

Intro to Cyberwarfare

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Course Description

Presents an overview of the policies and government agencies that protect U.S. critical infrastructure (CI). Students will study the history of cyber warfare and the hacker groups that are targeting CI. The evolution and growing need of Critical Infrastructure Protection will be analyzed by students. Students will gain awareness of how law enforcement and cyber investigation integrates on a City, State, and Federal level.

Upon successful completion of this course, you will be able to understand the interconnected systems that Americans rely on to maintain our quality of life. You will become familiar with the impact of a sophisticated cyber-attack against the electrical grid and the methods an attacker may use against our critical infrastructure.

Student Learning Objectives

1. Upon successful completion of this course, students will be able to:
2. Describe Critical Infrastructure Characteristic's.
3. Explain the Critical Infrastructure Sectors and the national agencies that are responsible.
4. Explain government agencies involved with cyber security.
5. Describe the origins and history of Critical Infrastructure Protection (CIP).
6. Identify Social Engineering tactics and how hacker groups use them.
7. Evaluate an Industrial Control System Cyber-Attack Surface.
8. Understand the fundamentals of hacktivism.
9. Analyze the history of cyber terrorism.
10. Explain the cyber warfare.
11. Compare hacker groups and their motivations.

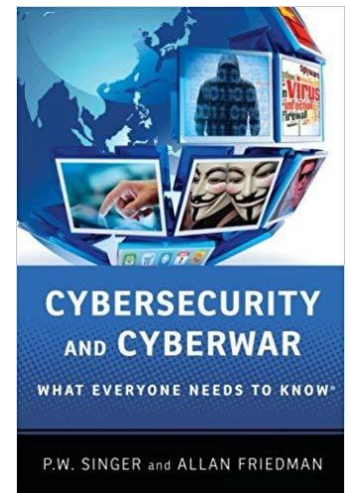
Required Textbooks

[Cybersecurity and Cyberwar: What Everyone Needs to Know, 1st Edition](#)

Grades

Grades are earned on quizzes, homework, class exercises, and the final project. Assignments will receive credit only if turned in on or before the due date. The grade point value awarded is aligned with [EvCC Policy](#).

Late assignments will not be accepted for reduced credit.



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Quarter grades will be determined by the following percentage of total points:

95-100.00% = A	84-86% = B	74-76% = C	64-66% = D
90-94% = A-	80-83% = B-	70-73% = C-	60-63% = F
87-89% = B+	77-79% = C+	67-69% = D+	

Course Structure

The class will consist of lectures nearly every class period. Most class meeting will also consist of a lab or group assignment. In-class group assignments cannot be made up – no exceptions. You will also receive weekly Concepts and/or research assignments that you are expected to complete outside of class. I strongly advise you to use your textbook to complete Concepts assignments.

Please email, or ask me in person, any questions that you may have about an assignment.

Course Policies

Late assignments will not be accepted for reduced credit. All assignments are due on the date due.

Use the Modules/Home page on Canvas. Make sure you are looking at the **Modules/Home** page in canvas. You cannot rely on your To-Do list to provide all of the course information. I have all of the assignments and quizzes laid out in order. I also post supplementary materials including documents, content pages, and external links to resources.

Make sure that you have your notifications set up so that you are receiving announcements and assignment updates. “I didn’t see the notification” is not a valid excuse for missing an assignment or failing to be prepared for class.

Assignments: All work must be original work in your own words. Concepts and research assignments need to be completed thoroughly to the point that a layman could read your assignment and gain a general understanding of the topics covered. **Read all of my instructions through completely BEFORE starting the assignment or lab.** Being able to follow instructions and view them critically is a necessary IT skill.

Changes may occur. I may publish a tentative schedule of topics, activities, assignments, due dates, etc. The instructor reserves the right to make any changes as he/she deems necessary.

