Critical Infrastructure Protection (HMSY 1341)

CREDIT

3 Semester Credit Hours (3 hours lecture, 0 hours lab)

MODE OF INSTRUCTION
Online

PREREQUISITE/CO-REQUISITE:
None

COURSE DESCRIPTION
Identification and analysis of critical infrastructure systems including security and threat assessments. Includes mitigation of threats as well as evaluation and revision of security measures in order to protect critical infrastructures. This course is time-bound, structured, and completed totally online.

COURSE OBJECTIVES
1. Identify local area critical infrastructures
2. Evaluate security measures
3. Report methods to revise security of protection assets
4. Demonstrate mitigation of a critical infrastructure threat
5. Conduct information collection using the Internet and library resources
6. Present written and oral reports on findings

INSTRUCTOR CONTACT INFORMATION

Instructor: Tim Ocnaschek

Email: twocnaschek@lit.edu

Office Phone: 409-839-2968

Office Location: Technology Center (TC) – Room 116

Office Hours: BY APPOINTMENT

REQUIRED TEXTBOOK AND MATERIALS
Text Material is provided online:
- A Guide to Critical Infrastructure Security and Resilience (November 2019)
- Critical Infrastructure Sectors_ CISA
- The Office of Infrastructure Protection
- IS-913.a Critical Infrastructure and Key Resources Support Annex
- IS-860.c National Infrastructure Protection Plan (NIPP), An Introduction
- IS-1170, Introduction to the Interagency Security Committee (ISC)

Approved:

- IS-906 Workplace Security Awareness
- IS-907 Active Shooter: What You Can Do
- IS-914 Surveillance Awareness: What You Can Do
- IS-915 Protecting Critical Infrastructure Against Insider Threats

ATTENDANCE POLICY

1. Except for the introductory week, weekly discussion assignments are due by Wednesday at midnight. Responses to classmate(s) are due by midnight Saturday. Tests are due by midnight Sunday.
2. Discussion assignments must be submitted in the following format: Course name, Student name, and date as a header. Answers must be in paragraph format and double spaced with a 100 word minimum and 250 word maximum.
3. The Final Project paper is due the week before Finals

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	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week 1	"Start Here" Module 1	• Initial Intro Discussion 1 • Final Intro Discussion 1	• Post by Feb 19 • Post by Feb 22
Week 2	Module 1 Introduction and Foundation	• Read Guide to Critical Infrastructure Security and Resilience • Initial Intro Discussion 1 • Final Intro Discussion 1	• Post by Feb 26 • Post by Mar 1
Week 3	Module 1, Introduction and Foundation	• Review IS-860.c • Initial Discussion 1 • Initial Discussion 2 • Final Discussion 1 • Final Discussion 2	• Post by Mar 5 • Post by Mar 5 • Post by Mar 8 • Post by Mar 8
Spring Break	Spring Break	Spring Break	Mar 10-14

Week 4	Module 2, Sector-Specific Information and Threat Assessment and Mitigation	• **Read Critical Infrastructure** Sectors • **Post** selected Critical Infrastructure Sector for final project • **Post** CI Sectors corresponding to wk 1 assignment • Initial Discussion 1 • Final Discussion 1 • **Review IS-1170** • Initial Discussion 1 • Final Discussion 1 • **Review IS-913.a** • Initial Discussion 1 • Final Discussion 1 • **Test #1** over material from IS 860.c and 913.a	• Post by Mar 19 • Post by Mar 19 • Post by Mar 19 • Post by Mar 22 • Post by Mar 19 • Post by Mar 22 • Post by Mar 19 • Post by Mar 22 • Post by Mar 23
Week 5	Module 2, Sector-Specific Information and Threat Assessment and Mitigation	• **Read 2019 National Threat** & Hazard Identification and Risk Assessment (THIRA) • Initial Discussion 1 • Final Discussion 1 • **Read National Risk** & Capability Assessment • Initial Discussion 1 • Final Discussion 1	• Post by Mar 26 • Post by Mar 29 • Post by Mar 26 • Post by Mar 29
Week 6	Module 2, Sector-Specific Information and Threat Assessment and Mitigation	• **Read About BRIC** _ reducing risk through Hazard Mitigation • Initial Discussion 1 • Final Discussion 1 • **TEST 2** over module 2 reading material	• Post by Apr 2 • Post by Apr 5 • Post by Apr 6
Week 7	Module 3, Preparedness and Response	• **Review IS-906** • Initial Discussion	• Post by Apr 9

		• Final Discussion • **Review IS-907** • Initial Discussion • Final Discussion	• Post by Apr 12 • Post by Apr 9 • Post by Apr 12
Week 8	Module 3, Preparedness and Response	• **Review IS-914** • Initial Discussion 1 • Final, Discussion 1 • **Review IS-915** • Initial Discussion 1 • Final, Discussion 1	 • Post by Apr 16 • Post by Apr 19 • Post by Apr 16 • Post by Apr 19
Week 9	Module 3, Preparedness and Response	• Read USFA Critical Infrastructure Protection Process Job Aid • Initial Discussion 1 • Final Discussion 1	 • Post by Apr 23 • Post by Apr 26
Week 10	Module 3, Preparedness and Response	• Final Project paper due • Research essay regarding National Critical Functions	• Post by May 3 • Post by May 10
Week 11	Module 3, Preparedness and Response	• **Test 3** over material from IS-906, IS 907, IS 914 and IS 915	• Post by May 14

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

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GRADE SCALE

- 90-100 A
- 80-89 B
- 70-79 C
- 60-69 D
- 0-59 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 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.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses

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. Students are expected to use proper net etiquette while participating in course emails, assignment submissions, and online discussions 2. Log onto Blackboard at a minimum of 3 times a week.
2. Students must engage in weekly discussions and feedback to classmates

3. All students must register with FEMA and obtain a Student Identification Number (SID; https://cdp.dhs.gov/femasid/register).
4. Assignments' grades may be accessed through My Grades in Blackboard. Each assignment shows your grade and any comments I make on your assignment.