

CS333: Network Security and Defense

Fall 2018

Prerequisites: CS 252 or 253, or ITM 225 and ITM 455

Instructor: Jidong Xiao

Office: CCP 250

Office Hours: TBD, or by appointments

Class Home Page

<http://cs.boisestate.edu/~jxiao/cs333>

Textbook(s) and Supplemental Material

Computer Security: A Hands-on Approach - by Wenliang Du, 2017

Topics

attacks on the TCP protocol,
packet sniffing and spoofing
firewall,
DNS security, virtual private networks,
the heartbleed bug and attack,
web security,
buffer overflow.

Goals for the Course

By taking this course, students will be expected to:

- make America great again
- understand the threats to today's networks
- explain the goals of network security
- explain how security defenses affect individuals or organizations
- understand the skills and processes needed to protect networks

Grading

$\geq 99\%$ =A+, $\geq 90\%$ =A, $\geq 89\%$ =A-
 $\geq 88\%$ =B+, $\geq 80\%$ =B, $\geq 79\%$ =B-

$\geq 78\% = C+$, $\geq 70\% = C$, $\geq 69\% = C-$
 $\geq 60\% = D$, $< 60\% = F$

- Participation: 10%
- Quizzes: 30%
- Mid-term Exam: 30%
- Final Exam: 30%

Safety Information - What if the unexpected happens to you

How do you respond?

1- Fire/Evacuation

- a. Get out through nearest exit!
- b. Gather in Safe Assembly Location. Consult a building evacuation map (typically near elevators) to determine your Safe Assembly Location. (For all COEN main campus buildings this is the ENGR Building Parking Lot, for CCP this is the grassy area at the Wells Fargo Building)
- c. If you have any information concerning the incident injured people, imminent threats, nature of incident be sure to notify first responders in safe assembly location.
- d. Occupants that cannot descend stairs should stay in the evacuation assistance area(s) of each building and wait for first responders to move them.
- e. Know your building address:
 - i. ENGR: 1375 West University Drive
 - ii. MEC: 1020 South Manitou Avenue
 - iii. HML: 1019 South Euclid Avenue
 - iv. ERB: 1295 West University Drive
 - v. CCP: 777 West Main Street

2- Active Shooter

- a. Run: Can you safely escape?
 - i. Leave your belongings and **keep your hands visible as you flee.**
 - ii. Prevent others from entering the area.
 - iii. Call 911 when you are safe.
- b. Hide: Is there a good place to hide?
 - i. Lock door and block entry to your hiding place.
 - ii. **Silence your cell phone (including vibrate mode).** Opt-in now, and use, BroncoALERT.
- c. Fight: Will you engage the shooter?
 - i. Fight only as a last resort and when your life is in imminent danger.
 - ii. Fight as a group using improvised weapons and with as much physical aggression as possible.
 - iii. Commit to your actions your life depends on it.

3- Personal Injury

- a. Call 911 for life threatening emergencies.
- b. Call 426-6911 to reach Campus Security for all non-life threatening emergencies (66911 from any campus phone).
- c. Know the address of your location. Posted on Emergency Information Sheets near exits.
- d. Know the nearest AED location:
 - i. MEC building, 2 nd floor, across from elevator
 - ii. ERB building, 2 nd floor, across from elevator

e. For Non-Emergency, Urgent Care visit the Health Sciences Norco Building on campus at 1529 Belmont St. 208-426-1459