Department of Computer Science

Course Syllabus
DFSC 2316 - Section 01, CID: 21888
Digital Forensics and Information Assurance Fundamentals - II

Course Meeting Times

Spring 2018
Jan 17, 2018 – May 10, 2018
M, W, F, 10:00 AM -- 10:50 AM
Room: AB1-206

Professor

Dr. Narasimha Karpoor Shashidhar
Associate Professor, Department of Computer Science, Sam Houston State University
Office: AB1-216B
Office hours: M, W, F 8 AM to 10 AM, 1 PM to 2 PM.
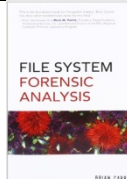Email: KARPOOR@SHSU.EDU
Phone: (936) 294-1591

Course Description

This course introduces students to the advanced concepts of digital forensics and cyber security. Emphasis is placed on identifying threats to, and vulnerabilities of, computer systems and how to minimize them. The content covered in this course is outlined below. The fundamental objectives of the course are to gain factual knowledge (terminology, classifications, methods, trends etc.) and principles of digital forensics and apply the course materials to improve thinking, problem solving and make sound forensics decisions.

Course Outline

- Network Security Labs
- Breaking into networks – SEED labs
- Basics of the BASH shell and shell scripting
- Metasploit framework and Cobalt Strike Framework
- Forensic Software Suites
- Cryptography and secure communications
- File System Forensics

Text/Reference books

| Title	Author(s)	ISBN	Edition	Publisher	Cover
File System Forensic Analysis 1st Edition	Brian Carrier	0321268172	1 edition (March 27, 2005)	Addison-Wesley Professional	

Grading plan:

Your final grade is computed as a percentage from the number of points earned divided by the number of points possible. The minimum percentage to earn an A is 90%, a B is 80%, a C is 70%, and a D is 60%.
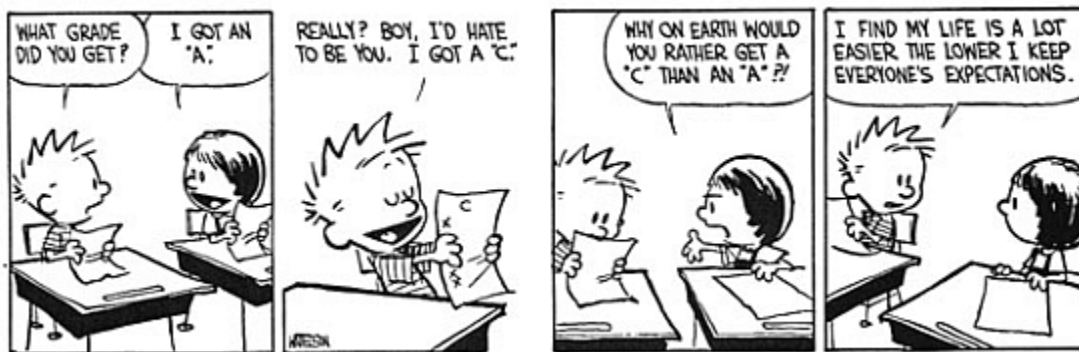
Homework

- There will be multiple homework assignments, due dates will be announced in class.
- Homework assignments will need to be typed and submitted on Blackboard.
- All emails need to conform to the following guideline: The subject of the email should contain the course and section numbers, e.g. "DFSC 2316 Sec 01 Question about HW 2" indicates a question about HW2 by a student from Section 01.
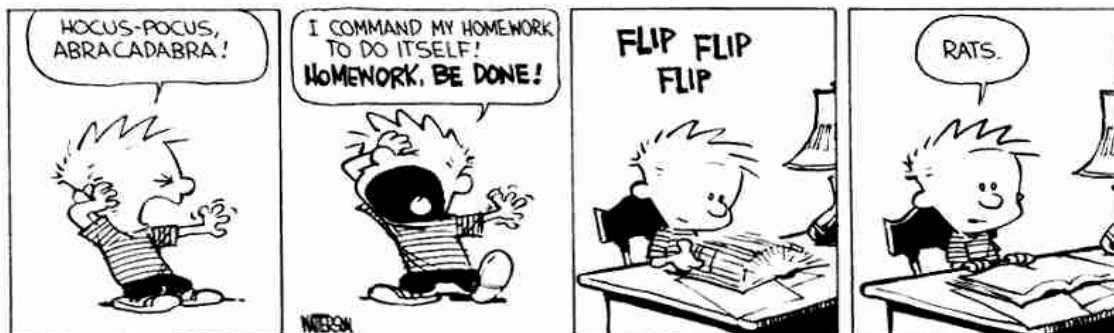
Labs

These are practical exercises designed to help students understand the course material better. Details of lab instructions and requirements will be posted on Blackboard.

Collaboration

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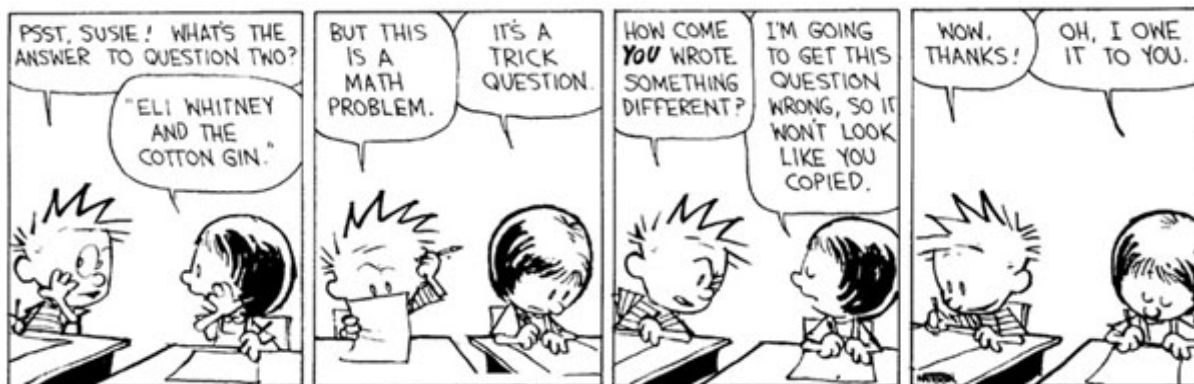- Each team project (when applicable) must be completed by the members of the team only.

Late Policy

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

Online Course Resources

Online course resources will be assigned for reading assignments.

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.