Sul Ross State University Course Syllabus CSST 3322: Secure Program Practices Spring 2025

Instructor: Thea Sul Ross State University Course Syllabus CSST 3322: Secure Program

Practices Spring 2023 Office Phone: 931-237-3324 No calls after 6pm

Text: 931-237-3324 (no text before 12 pm and not text after 6)

Class: Online (No text after 12pm or before 12 am)

Email: tglenn2@sulross.edu Office Hours: Office Hours: T&W 3 pm to 5 pm

Required Materials:

Textbook: Paperback + cloud labs: 9781284184624

eBook + cloud labs: 9781284184655

Computer Science SLOs

1. Understand modern computer systems, databases, and networking.

2. Work as a team in workgroup environments.

Course Description

This course provides students with knowledge of the methods of analyzing and mitigating threats coming from inside or outside the network. It addresses network protocols, security devices, security services, configuration, and packet capture and analysis.

Course Prerequisites and/or Co-requisites:

CS 1320 CSII

Direct quotes are not acceptable under any condition. This course will implement current research using peer-reviewed articles in the library. Make sure before you search the library, select the peer-reviewed articles box. Also, using .gov websites is the other source because all data regarding crime comes from gov websites and verified or expand information from peerreviewed articles. Please text me at 9312373324 if you have questions. Please do not text or call after 6 pm or before 12 am CST M-Sun. Prerequisite: CS 1320 CSII

ADA Statement

SRSU Accessibility Services. Sul Ross State University (SRSU) is committed to equal access in compliance with the Americans with Disabilities Act of 1973. It is SRSU policy to provide reasonable accommodations to students with documented disabilities. It is the student's responsibility to initiate a request each semester for each class. Students seeking accessibility/accommodations services must contact Mrs. Mary Schwartze Grisham, LPC, SRSU's Accessibility Services Director or Ronnie Harris, LPC, Counselor, at 432-837-8203 or email mschwartze@sulross.edu or ronnie.harris@sulross.edu. Our office is located on the first floor of Ferguson Hall, room 112, and our mailing address is P.O. Box C122, Sul Ross State University, Alpine. Texas, 79832.

Student Responsibilities All full-time and part-time students are responsible for familiarizing themselves with the Student Handbook and the Undergraduate & Graduate Catalog and for abiding by the University rules and regulations. Additionally, students are responsible for

checking their Sul Ross email as an official form of communication from the university. Every student is expected to obey all federal, state and local laws and is expected to familiarize him/herself with the requirements of such laws.

SRSU Distance Education Statement

Students enrolled in distance education courses have equal access to the university's academic support services, such as library resources, online databases, and instructional technology support. For more information about accessing these resources, visit the SRSU website.

Students should correspond using Sul Ross email accounts and submit online assignments through Blackboard, which requires a secure login. Students enrolled in distance education courses at Sul Ross are expected to adhere to all policies pertaining to academic honesty and appropriate student conduct, as described in the student handbook. Students in web-based courses must maintain appropriate equipment and software, according to the needs and requirements of the course, as outlined on the SRSU website. Directions for filing a student complaint are located in the student handbook.

Counseling

Sul Ross has partnered with TimelyCare where all SR students will have access to nine free counseling sessions. You can learn more about this 24/7/365 support by visiting Timelycare/SRSU. The SR Counseling and Accessibility Services office will continue to offer in-person counseling in Ferguson Hall room 112 (Alpine campus), and telehealth Zoom sessions for remote students and RGC students.

Libraries

The Bryan Wildenthal Memorial Library and Archives of the Big Bend in Alpine offer FREE resources and services to the entire SRSU community. Access and borrow books, articles, and more by visiting the library's website, library.sulross.edu/. Off-campus access requires logging in with your Lobo lD and password. Librarians are a tremendous resource for your coursework and can be reached in person, by email (srsulibrary@sulross.edu), or by phone (432-837-8123).

No matter where you are based, public libraries and many academic and special libraries welcome the general public into their spaces for study. SRSU TexShare Cardholders can access additional services and resources at various libraries across Texas. Learn more about the TexShare program by visiting library.sulross.edu/find-and-borrow/texshare/ or ask a librarian by emailing srsulibrary@sulross.edu.

