

**NWACC Business & Computer Information Division
Computer Information Department Course Outlines**

NTWK 2224 WAN IMPLEMENTATION AND SUPPORT (ON DEMAND)

Course Number and Title

NTWK 2224 WAN Implementation and Support

Catalog Description

The focus of this course is on the WAN technologies and network services required by converged applications in a complex network. In this course, students will learn the selection criteria of network devices and WAN technologies to meet network requirements. Students will learn to describe network architectures and how to monitor network traffic using syslog, SNMP, and NetFlow. Broadband connections and secure connections through broadband such as virtual private networks (VPNs) and IPsec tunneling are covered. This course will assist students in preparing for the ICND2 or the CCNA exam which are industry recognized certifications. Preparation for the ICND exam should include both NTWK 2214 and 2224. Preparation for the CCNA exam should include all four semesters of CCNA training (NTWK 2014, NTWK 2084, NTWK 2214, and NTWK 2224)

Prerequisites

NTWK 2014 Network & Information Systems (CCNA1)
NTWK 2084 Network Hardware (CCNA 2)
NTWK 2214 Switching Basics and Intermediate Routing (CCNA 3)

Credit Hours/Contact Hours/Load Hours

4/4/4

Target Audience/Transferability

The target audience includes but is not necessarily limited to the following:

- Students pursuing a career in Networking or other computer-related field.
- Students who wish to enhance their understanding of networking equipment.
- Community members or Networking professionals who wish to expand their understanding of networking systems.

This course does not transfer to the University of Arkansas, Fayetteville.

Student Learning Outcomes

Students completing this course will:

- Configure and troubleshoot PPP
- Configure and troubleshoot Frame Relay
- Configure and troubleshoot dynamic and static NAT & PAT
- Describe the operations and benefits of virtual private networks (VPNs) and tunneling
- Configure and troubleshoot serial connections
- Configure and troubleshoot broadband connections
- Configure and troubleshoot IPsec tunneling operations
- Monitor and troubleshoot network operations using syslog, SNMP, and NetFlow
- Describe network architectures

Forms of Assessment

On-line chapter quizzes, hands-on lab assignments, a case study, a comprehensive on-line final exam and a comprehensive hands-on final exam will be required.