# **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: Available by Email or Personally by Appointment

Office Location: Engineering Building, Adjunct Office

#### **Location and Time**

Fairfax Campus, Music & Theater Building (Near Johnson Center), Room 1004 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 practical considerations and concerns in "real world" computer forensics, different specializations in computer forensics, witness testimony, and forensic report writing. The course will be participative, discussion focused, and most importantly, 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 and Presentation	25%
Final Exam	35%

The overall grading scale used in this course is:

A 92-100 B 82-91.999 C 72-81.999

F 71.999 and Below

Please Note: 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, the date of research paper presentations, 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 and the date of submission.

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.

Due to the highly discussion-oriented nature of the program, students are expected to ask questions, discuss topics, and share their own experiences; these are all key components to this course.

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 student level via the written word for weekly 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 and are usually composed of multiple choice, multiple answer, true/false, matching, and ordering questions.

#### **Research Paper or Presentation**

Students will complete a research paper and presentation reviewing a published computer forensic-related case discussing the legal and ethical topics involved. Further guidance will be given when the paper is assigned. Late research papers will be penalized ten points for the first week (or any portion thereof) or twenty points for the second week (or any portion thereof)—no exceptions. Papers will not be accepted later than fourteen calendar days past the due date and will be given a grade of zero.

#### **Textbook**

The following book is optional, yet highly recommended, 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.

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. You will not plagiarize the work of another. Another aspect of academic integrity is the free play of ideas. Vigorous and sometimes uncomfortable 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; <a href="http://ods.gmu.edu">http://ods.gmu.edu</a>) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs. Both GMU and the instructor will do everything possible to accommodate any specific needs.

# **Preliminary Schedule (Subject to Change)**

Week	Date	Topic
1	Aug 26	Student and Instructor Introductions and Course Overview
2	Sep 2	Computer Forensics as a Career—Overview and Discussion
3	Sep 9	Personal Ethics in Computer Forensics, Understanding and Controlling Biases, Allowing the Evidence to Speak for Itself, Types of Evidence
4	Sep 16	Ethics of Computer Forensics in a Law Enforcement Environment
5	Sep 23	Legal Issues in Computer Forensics in a Law Enforcement Environment, Fourth Amendment, Search Warrants & Affidavits
6	Sep 30	Legal Issues in Computer Forensics in a Law Enforcement Environment, Chapter 8: Frye/Daubert, Chapter 4: Best Evidence/Original Writing Rule, ASCLD

Week	Date	Topic
7	Oct 7	Digital Forensic Report Writing, Note Taking, Worksheets/Checklists, Chain of Custody, <b>Assign Research Paper</b>
8	Oct 14	COLUMBUS DAY BREAK — MONDAY CLASSES MEET TODAY, TUESDAY CLASSES DO NOT MEET
9	Oct 21	Midterm Exam—Check BlackBoard for Location
10	Oct 28	Expert/Fact Witness Testimony Possible Guest Speaker
11	Nov 4	Research Paper Presentations/Group Discussion
12	Nov 11	Ethics of Computer Forensics in an Intelligence Environment, Legal Issues in an Intelligence Environment, FISA: Foreign Intelligence Surveillance Act
13	Nov 18	Ethics of Computer Forensics in a Commercial Environment  Possible Guest Speaker
14	Nov 25	Legal Issues of Computer Forensics in a Commercial Environment, Chapter 3: Attorney/Client Privilege, PI Laws, State Courts
15	Dec 2	TBD or Computer Forensic Tool Review and Discussion
16	Dec 9	TBD or Current Topic Discussion
17	Dec 16	Final Exam—Check BlackBoard for Location