Dr. Mohammed Atiquzzaman DEH 250 (405) 325-8077 atiq@ou.edu

CS 4133/5133 Data Networks – Fall 2025

Instructor:

Dr. Mohammed Atiquzzaman School of Computer Science,

Email: atiq@ou.edu, Tel: (405) 325 8077

Office Hours: Tues and Thu 9:15 – 10:15 AM through Zoom on or by appointment https://oklahoma.zoom.us/i/98672288200?pwd=OZNwcNsqhbHHP6obtqHo1ZDtl9YvRQ.1

Meeting ID: 986 7228 8200 Passcode: 87206140

Teaching Assistant:

TBD

Office Hours: TBD by Zoom or by appointment on Zoom

Zoom Link: TBD

Lecture Schedule:

This course meets on Tue and Thu 12 noon – 1.15 PM through Zoom. Log on to the following Zoom meeting for the lectures.

https://oklahoma.zoom.us/j/95189998082?pwd=wzsCBCo0B7wxOO0GoTHUKdO5Hf3Qsl.1

Meeting ID: 951 8999 8082 Passcode: 05624528

Course Description:

This course provides a comprehensive treatment of the data networking principles, including layered protocol design and its functions, tools for performance analysis, multi-access communication, routing, and flow control.

Course Focus:

This course focuses on obtaining a broad picture of the different types of computer networks, grasping the concept of layers in computer networks, acquiring the fundamental concepts of the Internet and TCP/IP protocol, and acquiring knowledge about performance evaluation techniques for computer networks.

Prerequisite:

CS 3113 (Intro to Operating Systems) or permission of the instructor is a prerequisite for CS 4133 / CS 5133. Any student who has not completed at least one of these prerequisite courses (as stated in the University of Oklahoma catalog) will be subject to administrative withdrawal at any time before final grades are released.

Texts and References:

- Andrew S. Tanenbaum, "Computer Networks," Prentice Hall, Fourth edition.
- Notes will be available on the web through the Canvas course management system
- Additional references, if needed, will be provided by the instructor.

Computer Usage:

General office software and computer simulation software may be used. Selected course material will be delivered via *Canvas*. If you have any difficulty accessing *Canvas*, please contact the Course Management Support line at 325-7010 or web-courses@ou.edu

Student Contributions:

Lecture attendance is crucial in this class. Each student will take a midterm exam, a comprehensive final exam, and several quizzes. Homework will be assigned during the semester. The lowest homework grade will be dropped from the grade calculation to account for unexpected emergencies and sickness. The lowest quiz will be dropped.

Electronic submission of homework is planned. Working together on out-of-class assignments is encouraged, but all submitted work must reflect each student's understanding, and all documents/submissions must be developed independently. A 24-hour grace period may be granted to allow for last-minute difficulties in homework submissions.

Page 1 Fall 2025

Dr. Mohammed Atiquzzaman **DEH 250** (405) 325-8077 atiq@ou.edu

Course Evaluation:

Exams, homework, and projects will assess students' progress toward meeting the stated course goals. The points will be distributed as follows:

> Homework 20 points Quiz 25 points 25 points Midterm Exam Comprehensive Final Exam 30 points

Final grades will be determined on the total points obtained as follows:

 $A \ge 90, 80 \le B < 90, 70 \le C < 80, 60 \le D < 70$

Graduate students may not receive a grade of D

Attendance Policy

Attendance in lectures is highly encouraged.

Academic Integrity:

All work submitted for an individual grade, such as homework and projects, should be the work of that single individual, not their friends or their tutor. Students who fail to do their own work not only violate the Code of Conduct for the University of Oklahoma, but also may fail to learn critical learning objectives for the class.

- Do not show another student a copy of your homework or projects.
- 2. Do not email your project to another student, even if they promise they will not copy it.
- Make sure that your computer account is adequately protected. Use a strong password and avoid 3. giving your friends access to your account or computer system.
- 4. Do not leave thumb drives around a laboratory where others might access them.
- The penalties for knowingly permitting your work to be copied are the same as the penalties for copying someone else's work.

