



Integrated Science & Technology 447

**Applied Digital Forensics & Electronic Discovery – Writing Intensive
Course Syllabus**

Spring 2012

MWF 11:00 – 11:50

Morrow Library 121/122

Instructor – John Sammons

Office – Prichard Hall 208

Office Phone – 696-7241

Cell Phone – 633-3411

eMail Address – john.sammons@marshall.edu

Office Hours:

Monday - Friday – 1:30PM – 2:30PM

Textbooks

Digital Evidence and Computer Crime, Third Edition: Forensic Science, Computers, and the Internet. Eoghan Casey. Academic Press; 3 edition (May 4, 2011). ISBN-13: 978-0123742681

Course Description

IST 447 examines the application of sound forensic practices and investigative strategies in a variety of environments and circumstances. Students will study the electronic discovery process from end to end along with the fundamental legal requirements and case law. Students will examine in-depth the investigative process as it related to digital evidence. Students will also be introduced to cell phone and mobile device forensics as well as EnCase, one of the major software tools in wide use.

Credit

The course is three (3) credit hours.

Pre/co-requisites

IST 264 Hardware Technologies

Desired Objectives/Outcomes

Long after this course is over, you should:

Foundational Knowledge

- Understand the fundamental process and legal issues of electronic discovery
- Understand the proper protocol for investigating mobile devices such as cellular phones
- Understand how to conduct a digital investigation
- Have a fundamental understanding of EnCase software
- Understand the common Macintosh artifacts

Integration

- Appreciate the interconnectedness of technology, law and society

Caring

- Understand the stakes involved in digital investigations and electronic discovery

Learning How to Learn

- Be able to identify and use important resources for their own learning after graduation

Instruction method

There will be 3 contact hours of classroom instruction per week. Coursework will include classroom lectures, a learning journal, and exams along with a variety of low, med and high stakes writing assignments. Discussions and writing assignments play significant roles in the conduct of the course.

There is a writing guide for the course located on Blackboard that explains the writing requirements, assignments, and the reasoning behind them. You need to read this.

File Names: All electronic submissions must follow this file naming convention:

Ist447_Last Name_First Initial_Assignment Name.doc ("ist447_sammons_j_researchpaper.doc")

Evaluation method

Course grades will be based on a total points system. Your grade will be based on a percentage of the total points possible.

Course Point Distribution

Midterm Exam	100
Final Exam	100
High Stakes Writing Assignment	200
Practice Concept Map	25
Learning Journal	200
Quizzes	130 (Subject to change))
Presentations	100
Professionalism	100
Total	955 (Approximate)

Final letter grades are determined based on the following grading scale:

90-100%	A
80-89%	B
70-79%	C
60-69%	D
0 – 59% =	F

The instructor reserves the right to change these values depending on the overall class performance and/or extenuating circumstances. Please note that the point total in Bb may not be 100% accurate. Please check with the GA for the definitive total.

Policy Statement

My Academic Dishonesty Policy

Academic Dishonesty is defined as any act of a dishonorable nature which gives the student engaged in it an unfair advantage over others engaged in the same or similar course of study and which, if known to the classroom instructor in such course of study, would be prohibited. Academic Dishonesty will not be tolerated as these actions are fundamentally opposed to "assuring the integrity of the curriculum through the maintenance of rigorous standards and high expectations for student learning and performance" as described in Marshall University's Statement of Philosophy.

If you are found cheating on projects or plagiarizing answers from the Internet or other sources (among other things), there will be no second chance. Your penalty is that you will receive a failing grade for the course. In those cases in which the offense is particularly flagrant or where there are other aggravating circumstances, additional, non-academic, sanctions may be pursued through the Office of Judicial Affairs. Notice of an act of academic dishonesty will be reported to the Department Chair, Dean of the College of Science, and to the Office of Academic Affairs. Please refer to the Marshall University Undergraduate Catalog for a full definition of academic dishonesty.

Your assignments may be analyzed using the anti-plagiarism suite of tools powered by Turnitin. Please visit <http://turnitin.com> for more information.

