Introduction to Computer Networks
CSCE 3530, Section 002/005
Fall 2020

Class Timings: Monday and Wednesday 4:00 PM – 5:20 PM, Face-to-Face: D215 and Remote delivery using Zoom: https://unt.zoom.us/j/91648218721

Instructor: Robin Pottathuparambil, Email: rpottath@unt.edu, Office hours: Tuesday and Thursday 10:30 AM – 12:30 PM or by appointment. Zoom Meeting: https://unt.zoom.us/j/95963486917

Teaching Assistants:
- Alakananda Mitra, Email: alakanandamitra@my.unt.edu, Help hours: Tuesday and Thursday, 2:00 PM – 4:00 PM. Zoom Meeting: https://unt.zoom.us/j/4064206033
- Vishnu Theja Reddy Madavaram Janaki, Email: vishnuthejareddymadavaramjanaki@my.unt.edu, Help hours: Friday, 12:00 PM – 2:00 PM or by appointment. Zoom Meeting: https://unt.zoom.us/j/96824988726
- Soujanya Dawalagiri, Email: soujanyadawalagiri@my.unt.edu, Help hours: Wednesday and Friday, 8 AM – 10:00 AM. Zoom Meeting: https://unt.zoom.us/j/7357631029
- Jyothi Reddy Guduru, Email: jyothireddyguduru@my.unt.edu, Help hours: Wednesday, 10:00 AM – 12:00 PM. Zoom Meeting: https://unt.zoom.us/j/94057627698

Peer Mentor: Omer Saeday, Email: omersaeday@my.unt.edu, Help hours: Tuesday and Thursday, 12:00 PM – 2:00 PM and Monday, Wednesday, and Friday, 5:30 PM – 7:30 PM. Zoom Meeting: https://unt.zoom.us/j/2727665300

Course Webpage: All the course related material will be posted on the course webpage which is available through Canvas (https://learn.unt.edu).

Course Outcomes:
- Understand a conceptual view of the role of computers in communications
- Understand communication protocols in the Internet
- Be able to do fundamental network programming
- Understand different network architecture
- Recognize the role of application protocols
- Understand different routing and forwarding protocols.

Text: *Computer Networking: A Top-Down Approach featuring Internet* 7th edition, Kurose and Ross, Addison Wesley, ISBN-13: 9780133594140.

Catalog Description: Prerequisite: CSCE 3600. Introduction to data communications; asynchronous, synchronous, networks and current technology.

Topics:
- Computer Networks and the Internet
- Application Layer
- Transport Layer
- The Network Layer: Data Plane
- The Network Layer: Control Plane
- The Link Layer

Grading:

Class Activities	6%
Homework	12%
Quizzes	12%
Programming Assignments	20%
Midterm Exam (10/12/2020)	20%
Comprehensive Final Exam (12/09/2020)	30%

Class Activities: There will be several class activities during the class session that will reinforce the concepts that we learned in the class. These class activities will be scheduled during the class timing and you are required to be available during the class time to take the class activities.

Homework: Homework will be in the form of definitions, theoretical questions, and problem sets with a due date one week after it is assigned. Homework will be normally assigned on **Tuesdays** and will be due one week after it is assigned. **No late homework will be accepted.** Homework must be done individually (you will learn the most from this). Any evidence of group participation or direct copying from unauthorized sources (Example: previous year's solutions, textbook solutions, Wikipedia, and websites) will be interpreted as academic dishonesty. There will be six to seven homework assignments throughout the semester.

Quizzes: There will be six to seven pop quizzes given throughout the semester. The pop quizzes can be given any time during the class and you are required to be available during the class time to take the quizzes. These will be to reward students who consistently attend the class but will be more than just attendance points. **These quizzes can be only taken using Respondus LockDown browser, webcam, and a microphone.**

Programming Assignments: The programming assignments are an integral part of the course and are intended to provide experience in the application of the design techniques discussed in lecture. Programming assignments will be assigned on Tuesdays as per the schedule and with a due date of two weeks after it is assigned. There will be five to six programming assignments assigned. Programming assignments must be done on the CSE servers (cse01 – cse06). Any evidence of group participation will be interpreted as academic dishonesty.

