

CFRS 510- 001 Digital Forensics Analysis
Department of Electrical and Computer Engineering
George Mason University
Fall 2018 Syllabus

Administrative Information:

Class time: Thursdays, 7:20pm – 10:00pm
Location: Fairfax Campus, Nguyen Engineering Building 4457
Instructor: Brienne Douglas
E-mail: bdougla4@gmu.edu
Office hours: by appointment only

Course Description:

TCOM/CFRS 510, Sec 001 (catalog ID 76572) – 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.

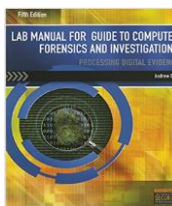
Credits: 3

Prerequisite(s): Graduate standing or permission of instructor

Required Texts:



Title: Guide to Computer Forensics and Investigations,
 Processing Digital Evidence, 5th Edition (GCFI)
Author: B. Nelson, A. Phillips, C. Stuart
Publisher: Course Technology
ISBN-10: 1285060032



Title: Lab Manual for Guide to Computer Forensics and Investigation
 Processing Digital Evidence, 5th Edition (GCFI Lab)
Author: Andrew Blitz
Publisher: Course Technology
ISBN-10: 1285079086



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

Grading:

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

Homework:	15%	Presentation 1 (PR1):	10%
Midterm Exam:	25%	Presentation 2 (PR2):	15%
Final Exam:	30%	Participation:	5%

Schedule *(subject to change)*

Week	Date	Topic	Reading/Lab Assignment	Assigned/Due Item
01	30-Aug-18	Digital Forensics Foundation, Data Acquisition & Processing	GCFI Ch. 1, 3, 4 Labs 1, 3, 4	Assigned: HW1 & PR1 Topics
02	06-Sep-18	File Systems, Analysis & Validation	GCFI Ch. 5, 7, 9 Labs 5 – 7, 9	Due: PR1 Topics
03	13-Sep-18	Graphic Files, Live Acquisitions, Social Media Files	GCFI Ch. 8, 10 – 11 Labs 8, 10 – 11	Assigned: HW2 Due: HW 1
04	20-Sep-18	Memory & Cloud Forensics	GCFI Ch. 12 – 13 Labs 12 – 13	Assigned: PR2
05	27-Sep-18	Expert Witness, Testimony, & Report Writing	GCFI Ch. 14 – 16	Due: HW 2 & PR2 Topics
06	04-Oct-18	Presentation 1		
07	11-Oct-18	Midterm		
08	18-Oct-18	Python Basics – Data Types & Conversions, Libraries, Loops, Conditional Statements	Python in a Day Python Lab1	Assigned: HW3
09	25-Oct-18	Python – Control Flow, Date/Time stamps, Functions	Python Lab2	
10	01-Nov-18	Python – Handling files, Error handling, Try/Except clauses	Python Lab3	Assigned: HW4 Due: HW 3
11	08-Nov-18	Python – Web Scraping	Python Lab4	
12	15-Nov-18	Python – Generators, Iterators	Python Lab5	
13	22-Nov-18	Thanksgiving Break; NO CLASS		
14	29-Nov-18	Python – Wrap Up Presentation 2 – Anti Forensics	Python Lab6	Due: HW 4
15	06-Dec-18	Presentation 2 – Anti Forensics (part 2)		
16	13-Dec-18	Final Exam		

[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.