Bossier Parish Community College Master Syllabus

Course Prefix and Number: CTEC 104 Credit Hours: 3-3-0

Course Title: Introduction to Scripting

Course Prerequisites: None

Textbook(s): None

Course Description: This course introduces students to scripting using PowerShell. Students will learn about concepts including execution permissions, commands, pipelining, variables, arrays, split and join operators, program control blocks, scripts, functions, debugging, and breakpoints. On a basic level, students will also become familiar with Visual Basic script, BASH, Korn Shell, C shell, PERL, and PHP.

Learning Outcomes:

At the end of this course, the student will:

- A. perform system operations using PowerShell commands;
 - B. write PowerShell commands that use pipelined operations and variables;
 - C. build PowerShell scripts and functions that are reusable; and
 - D. describe common scripting languages and their capabilities.

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. perform PowerShell commands for basic system operations (A);
- 2. describe the PowerShell help system and Microsoft Technet resources (A);
- 3. implement PowerShell commands to access system resources (A);
- 4. write PowerShell commands that pipe output to other commands (B);
- 5. implement variables that store output from and pass input to commands (B);
- 6. write PowerShell commands that manipulate strings and perform mathematical operations (B);
- 7. write PowerShell scripts that use conditions and looping blocks (C);
- 8. write PowerShell functions that are stored in modules (C);
- 9. describe Unix/Linux BASH, Korn shell, and C shell capabilities (D); and
- 10. describe Visual Basic, PERL, and PHP scripting capabilities (D).

Course Requirements:

- 1. A 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).

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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://catalog.bpcc.edu/content.php?catoid=5&navoid=369

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.

NICE Framework Categories:

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

Investigate (IN)

Specializations:

- Data Security Analysis
- Digital Forensics

CAE Knowledge Unit Mapping

• Basic Scripting and Programming (BSP)

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COORDINATOR FOR SECTION 504 AND ADA

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Revised: 10/22/2020

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