Bossier Parish Community College
Master Syllabus

Course Prefix and Number: CTEC 263 **Credit Hours:** 3-3-0

Course Title: Cloud+

Course Prerequisites: None

Textbook(s): Wilson, Scott and Vanderburg, Eric. CompTIA Cloud+ Certification Study Guide, Second Edition (Exam CV0-002), 2nd Edition. McGraw-Hill, 2018. ISBN: 978-1260116618

Course Description: This course covers fundamentals of cloud computing. Skills will be covered to understand standard cloud methodologies, implement, maintain, and deliver cloud technologies, and to understand aspects of IT security. Additionally, students will learn to use industry best practices related to cloud implementations. This class will help students gain the skills required for the nationally recognized CompTIA Cloud+ certification exam.

Learning Outcomes:
At the end of this course, the student will:

A. identify standard cloud methodologies;
B. implement, maintain, and deliver cloud technologies;
C. recognize aspects of IT security as they relate to cloud technologies;
D. utilize industry best practices related to cloud implementations; and
E. use troubleshooting theory to apply basic cloud computing troubleshooting skills.

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. analyze system requirements to ensure successful system deployment (A, B);
2. given a scenario, execute a provided deployment plan (B);
3. analyze system requirements to determine if a given testing plan is appropriate (B);
4. analyze testing results to determine if the testing was successful in relation to given system requirements (B, D) ;
5. analyze sizing, subnetting, and basic routing for a provided deployment of the virtual network (B, D);
6. analyze CPU and memory sizing for a provided deployment (B);
7. analyze the appropriate storage type and protection capability for a provided deployment (B, C);
8. analyze characteristics of the workload (storage, network, compute) to ensure a successful migration (B);
9. apply elements required to extend the infrastructure into a given cloud solution (A, B, C);
10. apply security configurations and compliance controls to meet given cloud infrastructure requirements (C, D);
11. apply the appropriate ACL to the target objects to meet access requirements according to a security template (A, C);
12. given a cloud service model, implement defined security technologies to meet given security requirements (A, C);

13. given a cloud service model, apply the appropriate security automation technique to the target system (A, C);
14. given a cloud service model, determine the appropriate methodology to apply given
15. patches (A, B);
16. apply the appropriate automation tools to update cloud elements (B);
17. apply an appropriate backup or restore method (B);
18. given a cloud-based scenario, apply appropriate disaster recovery methods (B, D);
19. given a cloud-based scenario, apply the appropriate steps to ensure business continuity (B, D);
20. given a scenario, apply the appropriate maintenance automation technique to the target objects (B);
21. analyze defined metrics to determine the presence of an abnormality and/or forecast future needed cloud resources (B,D);
22. given a scenario, determine the appropriate allocation of cloud resources (B, D);
23. given a scenario, determine when to provision/deprovision cloud resources (B, D);
24. implement account provisioning techniques in a cloud environment to meet security and policy requirements (B, C, D);
25. given a scenario, analyze deployment results to confirm they meet the baseline (B, D);
26. given a specific environment and related data, apply appropriate changes to meet expected criteria (A, D);
27. given SLA requirements, determine the appropriate metrics to report (A, D);
28. troubleshoot a deployment issue (E);
29. troubleshoot common capacity issues (E) ;
30. troubleshoot automation/orchestration issues (E);
31. troubleshoot connectivity issues (E);
32. troubleshoot security issues (C, E); and
33. explain the troubleshooting methodology (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 only MindTap® assignments.

Course Grading Scale:

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

Attendance Policy: The college attendance policy is available at: http://www.bpcc.edu/catalog/current/academic policies.html

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
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 Resource s Office, A-10 5
6220 East Texas Street
Bossier City, LA 71111
Phone: 318-678-6056
Hour s: 8:00 a.m.-4:30 p.m. Monday - Friday, excluding holidays and weekends.