

## **DCOM 142**

### **Introduction to Linux/UNIX**

3 Credits

## Community College of Baltimore County Common Course Outline

### **Description**

**DCOM 142 – Introduction to Linux/UNIX:** introduces fundamental concepts of various Linux distributions. Students practice common user tasks in the operating system (OS) shell. Students perform command line utilities, learn basics of shell scripting, pipes, redirection, Linux file system, and GNU Network Object Model Environment (GNOME). Graphical User Interface (GUI) and basic network commands are reviewed. Students learn to setup and manage users and groups and configure ownerships and permissions.

**Pre-requisites:** ACLT 052 or ACLT 053 or (ESOL 052 and ESOL 054) and MATH 081

### **Overall Course Objectives**

Upon completion of this course, students will be able to:

1. identify the key components of the Linux operating system;
2. identify different Linux distributions;
3. manage files and directories in the Linux File System;
4. explain the purpose of the Linux shells;
5. explore Linux file management commands;
6. explore various utilities using the command line;
7. manage users and groups;
8. configure ownerships and permissions;
9. write shell scripts using bash shell;
10. manage packages for Debian and RedHat Linux distributions;
11. perform basic network commands; and
12. identify various processes.

### **Major Topics**

- I. Distributions and key components
- II. Linux command-line tools
- III. Linux file system
- IV. Linux shell
- V. File management
- VI. Manage users and groups
- VII. Ownership and permission
- VIII. Shell scripts

The Common Course Outline (CCO) determines the essential nature of each course.

For more information, see your professor's syllabus.

- IX. Manage packages
  - a. Debian and RedHat Linux distributions
  - b. Install, upgrade, and uninstall packages
- X. Basic network commands

### **Course Requirements**

Grading will be determined by the individual faculty member, but shall include the following, at minimum:

- 5 laboratory assignments
- 2 exams

### **Other Course Information**

This course is a program requirement for the following programs: Network Technology A.A.S Degree with Cisco Concentration, Network Technology A.A.S Degree with Information Technology Support Concentration, Network Technology A.A.S with General Networking Concentration, Network Technology A.A.S with Microsoft Certified Information Technology Professional Concentration, Cyber Security A.A.S Degree, Digital Forensics A.A.S Degree, Network Technology General Networking Certificate, Network Technology Information Technology Support Certificate, and Cyber Security Certificate. This course is taught in a computerized environment.

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