



# COMPUTER SECURITY FUNDAMENTALS

## CSF200 — Computer Security Fundamentals, 3.0 hours

### PROFESSOR

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While pursuing a Master's Degree in Information Technology from Grantham University, I developed skills in reverse engineering, computer forensics, networking, training and information security. This knowledge has enabled me to operate in Windows and Linux platforms and master multiple security principles virtual and physical. During my 28 years in the Military as a Signal Warrant Officer I have had several opportunities to act in an instructor role; both face to face and virtual. I have been trained as an instructor by both the U.S. Army and the Royal Danish Defense College in Copenhagen, Denmark. I take teaching to heart in all cases.

### CONTACT INFORMATION

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E-mail: [wbyrd@lakewood.edu](mailto:wbyrd@lakewood.edu)  
Cell Phone: 800-517-0857 X 787

### ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

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All members of the Lakewood University community who use the University's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing [info@lakewood.edu](mailto:info@lakewood.edu)

### BOOKS AND RESOURCES

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Mattord, Herbert. Whitman, E. Michael. Principles of Information Security. 5th ed. Cengage, 2015.

### EVALUATION METHOD

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Graded work will receive a numeric score reflecting the quality of performance.  
Course Requirement Summary

- Assignments - Total of 60 Points
- Weekly discussion forums-Total of 90 Points
- Final Exam - 50 Points

### GRADING SCALE

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Graded work will receive a numeric score reflecting the quality of performance as given above in evaluation methods. The maximum number of points a student may earn is 200. To determine the final grade, the student's earned points are divided by 200.

Your overall course grade will be determined according to the following scale:

A = (90% -100%)

B = (80% - 89%)

C = (70% - 79%)

F < (Below 70%)

## ACADEMIC INTEGRITY/ PLAGIARISM:

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Cheating (dishonestly taking the knowledge of another person whether on a test or an assignment and presenting it as your work) and plagiarism (to take and pass off as one's own the ideas or writing of another) are a serious issue. While it is legitimate to talk to others about your assignments and incorporate suggestions, do not let others "write" your assignments in the name of peer review or "borrow" sections or whole assignments written by others. We do get ideas from life experiences and what we read but be careful that you interpret these ideas and make them your own.

I am aware that many types of assignments are available on the internet and will check these sources when there is legitimate suspicion.

Penalty is a zero on the assignment. In cases where there is a major or continuous breach of trust, further discipline, such as an "F" in the course, may be necessary.

The major consequence of any form of cheating is damage to your character and the result of trust and respect.

## DISABILITY ACCOMMODATIONS

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Students who may have a disability meriting an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. For accommodations to be awarded, a student must complete a form and provide documentation of the disability to the Disability Services Coordinator. Any accommodations for disabilities must be re-certified each year by the Disability Services Coordinator before course adjustments are made by individual instructors. Additional information on disability accommodations may be found in the Lakewood University Catalog.

## SUPPLEMENTAL TEXTS

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You can use the following resources to assist you with proper source citation.

American Psychological Association Style Guide- [https://www.mylakewoodu.com/pluginfile.php/118179/mod\\_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf](https://www.mylakewoodu.com/pluginfile.php/118179/mod_resource/content/1/APA%20Style%20Guide%207th%20edition.pdf)

The Purdue OWL website is also a helpful resource for students. Here is a link to the OWL website: [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/general\\_format.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/general_format.html)

## LIBRARY

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Mary O'Dell is the Librarian on staff at Lakewood University

She is available by appointment. You can make an appointment with her by emailing her at [modell@lakewood.edu](mailto:modell@lakewood.edu) or call at 1-800-517-0857 X 730

You may also schedule a meeting at this link: <https://my.setmore.com/calendar#monthly/r3a761583354923270/01032020>

She can assist you with navigating LIRN, research, citations etc.

## SUPPORT

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Each student at Lakewood University is assigned a Success Coach. Your Success Coach exists to assist you with academic and supportive services as you navigate your program. They will reach out to you, often, to check-in. Please use the resources they offer.

Student Services is available to assist with technical questions regarding Lakewood University and all services available to you.

1-800-517-0857 option 2  
info@lakewood.edu  
studentservices@lakewood.edu

## CAREER SERVICES

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Students are offered Career Services at any point as they journey their academics at Lakewood University.

1-800-517-0857 option 2  
careerservices@lakewood.edu

## LESSONS

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TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	<ul style="list-style-type: none"><li>Introduction to Information Security</li><li>The Need for Security</li></ul>	Study Course Syllabus Read Chapters 1 & 2 Participate in 2 Discussion Forums Lesson Evaluation		Objective 1
Lesson #2	<ul style="list-style-type: none"><li>Legal, Ethical, and Professional Issues in Information Security</li><li>Planning for Security</li></ul>	Read Chapters 3 & 4 Participate in the Discussion Forum Lesson Evaluation		Objective 2
Lesson #3	<ul style="list-style-type: none"><li>Risk Management</li><li>Security Technology: Firewalls and VPNs</li></ul>	Read Chapters 5 & 6 Participate in the Discussion Forum Complete Assignment 1 Lesson Evaluation	Assignment 1 upon completion of the lesson	Objective 3
Lesson #4	<ul style="list-style-type: none"><li>Security Technology: Intrusion Detection and Prevention Systems, and Other Security Tools</li><li>Cryptography</li></ul>	Read Chapters 7 & 8 Participate in the Discussion Forum Lesson Evaluation		Objective 4

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #5	<ul style="list-style-type: none"> <li>Physical Security</li> </ul>	Read Chapters 9 Participate in the Discussion Forum Complete Assignment 2 Lesson Evaluation	Assignment 2 upon completion of the lesson	Objective 5
Lesson #6	<ul style="list-style-type: none"> <li>Implementing Information Security</li> </ul>	Read Chapters 10 Participate in the Discussion Forum Lesson Evaluation		Objective 6
Lesson #7	<ul style="list-style-type: none"> <li>Security and Personnel</li> </ul>	Read Chapters 11 Participate in the Discussion Forum Lesson Evaluation		Objective 7
Lesson #8	<ul style="list-style-type: none"> <li>Information Security Maintenance</li> </ul>	Read Chapter 12 Participate in the Discussion Forum Complete Assignment 3 Complete the Final Exam Request the Next Course Lesson Evaluation THANKS FOR A GREAT CLASS	Assignment 3 and the Final exam upon completion of the lesson	

## DESCRIPTION

This course provides students with a core foundation of technical knowledge necessary to design and build secure computing systems, to detect unauthorized use, and to protect those systems, their resources, and the data that they store or access.

### Program Objectives

1. Discuss the important role of access control in computer-based information systems, and identify and discuss widely used authentication factors.
2. Describe firewall technology and the various approaches to firewall implementation.
3. Define information security.
4. Recount the history of computer security, and explain how it evolved into information security.
5. Define key terms and critical concepts of information security.
6. List the phases of the security systems development life cycle.
7. Describe the information security roles of professionals within an organization.
8. Describe management's role in the development, maintenance, and enforcement of information security policy, standards, practices, procedures, and guidelines

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