SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Computer Information Technology Program
Revision Date: August 2024

I. CATALOG DESCRIPTION

Course Number:	INFO1171
Course Title:	PC Operating Systems
Prerequisite(s):	None
Corequisite(s):	BSAD1010
Catalog Description:	An introduction to features and capabilities of both Microsoft Windows and Linux operating systems, including directory and file management. The course includes extensive use of command line interfaces.
Credit Hours:	3
Class Hours:	45
Lab Hours:	0
Total Contact Hours:	45

II. COURSE OBJECTIVES: *Course will:*

A. Compare and contrast basic directory and file structure, and command-line interfaces in Windows and Linux environments.
B. Compare and contrast features of Windows and Linux interfaces.
C. Provide training in Windows directory and file management skills.
D. Provide training in Linux directory and file management skills.
E. Discuss file and folder permissions in Windows and Linux.
F. Show scripting techniques for file management automation in Windows and Linux.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES

A. Student Learning Outcomes: *Students will be able to:*
1. Identify file and directory management terminologies for Windows and Linux.
2. Recognize the general layout/syntax of commands.
3. Compare and contrast absolute versus relative paths in Windows and Linux.
4. Analyze the results of commands in Windows and Linux.
5. Navigate through graphical interfaces in Windows.
6. Navigate the command line interface in Windows and Linux.
7. Differentiate between internal and external commands.
8. Use introductory commands using Windows Command Prompt.
9. Use introductory commands using Linux.
10. Use commands using Windows PowerShell for directory and file management.
11. Use commands using Linux for directory and file management.
12. Identify the file permissions used by Windows.
13. Identify the file permissions used by Linux.
14. Create scripts to manipulate files and directories in Windows.
15. Create scripts to manipulate files and directories in Linux.

B. General Education Learning Outcomes (GELOs)
1. GELO #3: Critical Thinking & Problem Solving
Outcome 2: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE

A. File and directory management terminologies for Windows and Linux
B. Internal and external commands

C. Text editors in Windows and Linux
D. General syntax of Command Prompt commands
E. Command line basics in Windows
F. Command line basics in Linux
G. PowerShell basics
H. Absolute versus relative paths in Windows and Linux
I. Command Prompt commands for file and directory management
J. PowerShell for file and directory management
K. Linux commands for file and directory management
L. File permissions used by Windows
M. File permissions used by Linux
N. Scripts to automate file and directory management using Command Prompt
O. Scripts to automate file and directory management in Linux

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): Shotts, William E., Jr. *The Linux Command Line, A Complete Introduction;* materials provided in digital format
B. Other Resources: Virtual Machines provided by the college to the students
C. Computer and Internet access

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:
  1. Technology enhanced lectures
  2. Group discussions
  3. Engaged learning activities

VII. METHODS OF EVALUATION

A. Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
  1. Attendance and/or training activities
  2. Homework assignments
  3. Quizzes
  4. Exams

VIII. SPECIFIC COURSE REQUIREMENTS

A. This course will not qualify as a prerequisite if the student receives a final grade below a C (70%).