Greensheet

CS166: Information Security

Spring 2023, Section 80

San José State University

Department of Computer Science

Instructor Info

Instructor	Ahmad Yazdankhah	My name is difficult to pronounce!
Office Location Online		
Email	ahmad.yazdankhah@sjsu.edu	Please email me via Canvas
Website *		Our official educational web tool is Canvas available at https://sjsu.instructure.com/
Phone Canvas email is the best way to communicate with me!		Canvas email is the best way to communicate with me!
Office Hours	TR 18:00 – 19:00	Online, by appointment

^{*} Course materials such as handouts, notes, assignment instructions, etc. can be found on <u>Canvas Learning Management System</u> <u>course login website</u> at http://sjsu.instructure.com. <u>You are responsible for regularly checking</u> with its messaging system (or other communication system as indicated by the instructor) to learn of any updates.

Class Info

	Section 80
Meeting time	TR 4:30pm – 5:45 pm
Classroom	N/A
Course Type	Online

Catalog Description

Fundamental security topics including cryptography, authentication, access control, network security, security protocols, and software security. Networking basics are covered. Additional security topics selected from multilevel security, biometrics, blockchain, machine learning, information warfare, e-commerce, intrusion detection, system evaluation and assurance.

Prerequisites

Prerequisite(s): CS 146 (with a grade of "C-" or better) and either CS 47 or CMPE 102 or CMPE 120 (with a grade of "C-" or better); Computer Science, Applied and Computational Math, Forensic Science: Digital Evidence, or Software Engineering Majors only; or instructor consent.

The Department of Computer Science strictly enforces prerequisites.

If you are not already pre-enrolled, you must attend the first day of the class and let your instructor know and fill out the provided document. If the class is not full, the permission codes will be provided to the requesters based on the priorities. More information will be given in the first day of the class.

Please note that any student who does not show up during the first two class meetings, may be dropped by the instructor.

Required Text

There is no required text for this course. My lecture notes contain all required materials and homework.

Further Readings

- 1. Mark Stamp, Information Security: Principles and Practice, 2nd/3rd edition, Wiley, ISBN-10: 0470626399, ISBN-13: 978-0470626399
- 2. The references at the end of each lecture note

Course Learning Outcomes (CLO)

Upon successful completion of this course, students would be familiar with the fundamental concepts, principles, and protocols of information security and understand the major technical security challenges in each of the following four areas:

- 1. Cryptography
- 2. Access control
- 3. Protocols
- 4. Software

Examinations and Evaluations

- Every week, there would be a short quiz.
- There would be two midterms, and a final exam.
- There would be several individual assignments.
- All examinations would cover from the beginning of the semester.
- All examinations would be closed-all-materials.
- There won't be any makeup for the exams.

Grading Information

Assignments	35%
Quizzes (10 quizzes)	20%
Midterm #1	10%
Midterm #2	15%
Final	20%
Total	100%

Nominal Grading Scale

То	Grade				
100	A plus				
96.99	А				
92.99	A minus				
89.99	B plus				
86.99	В				
82.99	B minus				
79.99	C plus				
76.99	С				
72.99	C minus				
69.99	D plus				
66.99	D				
62.99	D minus				
59.99	F				
	100 96.99 92.99 89.99 86.99 79.99 76.99 72.99 66.99 62.99				

To practice time management, late submissions will lose 20% of the total assignment score and an additional 20% for each 24-hour afterward.

Course Requirements and Workload

- A computer with microphone and camera is required for the online activities (some lectures, office hours, online exams, etc.).
- Success in this course is based on the expectation that students will spend at least 6 10 hours per week for:
 - working on the assignments.
 - preparation for the exams (quizzes, midterms, and final).
- More details about student workload can be found in <u>University Policy S16-9</u>, available at http://www.sjsu.edu/senate/docs/S16-9.pdf.

Course Format

This course will be taught in online format. The lectures will be recorded and provided during the lecture time.

In each lecture meeting, the lecture will be summarized, last week assignment and quiz will be solved, and students' questions will be responded.

Classroom Protocol

- All microphones will be muted automatically when you join the meeting. If you have a question, you need to unmute it and speak up or type your question in the chat room.
- The chat room will be private, and instructor reads your questions loudly and answer them.
- We won't use camera during the lectures but will use it during the exams. Therefore, you need to get dressed appropriately. Dressing code is "Business Casual".

Consent for Recording of Class and Public Sharing of Instructor's Material

- Common courtesy and professional behavior dictate that you notify someone when you are recording him/her.
- You must obtain the instructor's permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only.
- The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.

University Policies

Per <u>University Policy S16-9</u>, relevant university policy concerning all courses, such as student responsibilities, academic integrity, accommodations, dropping and adding, consent for recording of class, etc. and available student services (e.g. learning assistance, counseling, and other resources) are listed on <u>Syllabus Information web page</u> available at (https://www.sjsu.edu/curriculum/courses/syllabus-info.php). Make sure to visit this page to review and be aware of these university policies and resources.

SJSU, Department of Computer Science

Course Schedule

Note: This is a tentative schedule and is subject to change but with fair notice.

Day	Date	Lec#	Topics	Exams
1	01/26	0	Greensheet; A big picture of the course	
2	01/31	1	Enter the Information Security	
3	02/02	2	Crypto: Classic (Part 1)	Quiz 0
4	02/07	3	Crypto: Classic (Part 2)	
5	02/09	4	Crypto: Symmetric (Part 1)	Quiz 1
6	02/14	5	Crypto: Symmetric (Part 2)	
7	02/16	6	Crypto: Symmetric (Part 3)	Quiz 2
8	02/21	7	Crypto: Public Key (Part 1)	
9	02/23	8	Crypto: Public Key (Part 2)	Quiz 3
10	02/28		Review, Study Guide, Q & A	
11	03/02		Exam: Mid 1	Quiz +
12	03/07	9	Crypto: Public Key (Part 3)	
13	03/09	10	Crypto: Hashing (Part 1)	Quiz 4
14	03/14	11	Crypto: Hashing (Part 2)	
15	03/16	12	Access Control (Part 1)	Quiz 5
16	03/21	13	Access Control (Part 2)	
17	03/23	14	Access Control (Part 3)	Quiz 6
18	03/28		Spring Recess	
19	03/30		Spring Recess	
20	04/04	15	Access Control (Part 4)	
21	04/06	16	Protocols (Part 1)	Quiz 7
22	04/11		Review, Study Guide, Q & A	
23	04/13		Exam: Mid 2	Quiz ++
24	04/18	17	Protocols (Part 2)	
25	04/20	18	Protocols (Part 3)	Quiz 8
26	04/25	19	Protocols (Part 4)	
27	04/27	20	Software (Part 1)	Quiz 9
28	05/02	21	Software (Part 2)	
29	05/04	22	Software (Part 3)	Quiz 10
30	05/09	23	Software (Part 4)	
31	05/11		Review, Study Guide, Q & A	

Final exam	Sec 80 (TR 16:30 – 17:45)
Date and Time	Thursday, May 18
Venue	Online