

Computer Security
University of Pittsburgh INFS 1074
Course Requirements: 2017-2018
Mrs. Zboran
Email: zboran@freeport.k12.pa.us

Textbooks

Security in Computing, Fifth Edition by Charles P. Pfleeger.

Supplies needed

Double pocket folder (provided)
Notebook or binder for class notes
Pen or pencil EVERYDAY!

Course Description & Objectives

This course covers the fundamental concepts in computer security and privacy. The course is intended to expose the various security threats and vulnerabilities in computer systems and provide an understanding of the various defense and protection mechanisms. Primarily, the course will focus on models and mechanisms related to insuring confidentiality, integrity, and availability related to computer and information systems. We will cover the basic concepts of cryptography including symmetric and public key encryption schemes. We then focus on program security issues such as buffer overflow attacks and discuss various control mechanisms to handle malicious code. The second half of the course will cover the topics of Database Security and general security issues in Operating Systems. Towards the end, we discuss various security and privacy issues in the context of emerging cloud computing systems.

University of Pittsburgh Credit Option

Students may choose the option of receiving 3 credits from University of Pittsburgh. This option will be discussed in class. Students must remember that if they choose to take the course for college credit that there will be a registration cost and they establishing a lasting college transcript.

Homework Policy

All homework assignments must be completed and turned in on the due date. Students will have the opportunity to download programming software on their home computers for additional programming practice. Points will be deducted from late assignments.

Notebook Policy

Students are expected to take notes during class and to keep those notes organized. Notebooks may be checked from time to time and assigned a grade.

Testing

Quizzes may or may not be announced.

Tests will be announced a few days in advance. If a student is aware of a test date but is absent...

- the day **of** the test, he/she must take the test on the day of return.
- the day **before** the test, the student must take the test with the rest of the class.

Grading

Students will be graded on the following items

1. Classroom participation (activities, projects, group work, prepared for class and acceptable behavior)
2. In class assignments and projects. (heavy grading emphasis is on producing programs that work and meet required specifications)
3. Quizzes (may or may not be announced)
4. Tests (always announced a few days prior)

Grading will be on the point basis. At the end of the nine weeks, the possible number of points will be totaled. Your total points will be divided by the total possible points and a percent will be calculated. Grades are based on the school district grading scale.

91-100% A

81-90% B

70-80% C

60-69% D

59 – 0% F

Absences

It is the student's responsibility to make arrangements to make up missed work. Students will be given a day for each day of excused absence to make up work missed while out of school. See above for special policies for missing tests.