Assignments: The course includes a number of writing assignments. All assignments are due **BY THE BEGINNING OF CLASS** on their due date. **NO LATE ASSIGNMENTS WILL BE ACCEPTED.** Please do not procrastinate. If you wait until the last night to start a writing assignment, chances are, you will fail.

Exams: There are TWO exams. They will be take home concept maps covering all the course material to that particular point.

Make-up Quizzes and Late Penalty: Make-up exams will not be given except under unusual circumstances and satisfactory written justification. Any student who misses an exam due to an unexcused absence will receive a grade of zero for that exam with no opportunity for make-up or substitution. University excused absences or those occurring with a good reason (and that reason must be given prior to missing the exam – call and leave a message if you have to) will be excused. Make up exams must be taken within one week of the original scheduled date. The decision whether to give a make up exam rests with the instructor.

Class Grade Appeals

Should wish to appeal a grade, test question, etc, you need to follow this procedure. You should send an email in Bb to the GA and CC me. The title of the email must read "GRADE APPEAL – Assignment Name" (i.e. Storage Quiz, Mid-Term, etc). The body of the email must include the question, question number, your answer, and why you think you deserve credit. For tests and quizzes in Bb, this should be done immediately after completion, before you leave class. You can copy and paste this information to make things simple. We will get back to you as soon as possible.

Policy for Students with Disabilities: Marshall University is committed to equal opportunity in education for all students, including those with physical, learning and psychological disabilities. University policy states that it is the responsibility of students with disabilities to contact the Office of Disabled Student Services (DSS) in Prichard Hall 117, phone 304 696-2271 to provide documentation of their disability.

Following this, the DSS Coordinator will send a letter to each of the student's instructors outlining the academic accommodation he/she will need to ensure equality in classroom experiences, outside assignment, testing and grading. The instructor and student will meet to discuss how the accommodation(s) requested will be provided. For more information, please visit <http://www.marshall.edu/disabled> or contact Disabled Student Services Office at Prichard Hall 11, phone 304-696-2271.

University Policies

You can access University policies here: http://www.marshall.edu/academic-affairs/?page_id=802. Policies include:

1. Academic Dishonesty
2. Excused Absence Policy for Undergraduates
3. University Computing Service Acceptable Use
4. Inclement Weather
5. Dead Week
6. Students with Disabilities
7. Academic Dismissal
8. Academic Forgiveness
9. Academic Probation and Suspension
10. Academic Rights and Responsibilities of Students
11. Affirmative Action
12. Sexual Harassment

Attendance Statement

Attendance is very important in this course. This course is centered on active learning which includes class discussions. Your participation in these discussions not only impacts your grade, but impacts the overall quality of the course. In short, we (the other students and I) need you in class. That said, I also understand that other things come up. You will be allowed three unexcused absences during the semester. After that, your professionalism grade will be reduced for each absence.

If you miss class, it is your responsibility to catch up on material missed, and it will not be the responsibility of the instructor to catch you up on material missed during office hours, or re-lecture to you.

Professionalism

In this course you will be treated as professionals and will be expected to behave and perform as such. As professionals, you will be expected to attend class, be on time, complete all of your assignments, meet deadlines, ask questions when you don't understand, and participate. If you can't be in class, I expect you to let me know ahead of time. Your classroom language and demeanor should also be professional.

Withdrawal Policy

The University withdrawal policy is followed in this course. The last day to drop an individual course for the Fall Semester is April 27, 2012.

University Holidays & Key Dates

January 16, Monday

Martin Luther King, Jr. Holiday – University Closed

March 16, Friday

Last Day to Drop a Full Semester Individual Course

March 18, Sunday – March 25, Sunday

Spring Break – Classes Dismissed

March 28, Monday

Classes Resume

April 6

Assessment Day – Classes Cancelled for University Wide Assessment Activities (TBA)

April 23, Monday – April 27, Friday

“Dead Week”

April 27, Friday

Last Class Day and Last Day to Completely Withdraw For Spring Semester

Class Grade Appeals

Should wish to appeal a grade, test question, etc, you need to follow this procedure. You should send an email in Bb to the GA and CC me. The title of the email must read “GRADE APPEAL – Assignment Name” (i.e. Storage Quiz, Mid-Term, etc). The body of the email must include the question, question number, your answer, and why you think you deserve credit. For tests and quizzes in Bb, this should be done immediately after completion, before you leave class. You can copy and paste this information to make things simple. We will get back to you as soon as possible.

