Syllabus

COURSE GENERAL INFORMATION

Course Title: Linux I
Code: PWHL 1020
Contact Hours: 42.5
Term: April 8, 2021 to May 27, 2021
Teacher: Joel Vargas Ramos
Email: jvargas@passwordpr.com

Course Description

This course implements a "practice as you read" approach to learning. Each learner has hands-on access to a Linux virtual machine to practice, explore and trial Linux command line concepts. The learner is provided prescriptive step-by-step labs. These labs provide a learning environment where students interact with the Linux operating system and build on their skills and knowledge as they progress through the course.

Objectives

Knowledge of Linux is a helpful skill for a wide variety of careers in business and Information Technology fields. Many emerging and growing career opportunities including big data, cloud computing, cyber security, information systems, networking, programming and software development (to name a few) require basic to advanced knowledge of the Linux command line. During the course, students will study the following objectives:

- Understand Linux as an operating system
- Explain some of the considerations for choosing an operating system
- Understand some of the basics of open source software and licensing
- Acquire basic knowledge of working with Linux
- Learn basic Linux command line skills
- Learn how to use help commands and navigate help systems when using Linux
- Basics of how to work with Linux files and directories
- Searching and extracting data from Linux files
- Basic understanding of the concept of scripting
- Familiarity with the components of desktop and server computers
- Knowing where data is stored on a Linux system
- Querying vital network settings for a Linux computer on a Local Area Network
- Identifying various types of users on a Linux system
- Creating users and groups on a Linux system

- Managing Linux file permissions and ownership
- Understanding special Linux directories and files

Skills Distribution

- Linux Introduction
- Linux Distribution
- IPtables and Logs
- Commands for GNU and Linux
- Manage Packet and Process
- Basic Commands, Help and Operation Directory
- Permissions
- System Information
- Network, Editor and Partitions

Forums:

- Foro 1: Linus Torvalds Apologizes years unprofessional Rants
- Foro 2: Cuando las líneas de códigos atormentaban los programadores.
- Foro 3: Linux Mint y su Preocupación
- Foro 4: Dell incluirá un driver en Linux para aprovechar la privacidad
- Foro 5: Nginx un servidor cada vez más popular

Evaluation Criteria

CRITERIA	Grade total
Mid-Term Exam	100
Quizzes	100
Forums 1-5	100
Final Exam	100
Total	400

*3 Points less for each absence.

*Assignments are always due in class on the day designated. You are responsible for any work lost due to technical problems, etc. Late papers will lose a letter grade for each day that they are late. Any exceptions must be properly documented and discussed in advance for an extension to be arranged.

Educational Resources

Neo LMS (2021). Linux 1. *passwordtech.edu20*. https://passwordtech.edu20.org/

Linux Survival. (2021). *Linux Modules 1-4*. https://linuxsurvival.com/

Learn Shell (2021). Shell Programming Tutorial. https://www.learnshell.org/

Smith, R. (2017). *CompTIA Linux + Study Guide*. (2nd Edition). Indianapolis, Indiana.

Sybex John Wiley and Sons, Inc.

Notes

• *Reasonable Accommodation*: Any student who requires a reasonable accommodation should do the request at the beginning of the course or as soon as he / she acquires knowledge of what it requires, through the Professor in charge and this notifying the Academic Director.

• *Honesty, fraud, plagiarism:* The lack of honesty, fraud, plagiarism and / or any other inappropriate behavior in relation to the student's academic performance constitute violations of the Institution's Catalog, its Rules of Conduct and Student Duties. Major infractions, as determined by the Catalog, may result in the suspension of the Institution for a definite time or permanent expulsion as stipulated in the Norms of Conduct and Duties of the Student.