

# Syllabus

## College of Computing and Computer Engineering

### Department of Computer Science

#### CSCE 4535: Introduction to Network Administration

#### Spring 2026 Section 501

### Instructor Information

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Instructor: Dr. James E. Freedle II  
Office Location: Frisco Landing FRLD 366  
Email: [james.Freedle@unt.edu](mailto:james.Freedle@unt.edu)

### Course Description, Structure, and Objectives

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Students will explore topics in network administration in theoretical and practical way, study different software platforms, control, shared resources, administration, security, anti-virus proceedings and methodologies.. The class will be an in person face to face class.

### Course Learning Outcomes

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1. Demonstrate understanding of IP addressing, sub-netting and networks configuration but configuring and setting up a network across a heterogeneous group of computers.
2. Describe network planning and design of local-area-network (LAN) and wide-area-network (WAN) networks.
3. Describe quality of service (QoS) parameters and how they relate to network availability.
4. Configure, operate and troubleshoot routing protocols such as Open-Shortest-Path-First (OSPF) and Border-Gate-Protocol (BGP).
5. Install and configure simple network security tools such as Intrusion-Prevention-System (IPS), Intrusion-Detection-System (IDS), firewalls and virus scanners.
6. Evaluate network performance both by simulation and by designing, gathering, and analyzing experiments.

### Course Requirements and Assignments

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All class lecture presentation slides, assignments, projects, and textbook assignments are available on the Canvas site. All assignment submissions will be uploaded to Canvas. Emailing submissions to the TA or Instructor will not be accepted. Please check the Canvas Calendar and syllabus for due dates.

### Weekly Tasks:

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Each week, we will cover a chapter, and each module will include assignments, labs, participation, and challenge activities. All submissions are due by Sunday at 11:59 pm. Late assignments will be accepted within two days of the due date with a 10%/day penalty.

### How to Succeed in this Course

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Class Meeting Time: Monday and Wednesday 3:30 pm to 4:50 pm in FRLD 448  
Office/Student Hours: Monday through Thursday 1 pm to 2 pm and by [Appointment](#) via Microsoft Teams

You may contact me via Canvas or UNT email, but it must be through your UNT email account, no personal accounts. In the subject line, you need to put the course and section (CSCE 4535 §501:) along with one or two words of the reason for your communication. You may also contact me through Microsoft Teams, either chat or audio call. I receive a lot of email so give me 1 to 2 business days for a response, however if you see me online and available in Microsoft Teams, you can certainly contact me with any quick questions. Office hours (Student hours) offer you an opportunity to ask for clarification or find support with understanding class material. Come

and visit me! I encourage you to connect with me and/or my TA for support. Additional office hours, in person and virtually, may be offered as the semester concludes. Your success is our goal.

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time; however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the [Office of Disability Access](https://studentaffairs.unt.edu/office-disability-access) website (<https://studentaffairs.unt.edu/office-disability-access>). You may also contact ODA by phone at [\(940\) 565-4323](tel:9405654323).

UNT strives to offer you a high-quality education and a supportive environment, so you learn and grow. As a faculty member, I am committed to helping you be successful as a student. To learn more about campus resources and information on how you can be successful at UNT, go to [unt.edu/success](https://unt.edu/success) and explore [unt.edu/wellness](https://unt.edu/wellness). To get all your enrollment and student financial-related questions answered, go to [scrappysays.unt.edu](https://scrappysays.unt.edu).

## Supporting Your Success and Creating an Inclusive Learning Environment

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Every student in this class should have the right to learn and engage within an environment of respect and courtesy from others. We will discuss our classroom's habits of engagement and I also encourage you to review UNT's student code of conduct so that we can all start with the same baseline civility understanding ([Code of Student Conduct](https://policy.unt.edu/policy/07-012)) (<https://policy.unt.edu/policy/07-012>).

## Required/Recommended Materials

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**Required Textbook:** *Unix + Linux System Admin Handbook 5th Edition; Nemeth, Pearson. ISBN 9780133594140*

- This course has digital components. To fully participate in this class, students will need internet access to reference content on the Canvas Learning Management System. If circumstances change, you will be informed of other technical needs to access course content. Information on how to be successful in a digital learning environment can be found at [Learn Anywhere](https://online.unt.edu/learn) (<https://online.unt.edu/learn>).

Prerequisite (should have a grade of C or better):

- [CSCE 3530: Introduction to Computer Networking](#)

## Course Requirements/Schedule

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Here is the schedule as planned. Depending upon the circumstances the schedule is subject to change and the assignments will be updated in Canvas.