Upon the first documented occurrence of a breach of academic integrity, the academic misconduct will be reported to Academic Integrity. The procedure to be followed is documented in the University of Oklahoma Academic Misconduct Code. In the unlikely event that I elect to admonish the student, the appeals process is described at http://integrity.ou.edu/. Check out the website for details about integrity at OU.

Copyright for In-Person or Online Courses:

Sessions of this course may be recorded or live-streamed. These recordings are the intellectual property of the individual faculty member and may not be shared or reproduced without the explicit, written consent of the faculty member. In addition, the privacy rights of others, such as students, guest lecturers, and providers of copyrighted material displayed in the recording, may be of concern. Students may not share any course recordings with individuals not enrolled in the class or upload them to any other online environment.

Generative AI:

We learn best when we are actively engaged in the process of completing all aspects of an assignment. Even the brainstorming and initial draft phase is a time of discovery that is an integral part of your learning. To empower you to engage in the learning process fully, the use of Generative AI, including, but not limited to, ChatGPT, CoPilot, ClaudeAI, Gemini, and Grammarly AI, is considered a violation of the academic integrity policy for this course. As the use of Generative AI to assist in completing any aspect of work for this course is prohibited, this includes using Generative AI to write outlines, conduct research, write or edit your papers, and to take your quizzes or exams. If using an e-book or search engine that has integrated Generative AI, then you should not rely on the Generative AI output and engage instead with the source material.

Page 2 Fall 2025

University Policies

Mental Health Support Services

Support is available for any student experiencing mental health issues that are impacting their academic success. Students can either been seen at the University Counseling Center (UCC) located on the second floor of Goddard Health Center or receive 24/7/365 crisis support from a licensed mental health provider through TELUS Health. To schedule an appointment or receive more information about mental health resources at OU please call the UCC at 405-325-2911 or visit University Counseling Center. The UCC is located at 620 Elm Ave., Room 201, Norman, OK 73019.

Title IX Resources and Reporting Requirement

The University of Oklahoma faculty are committed to creating a safe learning environment for all members of our community, free from gender and sex-based discrimination, including sexual harassment, domestic and dating violence, sexual assault, and stalking, in accordance with Title IX. There are resources available to those impacted, including: speaking with someone confidentially about your options, medical attention, counseling, reporting, academic support, and safety plans. If you have (or someone you know has) experienced any form of sex or gender-based discrimination or violence and wish to speak with someone confidentially, please contact OU Advocates (available 24/7 at 405-615-0013) or University Counseling Center (M-F 8 a.m. to 5 p.m. at 405-325-2911).

Because the University of Oklahoma is committed to the safety of you and other students, and because of our Title IX obligations, I, as well as other faculty, Graduate Assistants, and Teaching Assistants, are mandatory reporters. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This means that we are obligated to report gender-based violence that has been disclosed to us to the Institutional Equity Office. This includes disclosures that occur in: class discussion, writing assignments, discussion boards, emails and during Student/Office Hours. You may also choose to report directly to the Institutional Equity Office. After a report is filed, the Title IX Coordinator will reach out to provide resources, support, and information and the reported information will remain private. For more information regarding the University's Title IX Grievance procedures, reporting, or support measures, please visit Institutional Equity Office at 405-325-3546.

Reasonable Accommodation Policy

The University of Oklahoma (OU) is committed to the goal of achieving equal educational opportunity and full educational participation for students with disabilities. If you have already established reasonable accommodations with the Accessibility and

Page 3 Fall 2025 8/26/25

Dr. Mohammed Atiquzzaman **DEH 250** (405) 325-8077 atiq@ou.edu

Disability Resource Center (ADRC), please submit your semester accommodation request through the ADRC as soon as possible and contact me privately, so that we have adequate time to arrange your approved academic accommodations.