Show up on time, every time. This course presents topics in sequential order. If you miss a lecture, the same material will *not* be covered again later in the term, and you may have difficulty understanding new concepts that build on prior material. If you are unable to attend class, please notify me at least one hour before class begins.

Complete all assignments on time. The due date for each assignment will be indicated in Canvas. You may have opportunities for additional feedback if you submit an assignment early. Unless otherwise indicated in Canvas, all assignments are due before midnight on the day prior to class.

Submit all work via Canvas. Assignments are not accepted on paper (unless specifically requested on paper) or via e-mail. No work will be graded until it is submitted in Canvas.

Ask questions. If you are having trouble comprehending instructions for an assignment or activity, please don’t hesitate to contact me via e-mail or the discussion board. However, it is crucial that you do so within a reasonable time period. Asking for assistance one or two hours before the due date and time is not sufficient time for me or other students to assist you.

Show respect for others. When posting online, please be polite and respect the point of view of others. Avoid being negative, judgmental, or insulting. Remember that this is an academic forum and not a public chat room. This activity is crucial to the success of our course; the discussions turn our virtual classroom into a real place where students and the instructor are truly interacting. Please take your participation contribution seriously because we need to learn from each other.

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Academic Dishonesty. Plagiarism and/or any other form of academic dishonesty are serious offenses and *will* result in a **failing grade for the assignment *and* possibly for the entire course**. Students who commit plagiarism will be reported to Everett Community College and appropriate action, up to suspension, will be taken by the dean. General advice and interaction are encouraged. Each person, however, must develop his or her own solutions to the assigned projects, assignments, and tasks. In other words, students may not "work together" on graded assignments unless specifically authorized in the assignment's written instructions. It is *never* acceptable to "copy and paste" material from *any* outside source without proper referencing. Please ask me immediately if you have any questions about academic integrity. This information can also be found in the Student Handbook.

Distractions. Students are expected to pay attention and participate actively in class. Cell phones must be turned off or silenced prior to the beginning of class. Students engaging in the use of cell phones, social networking sites, games, or other distracting activities while in class may be asked to leave the room.

Disability Accommodations. Everett Community College will make reasonable accommodations for persons with documented disabilities. Students should notify the Director of the Center for Disability Services (located in Parks 267 right across from the bookstore) and their instructors of any accommodation needs as soon as possible.

Food and drink. Food and drinks are not permitted at the computer stations. Please ask me where it is safe to leave these items during class.

Electronic devices. You may use Wi-Fi in the lab, but it is *never* acceptable to plug a personal computer into the lab network. Mobile phones and pagers are disruptive to the classroom environment. Please turn off your devices before class starts. If you **MUST** monitor a device during class, please set it to silent mode and exit the classroom to answer. Failure to do so will be considered disruptive behavior. Repeated disruptions caused by these devices will not be tolerated.

Software/Hardware. No unauthorized software may be installed on the lab computers. No games or other application programs may be used in class. The EvCC Computer and Network Acceptable Use Policies apply to this classroom. In particular, do not install or modify equipment; do not attach personal computers to the lab network; do not copy licensed software! If in doubt, *ask first*.

EvCC Core Learning Outcomes

1. Think critically: Students will be graded on analytical skills through a writing assignment requiring them to compare and contrast hacker groups and their motivations. A minimum average of 73 percent is required.
2. Communicate effectively: Students will prepare individual and a group presentation on cyber warfare. A minimum average of 73 percent is required.

CJ Program Outcomes

Differentiate between the various components of the criminal justice system, the purposes and objectives of these components, and their roles in society: The outcomes will be measured by evaluating small group activities and written work for clarity, accuracy, precision, and depth of thinking. The results are graded on a rubric with a minimum average of 73 percent.

Utilize effective communication, critical thinking, and decision-making as they apply to criminal justice practice: The outcomes will be measured by evaluating small group activities and written work for clarity, accuracy, precision, and depth of thinking. The results are graded on a rubric with a minimum average of 73 percent.