

**University of Arkansas - Fort Smith**  
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### **General Syllabus**

#### **NET 2123 Linux Foundations**

Credit Hours: 3

Lecture Hours: 1

Laboratory or other types of Hours:4

Prerequisite: NET 1243 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