# San José State University Department of Computer Science CS166, Information Security, Section 1, Spring, 2021

#### **Course and Contact Information**

Instructor:	Fabio Di Troia
Office Location:	MH217
Telephone:	
Email:	fabio.ditroia@sjsu.edu
Office Hours:	MW, 5:00 – 6:00pm
Class Days/Time:	MW 15:00
Classroom:	Online Synchronous with Zoom links shared via Canvas messages
Prerequisites:	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, or Software Engineering Majors only; or instructor consent.

#### **Course Format**

### Faculty Web Page and MYSJSU Messaging

Course materials such as syllabus, handouts, notes, assignment instructions, etc. can be found on <u>Canvas</u> <u>Leaning Management System course login website</u> at <u>http://sjsu.instructure.com</u>. You are responsible for

#### **Course Learning Outcomes (CLO)**

After completing this course, you should be knowledgeable of the major technical security challenges in each of the following four areas: cryptography, access control, protocols, and software.

### **Zoom Classroom Etiquette**

Mute Your Microphone: To help keep background noise to a minimum, make sure you mute your microphone when you are not speaking.

Be Mindful of Background Noise and Distractions: Find a quiet place to "attend" class, to the greatest extent possible.

- Avoid video setups where people may be walking behind you, people talking/making noise, etc.
- Avoid activities that could create additional noise, such as shuffling papers, listening to music in the background, etc.

Position Your Camera Properly: Be sure your webcam is in a stable position and focused at eye level. Limit Your Distractions/Avoid Multitasking: You can make it easier to focus on the meeting by turning off notifications, closing or minimizing running apps, and putting your smartphone away (unless you are using it to access Zoom).

Use Appropriate Virtual Backgrounds: If using a virtual background, it should be appropriate and professional and should NOT suggest or include content that is objectively offensive or demeaning.

#### **Final Examination or Evaluation**

The final test will be published on Canvas and will be submitted online.

## **Grading Information**

Homework, 25% Midterm 1, 25% Midterm 2, 25% Final, 25%

Note that "All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades." See University PmrnBDC 0 (or)3 ui2y Pml and s(e)4 (pe)4m1Td[M)1 (id)2 (()]TJE)ons f33 0 Td[d)-1(C)16.33 0 T148 0 T[d)-1(C)16.33

# Nominal Grading Scale:

Percentage	Grade
92 and above	А
90 - 91	A-
88 - 89	B+
82 - 87	В
80 - 81	B-
78 – 79	C+
72 – 77	С
70 – 71	C-
68 - 69	D+
62 - 67	D
60 - 61	D-
59 and below	F

# **Classroom Protocol**

**Cheating** will not be tolerated. Student must be respectful of the instructor and other students. For example, No disruptive or annoying talking. Turn off cell phones Class begins on time Valid picture ID required at all times

# **University Policies (Required)**

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' <u>Syllabus</u> <u>Information web page</u> at http://www.sjsu.edu/gup/syllabusinfo/". Make sure to review these policies and resources.

# CS166 / Information Security, Spring 2021, Course Schedule

# **Course Schedule**

Week	Date	Topics, Readings, Assignments, Deadlines
1	01/27	Introduction
2	02/1	Crypto Basic
2	02/3	Symmetric Key Crypto
3	02/8	Symmetric Key Crypto
3	02/10	Symmetric Key Crypto
4	02/15	Public Key Crypto
4	02/17	Public Key Crypto
5	02/22	Public Key Crypto
5	02/24	Public Key Crypto
6	03/1	Hash Functions and Other Topics
6	03/3	Hash Functions and Other Topics
7	03/8	Hash Functions and Other Topics
7	03/10	Midterm 1
8	03/15	Authentication
8	03/17	Authentication
9	03/22	Authentication
9	03/24	Authorization
10	04/5	Authorization
10	04/7	Authorization
11	04/12	Networking Basics
11	04/14	Simple Authentication Protocols
12	04/19	Simple Authentication Protocols
12	04/21	Simple Authentication Protocols
13	04/26	Midterm 2
13	04/28	Real-World Security Protocols
14	05/3	Real-World Security Protocols
14	05/5	Real-World Security Protocols
15	05/10	Software Flaws and Malware

Week	Date	Topics, Readings, Assignments, Deadlines
15	05/12	Insecurity in Software
16	05/17	Insecurity in Software
Final Exam	05/21	1215-1430