Exams: There will be a midterm exam and a final exam. The exams are closed books and closed internet. Mobiles phones are not permitted and browsing the internet is not allowed. **These exams require Respondus LockDown browser, webcam, and a microphone.** Exams will include material from the modules, the readings, homework, and programming assignments and should be taken individually and not as a team. Final exam will be comprehensive.

- **Midterm Exam:** Total time allowed is 80 minutes and will be available on Canvas from Monday, October 12th, 2020 4:00 PM till 6:00 PM
- **Comprehensive Final Exam:** Total time allowed is 2 hours and will be available on Canvas from Wednesday, December 9th, 2020 1:30 PM till 4:30 PM.

Missing Assignments and Exams: All the exams, quizzes, class activities, and other assessments are mandatory. Throughout the semester, a student may miss assignments, quizzes, or exams due to many reasons. Most of the reasons will not be accepted as an "excused" absence. Assignments, quizzes, or

exams can be made-up only under extraordinary circumstances and only when notification is given to me before the quiz or exam is administered. A no-show for a quiz or exam without prior notification and a verifiable excuse (appropriate official documentation) results in a grade of zero (0) for that quiz or exam.

COVID-19 Impact on Attendance: While attendance is expected as outlined above, it is important for all of us to be mindful of the health and safety of everyone in our community, especially given concerns about COVID-19. Please contact me if you are unable to attend class because you are ill, or unable to attend class due to a related issue regarding COVID-19. It is important that you communicate with me prior to being absent so that I can decide about accommodating your request to be excused from class.

If you are experiencing any symptoms of COVID-19 please seek medical attention from the Student Health and Wellness Center (940-565-2333 or askSHWC@unt.edu) or your health care provider PRIOR to coming to campus. UNT also requires you to contact the UNT COVID Hotline at 844-366-5892 or COVID@unt.edu for guidance on actions to take due to symptoms, pending or positive test results, or potential exposure. While attendance is an important part of succeeding in this class, your own health, and those of others in the community, is more important.

Class Materials for Remote and Face-to-Face Instruction: The UNT fall schedule requires this course to have remote and face-to-face instruction. Additional remote instruction may be necessary if community health conditions change or you need to self-isolate or quarantine due to COVID-19. Students will need access to a laptop, calculator, webcam, and microphone to participate in the remote and face-to-face class. Additional required classroom materials for remote learning include access to cse severs. Information on how to be successful in a remote learning environment can be found at https://online.unt.edu/learn.

Statement on Face Covering: Face coverings are required in all UNT facilities. Students are expected to wear face coverings during the face-to-face class. If you are unable to wear a face covering due to a disability, please contact the Office of Disability Access to request an accommodation. UNT face covering requirements are subject to change due to community health guidelines. Any changes will be communicated via the instructor.

Disputing Grades: If you have a dispute with how an assignment, quiz, or exam is graded, you should get the solution to the assignment, quiz, or exam off the class web site and examine it. If you really believe that your answer is correct (matches the answer given in the solution), contact the grader and discuss it with him. The grader will listen to your concern, and act on it, at their discretion. In any case, they will sign the assignment verifying that they saw it again. The programming assignments will not have solutions posted, so contact the grader for disputing the grade if you have met all the requirements of the programming assignment and you have lost points. Note that instructor or grader addition errors should follow the above procedure. Assignment, quiz, exam, and homework grades are disputable for **one week** from the day the grades were assigned on Canvas.

