing and scalable cloud solutions; and
- D. choose cost-effective cloud solutions.

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. explain the benefits and business value associated with cloud computing (A);
- 2. compare and contrast traditional computing models with cloud computing models; (A)
- 3. evaluate various cloud architecture design principles; (A)
- 4. apply appropriate security and compliance concepts; (B)
- 5. determine appropriate security options to be applied based on access patterns, user needs, and organization requirements; (B)
- 6. choose appropriate architecture and services that scale to meet performance requirements; (C)
- 7. select high-performing compute, network, storage, and database solutions for a workload; (C)
- 8. determine the most cost-effective compute, network, storage, and database services based on an organization's requirements; (D)
- 9. compare various pricing models used in cloud computing; (D);

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 = A80 - 89 = B $\begin{array}{ll} 70-79 & = C \\ 60-69 & = D \\ 0 & -59 & = F \end{array}$

Attendance Policy: The college attendance policy is available at <u>http://www.bpcc.edu/catalog/current/academicpolicies.html</u>

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 Coordinator Sarah Culpepper, Coordinator Disability Services, D-110 6220 East Texas Street Bossier City, LA 71111 Phone: 318-678-6539 Email: <u>sculpepper@bpcc.edu</u> 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.