If you have not yet established services through ADRC, but have a documented disability and require accommodations, please complete ADRC's pre-registration form to begin the registration process. ADRC facilitates the interactive process that establishes reasonable accommodations for students at OU. For more information on ADRC registration procedures, please review their Register with the ADRC web page. You may also contact them at (405)325-3852 or adrc@ou.edu, or visit www.ou.edu/adrc for more information.

Note: disabilities may include, but are not limited to, mental health, chronic health, physical, vision, hearing, learning and attention disabilities, pregnancy-related. ADRC can also support students experiencing temporary medical conditions.

Religious Observance

It is the policy of the University to excuse the absences of students that result from religious observances and to reschedule examinations and additional required classwork that may fall on religious holidays, without penalty. [See Faculty Handbook 3.15.2]

Adjustments for Pregnancy/Childbirth Related Issues

Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact the Accessibility and Disability Resource Center at 405/325-3852 and/or the Institutional Equity Office at 405/325-3546 as soon as possible. Also, see the Institutional Equity Office FAQ on Pregnant and Parenting Students' Rights for answers to commonly asked questions.

Final Exam Preparation Period

Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. For specific provisions of the policy please refer to OU's Final Exam Preparation Period policy.

Emergency Protocol

During an emergency, there are official university procedures that will maximize your safety.

Page 4 Fall 2025 8/26/25 Severe Weather: If you receive an OU Alert to seek refuge or hear a tornado siren that signals severe weather.

- 1. Look for severe weather refuge location maps located inside most OU buildings near the entrances.
- 2. Seek refuge inside a building. Do not leave one building to seek shelter in another building that you deem safer. If outside, get into the nearest building.
- 3. Go to the building's severe weather refuge location. If you do not know where that is, go to the lowest level possible and seek refuge in an innermost room. Avoid outside doors and windows.
- 4. Get in, Get Down, Cover Up
- 5. Wait for official notice to resume normal activities.

Additional Weather Safety Information is available through the Department of Campus Safety.

The University of Oklahoma Active Threat Guidance

The University of Oklahoma embraces a Run, Hide, Fight strategy for active threats on campus. This strategy is well known, widely accepted, and proven to save lives. To receive emergency campus alerts, be sure to update your contact information and preferences in the account settings section at one.ou.edu.

RUN: Running away from the threat is usually the best option. If it is safe to run, run as far away from the threat as possible. Call 911 when you are in a safe location and let them know from which OU campus you're calling from and location of active threat.

HIDE: If running is not practical, the next best option is to hide. Lock and barricade all doors; turn of all lights; turn down your phone's volume; search for improvised weapons; hide behind solid objects and walls; and hide yourself completely and stay quiet. Remain in place until law enforcement arrives. Be patient and remain hidden.

FIGHT: If you are unable to run or hide, the last best option is to fight. Have one or more improvised weapons with you and be prepared to attack. Attack them when they are least expecting it and hit them where it hurts most: the face (specifically eyes, nose, and ears), the throat, the diaphragm (solar plexus), and the groin.

Please save OUPD's contact information in your phone.

NORMAN campus: For non-emergencies call (405) 325-1717. For emergencies call (405) 325-1911 or dial 911.

TULSA campus: For non-emergencies call (918) 660-3900. For emergencies call (918) 660-3333 or dial 911.

Page 5 Fall 2025 8/26/25

Fire Alarm/General Emergency

If you receive an OU Alert that there is danger inside or near the building, or the fire alarm inside the building activates:

- 1. LEAVE the building. Do not use the elevators.
- 2. KNOW at least two building exits
- 3. ASSIST those that may need help
- 4. PROCEED to the emergency assembly area
- 5. ONCE safely outside, NOTIFY first responders of anyone that may still be inside building due to mobility issues.
- 6. *WAIT* for official notice before attempting to re-enter the building.

OU Fire Safety on Campus

Page 6 Fall 2025 8/26/25