Northeast Texas Community College

ITNW 2312 088 – Routers (Online)

Course Syllabus: Spring 2026

Instructor: Sebastian Barron

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Office Hours: Available via Microsoft Teams upon request

This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change.

Should that happen, the student will be notified.

Course Description:

3 credit hours. Implement, configure, and maintain routers and switches in an enterprise network. Configure and troubleshoot VLANs, inter-VLAN routing, OSPF, ACLs, and NAT.

Prerequisite(s):

ITCC 1314 or Instructor Approval.

Student Learning Outcomes:

1. Configure and troubleshoot routers and switches in a small to medium-sized network.
2. Resolve common VLAN routing issues.
3. Configure and troubleshoot Access Control Lists (ACLs) for IPv4 and IPv6.
4. Configure and troubleshoot NAT (Network Address Translation) and PAT.
5. Configure and troubleshoot DHCP on routers and switches.
6. Implement and verify WAN connections and routing protocols (OSPF).

Evaluation/Grading Policy:

The final grade will be determined by the following weighted criteria:

- **Labs (NetAcad/Packet Tracer):** 40%
- **Exams:** 40%
- **Discussion Questions:** 20%

Grades will be returned to students within one week of the assignment due date.

- **A:** 90% - 100%
- **B:** 80% - 89%
- **C:** 70% - 79%
- **D:** 60% - 69%
- **F:** Below 60%

Required Instructional Materials:

Publisher: Cisco Press

Title: Switching, Routing, and Wireless Essentials Companion Guide (v7/v8)

ISBN Number: 978-1-64274-613-6

Access: Inclusive Access (Access provided via Blackboard Day 1)

Note: This course uses the Cisco Networking Academy (NetAcad) platform for all labs and exams.

Optional Instructional Materials:

Minimum Technology Requirements:

Students must have daily access to a computer with high-speed internet to access Blackboard and complete NetAcad assignments. Students must also have a mobile phone capable of running the Microsoft Teams app.

Required Computer Literacy Skills:

Basic knowledge of operating systems (Windows/Linux), file management, and internet navigation.

Course Structure and Overview:

This is a fully online course utilizing the Cisco Networking Academy curriculum.

- **Weekly Schedule:** The course works on a 7-day cycle. Each week begins on Monday and ends on Sunday.
- **Assignments:** Students will engage in weekly modules that include reading assignments, Packet Tracer simulations, and module exams.

- **Deadlines:** All weekly assignments (Labs, Exams, and Discussions) are due by 11:59 PM on Sunday night.

Communications:

Emails will be responded to within 24 hours during the week and 48 hours on weekends.

Microsoft Teams Instructions:

Students are required to download the Microsoft Teams app on their mobile phone. Log in with your NTCC email address and password. Once logged in, select "Teams" and look for the Microsoft Team labeled with this course name. This will be the primary method for contacting the instructor for office hours and quick questions.

Reminder: NTCC email is the official form of communication used by the college.

Institutional/Course Policy:

- **Attendance:** Regular participation is crucial.
- **Late Work Policy:** Work for the week is due by 11:59 PM Sunday night. Late work is not accepted unless prior arrangements are made with the instructor.

Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (http://www.ntcc.edu/) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Statement Regarding the Use of Artificial Intelligence (AI) Technology:

Absent a clear statement from a course instructor, use of or consultation with generative AI shall be treated analogously to assistance from another person (collusion). Unauthorized use of generative AI tools to complete an assignment or exam is not permitted. Students should acknowledge the use of generative AI and default to disclosing such assistance when in doubt.

NTCC Academic Honesty/Ethics Statement:

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action.

ADA Statement:

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264.

Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records.

Tentative Course Timeline (*note* instructor reserves the right to make adjustments at any point):

Week	**Dates**	**Module / Topic**
Week 1	Jan 20 - Jan 25	Module 1: Basic Device Configuration
Week 2	Jan 26 - Feb 1	Module 2: Switching Concepts
Week 3	Feb 2 - Feb 8	Module 3: VLANs
Week 4	Feb 9 - Feb 15	Module 4: Inter-VLAN Routing
Week 5	Feb 16 - Feb 22	Module 5: STP Concepts & Module 6: EtherChannel
Week 6	Feb 23 - Mar 1	Module 7: DHCPv4
Week 7	Mar 2 - Mar 8	Module 8: SLAAC and DHCPv6
Week 8	Mar 9 - Mar 15	Module 9: FHRP Concepts (Class is in Session)
Week 9	Mar 16 - Mar 22	Module 10: LAN Security Concepts
Week 10	Mar 23 - Mar 29	Module 11: Switch Security Configuration
Week 11	Mar 30 - Apr 5	Module 12: WLAN Concepts
Week 12	Apr 6 - Apr 12	Module 13: WLAN Configuration
Week 13	Apr 13 - Apr 19	Module 14: Routing Concepts
Week 14	Apr 20 - Apr 26	Module 15: IP Static Routing
Week 15	Apr 27 - May 3	Module 16: Troubleshoot Static and Default Routes
Week 16	May 4 - May 8	**Final Exams**