Fall 2013 CMSC 414
Computer and Network Security

1 Description

This course is an introduction to the broad field of computer, network, and information security. We will cover both computer security (including such topics as security policies, access control, viruses, etc.) and network security (such as protocols for maintaining confidentiality of email or for secure web transactions), along with some relevant background in basic cryptography.

2 Textbooks


3 Contact information

3.1 Instructor

Instructor: Dr. Pete Keleher
Office: 4157 A. V. Williams
Contact info: keleher@cs.umd.edu (*)

Office hours: Tuesday 2-3pm, and by appointment (feel free to drop in any time I’m in my office).

4 Class webpage and Computing Environment

1. Webpage: Various course materials will be made available on the class webpage, which can be accessed at the following link:

   http://triffid.cs.umd.edu/414

   Check the webpage frequently, as it will contain (among other things) the class’s schedule, reading materials, and project descriptions, files, and errata.

2. Piazza: Class help and details will also be posted on Piazza. This provides a forum-like functionality that allows you to post questions and insights, as well as respond to questions from others. I ask only that you do not post code, even pseudo-code. You should have received an invite from piazza; let me know if you have not.

Project submission will be done by emailing tarballs to the instructor.

5 Project Policies

All projects will have a due date, and a late due date two days later.

- Do each project by yourself. Sadly, we can and do detect and fail those that do not abide by this policy each semester. You may ask, and answer, general questions on Piazza.
- Each project has 100 points.
- Your grade loses 20 of 100 points if the project is turned in after the due date, but by the late due date.
- Anything after the late due date gives you a zero.
- However: you must get 50 points on each project to pass this course. This is true even if you do not get any credit because you are too late. In other words, you can turn all projects in the last day of class if you want. You won’t get any credit, but it is conceivable that you could pass the course (very, very unlikely, though). If you are carrying a 95% average in the course, but don’t bother to turn in Project #1 because it is too easy, you will receive an F.
6  Attendance and general grading policies

Students are responsible for all material covered, and all announcements, deadlines, policies, etc., discussed in lecture and discussion section, regardless of whether they were in class to hear the information or not. It's understood that students may occasionally have to miss class for various reasons, but email and office hours are not intended as a replacement for class attendance. Consequently, only students who typically and regularly attend class will receive assistance during office hours.

Coursework will count toward the final grade according to the following percentages:

- Five projects: each 11% 55%
- Three Quizzes: each 11% 33%
- Final: will be comprehensive 12%

The above may change by up to 5%

Final course grades will be curved as necessary, based on each student’s total numeric score for all coursework at the end of the semester.

6.1  Laptops / tablets in the Classroom

My hope is that you can use your laptop/tablet in class to, on occasion, augment the materials in class (e.g., by actively searching for additional content that may supplement a discussion point made in the classroom). However, the downside of allowing laptops is that they are a tempting distraction that may pull you away from being present and active participants in the class. If you have your laptop out and I observe that you are involved in activities unrelated to the classroom, you will lose the privilege of classroom laptop usage at my discretion.

6.2  Excused absences

Besides the policies in this syllabus, various University policies may apply to students during the semester. Policies that may be relevant appear in the Undergraduate Catalog, which may be reached at the following link:

http://www.umd.edu/catalog

Documentation for absences due to medical reasons must contain a statement that you were incapacitated, the phone number of the health care professional who examined you, and the dates of incapacitation (which must include the dates of the missed exam or quiz).

It is the student’s responsibility to inform the instructor of any expected excused absences ahead of time. For exams, students are expected to inform the instructor of a conflict in writing (email is acceptable) as soon the exam is announced or the conflict is known, whichever occurs first.

An excused absence does not relieve the student of the obligation to turn in programming homework on time, as homework are assigned well in advance of their due dates. In cases of a lengthy illness, or other protracted emergency situations, the instructor may consider extensions on project assignments, depending on the specific circumstances.

6.3  Students with disabilities

Students with disabilities who have been certified by Disability Support Services as needing any type of special accommodations should see their instructor as soon as possible, within the first week of classes. All arrangements for exam accommodations as a result of disability must be made and arranged with their instructor at least three business days prior to the exam date, or accommodations cannot be made.

7  Exam

Final exam: December 20, 1:30 - 3:30.

8  Academic integrity

The Campus Senate has adopted a policy asking students to include the following statement on each examination or assignment in every course: “I pledge on my honor that I have not given or received any unauthorized assistance on this examination (or assignment).” Consequently, you will be requested to include this pledge on each exam and project.

You may review the University’s Code of Academic Integrity for yourself at
http://www.shc.umd.edu/code.html

Please carefully read the Office of Information Technology’s policy regarding acceptable use of computer accounts and resources at

http://www.nethics.umd.edu/aup

Unless stated otherwise by the instructor, all programming assignments are to be written individually. Cooperation between students on exams, quizzes, or homework is a violation of the Code of Academic Integrity. Any evidence that a violation of the Code has occurred will be submitted to the Student Honor Council, which could result in an XF for the course, suspension, or expulsion. Automated tools may be used to compare students’ code to look for evidence of cheating.

Students are welcome and encouraged to study and compare or discuss their implementations of the programming homework with others after they are graded. However, before a project’s results are announced, students should not discuss or examine each other’s solutions for that project in any way. If you have any question about the appropriateness of a particular situation then consult with the instructors in advance. Should you have difficulty with a programming assignment you should see the instructional staff in office hours, NOT solicit help from anyone else in violation of these rules.

IT IS THE RESPONSIBILITY, UNDER THE HONOR CODE, OF ANYONE WHO SUSPECTS AN INCIDENT OF ACADEMIC DISHONESTY HAS OCCURRED TO REPORT IT TO THEIR INSTRUCTOR, OR DIRECTLY TO THE HONOR COUNCIL.

9 Course evaluations

Course evaluations are important, and taken seriously both by the instructor and by the Computer Science Department. To complete your evaluation, go to

http://www.courseevalum.umd.edu

10 Right to change information

Although every effort has been made to be complete and accurate, unforeseen circumstances arising during the semester could require the adjustment of any material given here. Consequently, given due notice to students, the instructor reserves the right to change any information on this syllabus or in other course materials.