

# Computer Systems Security

## ENEE 457 (Fall 2020)

### Lecture Information

<b>Lectures:</b>	Pre-recorded and posted on Canvas	
<b>Discussion:</b>	MW 11:00am-12:15pm	Zoom link: Posted on Canvas
<b>References:</b>	<i>Introduction to Computer Security</i> , Goodrich and Tamassia, Addison Wesley, 2011 <i>Introduction to Modern Cryptography, 2nd Edition</i> , Katz and Lindell, Chapman & Hall/CRC 2014 <i>Cryptography and Network Security: Principles and Practice</i> , 6th Edition Stallings, Pearson 2014	
<b>Class URL:</b>	<a href="http://www.ece.umd.edu/~danadach/Security_Fall_20/">http://www.ece.umd.edu/~danadach/Security_Fall_20/</a>	
<b>Instructor:</b>	Dr. Dana Dachman-Soled	
	Office: 5238 Iribe	Email: danadach@umd.edu
<b>Office Hours:</b>	<i>by appointment only</i>	
<b>TA:</b>	Aria Shahverdi	Email: ariash@umd.edu
<b>TA Office Hours:</b>	Th 11am-noon	Zoom link: Posted on Canvas

### Important Dates

August 31	Monday	First Discussion
September 7	Labor Day	No Discussion
September 14	Monday	Last day to drop course without a “W”
November 25-November 29	Thanksgiving Recess	No Lecture
December 14	Monday	Last day of class
December 18	Friday	Final exam (8:00am-10:00am)

If you have a documented disability and wish to discuss academic accommodation, please contact me as soon as possible and before **September 9, 2020**.

If you are experiencing difficulties in keeping up with the academic demands of this course, contact the Learning Assistance Service, 2201 Shoemaker Building, 301-314-7693. Their educational counselors offer help with time management, reading, note-taking and exam preparation skills.

### Grading Policy

Programming Projects	35%	7%, 7%, 7%, 7%, 7%
Homework Exercises	6%	
In-Class Labs	9%	
Midterm Exam	25%	(Tentative date: Wednesday, October 21)
Final Exam	25%	Fri. Dec. 18, 8am-10am

Students can earn Extra Credit in this course by giving a short (3-5 minute) video presentation on a news article relating to a topic covered in class. The video will be posted on UMD’s Google Drive with appropriate permissions. You may take advantage of this by e-mailing the instructor with a link to the relevant news article and a brief explanation of how the article relates to the topic covered in class.

An additional Extra Credit Opportunity, consisting of reading a scholarly paper chosen from a list of approved papers and writing a critical summary, will be posted after the midterm exam.

## **Exams:**

- Exams will be posted on Canvas at the scheduled time. The exams are to be completed individually in compliance with the University Code of Academic Integrity found at the end of this document. The scanned or photographed copies of the completed exams are to be submitted via Canvas.
- The midterm exam will be scheduled during a discussion session. At the end of the session 30 extra minutes will be given for uploading the completed exam.
- The final exam will be given at the assigned time. Again, the final exam must be completed individually and uploaded no later than 30 minutes after the scheduled end of the exam.
- While taking the midterm and final exams students will be able to ask questions to the instructor via Zoom. The Zoom links will be provided as the date gets closer.
- Students who cannot take an exam at the scheduled time for religious reasons should contact the instructor before September 9 to schedule a makeup exam. Students who cannot take an exam at the scheduled time for other reasons should get permission from the instructor least 48 hours before the time. If illness or other emergency prevents taking the exam at the scheduled time, students need to present suitable documentation in order to schedule a make-up exam.
- If you would like to discuss the grading of your midterm exam, you should contact the instructor no later than a week after the exam was returned.

## **Pre-Recorded Lectures:**

- Lectures will be posted on Canvas well in advance of the scheduled time of the lectures with indications of the dates of discussion sessions devoted to covering the lecture topics. This should enable students to allocate their time accordingly.

## **Course Webpage, Canvas and Piazza:**

- The course webpage is used for posting homework and project assignments, announcements, lecture summaries and practice problems/class exercises.
- Canvas is used for posting recorded lectures and discussion sessions, announcements, solutions, exams, submissions of projects, homeworks and exams, and for grading.
- Students may post *non-anonymous* discussion topics and questions related to the course material. The instructor reserves the right to delete comments that are inappropriate or do not fall under the scope indicated above. Specifically, complaints or grievances related to the course, instructors, or TAs should be addressed to the instructor via private e-mail and not via Piazza.

## **Discussion Sessions:**

- The discussion session will comprise either an open session for questions or completion of a small “class exercises,” followed by an open session for questions. The class exercises will not be collected and solutions will be posted on the course webpage in a timely fashion.
- Since discussion sessions held twice a week provide an opportunity to ask questions for 30-45 minutes, they may be described as office hours. Additional office hours will be virtual and by appointment only.
- Discussion sessions will be recorded and then posted on Canvas.

## **In-Class Labs:**

- There will be 3-4 in-class labs assigned in the second half of the course.
- These will consist of a tutorial posted on Canvas guiding you through the first several tasks of the lab and one or two tasks remaining to be completed and submitted via Canvas.

## **Projects and Homeworks:**

- This course contains 5 programming projects and 2-3 homework assignments. Instructions will be posted on the course webpage and announced on Canvas at least one week before the due date. Projects/assignments should be submitted online via Canvas. Late submission will not be accepted without documentation supporting legitimate reasons.
- If you dispute your score on a project or homework, you must contact the TA within one week from the date that your project/homework is officially returned. If the matter remains unsettled, you have one more week to bring the issue to Dr. Dachman-Soled with a written request.
- It is acceptable, and you are encouraged, to discuss the projects/homeworks with others, but you must do the coding and/or final write-up by yourself (unless it is a group assignment). Both copying code/writeups and allowing others to copy your code/writeups will be considered as academic dishonesty.

## **Build-It Break-It Project:**

- The Build-It Break-It Project is an intensive, two-part programming project that constitutes Projects 4 and 5. (Build-It = Project 4 and Break-It = Project 5). You are expected to work individually on this project.
- Successful completion of the project requires correct invocation of the cryptographic primitives covered in the lectures and in Project 3. Therefore close attention should be paid to this part of the course.
- The details of the Build-It Break-It Project will be released soon after the midterm exam.
- It is very advisable for you to start working on this project immediately after it is assigned.

**Academic dishonesty:** The University Code of Academic Integrity, which can be found at <http://www.inform.umd.edu/CampusInfo/Departments/JPO/> prohibits students from committing the following acts of academic dishonesty: cheating, fabrication, facilitating academic dishonesty, and plagiarism. Academic dishonesty in this class includes outright copying on homework; however, discussing homework problems and exchanging tips is permissible and also encouraged. If there are any take-home exams, discussing the material with anyone, inside or outside of the class, is considered academic dishonesty. Instance of academic dishonesty will be referred to the Office of Judicial Programs.