

George Mason University
CFRS- 762 Mobile Device Forensics
CRN 17675 SEC 001
3.0 Credit Hours
Spring 2017 - January 23, 2017 – May 17, 2017
Mondays 7:20pm - 10:15pm (except where noted)
Innovation Hall 205

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

Required Materials:

You must have a personal laptop computer that you can bring to class capable of using the forensic tools that will be made available on Blackboard starting in week 4. Download links will be provided by the instructor and disseminated via Blackboard.

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.

Grading:

<u>Weights</u>		<u>Letter Grades</u>
Homework	15% (three assignments at 5 points each)	A+ 98-100
Labs	10% (two labs at 5 points each)	A 92-98
SOP Project	15%	A- 90-91
Midterm	30%	B+ 87-89
Final	30%	B 83-86
		B- 80-82
		C 70-79
		F 0-69

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	Jan 23	Lesson 1: Mobile Phone Networks, Data Sources, and Data Presentation	Reiber Ch 1, 14	Homework 1 Distributed
2	Jan 30	Lesson 2: Mobile Forensics vs Computer Forensics and Mobile Forensic Image Types	Reiber Ch 2, 6 (p 119 -133)	Homework 2 distributed SOP project discussed
3	Feb 6	Lesson 3: Mobile Data preservation	Reiber Ch 3, Ch 4, 7, 8	Homework 1 due
4	Feb 13	Lesson 4: Acquisition with Commercial Tools - Lab 1	Reiber Ch 6 (p 142 - 142)	Lab 1
5	Feb 20	Lesson 5: Acquisitions via Manual Methods -Lab 2	Reiber Ch 5	Lab 2
6	Feb 27	Lesson 6: Advanced Acquisitions – Flasher Boxes, JTAG, Chip-Off	Reiber Ch 6 (p 133 - 142)	Homework 3 distributed
7	Mar 5	Midterm		
8	Mar 13	Spring Break – No Class		
9	Mar 20	Lesson 7: Mobile Analysis – SIM	Reiber Ch 9	
10	Mar 27	Lesson 8: Mobile Analysis – Android	Reiber Ch 13	Homework 2 due
11	Apr 3	Lesson 9: Mobile Analysis – iOS	Reiber Ch 11	
12	Apr 10	Lesson 10: Mobile Analysis – Blackberry and Windows	Reiber Ch 10	Homework 3 due
13	Apr 17	Lesson 11: Mobile Analysis - Feature Phones, Raw Binaries, and Time Stamps		
14	Apr 24	Lesson 12: Mobile Analysis - 3rd Party Applications	Reiber Ch 12	
15	May 1	Lesson 13: SQLite, Internet of Things, and Challenges to Mobile Forensics		SOP Project Due
16	May 8	Reading Day - No Class		
17	May 15	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. **Students must utilize their GMU email account to contact the instructor.**

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.