



BAKER COLLEGE

STUDENT LEARNING OUTCOMES

ITS2310 Linux I
3 Semester Credit Hours

Student Learning Outcomes and Enabling Objectives

1. Demonstrate knowledge of Linux evolution, operating systems, Open Source software licensing and choosing an operating system.
 - a. Describe Linux development and major Linux distributions.
 - b. List popular operating systems.
 - c. Summarize Open Source software and licensing.
2. Demonstrate knowledge of major Open Source applications, working with Linux at the command line, using directories and listing files.
 - a. Summarize Linux, cloud computing and virtualization.
 - b. Describe major types of applications, their uses and development.
 - c. Explain the basic components of the Linux command line.
 - d. Describe command line help and navigating different help systems.
 - e. Summarize how to access directories and list files.
3. Demonstrate knowledge of searching and extracting data from files, data storage, special directories and computer hardware components
 - a. Summarize the components that go into building desktop and server computers.
 - b. Explain how to work with files and directories under the home directory.
 - c. Describe how to archive, search and extract data from files in the home directory.
 - d. Describe how to work with Linux processes and process data.
 - e. Explain where various types of information are stored on a Linux system.
 - f. Describe the special directories and files on a Linux system including permissions.
4. Demonstrate knowledge of creating a script from commands, identifying user types, creating user groups, basic security, managing file permissions and ownership.
 - a. Explain how to use vi and convert commands into a script.
 - b. Summarize basic security.
 - c. Describe how to create users and groups.
 - d. Explain how to indentify user types.
 - e. Describe how to manage file permissions and ownership.

- f. Explain how to find and configure networking and for a computer on a LAN.

Big Ideas and Essential Questions

Big Ideas

- Operating Systems and Software Licensing
- Working at the command line
- Creating, searching, extracting and archiving data.
- Managing hardware and network connectivity.
- Setting basic security, creating user groups and setting ownership permissions.
- Editing directories and files.
- Creating scripts
- Working with processes and data.

Essential Questions

1. What is the history of Linux?
2. What is GNOME3 and how do you access the GNU operating system?
3. What are the different Linux distributions?
4. How would you check a Linux software license and copyright information?
5. What are Linux server, network and package management applications?
6. How do you access, get help and retrieve history at the command line?
7. How do you retrieve CPU information and hardware storage information?
8. How do you use grep, find, redirection and pipes?
9. How is compression archiving performed on a Linux system?
10. How do you find Linux processes and display process information?
11. How do you access, edit and save a file with both vi and nano?
12. How do you make batch files and advanced scripts?
13. How do you set file permissions and create or delete user accounts and groups?
14. How are file permissions set?
15. How do you test network connectivity and manage network information on your system?

These SLOs are for experiential credit.

Effective: Summer 2021