

CS-4351 Computer Security

Dates: 08/24/2026 - 12/03/2026
Location: Texas Western Hall 304
Time: Tuesday Thursday 12:00 PM - 1:20 PM
Course web page:

Instructor: Dr. MD Armanuzzaman
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Office Hours: Tuesday 10:30 AM - 11:50 AM or by appointment
Office hours location CCSB3.1008 or teams link:
<https://teams.microsoft.com/meet/217637318343739?p=GvBYwriXHZoI4SXyls>

Teaching Assistant: Ahmed Ann Noor Ryen
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Office Hours: TR 3:00 PM – 5:00 PM or by appointment
Office hours location CCSB1.0706 or teams link:
<https://teams.microsoft.com/meet/230825617863754?p=ZW7BVlmA7Wh03H2KU4>

1 Course Description

The objectives of this course consist of developing a solid understanding of fundamental principles of the security field and building knowledge of tools and mechanisms to safeguard a wide range of software and computing systems. It is intended for upper-level undergraduate and graduate students, and a tentative list of the covered topics is: cryptographic background and tools; access control; authentication; software security, malware; Internet security protocols and standards (SSL/TLS, IPsec, secure email); intrusion detection and intrusion prevention systems (firewalls); database security; privacy; identity management; security management and risk assessment; legal and ethical aspects (cybercrime, intellectual property)

2 Grading Policy

Grading for this course will be based on homework assignments and projects (HW), one midterm exam (ME), and the final exam (FE). There will be six homework assignments, some of which will be programming assignments. Attendance check will be performed in each week. Table 2 shows the grade breakdown.

Area	No. Items	Points per Item	Points for Area
Homework	6	60	360
Exams	2		630
Midterm	1	250	
Final	1	380	
Attendance	14	1	14
Anonymous Course Evaluation Bonus	2	10	20
Total			1024

Table 1: Grades Breakdown

3 Textbooks

Required textbook:

Points	Grade
930 -	A
900 - 930	A-
870 - 900	B+
830 - 870	B
800 - 830	B-
770 - 800	C+
700 - 770	C
670 - 700	D+
600 - 670	D
0 - 600	F

Table 2: Final Letter Grades

- William Stallings and Lawrie Brown, Computer Security: Principles and Practice, 4th edition, Pearson, 2017.

Additional resources:

- Charles Pfleeger and Shari Pfleeger, Security in Computing.
- William Stallings, Cryptography and Network Security, Principles and Practice.
- Charlie Kaufman, Radia Perlman, and Mike Speciner, Network Security: Private Communication in a Public World.
- Edward Skoudis and Tom Liston, Counter Hack Reloaded: A Step-by-Step Guide to Computer Attacks and Effective Defenses.
- Ross Anderson, Security Engineering: A Guide to Building Dependable Distributed Systems.

4 Course Policies

- Lectures and quizzes
 - Lectures will be posted on the course web page.
- Homework assignments
 - All assignments must be done individually unless announced otherwise; no collaboration on solving or writing assignments.
 - Searching for homework answers online is not permitted.
 - The use of any external resources should be properly documented when answering the question (i.e., not at the end of the homework) and the nature of the help the document provided (i.e., what information it contained and how it helped with answering the question).
 - If you come across an answer to a homework question online, you receive 70% of the question's credit.
 - Homeworks will be submitted via *blackboard*; they must be typed (diagrams can be hand-drawn) and normally would need to be submitted as a PDF.
- Late submissions
 - Late submissions in 48 hours will be accepted with a 15% (0 - 24 hours late) and 30% (24 - 48 hours late) penalty, respectively. Late submissions beyond 48 hours will not be accepted.

- Grading
 - Homework or exam regrade requests need to be submitted within two weeks of releasing the graded material to the class.
 - The request needs to be in writing clearly describing the error in grading.
- Course materials
 - Sharing of the course materials provided by the instructor with someone who is not currently enrolled in this course or in a forum accessible to someone not currently enrolled in this course is not allowed without the instructor's permission.

5 Course Drop Policy

According to UTEP Catalog, "At the discretion of the instructor, a student can be dropped from a course because of excessive absences or lack of effort. A grade of "W" will be assigned before the course drop deadline and a grade of "F" after the course drop deadline." See Policies and Regulations in the UTEP Undergraduate Catalog for a list of excused absences. Therefore, if I find that, due to excessive absences or nonperformance in the course, you are at risk of failing, I will drop you from the course. I will provide 24 hours advance notice via email.

6 Incomplete and Grade Policy

The University is committed to providing reasonable accommodations and auxiliary services to students, staff, faculty, job applicants, applicants for admissions, and other beneficiaries of University programs, services and activities with documented disabilities in order to provide them with equal opportunities to participate in programs, services, and activities in compliance with sections 503 and 504 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA) of 1990 and the Americans with Disabilities Act Amendments Act (ADAAA) of 2008. Reasonable accommodations will be made unless it is determined that doing so would cause undue hardship on the University. Students requesting an accommodation based on a disability must register with the UTEP Center for Accommodations and Support Services (CASS). Contact the Center for Accommodations and Support Services at [915-747-5148](tel:915-747-5148), email them at cass@utep.edu, or apply for accommodations online via the CASS portal.

7 Scholastic Integrity

Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the **Office of Student Conduct and Conflict Resolution (OSCCR)** for possible disciplinary action. To learn more, please visit **HOOP: Student Conduct and Discipline**.

8 Syllabus Update

Information in the syllabus may be subject to change with reasonable advance notice.