

CS105 UNIX Operating Systems

Instructor	Course Dates
Tom Sinclair	01/15/2008 - 03/15/2008

Classroom Hours	Office Hours
MT 5:30 – 10:30 PM W 6 – 8 PM	W Noon – 4 PM (all others by appt.)

Course Description

This course introduces basic concepts of UNIX-style operating systems. Topics include file management, user administration, directory structure, processes, and basic system architecture. Upon completion of the course, students should be able to log on to a UNIX-style system, navigate the file structure, edit files, and control processes.

Course Outcomes

The course outcomes are the goals of instruction. These outcomes identify the knowledge, skills, and attitudes a student should have upon completing this course.

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

Knowledge

1. Explain how to use UNIX/Linux operating systems for a wide range of purposes, including file management, running command line utilities, creating and editing files, and using shells.
2. Evaluate the best techniques to use for tailoring a UNIX/Linux system to specific user needs.

Skills

1. Execute UNIX/Linux commands and use command-line editing to create, view, edit, and manipulate files.
2. Identify UNIX based solutions for implementing common operating system functions.
3. Compare features of common file editors that are available in the UNIX environment.
4. Manage processes using system administration utilities.

Attitudes

1. Assess the value of using command line vs. graphical interface.

Course Prerequisites

None

Class Breakdown

Lecture Hours:	72
Lab Hours:	36
Total Hours:	108

Credit Hours

CO/IL = 9.0 Credit Hours

CA = 8.5 Credit Hours

Course Texts

Guide to Unix Using Linux, Third Edition, 2005, Palmer, Dent, Gaddis, Thomson, ISBN: 0-619-21562-3.

Teaching Strategies

The teaching strategies for this course include facilitated discussion (with visuals as needed), demonstration, class discussion, hands-on guided practice, and feedback.

There will also be additional, outside material brought into the class discussion. Periodically students will be given in-class assignments that they will be expected to complete during that class session.

Grading

Key Graded Assignment: Exploring UNIX/Linux Operating Systems **	30%
Key Graded Assignment: Outdoor Adventures	30%
Quizzes	10%
In-Class and Out-of-Class Activities	10%
Attendance	20%

** Indicates that this Key Graded Assignment has a research component.

At the end of each course, each student is assigned a final grade as follows:

Grade	Quality Points	Point Range	Interpretation
A	4.0	93-100	Excellent
A-	3.7	90-92	
B+	3.3	87-89	
B	3.0	83-86	Above average
B-	2.7	80-82	
C+	2.3	77-79	
C	2.0	73-76	Average
C-	1.7	70-72	
D+	1.3	66-69	
D	1.0	60-65	Below average
F	0.0	59 & below	Failure
I	0.0		Incomplete

Course Completion Requirements

Students must achieve a passing grade of D or above by completing all required examinations, submitting all required lab exercises and projects, and meeting the standards of the school attendance policy.

Attendance and Classroom Policies

Students are expected to adhere to the attendance and tardiness policies stated in the current catalog. If your attendance drops below 90% (10.8 hrs.), you will receive a written warning. If it drops below 80%, you will be dropped from the course. If you have missed class time and you are still above the 90% cut-off, you may be able to make up some or all of the hours missed, subject to instructor approval.

Assignments are due on the date specified by the instructor. No late work will be accepted. If you have not completed your assignment by the due date hand in what you have to receive partial credit.

Course Topics**Week 1**

- The Essence of UNIX and Linux

Week 2

- Exploring the UNIX/Linux File Systems and File Security

Week 3

- Mastering Editors (Library research)

Week 4

- UNIX/Linux File Processing

Week 5

- Advanced File Processing

Week 6

- Introduction to Shell Script Programming (Library research)

Week 7

- Shell Script Programming

Week 8

- Exploring the UNIX/Linux Utilities

Week 9

- Complete final project work