INTRODUCTION TO DIGITAL FORENSICS
(ITDF 1300.1A1) - Spring 2023

INSTRUCTOR CONTACT INFORMATION

Instructor:	Patrick Stewart
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Office Location:	Wayne A. Reaud Building Suite 222
Office Hours:	By Appointment Only

CREDIT

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

MODE OF INSTRUCTION

Hybrid

PREREQUISITE/CO-REQUISITE:

None

COURSE DESCRIPTION

A study of the application of digital forensic technology to collect, analyze, document, and present information while maintaining a documented chain of custody. Overview of ethics, crime, and other legal guidelines/regulations/laws. Includes overview of tools used for forensic analysis of digital devices in investigations.

COURSE OBJECTIVES

Upon completion of this course, the student will be able to
- Identify crimes committed using digital devices.
- Define the role of the digital forensics technician in investigating crimes or incidents.
- Identify the tools used to collect and analyze information stored on digital devices.
- Describe proper handling of evidence obtained during investigation for civil or criminal proceedings including chain of custody.

REQUIRED TEXTBOOK AND MATERIALS

MindTap access to *Guide to Computer Forensics and Investigations, 6th Edition*, Nelson, Phillips, and Steuart; Cengage, 2019

a. **How to buy** your Course Materials
Step 1: Sign into **Blackboard** and click on **this course**
Step 2: Click on the Cengage link: **Getting Started** in the *Getting Started with Cengage MindTap* section.
Step 3: Create or sign into your Cengage account to access or purchase the materials for this course.

b. Beware of sites that are selling discounted codes. These sources are likely unauthorized sellers who have acquired access codes illegally, and transactions with such sources may pose a risk to your personal information.

c. Need help? Visit startstrong.cengage.com for step-by-step registration instructions and videos.

ATTENDANCE POLICY

Three absences are allowed. If a student is tardy to class or departs early three (3) times, it will be equal to one (1) absence. Each absence beyond three absences will result in a 2-point deduction from your final grade.

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the Academic Calendar. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16-week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face-to-face class.

COURSE CALENDAR

DATE	TOPIC	READINGS (Due on this Date)	ASSIGNMENTS (Due on this Date)
Week 1	Understanding the Digital Forensics Profession and Investigations	Module 1 Reading See Blackboard Calendar	Lab 1-1 Quiz 1
Week 2	The Investigator's Office and Laboratory	Module 2 Reading See Blackboard Calendar	Quiz 2
Week 3	Data Acquisition	Module 3 Reading See Blackboard Calendar	Lab 3-1 Quiz 3
Week 4	Processing Crime and Incident Scenes	Module 4 Reading See Blackboard Calendar	Lab 4-1 Quiz 4

Week 5	Working with Windows and CLI Systems	Module 5 Reading See Blackboard Calendar	Lab 5-1 Quiz 5
Week 6	Current Digital Forensics Tools	Module 6 Reading See Blackboard Calendar	Lab 6-1 Quiz 6
Week 7	Linux and Macintosh File Systems	Module 7 Reading See Blackboard Calendar	Lab 7-1 Quiz 7
Week 8	Recovering Graphics Files	Module 8 Reading See Blackboard Calendar	Quiz 8
Week 8	Digital Forensics Analysis and Validation	Module 9 Reading See Blackboard Calendar	Lab 9-1 Quiz 9
Week 9	Virtual Machine Forensics, Live Acquisitions, and Network Forensics	Module 10 Reading See Blackboard Calendar	Lab 10-1 Quiz 10
Week 10	E-mail and Social Media Investigations	Module 11 Reading See Blackboard Calendar	Lab 11-1 Quiz 11
Week 11	Mobile Device Forensics and the Internet of Anything	Module 12 Reading See Blackboard Calendar	Lab 12-1 Quiz 12
Week 12	Cloud Forensics	Module 13 Reading See Blackboard Calendar	Lab 13-1 Quiz 13
Week 13	Report Writing for High-Tech Investigations	Module 14 Reading See Blackboard Calendar	Lab 14-1 Quiz 14
Week 14	Expert Testimony in Digital Investigations	Module 15 Reading See Blackboard Calendar	Lab 15-1 Quiz 15
Week 15	Ethics for the Expert Witness	Module 16 Reading See Blackboard Calendar	Lab 16-1 Quiz 16
Week 16	Final Exam	Final Exam See Blackboard Calendar	Final Exam

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

- Labs   45%
- Module Quizzes   30%
- Final Exam   25%

GRADING SCALE

90 – 100   A
80 – 89   B
70 – 79   C

60 – 69   D
0 – 59   F

LIT does not use +/- grading scales

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 at http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty.

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.

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. 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.
3. Do not bring children to class.
4. 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.
5. A grade of 'C' or better must be earned in this course for credit toward degree requirement.
6. It is the student's responsibility to verify transferred grades and ask for corrections if needed.
7. All work is due before the final exam date. Nothing will be graded after the final exam.

Certification Requirement
CSNT 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)