<b>Date</b>	<b>Topic</b>	<b>Assignment</b>
1/12, 14	Course Introduction	Quiz, Discussion, Assignment
1/19, 21	Network Administration Basics	Discussion, Assignment
1/26, 28	Introduction to Networking	Discussion, Assignment
2/2, 4	TCP/IP	Quiz, Discussion, Assignment

<b>Date</b>	<b>Topic</b>	<b>Assignment</b>
2/9, 11	Subnetting	Quiz, Discussion, Assignment
2/16, 18	Fundamentals in Network Communication and Protocols	Assignment, Quiz, Practicum
2/23, 25	Network Fundamental Services (NAT, PAT)	Assignment
3/2, 4	Midterm Review, Midterm Exam	Midterm Exam (In Person)
3/9, 11	Spring Break	
3/16, 18	Quality of Service (QoS)	Assignment, Discussion, Practicum
3/23, 25	Network Security Management	Assignment
3/30, 4/1	Intrusion Detection (IDS) & Intrusion Prevention (IPS) System	Quiz, Discussion, Assignment
4/6, 8	Firewalls	Discussion, Assignment
4/13, 15	Firewalls	Quiz
4/20, 22	Ethical Hacking	Assignment, Practicum
4/27, 29	Course Review	
<b>Finals Week</b>	The final exam will be posted in Canvas when made available	<b>Final Exam (In Person)</b>

You will be notified by Eagle Alert if there is a campus closing that will impact a class and the calendar is subject to change, following the [Campus Closures Policy \(https://policy.unt.edu/policy/15-006\)](https://policy.unt.edu/policy/15-006).

## Assessing Your Work

The final grade will be assessed using the following grade distribution:

<b>Group</b>	<b>Weight</b>
Individual Assignments	30%
Discussions	10%
Practicum — Labs	20%
Quizzes	20%
Exams	20%
<b>Total</b>	<b>100%</b>

### Grading scale:

A = 90% to 100%  
 B = 80% to <90%  
 C = 70% to <80%  
 D = 60% to <70%  
 F = <60%

## Course Policies

### Submission Policy

Students are responsible for submitting the correct assignments in the correct assignment location in Canvas. If you have any questions or concerns about your submission, please work with your instructor or TA to ensure that the correct file(s) is/are submitted.

### *AI Course Policy*

In this course, the use of GenAI (Generative Artificial Intelligence) tools is not permissible for any coding assignments. No matter the approach, any attempt to represent GenAI output as a student's own work will be considered fabrication, cheating, and/or academic dishonesty as determined on a case-by-case basis. Using GenAI tools to proofread and grammar-check is permitted.

### *Make-up Work Policy*

Missed exams or assignments due to illness or in the event of an unavoidable absence, make-up work will only be allowed by providing the instructor with a physical copy of a signed doctor's note or any proof in the event of an unavoidable absence. See the [UNT Class Attendance Policy](#) for more information.

### *Academic Integrity and Collaboration Policy*

Check UNT policy 06.003 that defines the breaches of academic integrity: from Cheating, Plagiarism, Forgery, Fabrication, Facilitating Academic Dishonesty,... etc.

Cheating of any sort will not be tolerated in this course. All submissions must be your own original work. Taking information or code from the internet or other students is considered a breach of academic integrity. Failure to adhere to these strict standards will be cause for disciplinary action that could be as severe as expulsion from the university. If it is determined a student cheated on any assignment in this course they will receive an F for this final course grade and an academic integrity report will be filed with the Office of Academic Integrity. Further, UNT is now maintaining a database recording any acts of academic dishonesty that is available to employers. For more information see the [UNT Student Academic Integrity Policy](#).

*Honor Code: "I commit myself to honor, integrity, and responsibility as a student representing the University of North Texas community. I understand and pledge to uphold academic integrity as set forth by [UNT Student Academic Integrity Policy, 06.003](#) (<https://policy.unt.edu/policy/06-003>). I affirm that the work I submit will always be my own, and the support I provide and receive will always be honorable."*

### *Attendance and Participation*

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Student attendance will be recorded. Every student who misses a class or a lab is responsible to learn the materials discussed. It is the student's responsibility to obtain the homework assigned on the missed class. I have great respect for students who are balancing the demands of their coursework with the responsibilities of caring for family members. If you run into challenges that require you to miss a class, please contact me or my TA. There may be some flexibility we can offer to support your academic success.