

**George Mason University**  
**CFRS- 762 Mobile Device Forensics**  
**CRN 75854 SEC 001**  
**3.0 Credit Hours**  
**Fall 2017 - August 28, 2017 – December 20, 2017**  
**Mondays 7:20pm - 10:15pm (except where noted)**  
**Nguyen Engineering Building 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

**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	Aug 28	Lesson 1: Mobile Phone Networks, Data Sources, and Data Presentation	Reiber Ch 1, 14	Homework 1 Distributed
2	Sep 4	No Class - Labor Day, University Closed	N/A	N/A
3	Sep 11	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
4	Sep 18	Lesson 3: Mobile Data preservation (R)	Reiber Ch 3, Ch 4, 7, 8	Homework 1 due
5	Sep 24	Lesson 4: Acquisition with Manual Methods - Lab 1	Reiber Ch 5	Lab 1
6	Oct 2	Lesson 5: Advanced Acquisitions – Flasher Boxes, JTAG, Chip-Off (R)	Reiber Ch 6 (p 133 - 142)	
7	Oct 10* Tuesday	Midterm		
8	Oct 16	Lesson 6: Acquisitions via Commercial Means-Lab 2	Reiber Ch 6 (p 142 - 152)	Lab 2 Homework 3 distributed
9	Oct 23	Lesson 7: Mobile Analysis – SIM	Reiber Ch 9	Homework 2 due
10	Oct 30	Lesson 8: Mobile Analysis – Android	Reiber Ch 13	
11	Nov 6	Lesson 9: Mobile Analysis – iOS (R)	Reiber Ch 11	
12	Nov 13	Lesson 10: Mobile Analysis - Blackberry and Windows	Reiber Ch 10	Homework 3 due
13	Nov 20	Lesson 11: Mobile Analysis – Feature Phones, Raw Binaries, and Time Stamps		
14	Nov 27	Lesson 12: Mobile Analysis - 3rd Party Applications	Reiber Ch 12	
15	Dec 4	Lesson 13: SQLite, Internet of Things, and Challenges to Mobile Forensics		SOP Project Due
16	Dec 11	Reading Day - No Class		
17	Dec 18	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.