COMPUTER FORENSICS
CSCE 5933.025 – SUMMER 2017

Instructor: Dr. Mark A. Thompson
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E-mail Address: Mark.Thompson2@unt.edu
Class Location/Time: NTDP F218, MoWe 8:30 AM – 11:20 AM
Office Hours: MoWe 2:30 – 3:30 PM or by appointment
Every attempt will be made to answer e-mails within 24 hours. Please include CSCE 5933.025 in subject line.


Technology: This course will make use of several computer forensic programs, available as freeware or shareware on the Internet, or through those accompanying the assigned textbook. A USB flash/jump drive is recommended for data storage and backup.

Blackboard This course will use Blackboard, a Web-based course management system, to distribute course materials, communicate and collaborate online, post grades and submit assignments. You are responsible for checking the Blackboard course site regularly for class work and announcements.

COURSE DESCRIPTION
This course will introduce students to the fundamentals of computer forensics and cyber-crime scene analysis including laws, regulations, international standards, and formal methodology for conducting computer forensic investigations. Emphasis will be placed on such advanced computer forensic science capabilities such as target hardening and software, tools for data duplication, recovery and analysis, and development of pre-search or on-scene computer investigative techniques. Topics include technical and formal methodology for conducting security incident investigations; file systems and storage analysis, data hiding techniques, network forensics; projects involving using, understanding, and design of digital forensic tools; anti-forensics; legal issues and standards.

COURSE OUTCOMES
Upon successful completion of this course, the student will be able to:

1. Demonstrate general knowledge and comprehension of computer forensics and computer investigations.
2. Describe and explain the Windows, Macintosh, and Unix/Linux operating systems data storage and methodologies.
3. Describe and explain the methods used for digital evidence control, processing crime and incident scenes, and data acquisition for computer forensic analysis.
4. Demonstrate knowledge and comprehension of basic tools and techniques used in the field of computer forensics sciences.
5. Describe and explain writing investigation reports and being an expert witness.
ADA STATEMENT
The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information, see the Office of Disability Accommodation website at http://disability.unt.edu. You may also contact them by phone at (940) 565-4323.

ACCEPTABLE STUDENT BEHAVIOR
Student behavior that interferes with an instructor’s ability to conduct a class or other students’ opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student’s conduct violated the Code of Student Conduct. The university’s expectations for student conduct apply to all instructional forums, including university and electronic classroom, labs, discussion groups, field trips, etc. The Code of Student Conduct can be found at http://deanofstudents.unt.edu.

ATTENDANCE POLICY
Class attendance is regarded as an obligation as well as a privilege. All students are therefore expected to attend each class meeting. A student who misses class is still responsible to find out what was discussed and to learn the material that was covered and obtain the homework that was assigned on the missed day. The instructor is not responsible for re-teaching material missed by a student who did not attend class. Therefore, each student is accountable for and will be evaluated on all material covered in this course, regardless of attendance.

Excessive student absences may have a negative impact on a student’s comprehension and learning. Since this class meets on a MoWe schedule, students with more than three (3) absences may have their participation/attendance grade lowered for each absence beyond the initial two absences. Therefore, I expect your participation and attendance in this class to receive high priority. Note that unless there are extenuating circumstances requiring an absence lasting more than two (2) class periods, all absences, whether excused or not, will be counted.
Grading Policy

Your course grade will be a weighted average according to the following:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance/Participation</td>
<td>5.0%</td>
</tr>
<tr>
<td>Homework</td>
<td>20.0%</td>
</tr>
<tr>
<td>Lab Projects</td>
<td>35.0%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>20.0%</td>
</tr>
<tr>
<td>Comprehensive Final Exam</td>
<td>20.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Grades will be posted on Blackboard throughout the semester to provide an ongoing assessment of student progress, though final assessment will be measured using the weighted average above. Once a grade is assigned on Blackboard, students have one (1) week to dispute the grade. The proper channel for grade disputes is to first go to the original grader (either the TA or IA) in an attempt to resolve the issue. If, however, a resolution cannot be reached between the student and the grader, the student shall then go to the instructor who will have the final say on the grade.

