



CSC470: Intro to Digital Forensics

Credit Hours: 4.0

Fall 2014

Instructor: TBA

Office: UHB 3102

Office Hours: By appointment only

Phone: 217-206-8335

Email: TBA

Course Description

This course is designed for students who want to learn about electronic evidence, including what types of evidence exist and where it may be found, and computer forensics methods available to examine the evidence. It is intended for those with basic knowledge of computers and networks. It is appropriate for students interested in a career in information security, criminal justice, accounting, law enforcement, and federal investigations, as well as computer forensics.

Course Objectives/Learning Outcomes

- Understand what constitutes a crime and identify categories of crime
- Understand law enforcement's authority to investigate criminal activity
- Explain the different types of evidence
- Identify what affects the admissibility of evidence in a court of law
- Identify what computer forensics tools and techniques can reveal and recover
- Describe the basic steps in a computer forensics investigation
- Explain chain of custody
- Identify the requirements for acquiring and authenticating evidence
- Explain the functions and features of forensics tools and toolkits
- Explain the reasons for policies and procedures
- Conduct a forensic examination of electronic media
- Report the results of a forensic examination

Reasonable accommodations are available for students who have a documented disability. A documented disability can include: physical, psychological, chronic health, vision, hearing, learning, traumatic brain injury, Asperger's Syndrome and/or autism, cognitive, and A.D./H.D.D. Please notify the instructor during the first week of class of any accommodations needed for the course. While O.D.S. does accept late applications, accommodations are not retroactive. All accommodations must be approved through the Office of Disability Services (ODS) (217-206-6666), HRB 80.

Course Content:

The following topics are a guideline only and are subject to change.

Topics

- Chapter 1: Forensic Evidence and Crime Investigation
- Chapter 2: Computer Forensics and Digital Detective Work
- Chapter 3: Tools, Environments, Equipment, and Certifications
- Chapter 4: Policies and Procedures
- Chapter 6: O/S and Data Transmission Basics
- Chapter 7: Investigating Windows, Linux, and Graphics Files
- Chapter 12: Federal Rules and Criminal Codes
- Chapter 13: Ethical Responsibilities

Required Text:

Computer Forensics: *Principles and Practices*

Linda Volonino

Pearson Prentice Hall © 2007

ISBN: 0-13-154727-5

Additional recommended reading:

Best Practices for Seizing Electronic Evidence v.3 by the U.S. Department of Homeland Security, United States Secret Service. (available on the course Blackboard)

Grading:

The final grade will be based on

45% Chapter Quizzes

45% Laboratory Reports

10% Participation

Delivery Method:

A Blackboard course space will be available for course material, quizzes, and labs. Laboratories will be performed on the UIS virtual servers using Encase® Forensic Suite by Guidance Software © 2011.

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I support the UIS policy on Academic Integrity, which states, in part: "Academic integrity is at the heart of the university's commitment to academic excellence. The UIS community strives to communicate and support clear standards of integrity, so that undergraduate and graduate students can internalize those standards and carry them forward in their personal and professional lives. Living a life with integrity prepares students to assume leadership roles in their communities as well as in their chosen profession. Alumni can be proud of their education and the larger society will benefit from the University's contribution to the development of

ethical leaders. Violations of academic integrity demean the violator, degrade the learning process, deflate the meaning of grades, discredit the accomplishments of past and present students, and tarnish the reputation of the university for all its members.”

Academic sanctions range from a warning to expulsion from the university, depending on the severity of your violation and your history of violations. Whatever the sanction, I will file a report of academic dishonesty to the Office of the Provost.

You are responsible for understanding and complying with the UIS Academic Integrity Policy available at <http://www.uis.edu/campussenate/academicintegrity.htm>