



**Integrated Science & Technology 449**  
**Data Recovery & Analysis**  
**Course Syllabus Spring 2012**

**Spring 2012,**  
**T Th 9:30 AM – 10:45 PM**  
**Morrow Library 121**

**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**

None. The textbook for this course will be provided.

**Course Description**

This course is focused on the proper use of Access Data's Forensic Toolkit software when investigating a standalone, Windows PC. The class is specifically designed to prepare to students to successfully complete Access Data's Certified Examiner (ACE) test. This test will be given at the end of the semester. The ACE credential is widely recognized in the computer forensics community. This program affords students the chance to leave the university not only with a college degree, but with an industry-recognized credential as well.

For more information on the ACE exam, process and study material, go here:

<http://accessdata.com/training/certifications>

**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 FTK, PRTK, Imager & Registry Viewer Interface and functionality

## **Application**

- Use FTK, PRTK, Registry Viewer and FTK Imager to conduct a proper forensic examination of a standalone, Windows PC.
- Successfully complete the Access Data Certified Examiner test

## **Integration**

- Integrate the various Access Data tools covered in this course to conduct a proper forensic examination

## **Human Dimension**

- Come to see themselves as members of the forensic community

## **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**

Evaluation of the student's performance will be based on your learning journal, quizzes, and exams. The course grade will be based on a percentage of total points. The number of quizzes may vary depending on class progress and preparedness.

## **Course Grading Policy**

Midterm Exam	100
Final Exam	100
Quizzes	100 (subject to change)
Professionalism	50
Total	<b>350</b>

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.

## **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 worth 200 points each. Exact dates and times of exams will be announced in class.

*Make-up Exams 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](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 critical to your successful completion of this course and the ACE examination. This course is centered around the hands-on use of the software. This software is only available in our lab. Therefore your time with the software will be limited.

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 400 level 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 make class, I expect you to let me know in advance. 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 30, 2010.

## **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

**Topics and Methodology**

The following outline delineates the tentative class schedule/topics to be addressed during the course. This schedule may change based on actual class progress.

<b>Week</b>	<b>Lecture Topics</b>	<b>Reading Assignments</b>
<b>1</b>	Introduction, ACE Exam Process, Working with FTK Imager	Module 1, 2
<b>2</b>	Working with FTK Part 1	Module 3
<b>3</b>	Working with FTK Part 2	Module 4
<b>4</b>	Processing the Case	Module 5
<b>5</b>	Narrowing Your Focus	Module 6
<b>6</b>	Filtering the Case, Regular Expressions	Module 8
<b>7</b>	Case Reporting, Working with PRTK/Mid Term	Module 9, 10
<b>8</b>	Windows Registry	Module 11
<b>9</b>	Registry Viewer	Module 12
<b>10</b>	ID Theft Practical 1	Module 13
<b>11</b>	The Recycle BIN	Module 14
<b>12</b>	Link & Spool Files	Module 15
<b>13</b>	Encrypting File System	Module 16
<b>14</b>	Processing Information Practical	Module 17
<b>15</b>	ID Theft Practical 2/Review & Test Prep	Module 18

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 CRITICAL and part of your 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.

### **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.

### **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.