

## CFRS 760 Fall 2016 Syllabus

# 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

Innovation Hall 215G

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 greatly cover practical considerations and concerns in “real world” computer forensics, different specializations in computer forensics, expert/fact 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 highly encouraged to share their own knowledge and experiences.

### Prerequisites

CFRS 500—Introduction to Technologies of Forensics Value (Accepted as a Co-Requisite)

### 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	10%
Midterm	25%
Research Paper and Presentation	30%
Final Exam	35%

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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-up to the next letter.**

## Class Participation and Homework Assignments

Each week (excluding the first night, the night of the midterm, the night of research paper presentations, and the night of the final exam), students will be expected to submit a homework assignment assigned during class. Typically the homework assignments are brief (with one or two exceptions) and concentrate on developing the students' understanding of current topics in digital forensics and their ability to communicate that understanding via the written word.

Homework assignments are due weekly before the start of class. Homework assignments should be submitted electronically through the Blackboard system for the 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 ability 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 the grading of written assignments due to the importance of writing and reporting skills in the profession of 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. If we are in a room without student computers, a room with student computers will be scheduled specifically for those exam nights.

## Research Paper and 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.* Papers and presentations are due to be submitted to Blackboard *and* in person (in hardcopy) by the date and time specified above. Should a paper not be submitted on time, the following penalties will apply:

1. An automatic five (5) point reduction will apply to the slides component for being unprepared to present (unless the student has the presentation portion completed and submitted), **and**
2. Five (5) points per day *or any fraction of a day* after the due date will be subtracted from the paper's otherwise assigned grade. For these purposes, a "day" will start at 7:20 PM and end the following day at 7:19 PM. Papers more than four days late will not be accepted and will result in a grade of zero for the assignment.

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Note: Because of the nature of the class, the generous length of time given to complete the paper, and the amount of time the paper should take to complete, *no extensions or delays will be granted outside of the handling of late papers as specified above*. I encourage you to start your papers soon upon receiving the assignment so that you have more than enough time to complete them; the assignment is not tremendously long or complex.

### Textbooks

The following book is optional, but 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 large 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.**

The following book is optional, **but highly recommended**, for this course:

Title: *The Elements of Style, Fourth Edition*  
Author: William Strunk and E.B. White  
Publisher: Pearson  
ISBN: 978-0205309023

### 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.

As this is an ethics course specifically, violations of the Honor Code (especially and including plagiarism) will be taken extremely seriously and handled similarly.

### 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 the instructor to discuss your accommodation needs. Both GMU and the instructor will do everything possible to accommodate any specific needs.

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### Preliminary Schedule (Subject to Change)

Week	Date	Topic
1	Aug 30	Student and Instructor Introductions and Course Overview, Expectations, and Background
2	Sep 6	Computer Forensics as a Career—Overview and Discussion, Job Expectations, Working Conditions, and Industry Background
3	Sep 13	Personal Ethics in Computer Forensics, Understanding and Controlling Biases, Allowing the Evidence to Speak for Itself, Types of Evidence
4	Sep 20	Ethics of Computer Forensics in a Law Enforcement Environment
5	Sep 27	Legal Issues in Computer Forensics in a Law Enforcement Environment, Fourth Amendment, Search Warrants & Affidavits
6	Oct 4	Legal Issues in Computer Forensics in a Law Enforcement Environment, Chapter 8: Frye/Daubert, Chapter 4: Best Evidence/Original Writing Rule, ASCLD
7	Oct 11	<b>COLUMBUS DAY HOLIDAY - MONDAY CLASSES MEET TUESDAY, TUESDAY CLASSES DO NOT MEET</b>
8	Oct 18	Digital Forensic Report Writing, Note Taking, Worksheets/Checklists, Chain of Custody, <b>RESEARCH PAPER ASSIGNED</b>
9	Oct 25	<b>MIDTERM EXAM - CHECK BLACKBOARD FOR LOCATION</b>
10	Nov 1	Expert/Fact Witness Testimony; <b>Possible Guest Speaker</b>
11	Nov 8	Ethics/Laws of Computer Forensics in an Intelligence Environment, Legal Issues in an Intelligence Environment, FISA: Foreign Intelligence Surveillance Act
12	Nov 15	<b>RESEARCH PAPER PRESENTATIONS</b>
13	Nov 22	Ethics and Discussion on Computer Forensics in a Commercial Environment; <b>Possible Guest Speaker</b>
14	Nov 29	Legal Issues of Computer Forensics in a Commercial Environment, Chapter 3: Attorney/Client Privilege, PI Laws, State Courts
15	Dec 6	Computer Forensic Tool Review and Discussion, or Other TBD Topic
16	Dec 13	<b>FINAL EXAM - CHECK BLACKBOARD FOR LOCATION</b>