Department of Electrical and Computer Engineering
George Mason University
Fall 2019

Syllabus (revised 2019-July 31)

Administrative Information
Instructor: **John J. Larkin II**
Email: jlarkin@gmu.edu Subject = GMU-TCOM/CFRS 661-Sec001
Phone: 703-944-2592
Office hours: By appointment
Teaching Assistant: N/A
Classes: Monday 4:30 pm – 7:10 pm
Location: ENG 5358 (Nguyen Engineering Building, Room 5358)

Course Description
TCOM/CFRS 661 - Digital Media Forensics (3:3:0)
Prerequisites: CFRS 510 and a working knowledge of computer operating systems (e.g. CYSE 211, IT 342, or equivalent) or permission from instructor. This course deals with the collection, preservation, and analysis of digital media such that the evidence can be successfully presented in a court of law (both civil and criminal). The relevant federal laws will be examined as well as private sector applications. The seizure, preservation, and analysis of digital media will be examined in this course.

Textbooks
- Digital Forensics Workbook by Michael K. Robinson (ISBN: 1517713609/ISBN-13: 978-1517713607) - **MANDATORY**
- Additional required supplies for this course will be discussed the first week of class.

Grading
The grade for the course is determined from a calculation of points on a 0 to 100 point scale, which will be assessed on the following components:

Homework (3@15% each)	45%
Article Presentations (2@5% each)	10%
Mid-term exam	20%
Final Project	20%
Class participation	5 %

Homework
Three small projects (Homework) will be assigned during the semester (see schedule).
Homework must be posted to Blackboard before the due date and time specified on Blackboard.

Graduate Grading Scale:
A+ (97-100), A (93-96), A- (90-92), B+ (88-89), B 83-87, B- (80-82), C (70-79), & F (0-69)

Article Presentations
Students must prepare and present two 5-minute PowerPoint presentations on articles relative to course content. The article should not come from advertisement or blogs. Students will present on two different topics during the semester (see schedule). Presentations must be conducted on different dates.

Mid-term exams
The mid-term exam will be taken in class and will cover material discussed in up until exam date.

Final Project
The final project must be uploaded to Blackboard by 10 on the final week (see schedule). Students will be responsible for conducting an individual forensic analysis of a drive that will be issued during the third week. Students are not allowed to collaborate on the final project.

Schedule

Week	Date	Topic	Reading Assignments	Projects Due
Week 1	08/26/2019	Introduction/Legal Issues		
Week 2	09/02/2019	(**NO CLASS**) – Labor Day		
Week 3	09/09/2019	Computer Incident Response (Crime Scene documentation)	DFW – Chapters 1-3 News article Pres.	Complete exercises
Week 4	09/16/2019	Data Acquisition and Duplication	DFW – Chapters 4-6 News article Pres.	Complete exercises
Week 5	09/23/2019	Crime Scene Practical		Homework 1 due
Week 6	09/30/2019	Windows File System FAT	DFW – Chapters 7-10 News article Pres.	Complete exercises
Week 7	10/07/2019	Windows File System NTFS	DFW – Chapters 11-12 News article Pres.	Complete exercises
Week 8	10/14/2019	(**NO CLASS**) – Fall Break - Review PowerPoint Presentation online (Registry)		
Week 9	10/21/2019	Mid Term	DFW – Chapters 13-15	Complete exercises Homework 2 due
Week 10	10/28/2019	Analysis Methodology	News article Pres.	
Week 11	11/04/2019	Tool Demonstration - Blacklight	News article Pres.	
Week 12	11/11/2019	(**NO CLASS**) – Work on HW 3 & Final Project	DFW – Chapters 17,18,21	Complete exercises
Week 13	11/18/2019	Managing a Computer Forensics Lab	News article Pres.	
Week 14	11/25/2019	TBD - Lab Visit/Guest Speakers		Homework 3 due
Week 15	12/02/2019	Courtroom Presentation	News article Pres.	
Week 16	12/09/2019	(**NO CLASS**) – Reading Day		
Weed 17	12/16/2019	(**NO CLASS**) Final Project must be uploaded to Blackboard by 10pm		Final Project Due

This schedule is subject to revision before and throughout the course.
Call 703-993-1000 for recorded information on campus closings (*e.g.* due to weather).

Semester Calendars/Deadlines (https://registrar.gmu.edu/calendars/)
Religious Holiday Calendar (https://ulife.gmu.edu/religious-holiday-calendar/)

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 email or telephone. Email is the preferred method – for urgent messages, you should also attempt to contact the Instructor via telephone. Email messages from the Instructor must be sent to students' GMU email addresses – if you use another email account, you should forward your GMU email to that account.

Lecture slides are complements to the lecture process, not substitutes for it - access to lecture slides will be provided as a courtesy to students provided acceptable attendance is maintained.

Honor Code

Students are required to be familiar and comply with the requirements of the GMU Honor Code (available at https://oai.gmu.edu/mason-honor-code/).

The Honor Code will be strictly enforced in this course.

All assessable work is to be completed by the individual student.

Students must **NOT** collaborate on the exam or final project.
In order to be able to fully exchange information and ensure complete candor in discussions, the policy of non-attribution will be STRICTLY enforced.

Disability Accommodations:

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 of Disability Services (SUB I, Rm. 2500; 703-993-2474; http://ods.gmu.edu) to determine the accommodations you need; and 2) talk with me to discuss your accommodation needs.

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 703-993-2474, http://ods.gmu.edu. All academic accommodations must be arranged through the ODS.

If you have a learning or physical difference that may affect your academic work, you will need to furnish appropriate documentation to the Office of Disability Services. If you qualify for accommodation, the ODS staff will give you a form detailing appropriate accommodations for your instructor. In addition to providing your professors with the appropriate form, please take the initiative to discuss accommodation with them at the beginning of the semester and as needed during the term. Because of the range of learning differences, faculty members need to learn from you the most effective ways to assist you. If you have contacted the Office of Disability Services and are waiting to hear from a counselor, please tell me.

Privacy:

Students must use their MasonLive email account to receive important University information, including messages related to this class. See *http://masonlive.gmu.edu* for more information.