

CFRS 510- 001 Digital Forensics Analysis  
Department of Electrical and Computer Engineering  
George Mason University  
Fall 2017 Syllabus

Administrative Information:

Class time: Thursdays, 7:20pm – 10:00pm  
Location: Fairfax Campus, Nguyen Engineering Building 4457  
Instructor: Brienne Douglas  
E-mail: bdougl4@gmu.edu  
Office hours: by appointment only

Course Description:

TCOM/CFRS 510, Sec 001 (catalog ID 78276) – Digital Forensics Analysis

Explains Computer Forensics crime scene procedures, beginning with initial walk-through and evaluation; identification and collection of potential evidence; preparation of intrusion investigation; aspects of working with investigators and attorneys; reverse engineering with file identification and profiling; application of critical thinking in determination of significance of artifacts; and analysis and reporting of evidence.

Credits: 3

Prerequisite(s): Graduate standing or permission of instructor

Required Texts:



Title: Digital Evidence and Computer Crime, 3rd edition  
Author: Eoghan Casey  
Publisher: Academic Press  
ISBN: 9780123742681



Title: Guide to Computer Forensics and Investigation Lab Manual  
Author: Andrew Blitz and Christopher Steuart  
Publisher: Course Technology  
ISBN: 9781435498853



Title: Python In A Day  
Author: Richard Wagstaff  
Publisher: CreateSpace Independent Publishing Platform  
ISBN: 13: 9781490475578

## Grading:

Homework assignments, individual presentations, and exams will be evaluated to create the final grade.

<b>Homework:</b>	15%	<b>Presentation #1:</b>	15%
<b>Midterm Exam:</b>	25%	<b>Presentation #2:</b>	15%
<b>Final Exam:</b>	25%	<b>Participation:</b>	5%

## Schedule

Date	Topic	Reading/Lab Assignment	Assigned/Due Item
31-Aug-17	Course Introduction & Foundations of Digital Forensics	Casey Ch. 1	Assigned: HW1 & Presentation Topics
07-Sept-17	Language of Computer Science Investigation	Casey Ch. 2 Labs 1 – 3	Due: Presentation Topics
14-Sept-17	Digital Evidence in the Courtroom	Casey Ch. 3 Lab 4-7	Assigned HW2 Due: HW1
21-Sept-17	Cybercrime Law	Casey Ch. 4	
28-Sept-17	Presentation 1 Conducting Digital Investigations	Casey 6 Labs 8 – 10	Due: Presentation 1
05-Oct-17	Handling a Digital Crime Scene/ Investigative Reconstruction with Digital Evidence	Casey Ch. 7 Labs 11 – 14	Due: HW2
<b>12-Oct-17</b>	<b>Midterm</b>		
19-Oct-17	Python Intro – What is Python?, Data Types, Program Modules		
26-Oct-17	Python Basics – Data Type Conversions, Loops, Conditional Statements	Python in a Day Python Lab1	
02-Nov-17	Python – Generators, breaks, continue statements, Handling files	Python Lab2	Assigned: HW3 – Due: Presentation 2 Topics
09-Nov-17	Python – Error handling, Try/Except statements	Python Lab3	
16-Nov-17	Python – Web Scraping	Python Lab4	Due: HW3 Assigned: HW4
<b>23-Nov-17</b>	<b>No Class – Thanksgiving Holiday</b>		
30-Nov-17	Python – Wrap Up	Python Lab6	Due: HW 4
<b>07-Dec-17</b>	<b>Presentation 2 – Anti Forensics</b>		

### [Black Board Learn & Communication](#)

Blackboard Learn will be used to post material, manage assignments, chat and other activities. You can access Blackboard at: <http://mymasonportal.gmu.edu>.

GMU policy requires that faculty and student course related communication be done via their respective GMU.EDU email addresses. E-mail messages from the Instructor to all class members will be sent to students' GMU email addresses – if you use another email account as your primary address, you should forward your GMU email to that account.

### [Attendance Policy](#)

Students are expected to attend each class, to complete any required preparatory work (including assigned reading) and to participate actively in lectures, discussions and exercises. As members of the academic community, all students are expected to contribute regardless of their proficiency with the subject matter. Students are expected to make prior arrangements with Instructor if they know in advance that they will miss any class and to consult with the Instructor if they miss any class without prior notice.

Departmental policy requires students to take exams at the scheduled time and place, unless there are truly compelling circumstances supported by appropriate documentation. Except in such circumstances, failure to attend a scheduled exam may result in a grade of zero (0) for that exam.

### [Honor Code](#)

Students are required to be familiar and comply with the requirements of the GMU Honor Code. The Honor Code will be strictly enforced in this course and can be accessed at <http://oai.gmu.edu/the-mason-honor-code-2/>.

### [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.