

**University of Arkansas - Fort Smith
5210 Grand Avenue
P. O. Box 3649
Fort Smith, AR 72913-3649
479-788-7000**

General Syllabus

CPSI 21233 Linux Foundations

Credit Hours: 3 Lecture Hours: 1 Laboratory or other types of Hours:4

Prerequisite: CPSI 12433 Networking with Enterprise Devices

Effective Catalog: 2021-2022

I. Course Information

A. Catalog Description

Introduces the foundations of using Linux workstation/server software for networking infrastructure as well as housing business applications.

II. Student Learning Outcomes

A. Subject Matter

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

1. Install or provision Linux server software to meet a given set of data sharing requirements
2. Install, configure and maintain Linux server software to service network infrastructure (DHCP/DNS/SLAAC etc..) application requirements
3. Install, configure, and maintain Linux server software to service organization (directory services/print services/webservices etc...) requirements.
4. Explain the capabilities and applications of virtualization technologies
5. Use a scripting language to automate the administration of Linux servers.

B. University Learning Outcomes (ULO)

This course enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills: Students will identify a problem or issue, then generate solutions/analysis of problems/issues evaluated.

III. Major Course Topics

- A. Overview of server technologies
- B. Installation / provisioning of Linux workstation/server
- C. Compute / storage / networking considerations
- D. Security considerations
- E. Network infrastructure (DNS/DHCP/SLAAC/ etc...)
- F. Organizational infrastructure (directory services/file/print/storage/Internet)
- G. Virtualization services and considerations
- H. Administration and monitoring