ADVANCED INTERNET SECURITY AND THREATS

AIST400 — Advanced Internet Security & Threats, 3.0 hours

PROFESSOR

Tom Tardy is an Information Security professional passionate about teaching and helping others perform at their best. Tom loves to learn and challenge himself. He has a master's degree in Information Security, two bachelors' degree - in Education and Computer Forensics - and an associate degree in Law Enforcement Technology. He also is a Certified Ethical Hacker (C|EH) and Certified Hacker Forensic Investigator (C|HFI).

CONTACT INFORMATION

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ONLINE SUPPORT (IT) AND MOODLE NAVIGATION:

All members of the Lakewood College community who use the College's computing, information or communication resources must act responsibly. Support is accessible by calling 1-800-517-0857 option 2 or by emailing info@lakewoodcollege.edu

BOOKS AND RESOURCES

Whitman, Michael. Principles of Information Security. Available from: VitalSource Bookshelf, (7th Edition). Cengage Learning US, 2021.

EVALUATION METHOD

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 80 Points
- Final Exam - 50 Points

GRADING SCALE

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 190. To determine the final grade, the student's earned points are divided by 190.

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:

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

Students who have a disability and wish to request an academic accommodation should contact Jim Gepperth, the Disabilities Services Coordinator and Academic Dean. The student can request an accommodation at any time although it is encouraged to do so early in the enrollment process. The student should complete an accommodation request form which begins a conversation between the school and the student regarding the nature of their disability and an accommodation that would help the student succeed in their program. The school may request documentation regarding the disability to address the accommodation request effectively. The school will communicate to the student the type of accommodation arranged. This process typically follows a team approach, bringing together persons from the academic department (including the instructor) and personnel from other departments as necessary. Additional information on disability accommodations may be found in the Lakewood University Catalog.

Disability Services Email: disabilityservices@lakewood.edu

SUPPLEMENTAL TEXTS

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

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

LIBRARY

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 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

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

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

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #1	• Introduction to Information Security • The Need for Security	Study Course Syllabus Read Chapters 1 & 2 Participate in the Discussion Forum Lesson Evaluation		Objective 1
Lesson #2	• Legal, Ethical, and Professional Issues in Information Security • Planning for Security	Read Chapters 3 & 4 Complete Assignment 1 Lesson Evaluation	Assignment 1 upon completion of the lesson	Objective 2
Lesson #3	• Risk Management • Security Technology: Access Controls, Firewalls and VPNs	Read Chapters 5 & 6 Participate in the Discussion Forum Lesson Evaluation		Objective 3

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #4	• Security Technology: Intrusion Detection and Prevention Systems, and Other Security Tools • Cryptography	Read Chapters 7 & 8 Participate in the Discussion Forum Lesson Evaluation		Objective 4

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #5	• Physical Security	Read Chapters 9 Participate in the Discussion Forum Complete Assignment 2 Lesson Evaluation	Assignment 2 upon completion of the lesson	Objective 5

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #6	• Implementing Information Security	Read Chapters 10 Participate in the Discussion Forum Lesson Evaluation		Objective 6

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #7	• Security and Personnel	Read Chapters 11 Participate in 2 Discussion Forums Lesson Evaluation		Objective 7

TITLE	COURSE TOPIC	READINGS/ASSIGNMENTS	DUE	OBJECTIVES
Lesson #8	• Information Security Maintenance	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	Final exam upon completion of the lesson	Objective 8

DESCRIPTION

This course will cover the advanced topics in Internet and Network security to help students understand complex attack paths and countermeasures specific system with different hardware/software components and architecture.

OBJECTIVES

1. Discuss the organizational need for information security.

2. Describe what contingency planning is and how it relates to incident response planning, disaster recovery planning, and business continuity plans.
3. Describe firewall technologies and the various categories of firewalls.
4. List and explain the major protocols used for secure communications.
5. Identify critical physical environment considerations for computer facilities, including uninterruptible power supplies.
6. Describe the need for professional project management for complex projects.
7. Explain the need for separation of duties.
8. Identify the key factors involved in monitoring the external and internal Environment.