

Department:

Computer Support Technology

Course Description:

This course is designed as an introduction to server operating systems and virtualization. The course will examine typical network hardware, network architectures, data transmission, and popular network technologies as well as how communication layers and their protocols are used on a network. The course will introduce students to working with various server operating systems and hypervisors, and the installation of various client operating systems in a virtualized environment.

Course Competencies:

Upon completion of the course, the student should be able to:

1. Identify and install appropriate server system hardware.
2. Install, configure, and troubleshoot software on a networked environment.
3. Install, configure, and troubleshoot network storage.
4. Design, implement, and manage a client/server environment.
5. Understand disaster recovery processes and procedures.
6. Troubleshoot server and network issues appropriately.

Course Content:

- A. Dive Into Windows Server Hybrid Infrastructure
- B. Discover Active Directory
- C. Manage Active Directory Accounts
- D. Configure Group Policies
- E. Configure Domains
- F. Manage Windows Server in a Hybrid Environment
- G. Configure DNS
- H. Manage IP Addressing
- I. Implement Network Connectivity
- J. Configure Storage and File Services
- K. Configure Advanced Storage Solutions
- L. Implement Virtualization with Hyper-V
- M. Implement Advanced Virtualization

Learning Assessments:

Competencies will be assessed by assignments, case problems, quizzes, chapter tests, hands-on projects, lab assignments, a midterm test, and a final test. The test can be in the objective format or in a problem solving format.

Instructional Materials:

Textbook: Tomsho, G. (2023). *Microsoft Exam AZ-800: Guide to Administering Windows Server Hybrid Core* (1st ed.). Boston, MA: Cengage Learning. ISBN-13: 9780357511800

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the “Disabilities Self-Identification Form” on our [Disability Services website](#).

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an [online report](#) about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our [Equity Grievance Policy](#).