Attendance/Participation: Attendance/Participation grades will be based on attendance and contribution to in-class discussions. Disruptive behavior and absences deemed excessive will result in a lower attendance/participation grade. Additionally, absences beyond what is calculated for the attendance/participation grade may result in a grade of WF for nonattendance or a one letter grade reduction in the final grade assigned.

Homework: Homework will be assigned based on material from the lectures or textbook. These assignments are meant for you to become familiar with the course material and this practice will aid you in mastering the concepts on lab projects and exams.

Lab Projects: Students will complete several in-depth hands-on laboratory assignments during the semester intended to give a more thorough view of computer forensics using modern and established forensics tools in the field of cyber forensics.

Midterm Exam: There will be a midterm examination given in this course covering both the theoretical and laboratory material covered in the course. The date of this exam will be posted on Blackboard and announced in class at least one week prior to the date of the exam. A make-up exam will be given at the discretion of the instructor when a student misses an exam with an excused absence. Unexcused absences on the date of an exam may result in a grade of 0 for the missed exam, so every effort should be made to attend class on the day of a scheduled exam.

Final Exam: There will be a final exam on Friday, July 7, 2017, at the same time and location of our regularly scheduled lecture. All students are expected to take the final exam during the scheduled time period.

Student Responsibility

Students are responsible for submitting the correct assignments (i.e., uploading the proper files) for each applicable assignment submission on Blackboard. When an incorrect assignment is submitted (or no assignment is submitted) to Blackboard, students wanting to submit with the correct file(s) may have their assignment assessed a 30% reduction penalty. If you have any questions or concerns about your submission, please work with your instructor, TA, or IA to ensure the correct file(s) is/are submitted.
ACADEMIC DISHONESTY

This course follows the Department of Computer Science and Engineering Cheating Policy. Specifically, students caught cheating or plagiarizing will receive a “0” for that particular assignment or exam for the first offense. Additionally, the incident may be reported to the Dean of Students, who may impose a further penalty. A second instance of cheating in this class will result in a grade of F in the class, and referral to the Department Chairperson and Dean of Engineering, whereby a dismissal hearing may be initiated by the Dean of Engineering.

In case the above description and in-class discussion of appropriate and inappropriate collaboration do not answer all of your questions, please meet with your instructor and look at the university Student Rights and Responsibilities web page.

SYLLABUS REVISIONS

This syllabus may be modified as the course progresses should the instructor deem it necessary. Notice of changes to the syllabus shall be made through Blackboard and/or class announcement.

TENTATIVE CLASS SCHEDULE (subject to change):

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Material Covered</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/15 – 5/19</td>
<td>Intro, Chap 1</td>
<td>HW1</td>
</tr>
<tr>
<td>2</td>
<td>5/22 – 5/26</td>
<td>Chaps 3 &amp; 4</td>
<td>HW2, L1</td>
</tr>
<tr>
<td>3</td>
<td>5/29 – 6/2</td>
<td>Chaps 4 &amp; 5</td>
<td>HW3, L2</td>
</tr>
<tr>
<td>4</td>
<td>6/5 – 6/9</td>
<td>Chap 7</td>
<td>Midterm, HW4, L3</td>
</tr>
<tr>
<td>5</td>
<td>6/12 – 6/16</td>
<td>Chaps 8 &amp; 9</td>
<td>HW5, L4</td>
</tr>
<tr>
<td>6</td>
<td>6/19 – 6/23</td>
<td>Chaps 9 &amp; 10</td>
<td>HW6, L5</td>
</tr>
<tr>
<td>7</td>
<td>6/26 – 6/30</td>
<td>Chaps 12 &amp; 13</td>
<td>HW7, L6</td>
</tr>
<tr>
<td>8</td>
<td>7/3 – 7/7</td>
<td>Review</td>
<td>Final Exam</td>
</tr>
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IMPORTANT DATES

May 15    First Class Day
May 29    Memorial Day (university closed)
Jun 6     Last day to drop a course with a grade of W for courses a student is not passing
Jun 15    Last day to drop a course with written consent of instructor
Jul 4     Independence Day (university closed)
Jul 5     Last class day
Jul 7     Final Examination