

CS 696: Network Management and Security

SECTION: 103 — Fall 2023

Instructor Information

Name: Samaneh Berenjian

Office: GITC-2101

Email: sb936@njit.edu

Class Information

Dates: Sep 5- Dec 13

Time: 6:00 – 8:50 pm

Office-hours: Wednsedays: 4-5:30pm

Course Description

Network Management and Security are essential factors in the reliable, efficient, and secure operation of any network. As networks are mission-critical operations for enterprises and governments, keeping those resources, services, and communication channels running and secure has become the first priority of any organization.

This course provides a thorough introduction to network security and management technologies and standards as well as to a wide variety of techniques and tools for evaluating, monitoring, and increasing the cyber resilience of computer networks, servers, clouds, communication channels, data security as well as business continuity in face of disasters (natural or man-made) and disaster recovery. Among the topics covered, the course explores the SNMP family of standards, including SNMP, SNMP2, SNMP3, RMON, etc and techniques for evaluating the security of networks and network devices, attack strategies, defense and prevention mechanism for a path to cyber resiliency for networks, servers, clouds, communication channels and most importantly for data.

Class Attendance and Participation

Class participation is a mandatory component of this course, and it is crucial for your academic success. While I understand that unforeseen circumstances can arise, students are expected to actively engage in class discussions, activities, and assignments. If you are unable to participate in a particular class or have a valid reason for non-participation, please communicate with me in advance or as soon as possible to discuss your situation. Significant excuses for not participating will be considered on a case-by-case basis, and I am committed to working with you to find reasonable solutions when necessary.

Exams

In this course we have a *Midterm Exam* and a *Final Exam*. You are expected to be present, seated, and ready to take the exam before the exam begins. You are not permitted to use any outside materials, resources, or electronic devices (including but not limited to mobile phones, smartwatches, etc., but not including a calculator) on the exams. Any violation of this policy is a violation of the university's Academic Integrity Policy.

There will be no make-up exams, even in the case of an emergency. A missed exam counts as a zero unless a valid excuse from a physician or the Dean's Office is presented to your instructor. With an acceptable written excuse, a missed exam score will be replaced with the percentage earned on the corresponding subsection of the final exam.

Grading

The course grade is determined by the following components:

Midterm Exam	35%
Final Exam	35%
Project	30%

Course Help

Be proactive about your success in the course! If you need help, there are many resources available to help you. Your first primary contact for help is the instructor. If you are struggling, attend office hours or send an email. Do not wait to bring issues, course related or otherwise, to the attention of the instructor. If you cannot attend office hours, send an email to the instructor to try to make other arrangements.