Information Technology Security (ITSY 1342 2A1)

LAMAR INSTITUTE OF TECHNOLOGY

INSTRUCTOR CONTACT INFORMATION

Instructor:	Steven Joiner
Email:	scjoiner@lit.edu
Office Phone:	409 247 4995
Office Location:	T4 – 105 (Back Office)
Office Hours:	Monday-Friday 8am-11am

CREDIT

3 Semester Credit Hours (2 hours lecture, 4 hours lab)

MODE OF INSTRUCTION

Online

PREREQUISITE/CO-REQUISITE:

Completed the Online Orientation and answered Yes to 7+ questions on the Online Learner Self-Evaluation: https://www.lit.edu/online-learning/online-orientation**.**

COURSE DESCRIPTION

Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices. *This course is time-bound, structured, and completed online*.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to:

- Apply National Institute of Standards and Technology (NIST) guidelines and other best practices.
- Develop backup/recovery procedures to provide for data security.
- Use desktop /device operating system features to implement security.
- Identify computer and network threats and vulnerabilities and methods to prevent their effects
- Use tools to enhance network security
- Use encryption techniques to protect network local and distributed systems data.

REQUIRED TEXTBOOK AND MATERIALS

Ciampa, M. D. (2022). CompTIA Security+: Guide to Network Security Fundamentals (7th ed.). Cengage.
ISBN: 9780357424377

ATTENDANCE POLICY

This is a fully online class. You are expected to log into BlackBoard 3 to 4 times a week to check for updates and announcements.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

COURSE CALENDAR (Subject to Change)

DATE	TOPIC	READINGS	Due Date
Week 1 (8/21-8/27)	Introduction/Syllabus	None	8/27/2023
Week 2 (8/28 – 9/3)	Introduction to Security/ Threat Management	Module 1-2 Pages 3-62	9/3/2023
Week 3 (9/4-9/10)	Cybersecurity Resources/ Threats and Attacks on Endpoints	Module 2-3 Pages 33-94	9/10/2023
Week 4 (9/11-9/17)	Endpoint and Application Development Security	Module 4 Pages 95-126	9/17/2023
Week 5 (9/18-9/24)	Mobile, Embedded, and Specialized Device Security	Module 5 Pages 127-154	9/24/2023
Week 6 (9/25-10/1)	Basic Cryptography	Module 6 Pages 157-190	10/1/2023
Week 7 (10/2-10/8)	Public Key Infrastructure and Cryptographic Protocols	Module 7 Pages 191-222	10/8/2023
Week 8 (10/9-10/15)	Networking Threats, Assessments, and Defenses	Module 8 Pages 225-254	10/15/2023
Week 9 (10/16-10/22)	Network Security Appliances and Technologies	Module 9 Pages 255-284	10/22/2023
Week 10 (10/23-10/29)	Cloud and Virtualization Security	Module 10 Pages 285-316	10/29/2023
Week 11 (10/30-11/5)	Wireless Network Security	Module 11 Pages 317-350	11/5/2023
Week 12 (11/6-11/12)	Authentication	Module 12 Pages 353-388	11/12/2023
Week 13 (11/13-11/19)	Incident Preparation, Response, and Investigation	Module 13 Pages 389-422	11/19/2023
Week 14 (11/20-11/26)	Cybersecurity Resilience	Module 14 Pages 423-452	11/26/2023
Week 15 (11/27-12/3)	Risk Management and Data Privacy	Module 15 Pages 453-452	12/3/2023
Week 16 (12/4-12/6)	Final Exam	BlackBoard	12/6/2023

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Chapter Quizzes 15%
- Labs 20%
- Assignments 15%
- Tests 25%
- Final Exam 25%

GRADE SCALE

- 90-100 A
- 80-89 B
- 75-79 C
- 70-74 D
- 0-69 F

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook accessible on the LIT website.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at https://lit.edu/online-learning/online-learning-minimum-computer-requirements. A functional broadband internet connection, such as DSL, cable, or Wi-Fi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at Special Populations - Lamar Institute of Technology (lit.edu).

STUDENT CODE OF CONDUCT STATEMENT
It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand, and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

STARFISH
LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance. Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION
1. All assignment due dates are indicated in the Blackboard course for this class. Any work submitted after the assigned due date will receive a 10 point per week deduction.
2. Tests are assigned a due date and must be completed by that date. Tests will not be reactivated after the due date.
3. All tests will require lockdown browser. Please see "Test Browser" in the introduction section of the Blackboard course.
4. All written assignments should be submitted in APA format. Refer to the "APA Format Assistance" section in the introduction section of the Blackboard course.
5. All assignments must be submitted via Blackboard unless specified by your instructor. Assignments submitted through any other method will receive a "0".
6. Grades for assignments may be accessed through My Grades in Blackboard. Each assignment shows your grade and any grading comments made on your assignment.
7. All assignments must be turned in before the final exam.

COMMUNICATING WITH YOUR INSTRUCTOR
- Email is the preferred method for contacting the instructor.
- You must include the course number (ITSY 1342) and section number (section 7A1).
- Please allow 24 hours during the week and 48 hours on the weekend for a response.

Certification Requirement
Cyber Security and Networking majors are required to earn certification in one of the following areas prior to graduation.
- A+ Certification
- Network+ Certification
- Security+ Certification
- Linux+ Certification
- Cisco Certified Network Associate (CCNA)