# **DF 583 Digital Forensics Investigation**

Spring 2008 White Hall Conference Room Tuesday 6:00 pm ~ 9:00 pm

#### Instructor

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### **Course Description**

This course introduces the process of acquiring, preserving, analyzing digital evidence from hard disks and file systems. Topics include data organization and acquisition, file system and volume analysis and tools on various platforms. The focus is to acquire and/or recover digital evidence.

#### **Course Outline**

- Basics of digital investigation and evidence
- Hard disk technologies, data organization and acquisition
- Volume analysis -- PC and server partitions, DOS, Apple and BSD partitions
- File system analysis -- FAT, NTFS and Ext2 & Ext3
- Tools for disk and file system image analysis -- the Sleuth Kit (TSK), Autopsy etc.

#### **Textbooks**

Title	Author(s)	ISBN	Edition	Publisher	Cover
File System Forensic Analysis	Brian Carrier	321268172	1 <sup>st</sup> (Mar. 05)	Addison-Wesley Professional	FILE SYSTEM FORENSIC AVALYSIS

#### Grading

Your grades will be determined according to the following:

Labs/Homework	200
Quizzes/Attendance	150
Research/Presentations	150
Exam 1	150
Exam 2	150
Final Exam	200

Under normal circumstances, if your score is	Letter grade
>= 895	A
>= 795	В
>= 695	С
>= 595	D
< 595	F

### **Quizzes/Class Attendance**

There will be pop quizzes in some classes. These short quizzes are designed to ensure that you understand the concepts and issues discussed in previous and current classes. When a quiz is missed, it cannot be retaken unless official documents are presented and verified. 10 points or 1% of total will be deducted from grades when a student misses a class without official excuse. Absence can count at a maximum of 100 points or 10% of the total. All official absence documents must be presented within 1 week calendar days after absence. **Attendance Initiative**: http://www.shsu.edu/~mis\_gab/Faculty-Handbook/sections/attendance\_initiative.html

### Homework

- There will be multiple homework assignments, due one week after assigned.
- Homework assignments must be typed and emailed to shsu.chen@gmail.com by due date.
- All submission email must start the subject of the email with "DF 583".

# Labs

• These are practical exercises aiming to help student understand the course material better.

#### Collaboration

- All homework assignments must be completed by each student individually.
- Each team project (when applicable) must be developed and programmed by the members of the team only.

• If you have questions concerning the difference between working with other students and unacceptable collaboration, please bring them to the instruction's attention.

#### Late Policy

Penalty for any late work is 20% of the worth per calendar day late, unless an extension (for a valid reason) has been granted in advance.

#### **Online Course Resources**

Online course resources can be obtained at http://www.shsu.edu/~lxc008/teaching/df583/

# **Academic Dishonesty**

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, collusion and the abuse of resource materials.

Students should be aware, specifically, that the instructor reviews all programming assignments and exercises for evidence of collaborative work. While it is sometimes appropriate and encouraged for students to discuss concepts and ideas, it is never permissible to collaboratively work on coded examples, to share or swap completed or partially completed programming assignments. In addition it is not permitted for students to use code examples provided by the instructor without appropriate documentation/ citation of the use of that code.

# **Classroom Conduct**

Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers must be turned off before class begins. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

# Visitors in the Classroom

Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in the classroom.

### **Americans with Disabilities Act**

Students with disabilities covered by the Americans with Disabilities Act should go to the Counseling Center and Services for Students with Disabilities (SSD) in a timely manner to obtain the documentation required. Students are responsible for initiating the process of documenting the need for an accommodation under the ADA act.

# **Religious Observance**

University policy allows for student to observe religious holy days, including travel time associated with visiting a holy site, without penalty. If you intend to miss class as a result of the observance of a religious holy day or as a result of the necessary traveling time required for religious observance, such an absence will not be penalized so long as you have notified the instructor in writing of the dates and times of class sessions that are missed. The deadline for notification is the 12 class day. Students absent from class as a result of religious observance are required to submit any due assignments immediately on their return to the classroom. Makeup tests and quizzes will also be provided on return to the class.