

**ANNE ARUNDEL COMMUNITY COLLEGE
ARNOLD, MARYLAND**

COURSE OUTLINE

COURSE NAME: Introduction to UNIX
COURSE NUMBER: CSI 135
CREDIT HOURS: 3 hours of lecture weekly
DEPARTMENT: Computer Information Systems

CATALOG DESCRIPTION

CSI 135

Introduction to UNIX

3 credit hours — Two hours of lecture and two hours of laboratory weekly; one term.

Topics include basic elements of the UNIX operating system, UNIX commands and utilities, hierarchical file structure, creating and editing documents and shell programming. Hands-on experience with a multi-user UNIX system is provided.

Prerequisite: One programming language course or CSI 115.

LEARNING OBJECTIVES

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

- a. Sign-on and sign-off a UNIX system.
- b. Protect his/her account.
- c. Use UNIX's hierarchical file system.
- d. Use background processing.
- e. Redirect and pipe input/output.
- f. Edit files with a UNIX editor.
- g. Write and debug shell programs.

DIVISION OF SUBJECT MATTER

Main Topic

Lecture Hours

1.0	Introduction to UNIX Operating System	3.0
2.0	UNIX commands	3.0
3.0	The UNIX file system	3.0
4.0	Electronic mail and other utilities	3.0
5.0	Xwindow overview	2.0
6.0	Networking overview	2.0

7.0	Shell programming	6.0
8.0	UNIX programming support	3.0
9.0	System administration overview	2.0
10.0	Testing	<u>3.0</u>
	Total	30.0

Detailed Course Outline

- 1.0 Introduction to UNIX Operating System
 - 1.1 Origin and history
 - 1.2 Accounts and access
 - 1.3 Working with UNIX
 - 1.4 Using online manuals

- 2.0 UNIX commands
 - 2.1 Common commands
 - 2.2 Command structure and options
 - 2.3 Command variations
 - 2.4 Shell interpretation

- 3.0 The UNIX file system
 - 3.1 Common directory structure
 - 3.2 File types
 - 3.3 File and directory commands
 - 3.4 Creating and removing files and directories
 - 3.5 Access modes

- 4.0 Electronic mail and other utilities
 - 4.1 Client/server model
 - 4.2 Email clients
 - 4.3 Domain addressing
 - 4.4 Other UNIX utilities

- 5.0 Xwindow overview
 - 5.1 Origin and history
 - 5.2 Organization
 - 5.3 Features
 - 5.4 Programming under Xwindow

- 6.0 Networking overview
 - 6.1 LAN connections
 - 6.2 The Internet
 - 6.3 TCP/IP
 - 6.4 Client/server communications

- 6.5 Services and ports
- 7.0 Shell programming
 - 7.1 Shell operations
 - 7.2 Variables and the environment
 - 7.3 File table
 - 7.4 Redirection and pipes
 - 7.5 Process table
 - 7.6 Background processing
 - 7.7 Script design
 - 7.8 Decision structures
 - 7.9 Loop structures
 - 7.10 Command substitution
 - 7.11 Exec, trap and here documents
- 8.0 UNIX programming support
 - 8.1 Compiling C programs
 - 8.2 Make utility
 - 8.3 Managing source code
- 9.0 System administration overview
 - 9.1 Overview
 - 9.2 User accounts
 - 9.3 Devices and files
 - 9.4 Bootup and shutdown
 - 9.5 System backup
- 10.0 Testing

TEXTBOOKS

TITLE: UNIX Primer (optional)
AUTHOR: Gregory
PUBLISHER: AACC Print Shop

TITLE: A Practical Guide to Red Hat Linux 8.0 (REQ)
AUTHOR: Mark G. Sobell
PUBLISHER: Addison Wesley