Computer Network Management Section 01
CS 158B

Fall 2024   3 Unit(s)   08/21/2024 to 12/09/2024   Modified 09/14/2024

👤 Contact Information

Instructor: Dr. Arun Saha

- Email: arun.saha@sjsu.edu

🕐 Course Information

Lecture: Mon, Wed: 7:30 PM - 8:45 PM

💻 Course Description and Requisites

Principles and technologies of network management: reference models, functions (fault, configuration, performance, security and accounting management), management information, communication protocols, integration, and assessment. Network security and cyber defense: cryptography, key distribution, authentication protocols, network attacks, access control, and example systems.

Prerequisite(s): CS 158A or CMPE 148 (with a grade of "C-" or better); Allowed Majors: Computer Science, Software Engineering or Forensic Science: Digital Evidence; or instructor consent.

Letter Graded

✳ Classroom Protocols

Be respectful.

Follow all the SJSU academic integrity guidelines.

▤ Program Information

Diversity Statement - At SJSU, it is important to create a safe learning environment where we can explore, learn, and grow together. We strive to build a diverse, equitable, inclusive culture that values, encourages, and supports students from all backgrounds and experiences.

◎ Course Goals

Introduction to Network Management

📊 Course Learning Outcomes (CLOs)

Upon successful completion of this course, a student is expected to have learned the following.

1. Fundamentals of Network Management
2. The SNMP ecosystem (SNMPv1, SNMPv2, SNMPv3, RMON1, RMON2)
3. An overview of Security and Network Security.
4. An overview of Software Defined Networking
5. An overview of network monitoring with some hands-on experience.

📘 Course Materials

There is no textbook.

The content of each class will be provided as a slide deck and shared to all the students via Canvas.

Project

The students would need a Linux programming environment (Ubuntu 22.04 recommended).

Tests

The midterms and the final will be in person via Canvas using the Lockdown browser.

✔ Grading Information

The final credit would consist of the following items along with their corresponding weighting.

- Midterm 1 = 20%
- Midterm 2 = 20%
- Project = 30%
- Final = 30%

The final grade would be according to the SJSU Undergraduate Classes Grading Scale at https://ischool.sjsu.edu/grading-policies

🏛 University Policies

Per University Policy S16-9 (PDF) (http://www.sjsu.edu/senate/docs/S16-9.pdf), 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 the Syllabus Information (https://www.sjsu.edu/curriculum/courses/syllabus-info.php) web page. Make sure to visit this page to review and be aware of these university policies and resources.