Mike Fernandez, SRSU Librarian, is based in Eagle Pass (Building D-129) to offer specialized library services to students, faculty, and staff. Utilize free services such as InterLibrary Loan (ILL), ScanIt, and Direct Mail to get materials delivered to you at home or via email.

Academic Integrity

Students in this class are expected to demonstrate scholarly behavior and academic honesty in the use of intellectual property. Students should submit work that is their own and avoid the temptation to engage in behaviors that violate academic integrity, such as turning in work as original that was used in whole or part for another course and/or professor; turning in another person's work as one's own; copying from professional works or internet sites without citation; collaborating on a course assignment, examination, or quiz when collaboration is forbidden. Students should also avoid using open AI sources unless permission is expressly given for an assignment or course. Violations of academic integrity can result in failing assignments, failing a class, and/or more serious university consequences. These behaviors also erode the value of college degrees and higher education overall.

Classroom Climate of Respect

Importantly, this class will foster free expression, critical investigation, and the open discussion of ideas. This means that all of us must help create and sustain an atmosphere of tolerance, civility, and respect for the viewpoints of others. Similarly, we must all learn how to probe, oppose and disagree without resorting to tactics of intimidation, harassment, or personal attack. No one is entitled to harass, belittle, or discriminate against another on the basis of race, religion, ethnicity, age, gender, national origin, or sexual preference. Still, we will not be silenced by the difficulty of fruitfully discussing politically sensitive issues.

Supportive Statement

I aim to create a learning environment for my students that supports various perspectives and experiences. I understand that the recent pandemic, economic disparity, and health concerns, or even unexpected life events may impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. I do this to demonstrate my commitment to you and to the mission of Sul Ross State University to create a supportive environment and care for the whole student as part of the Sul Ross Familia. If you feel like your performance in the class is being impacted by your experiences outside of class, please don't hesitate to come and talk with me. I want to be a resource for you.

Tutoring Center The Lobo Den Tutoring Center offers FREE tutoring support to help you excel in your courses. Whether you need assistance in Writing, Math, Science, or other subjects, we're here to help!

Important Information:

- **Drop-in and Scheduled Appointments:** Flexible options to fit your needs.
- **Hours of Operation:** Monday–Friday, 8:00 AM 5:00 PM.
- **Workshops:** Attend our regularly hosted academic workshops on STEM topics and professional development, often in collaboration with specialized faculty.
- Location: BWML Room 128.
- **Contact Us:** For more information or to book an appointment, email <u>tutoring@sulross.edu</u> or call (432) 837-8726.

Looking for additional support?

- Tutor.com offers FREE 24/7 online tutoring in over 200 subjects, including specialized support for ESL and ELL learners with native Spanish-speaking tutors.
- Access Tutor.com via Blackboard: Log in to your Blackboard account to get started anytime, anywhere.

Take advantage of these valuable resources to boost your confidence and performance in your classes. We look forward to helping you succeed!

Grading

Letter grades will be determined using a standard percentage point evaluation as outlined below. Please note that this is a tentative schedule and can change. Any changes that happen will be updated in Blackboard and due dates for assignments are be posted in Blackboard.

Calculating points based on the following weights will determine your final grade:

A 90 - 100 points

B 80 - 89 points

C 70-79 points

D 60-69 points

F below 60 points

Assignment Break Down:

Labs = 50%

Project 20%

Tests Text 30%

Lab 1: Analyzing Protocols with Wireshark

Lab 2: Using Wireshark and NetWitness Investigator to Analyze Wireless Traffic

Lab 3: Configuring a pfSense Firewall on the Client

Lab 4: Configuring a pfSense Firewall on the Server

Lab 5: Penetration Testing a pfSense Firewall

Lab 6: Using Social Engineering Techniques to Plan an Attack

Lab 7: Configuring a Virtual Private Network Server

Lab 8: Configuring a VPN Client for Secure File Transfers

Lab 9: Attacking a Virtual Private Network

Lab 10: Investigating and Responding to Network Security Incidents