Information Technology Security

(ITSY 1342 9T1)

INSTRUCTOR CONTACT INFORMATION

Instructor:	Steven Joiner
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Office Phone:	409 247 4995
Office Location:	T4 – 105 (Back Office)
Office Hours:	Tuesday/Thursday: 10:30am – 3:00pm

CREDIT

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

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

None

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.

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

- CompTIA Security+ Guide to Network Security Fundamentals, 7th Edition, Ciampa, Cengage, 2020.
 - o ISBN: 9780357424377

ATTENDANCE POLICY

Please refer to the Beaumont Independent School District attendance policy in the student handbook for details.



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

DATE	ΤΟΡΙϹ	READINGS	ASSIGNMENTS
		(Due on this Date)	(Due on this Date)
Week 1	Intro/Syllabus	None	None
		Module 1	Quiz 1
Week 2	Introduction to Security	See Blackboard Schedule	Live Lab 1.1
			Live Lab 1.2
Week 3	Threat Management and Cyber Resources	Module 2 See Blackboard Schedule	Quiz 2
			Live Lab 2.1
			Live Lab 2.2
	Threats and Attacks on	Module 3 See Blackboard Schedule	Quiz 3
Week 4			Live Lab 3.1
	Endpoints		Live Lab 3.2
			Live Lab 3.3
		Module 4 See Blackboard Schedule	Quiz 4
Week 5	Endpoint and Application		Simulation Lab 4.1
	Development Security		Simulation Lab 4.2
		Module 5 See Blackboard Schedule	Quiz 5
Week 6	Mobile, Embedded, and		Simulation Lab 5.1
	Specialized Device Security		Live Lab 5.1
			Test 1
	Basic Cryptography	Module 6 See Blackboard Schedule	Quiz 6
Week 7			Simulation Lab 6.1
			Live Lab 6.2
	Public Key Infrastructure and Cryptographic	Module 7 See Blackboard Schedule	Quiz 7
Week 8			Live Lab 7.1
	Protocols		Live Lab 7.2
	N N N N		Quiz 8
	Networking Threats, Assessments, and Defenses	Module 8 See Blackboard Schedule	Simulation Lab 8.1
Week 9			Live Lab 8.2
			Live Lab 8.3
Week 10	Network Security Applications and Technologies	Module 9 See Blackboard Schedule	Quiz 9
			Simulation Lab 9.2
			Live Lab 9.1
			Live Lab 9.2
			Test 2
			1 CJL 2

			Quiz 11
Week 11	Wireless Network Security	Module 11	Simulation Lab 11.1
		See Blackboard Schedule	Live Lab 11.1
			Live Lab 11.2
Week 12	Authentication	Module 12 See Blackboard Schedule	Quiz 12
			Simulation Lab 12.1
			Live Lab 12.1
Week 13	Incident Preparation,	Module 13 See Blackboard Schedule	Quiz 13
	Response, and		Live Lab 13.2
	Investigation		Live Lab 13.3
Week 14 Cybersecurity Resilien	Cybersecurity Resilience	Module 14 See Blackboard Schedule	Quiz 14
			Simulation Lab 14.1
			Live Lab 14.1
Week 15	Risk Management and		Quiz 15
		Module 15	Simulation Lab 15.1
	Data Privacy	See Blackboard Schedule	Live Lab 15.2
			Test 3
Week 16	Final Exam	None	Final Exam
			ТВА

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

25%	
25%	
25%	
25%	

GRADE SCALE

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

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 WiFi 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 special populations@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 <u>www.lit.edu</u>. 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

Course Policies

- 1. No food, drinks, use of tobacco products, or vaping products in class.
- 2. Electronic devices not being used for the class, such as phones and headphones, must be turned off while in class. Any device usage during class may result in a deduction of points on an assignment or test.
- 3. Certification: If a student passes the certification test that is associated with this class, you will receive an "A" on the final exam and credit for 25% of your labs.
- 4. A grade of 'C' or better must be earned in this course for credit toward degree requirement.
- 5. 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 deduction.
- 6. Tests are assigned a due date and must be completed by that date. Tests will not be reactivated after the due date.

- 7. All assignments must be submitted via Blackboard unless specified by your instructor. Assignments submitted through any other method will receive a "0".
- 8. Grades for assignments may be accessed through My Grades in Blackboard. Each assignment shows your grade and any grading comments made on your assignment.
- 9. It is the student's responsibility to verify transferred exam grades and ask for corrections if needed.
- 10. All work is due before the final exam date. Nothing will be graded after the final exam.