Bossier Parish Community College Master Syllabus

Course Prefix and Number: CTEC 170 Credit Hours: 3-3-0

Course Title: Microsoft Windows Server

Course Prerequisites: CTEC 101

Textbook(s): MindTap for Eckert's Hands-On Microsoft® Windows® Server 2019, 1 term

Instant Access, 3rd Edition, Cengage ISBN-13: 9780357436219

Optional Textbook/Subscription Offers from Cengage:

Cengage Unlimited, 1 term (4 month) Printed Access Card, 1st edition,

PAC: 9780357700037 or IAC: 9780357700006

Cengage Unlimited, Multi-term (12 month) Printed Access Card, 1st edition,

PAC: 978035770044 or IAC: 9780357700013

Cengage Unlimited, Multi-term (24 month) Printed Access Card, 1st edition,

PAC: 9780357700051 or IAC: 9780357700020

Certification:

(if required by academic degree or certificate), this course prepares students for the Microsoft's 70-740 certification exam.

Course Description: An introduction to the fundamentals of Windows Server. Students will work on multiple topics to include, but not limited to: Implementing, Managing and Monitoring DHCP, Implementing Name Resolution, Managing and Monitoring DNS, Network Security, Securing Network traffic with IPSec, Implementing and Managing updates, Configuring Routing and Remote Access, and Maintaining Network Infrastructure. This course is a required course for the NSA/DHS KU alignment for the CAE-CDE designation.

Learning Outcomes:

At the end of this course, the student will:

- A. install and configure servers;
- B. configure server roles and features;
- C. configure Hyper-V;
- D. deploy and configure core network services;
- E. install and administer Active Directory; and
- F. create and manage Group Policy.

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. install and configure server (A);
- 2. configure local storage (A);
- 3. configure file and share access (B);
- 4. configure print and document services (B);
- 5. configure servers for remote management (B);

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- 6. create and configure virtual machine settings (C);
- 7. create and configure virtual machine storage (C);
- 8. create and configure virtual networks (C);
- 9. configure IPv4 and IPv6 addressing (D);
- 10. deploy and configure Dynamic Host Configuration Protocol (DHCP) service (D);
- 11. deploy and configure DNS service (D);
- 12. install domain controllers (E);
- 13. create and manage Active Directory users and computers (E);
- 14. create and manage Active Directory groups and organizational units (OUs) (E);
- 15. create Group Policy objects (GPOs) (F);
- 16. configure security policies (F);
- 17. configure application restriction policies (F); and
- 18. configure Windows Firewall (F).

Course Requirements:

- The Microsoft 70-740 certification exam is optional. If a student chooses to take the exam, the exam must be taken on campus or at an approved proctored environment/facility.
- To earn a grade of "C" or higher in this course, the student must earn 70% or above on the combined average of course objectives;
- 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.

NICE Framework Categories:

Securely Provision (SP) Operate and Maintain (OM) Oversee and Govern (OV)
Analyze (AN) Collect and Operate (CO)

Specializations:

- Data Management Systems Security
- Digital Forensics
- Industrial Control Systems SCADA Security
- Secure Cloud Computing
- Secure Embedded Systems
- Security Incident Analysis and Response
- Security Policy Development and Compliance
- System Security Administration Systems Security Engineering

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CAE Knowledge Unit Mapping:

- Operating Systems Concepts (OSC)
- Operating Systems Hardening (OSH)
- Windows System Administration (WSA)

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 Bossier City, LA 71111

Phone: 318-678-6511 Email: <u>acao@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

Bossier City, LA 71111 Phone: 318-678-6056

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

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