

Course Title: INF-254 UNIX/Linux for Network Administrators

Credits/Hours: 3 credits/2 hours lecture, 2-hour lab.

Course Description:

UNIX/Linux for Network Administrators provides comprehensive coverage of the UNIX/Linux operating systems. The course covers all key aspects of the operating system including the installation procedure, command line usage, shell scripting and customization, commonly used tools and utilities, process control, Regular Expression (RE) pattern matching. The objective is to enable network administrators to effectively utilize the operating system and the tools it provides to automate their day-to-day activities.

Textbooks and Supplies: See course outline

Student Learning Objectives	Assessment Measures
1. Identify basic UNIX/Linux commands and select the appropriate functionality from a given list.	Lab Activity, Written exam, Lab test
2. Install and customize Linux OS independently.	Lab Activity
3. Create and validate an appropriate shell script for a specific task.	Lab Activity, Written exam, Lab test
4. Install and configure Network services	Lab Activity
5. Create, edit, and save files using vi Editor.	Lab Activity, Written Exam, Lab test
6. Work productively in UNIX/Linux OS environments.	Lab Activity, Lab test
7. Demonstrate a list of UNIX/Linux file system management techniques.	Lab Activity, Lab test
8. Successfully install and configure a network monitoring system	Project

College Competencies:	Student Learning Objective:
1. TECHNOLOGICAL AND INFORMATION LITERACY – Students will demonstrate computer literacy, and will be able to retrieve, organize, and analyze information using both technological and traditional means.	1-8
2. COMMUNICATION – Students will read, write, speak, and listen effectively.	8
3. QUANTITATIVE REASONING – Students will correctly apply and reason about mathematical and formal concepts and operations, and will correctly interpret and analyze numerical data.	3, 8

4. CRITICAL THINKING—Students will actively reflect on, reason about, and form independent judgments on a variety of ideas and information, and use these skills to guide their beliefs and actions.	1,3,7,8
5. INTERPERSONAL SKILLS—Students will demonstrate an ability to maintain personal and professional relationships, engage in meaningful teamwork, and resolve conflicts.	8

Course Content: See course outline (available from instructor)

Assessment:

An average of 60% from combined assessment measures is required to demonstrate proficiency in course material.

Evaluation Criteria	Percent Of Grade
Quizzes, Labs, & HW	25%
Midterm Exam	25%
Final Exam	25%
Project	25%

Quizzes:

There will be several quizzes, averaged into your Quizzes / Lab grade, given at the beginning of random classes. The quiz material will be based upon the prior lectures and labs. A quiz cannot be made up if missed. A student entering class late, after a quiz has begun, will not be entitled to extra time to complete the quiz. Students entering class after a quiz is completed will not be permitted to take the quiz.

Projects, Assignments, Laboratory Work:

Assignments are hands-on productions that show the instructor that the student understands concepts presented in class and in the readings and can competently use specified software to apply specific concepts.

It is anticipated that students will spend at least 4 hours per week perfecting their skills and completing their assignments. Some assignments are required for grading. They must be submitted on the assignment due date, and cannot be handed in late. Acceptance of late assignments is solely at the discretion of the instructor.

Some assignments are instructional and need not be submitted. However lab assignments that are correct and complete and submitted on-time will help students prepare for graded assignments, quizzes, and exams.

Testing:

Students are required to take examinations on the day and time they are scheduled. If special circumstances require a test schedule adjustment, this must be worked out in advance with the instructor. If a student misses an exam (except for prearranged circumstances with the instructor) a zero grade will be assigned.

The instructor can be reached by telephone (see course outline for appropriate phone number), e-mail, or a written note can be left in the Divisional Office (during the day) or in the Adjunct Faculty Office. If there are extreme circumstances (documentation may be required) that prevent a student from taking a test or an exam according to the published schedule, the student should use one of the above options to contact the instructor before the next class. An arrangement for a special testing schedule is solely at the discretion of the instructor. A student who waits for the next class session to speak with the instructor will not be accommodated with a special test schedule.

Homework:

It is anticipated that students will spend 4-6 hours per week outside of class reading, studying, reviewing, and working with exercises and supplemental resources associated with this course. In addition to any homework assignment given during class, it is a **standing assignment** that the student read each chapter of the book prior to its discussion

Policies:

Lateness – The roll will be taken at the beginning of class. If the student is not in attendance at that time, he/she will be carried in the roll book as being absent unless the instructor is notified immediately after class. Attendance sheets cannot be adjusted at following class meetings.

The student must adhere to all college policies. Due to the nature of this course, it is recommended that the student review the policy titled "*Acceptable Information Technology Use at Bergen Community College*".

The use of portable electronic devices is not permitted while class is in session. Please be sure to silence electronic devices before entering class.

The use of electronic devices or college computers to play music during class is prohibited.

Students are expected to demonstrate listening, reading, note taking, and writing skills. The student will need to take notes during class discussions and understand and follow verbal and written directions. All assignments and correspondence with the instructor (including e-mail) must be well written in full sentence format. Proper paragraph format must be used for all postings to the student bulletin board (if applicable).

The subject line of all e-mail correspondence to the instructor must contain the course number and section and student's name. Any e-mail received without this information will not be opened.

Plagiarism in any form will be treated as a failure to complete an assignment. All work submitted should reflect individual effort by the student.

In borderline cases that arise in almost every class each semester a student's attendance, class participation, attitude, and observed effort will be considered in helping to determine the student's final grade.

If the instructor does not appear after 20 minutes following the scheduled time, students should generate an attendance list. One volunteer member need deliver the list, containing the course title, date, and instructor's name, to the Department Office.