Class Policies: Please make sure you are always muted during the remote class session. When you have a question, you can use the 'raise hand' option at end of each topic to ask a question. The instructor will give you a chance to ask your question. The use of cell phones, beepers, or communication devices is disruptive and is therefore absolutely prohibited during the class session and exams. Turn off your cell phone during the class session and while taking exams. If I catch you using these devices during the class or during the exams, the penalty can range from a formal warning to an 'F' for the course and you will be asked to leave the remote class. Except in emergencies, students using such devices must leave the class for the remainder of the class period. I know that some of you may wish to take notes directly on your computer and I have no problem with that. If, however, you choose to access your email, search the web, play games, or instant messenger your friends during class, you will have 10% deducted from your final grade for each transgression. If I am arriving late to the class, it will be because of circumstances beyond

my control. You are expected to remain for 20 minutes past the scheduled class start time while I attempt to communicate my situation and relay instructions.

Grading Policies: You are expected to spend at least 10 hours per week for this course. Keep all your graded assignments, quizzes, and tests for study and review. You should track your own progress on Canvas and be aware of current grades throughout the term. Final grading will be done as follows. **A**: >= 90%, **B**: >= 80% and < 90%, **C**: >= 70% and < 80%, **D**: >= 60% and < 70% and **F**: < 60%. Grades will be curved if necessary. Grades cannot be changed after they have been electronically entered into the university's system except for instructor error. Any extenuating circumstances that may adversely affect your grade must be brought to my attention before the final course grades are recorded. To be considered, such circumstances must be unusual, unavoidable, and verifiable.

Syllabus Revisions: This syllabus may be modified as the course progresses. Notice of such changes will be by email or announcement in class.

Disability Services/Special Needs: UNT complies with all federal and state laws and regulations regarding discrimination including the Americans with Disability Act of 1990 (ADA). If you have a disability and need a reasonable accommodation for equal access to education or services, please contact the Office of Disability Accommodation. Please initiate this process and inform me during the first two weeks of class.

Academic Dishonesty: All the provisions of the University code of academic integrity apply to this course. In addition, it is my understanding and expectation that your signature on any test or assignment means that you neither gave nor received unauthorized aid. For homework and programming assignments, while discussion is allowed, direct copying is not, and students must turn in individual submissions. All students are required to know, observe and help enforce the UNT Code of Student Academic Integrity. Cheating will result in disciplinary action according to UNT Policy 18.1.16. The penalty for a first offense can range from a formal warning to an 'F' for the course. Regardless of the penalty imposed, a record of the offense will be kept in the Office of the Dean of Students.

Student Perceptions of Teaching (SPOT): Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The short SPOT survey will be made available **November 16th – December 3rd** to provide you with an opportunity to evaluate how this course is taught.

ABET Survey: Towards the end of the course, the students will be asked to ABET exit survey which will help instructors to quantitively measure whether the students met the course outcomes stated in the course syllabus. This survey will be administered during the last week of classes.

Tentative Course Schedule:

Week	Lecture	Assignments Due
08/24 – 08/28	Computer Networks and the Internet	
08/31 – 09/04	Computer Networks and the Internet	
09/07 – 09/11	Application Layer	Homework 1
09/14 – 09/18	Application Layer	Programming Assignment 1
09/21 – 09/25	Application Layer	Homework 2
09/28 – 10/02	Transport Layer	Programming Assignment 2
10/05 – 10/09	Transport Layer	Homework 3
10/12 – 10/16	Transport Layer/Review	Midterm Exam
10/19 – 10/23	Transport Layer	
10/26 – 10/30	Network Layer: Data Plane	Programming Assignment 3
11/02 – 11/06	Network Layer: Data Plane	Homework 4
11/09 – 11/13	Network Layer: Control Plane	Programming Assignment 4
11/16 – 11/20	Network Layer: Control Plane	Homework 5
11/23 – 11/27	Link Layer	Programming Assignment 5
11/30 – 12/04	Link Layer/Review	Homework 6
12/07 – 12/11	No Lecture	Comprehensive Final Exam