## CS 444/544 Intro to Cybersecurity, Spring 2019

**Instructor:** Dr. Marie Vasek

Email: vasek@cs.unm.edu — Please put [cs444] in the subject line of your emails to me so I can

keep track of course communications.

Office: FEC 2120

Office hours: Tuesday 11am - noon, Thursday 1pm - 2pm, and by appointment.

Class meeting time and place: T/TH from 9:30am to 10:45am in CEC B146b

**Prerequisites:** None. Since this is an upper level class, I will assume that you have programmed something interesting in a number of languages and have prior exposure to topics like computer systems and computer organization. I also assume that you have used Linux in previous courses.

Course website: <a href="https://www.cs.unm.edu/~vasek/cs444/">https://www.cs.unm.edu/~vasek/cs444/</a>

**Topics:** We will cover topics ranging from cryptography to web security to hacking cryptocurrencies to botnets and cyberwar. If there's a particular topic that you would like to be discussed in class, please let the instructor know. The current topics for the week will be posted on the course schedule ahead of time.

Required text: None. We will use a combination of online resources and handouts.

## **Grading:**

- Homework (50%)
- Project (25%)
- Final Exam (25%)

I use standard cutoff points when determining grades (e.g. A is [93-100], A- is [90-93), B+ is [87-90), etc.). I reserve the right to curve grades up, but not down.

**Homework:** You will have a combination of weekly short homework assignments and longer assignments. A homework assignment might include a short writing portion, a code portion, and/ or a problem portion. Each assignment will be worth points roughly associated with length.

**Submitting Assignments:** Most homework will be turned in by handing in a paper copy at the beginning of class on the due date. There is a printer in the Linux lab in Farris.

**Project:** You will be assigned an individual project topic. In short, this will include individual research, a coding component, and a writing component. The details will be flushed out later.

**Final Exam:** You will be given a comprehensive, closed note, closed-Internet exam during final exam period. This will be based on the readings and homework assignments.

**Attendance and Participation:** I expect you to attend classes and participate in class discussions. Attendance is encouraged, but not mandatory. I expect you to look at the course schedule before class and do the reading for the associated day beforehand.

Late Work: I expect you to submit your work on time. There are three exceptions to this:

- 1. You will be given 4 lateness coupons. Each can be used to turn in any homework assignment one day late. You may combine them. If you are planning on using any lateness coupons on an assignment, you need to email me before the due date with the subject "[cs444] lateness coupon".
- 2. If there are extenuating circumstances such as a serious illness, let me know as soon as possible to work out an accommodation.
- 3. If there's an unforeseeable incident affecting most students (eg power goes out on campus for hours right before the assignment is due), then I will provide a reasonable accommodation.

Extra Credit: I do not grant extra credit on a per-student basis.

Cheating and collaboration: I encourage students to work together on homework assignments and studying. Collaboration is essential part of science. However, directly copying material from another source is not allowed and will result in an F. If you use sources not given to you during class, you need to properly cite the material in your writing and/or comment a link to the source in your code. When you work with fellow classmate, copying their work is not allowed. Rather, you are allowed to take notes while working together with a classmate. Then you need to write up your assignment subsequently all on your own. This is effectively Yoshi Kohno's Gilligan's Island rule. I take cheating seriously and follow the associated university policies.

**Ethical scholarship and proper use of UNM resources:** You're responsible for understanding the laws and UNM policies pertaining to everything we do in class. You are expected at all times to comply with all policies and laws, and to behave in an ethical and responsible manner.

**UNM statement of compliance with ADA:** Qualified students with disabilities needing appropriate academic adjustments should contact the professor as soon as possible to ensure your needs are met in a timely manner. Students must inform the professor of the disability early in the class so appropriate accommodations can be met. Handouts are available in alternative accessible formats upon request.