Topics and Methodology

The following outline delineates the tentative class schedule with topics to be addressed during the course. Reading assignments are TBA. Please note these topics and schedules are tentative.

Week	Lecture Topics
1	Intro, Concept Mapping
2	Electronic Discovery
3	Electronic Discovery

4	Language of Computer Crime Investigation
5	Conducting Digital Investigations
6	Modus Operandi, Motive & Technology
7	Midterm
8	Violent Crime & Digital Evidence
9	Digital Evidence as Alibi
10	Applying Forensic Science to Computers
11	Digital Evidence on Macintosh Systems
12	Cell Phones
13	EnCase
14	EnCase
15	Final Review

Every student is responsible for all materials presented in class, including lectures, notes, and handouts. In case you are not present for a class, it is your responsibility to contact the instructor and receive information about the material presented in that class. Class attendance is VERY IMPORTANT and part of professionalism grade for this course.

Effort Required

For every one hour in class, the student is expected to put in an effort of at least 3 hours outside the class for studying and completing writing assignments. Depending upon background and preparedness, some students may have to put in additional effort. **PLEASE DO NOT PROCRASTINATE.** Prioritize, schedule, and take responsibility for your actions and you should do very well in this class.

Learning Journal

As part of this writing intensive class, each student must maintain a learning journal. This journal will contain a variety of low-medium stakes assignments, many to be done in class. It is your responsibility to keep it current. It will be turned in twice during the semester, once in middle and then at the end. Your grade will be based on a random sampling of five assignments. It is imperative that you commit the time and effort to complete the journal. Do NOT procrastinate.

Quizzes & Readings

The number of quizzes will vary, depending on class progress, participation, and the how well students keep up with assignments, readings, etc. Students are expected to keep up with all reading assignments and come to class prepared to discuss the material.

Due Dates/Late Assignments

No late assignments will be accepted without a University approved excuse. Most if not all of the assignments will be submitted through Blackboard. It's your responsibility to learn how to turn- in assignments through Bb. If you have

issues or questions about the process, please let me know. Note that there are very specific cut-off times for submissions. Do NOT wait until the last minute as issues, etc. may arise. Should a technical issue arise, email your assignment to me with a short description of the error.

Communication

Private E-mail will be used to make any general announcements, last minute changes, etc. It is **mandatory** that you monitor your email messages at least once a day. PLEASE ONLY USE MY MARSHALL EMAIL ADDRESS FOR CORRESPONDENCE. Messages left on Blackboard will result in delayed responses. Please read and follow the guidelines outlined in the "How to Email Your Professor" article. There is a link to it posted on Bb. This will ensure you get a response and the course run smoothly.

Note about cell phones in class

Please set your cell phone ringer to "Vibrate Only" mode (or turn it off) before you enter the classroom.

Professionalism

In this course you will be treated as professionals and will be expected to behave and perform as such. As professionals, you will be expected to attend class, be on time, complete all of your assignments, meet deadlines, ask questions when you don't understand, and participate. Your classroom language and demeanor should also be professional.

Disclaimer

The instructor reserves that right to modify the course schedule and evaluation system should it become necessary for the effective conduct of the course.

Social Networking

I often receive friend requests from students via Facebook. It is my policy however, not to accept these requests from current students. This is absolutely nothing personal, so please do not take it as such. You are welcome to follow me on Twitter and or join my network on Linked-In. Please join us on the MU Digital Forensics Facebook page.

Get Involved!

There are tremendous opportunities here beyond your coursework. The student chapter of AIDE (Appalachian Institute of Digital Evidence), internships, and research are just some of the possibilities. Involvement in these activities is what can separate your resume from the others. Do not miss this opportunity. See me for details.