

Louisiana Delta Community College

Academic Affairs Master Syllabus

Course Name: NETWORKING TECHNOLOGIES

Course Number: INCT 2110

Credit Lecture hours: 2 **Credit Lab Hours:** 2 **Contact Hours:** 90

Textbook, Author, and Publisher: To be provided by College Campus

Instructor Information: To be provided by College Campus

Class Location: To be provided by College Campus

Course Description: This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. It uses the OSI and TCP layered models to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum.

Prerequisites: None

Co-requisites: None

Learning Outcomes:

On completion of this course, the student should be able to perform the following with a proficiency that complies with the minimum standard of industry:

1. Explain the importance of data networks and the Internet in supporting business communications and everyday activities
2. Explain how communication works in data networks and the Internet
3. Recognize the devices and services that are used to support communications across an Internetwork
4. Use network protocol models to explain the layers of communications in data networks
5. Explain the role of protocols in data network
6. Describe the importance of addressing and naming schemes at various layers of data networks
7. Describe the protocols and services provided by the Application layer in the OSI and TCP/IP models and describe how this layer operates in various networks
8. Analyze the operations and features of the Transport layer protocols and services
9. Analyze the operations and feature of the Network layer protocols and services and explain the fundamental concepts of routing
10. Design, calculate, and apply subnet masks and addresses to fulfill given requirements

Learning Outcomes continued:

11. Describe the operation of protocols at the OSI Data link layer and explain how they support communications
12. Explain the role of Physical layer protocols and services in supporting communications across data networks
13. Employ basic cabling and network designs to connect devices in accordance with stated objectives
14. Build a simple Ethernet network using routers and switches
15. Use Cisco CLI commands to perform basic router and switch configuration and verification
16. Analyze the operations and features of common Application layer protocols such as HTTP, DNS, DHCP, SMTP, Telnet, and FTP
17. Utilize common network utilities to verify small network operations and analyze data traffic

Assessment Measures: To be provided by the College Campus.

Library Resource Center:

The Delta Library and Learning Resource Center is committed to providing quality information and learning resources and services, including technology, in supporting the overall mission of Delta Community College and its commitment to lifelong learning.

Special Accommodations:

Louisiana Delta Community College complies with Section 504 of the Rehabilitation Act, as well as the Americans with Disabilities Act. Students with disabilities who attend the Monroe campus may make a request by contacting the Director of Counseling and Disability Services (See College Directory for contact information.) at the beginning of each semester. Reasonable accommodations will be attempted for students with documented disabilities. If an impairment is identified later in the semester, a non-retroactive accommodation plan will be developed. Students at satellite campuses should contact the Coordinator of Student Affairs at their particular campus.

Title IX:

Louisiana Delta Community College is committed to protecting the rights of students, which includes compliance with Title IX requirements. As such, the institution and members of our community will not tolerate the offenses of dating violence, domestic violence, sexual assault, and stalking. Students with Title IX concerns should contact the College's Title IX Coordinator (See College Directory for contact information.) Students are required to complete Sexual Assault Awareness and Prevention Online Training. Access to this online course will be sent out through the Delta email account.

Student Code of Conduct:

Louisiana Delta Community College encourages an environment of academic integrity and mutual respect. Students should read and follow both academic and behavioral expectations identified in the Code of Student Conduct that can be found online at www.ladelta.edu. Students are expected to act with integrity, respect the rights of others, and conduct themselves in a professional manner. The Honor Code prohibits academic misconduct such as cheating, engaging in unauthorized collaboration, and plagiarism. Violations of the Code of Student Conduct may result in disciplinary action as provided in the Code. Incidents are reported through the online Student Conduct system.