CFRS 760

Legal and Ethical Issues in Computer Forensics

Department of Electrical and Computer Engineering Volgenau School of Information Technology and Engineering George Mason University

Instructor

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(Note: You MUST use your GMU account to contact me using my GMU account, per University privacy guidelines.)

Office Hours: By email, or in person by appointment Office Location: Engineering Building, Adjunct Office

Location and Time

Fairfax Campus, Innovation Hall, Room 207 Tuesdays, 7:20 PM to 10:00 PM

Course Description

This course will present and discuss legal and ethical topics in the context of computer forensics. Additionally, it will cover matters in "real world" computer forensics, different specializations in computer forensics, witness testimony, and forensic report writing. The course will be participative, discussion focused, and designed to prepare the student for careers in law enforcement, intelligence, or commercial computer forensics positions.

While prior work experience in computer forensics is not expected or necessary, this course will include discussion about professional computer forensic issues, and students are more than encouraged to share their own knowledge and experiences.

Prerequisites

CFRS 500—Introduction to Technologies of Forensics Value

Course Objectives

The objective of this course is to familiarize students with the legal and ethical issues that surround the practice of computer forensics and to prepare the student with an understanding of computer forensics as a career choice. Legal and ethical issues vary widely depending upon the environment in which computer forensic examiners practice, and failure to understand the differences between those operating environments can lead to professional disciplinary measures, civil action, or even criminal charges against a practicing forensic professional. Students will learn the differences in performing in these environments, to include personal, professional, legal, and ethical expectations encountered in each area.

Grading

Raw scores may be adjusted to calculate final grades. Grades will be assessed by the following components:

Class Participation & Homework	15%
Midterm	25%
Research Paper or Presentation	25%
Final Exam	35%

The overall grading scale used in this course is:

A 90-100 B 80-89.99 C 70-79.99

F 69.99 and Below

Because of the generous grading range assigned to each letter, pluses and minuses will not be used, nor will grades be rounded to the next letter.

Class Participation and Homework Assignments

Each week (excluding the first week of class, the date of the midterm, and the date of the final exam), students will be expected to submit a photocopied article related to computer forensics, computer law/ ethics, or computer security along with a half-page summary written by the student of the article's key points stapled to the top of the article. Please make sure to include your name.

Homework assignments are due weekly at the start of class. If a student is unable to make it to class, assignments should be sent electronically via PDF or other common electronic document format to the instructor's GMU email account before the time and date of the missed class. Late homework assignments will not be accepted and will result in a score of zero for the individual assignment.

Class participation is graded based upon students' level of communication in class. Due to the highly discussion-oriented nature of the program, students are expected to ask questions, discuss topics, and share their own experiences.

The instructor places a strong emphasis on writing due to the nature of computer forensic work. Students will be expected to communicate at a Graduate level via the written word for written assignments and the research paper. *Proper use of language, style, and grammar will factor into grading of written assignments due to the importance of writing and reporting skills in computer forensics.*

Midterm/Final

Midterm and final examinations will be given during the course and will cover information provided and discussed during lectures, required and supplemental readings, and any information derived from homework assignments. These exams will be given in class via Blackboard.

Research Paper or Presentation

Students will complete a research paper and presentation reviewing a published computer forensic-related case discussing the legal and/or ethical topics involved. Further guidance will be given when the paper is assigned.

Textbook

The following book is optional, yet highly suggested, for this course:

Title: Electronic Evidence: Law & Practice, Second Edition

Author: Paul R. Rice

Publisher: American Bar Association

ISBN: 978-160442084-5

Author's Description: *Electronic Evidence: Law and Practice* explores the range of problems encountered with electronic communications from discovery to trial, and offers practical solutions to both existing and

potential problems. Particular emphasis is given to the unique problems evolving around the way in which parties are asserting the attorney-client privilege and judges are applying it to e-mail communications.

Additional course material will be given to students via lecture. Recommended reading will be discussed during lecture. Students are encouraged to review recommended reading as needed and/or indicated by the instructor. The majority of the material covered in the midterm and final will come from the instructor's slides with a minority of questions from the reading assignments.

Honor Code

GMU is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

Accommodations for Disabilities

If you have a documented learning disability or other condition that may affect academic performance you should: 1) make sure this documentation is on file with Office for Disability Services (SUB I, Rm. 4205; 993-2474; http://ods.gmu.edu) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

Schedule (Subject to Change Due to Class Events)

Week	Date	Topic
1	Aug 27	Introductions, Course Overview, Computer Forensics as a Career Discussion, "Science vs. Art", Part A
2	Sep 3	Computer Forensics as a Career Discussion, "Science vs. Art", Part B
3	Sep 10	Personal Ethics in Computer Forensics, Understanding and Controlling Biases, Allowing the Evidence to Speak for Itself, Implicating and Exculpatory Evidence
4	Sep 17	Ethics of Computer Forensics in a Law Enforcement Environment
5	Sep 24 (Class TBD)	Legal Issues in Computer Forensics in a Law Enforcement Environment, Fourth Amendment, Search Warrants & Affidavits
6	Oct 1	Legal Issues in Computer Forensics in a Law Enforcement Environment, Chapter 8: Frye/Daubert, Chapter 4: Best Evidence/Original Writing Rule, ASCLD Labs vs. Non-ASCLD Labs
7	Oct 8	Digital Forensic Report Writing, Note Taking, Worksheets/Checklists, Chain of Custody, Assign Research Paper
8	Oct 15	COLUMBUS DAY HOLIDAY / TUESDAY CLASSES DO NOT MEET (MONDAY CLASSES MEET ON TUESDAY)

Week	Date	Topic
9	Oct 22	Expert/Fact Witness Testimony; Possible Guest Speaker
10	Oct 29	Mid-Term Exam
11	Nov 5	Research Paper Presentations/Group Discussion
12	Nov 12	Ethics of Computer Forensics in an Intelligence Environment, Legal Issues in an Intelligence Environment, FISA: Foreign Intelligence Surveillance Act
13	Nov 19	Ethics of Computer Forensics in a Commercial Environment; Possible Guest Speaker
14	Nov 26	Legal Issues of Computer Forensics in a Commercial Environment, Chapter 3: Attorney/Client Privilege, PI Laws, State Courts
15	Dec 3	Current Topic Discussion
16	Dec 10	Final Exam