

**COURSE OUTLINE**  
**CMSY-255**  
**Introduction to Unix and Linux**  
**3 Credits**

**HOWARD COMMUNITY COLLEGE**

**Description**

The course provides an introduction to the Unix and Linux operating systems. The goal of this course is to provide the student with an understanding of the Unix and Linux command line so that students will be able to customize a Unix/Linux environment under the Shell environment. Prerequisite: CMSY-219. (2 hours lecture; 2 hours lab)

**Overall Course Objectives**

Upon completion of this course, the student will be able to:

1. Understand the history of Unix and Linux.
2. Understand the Unix/Linux file system.
3. Issue essential commands from the command line.
4. Understand file access permissions.
5. Understand the BASH Shell.
6. Understand I/O redirection
7. Open, edit, and save text documents using the vi and emacs editors.
8. Understand how Unix/Linux command line shells differ comparing BASH to TCSH.
9. Learn to write shell scripts.
10. Understand Power user utilities.
11. Understand Regular expression pattern matching.

**Major Topics**

- I. History of Unix/Linux
- II. Command line utilities
- III. Unix/Linux file system structure
- IV. File and directory access permissions
- V. BASH shell
- VI. vi editor
- VII. Shell environment
- VIII. Comparison of shells
- IX. Shell scripts
- X. Advanced utilities
- XI. Regular expressions

**Course Requirements**

Grading/exams: Grading procedures will be determined by the individual faculty member but will include at least two exams and five graded lab activities.

**Other Course Information**

This course is a Business Elective.

This course is an elective for the program: Information Technology - PC/Network Hardware/iNet option.