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

General Syllabus

CPSI 21133 Microsoft Server 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 Microsoft server software for networking infrastructure as well as hosting 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 Microsoft server software to meet a given set of data sharing requirements
- 2. Install, configure, and maintain Microsoft server software to service network infrastructure (DHCP/DNS/SLAAC etc.) application requirements.
- 3. Install, configure, and maintain Microsoft server software to service organization (directory services/print services/webservices etc.) requirements.
- 4. Explain the capabilities and applications of virtualization technologies, such as Infrastructure As A Service (IAAS), Platform As A Service (PAAS), Software As A Service (SAAS) and other virtualization technologies.
- 5. Use a scripting language to automate the administration of Microsoft 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.

Ethical Decision Making

Students will identify ethical dilemmas and affected parties in Microsoft Server administration.

III. Major Course Topics

- A. Overview of server technologies
- B. Installation / Provisioning of Windows Server
- C. Compute / Memory / 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