

George Mason University
CFRS- 762 Mobile Device Forensics
CFRN 78945 SEC 001
3.0 Credit Hours
Fall 2016 - August 29, 2016 - December 20, 2016
Mondays 7:20pm - 10:15pm (except where noted)
ENGR 4457

Instructor:

Jessica Hyde
jhyde@gmu.edu
Office hours: Available upon request

Prerequisites:

CFRS 500, CFRS 661

Required Textbook:

Reiber, L. (2016). *Mobile forensic investigations: A guide to evidence collection, analysis, and presentation*. New York, NY: McGraw Hill Education. ISBN: 978-0-07-184363-8

Course Description:

This course will familiarize students with mobile forensics. We will focus on data types, storage, acquisition and analysis of data from mobile devices. Students will utilize industry best practices for acquisition, analysis, and presentation of data from mobile devices. This class will be a mixture of lecture and hands-on acquisition and analysis.

Graded Material:

Homework	15% (three assignments at 5 points each)
Labs	10 % (two labs at 5 points each)
SOP Project	15 %
Midterm	30 %
Final	30 %

The Midterm and Final exams are cumulative. The midterm will be timed on-line. For the Final Exam, each student is allowed one piece of 8.5 x11 paper with handwritten notes during the exam. No other books or notes will be allowed during the exam.

Course Schedule: *Subject to Change*

Week	Date	Topic	Reading	Homework
1	Aug 29	Lesson 1: Introduction to Mobile Phones, Networks, and Data Presentation	Reiber Ch 1, 14	Homework 1 Distributed
2	Sep 5	Labor Day - No Class		
3	Sep 12	Lesson 2: Mobile Forensics vs Computer Forensics and differences between image types	Reiber Ch 2, 6 (p 119 -133)	Homework 2 distributed SOP project discussed
4	Sep 19	Lesson 3: Data preservation	Reiber Ch 3, Ch 4, 7, 8	Homework 1 due
5	Sep 26	Lesson 4: Acquisitions with Commercial Tools - Lab 1	Reiber Ch 5, 6 (p 133 - 151)	Lab 1
6	Oct 3	Lesson 5: Acquisitions via other means - SDK, Terminals, backups, cloud, etc - Lab 2		Lab 2
7	Oct 11	Midterm - Open starting Oct 10. To be completed by 10pm Oct 11. *Note* Oct 10 is Columbus Day Holiday - Monday classes meet on Tuesday		
8	Oct 17	Lesson 6: Advanced Acquisitions - Flashers, JTAG, Chip-Off	None	Homework 3 distributed
9	Oct 24	Lesson 7: Mobile Analysis - SIM	Reiber Ch 9	
10	Oct 31	Lesson 8: Mobile Analysis - Android	Reiber Ch 13	Homework 2 due
11	Nov 7	Lesson 9: Mobile Analysis - iOS	Reiber Ch 11	
12	Nov 14	Lesson 10: Mobile Analysis - Nokia, Windows, BB	Reiber Ch 10	Homework 3 due
13	Nov 21	Lesson 11: Mobile Analysis Raw Binaries/ Time-stamp Analysis		
14	Nov 28	Lesson 12: Mobile Analysis - 3rd Party Applications and SQLite	Reiber Ch 12	
15	Dec 5	Lesson 13: Challenges to Mobile Forensics/ Internet of Things		SOP Project Due
N/A	Dec 12	Reading Day - No Class		
16	Dec 19	Final (7:30pm - 10:15pm)		

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.

Communications

Communication on issues relating to the individual student should be conducted using e-mail or telephone. E-mail is the preferred method – for urgent messages, you should also attempt to contact the Instructor via telephone. 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.

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.

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.