

CS468 Secure Programming and Systems

Spring 2024

Instructor: Dr. Maha Shamseddine
E-Mail: maha@gmu.edu
Office Location: Buchanan Hall D215I
Office Hours: Thursday 10:30-12:00 or by appointment

Class Time & Location

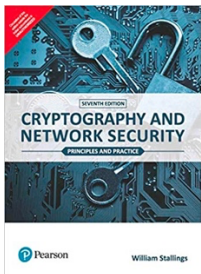
CS 468 -- 004

IN PERSON Monday, Wednesday 1:30 PM-02:45 PM Exploratory Hall L102

Teaching Assistants

Important Note: You are expected to check your GMU Blackboard on a **daily** basis for any announcements made for this class including but not limited to, announcements for homework, assignments, exams, etc.

Course Information



Textbook:

Cryptography And Network Security, 8Th Edition, William Stallings, ISBN-13: 978-9332585225, Pearson, 2017.

You will also rely on material provided by the professor in the lecture notes

Computing Requirements

- Students are expected to have access to a Windows or Macintosh computer
- Software requirements will be announced by the professor as needed.

Course Outcomes:

In this class, students will:

1. Describe the main security techniques and mechanisms for securing systems and networks

2. Explain the basic attacks on networks and the mitigation techniques against these attacks
3. Understand phishing attack and social engineering for attacking devices and networks
4. Explain access control mechanisms and intrusion detection and prevention
5. Understand the basics of data security and privacy
6. Understand denial of service attacks on systems and networks
7. Understand basic network security and web application security protocols

Course Grade:

Activity	Weight
Activities, Participation and Attendance Homework	10%
Assignments/Mini Projects 4	40%
Two Midterms, 15% and 10%	25%
Final Exam	25%

The letter grade will be assigned according to the following scale:

A+	>98
A	92-98
A-	90-92
B+	88-90
B	82-88
B-	80-82
C+	78-80
C	72-78
C-	70-72
D	60-70
F	<60

A set of 4 homework assignments will be provided over the semester.

Homework Assignments/Mini Projects

A set of 4 project components will be assigned during the semester. Some components should be developed individually while others can be developed in a team. The full assignment details will be posted on Blackboard. Late project submissions are NOT allowed. A submission is considered on time if submitted electronically on Blackboard on or before required submission date/time.

Exams

The course comprises two midterms and a final exam. There will be no makeup exams. Arrangements can be made in case of emergency, but the student needs to inform the professor in advance unless the emergency is unexpected.

Class Attendance and Classroom Policy

Class attendance and active participation is required. The student is strongly encouraged to ask questions during the lectures or using online using Piazza, and this is viewed as part of the class participation. If the student is absent from class, he or she is responsible for any materials covered,

handouts and any announcements made in class, regarding (but not limited to) class schedule, assignments, project and exams. Cell phones must be turned off during class.

Disability Accommodations

If you are a student with a disability and you need academic accommodations, please notify me and contact the Office of Disability Services (ODS) at 993-2474, <http://ods.gmu.edu>. All academic accommodations must be arranged through the ODS.

Honor Code Statement

Please be familiar with the GMU Honor Code. In addition, the CS department has its own Honor Code policies. Any deviation from this is considered an Honor Code violation. All graded work must be your own effort. Any attempts at cheating will not be tolerated and will be turned in to the Honor Committee with significant penalty recommended. The usual recommendation is grade of F in the course.

Tentative Course Outline:

Check your Blackboard course page for the tentative course schedule

*Note: This syllabus is subject to change. Any changes will be announced. It is the student's responsibility to obtain the information on the changes applied.

