The University of Texas at Tyler Department of Computer Science COSC 5388 Digital Forensics Spring 2020 Wednesday 6:00-8:45 pm Location: Soules COB 211

#### **Course Description**

This course prepares students to collect, examine, and preserve digital evidence; and examines techniques used to prepare for, respond to, and investigate cyberspace incidents. Students will use forensic software to investigate computers, mobile devices, and networks.

#### Prerequisite: COSC 2315 or equivalent.

#### **Instructor Information**

Dr. Tom L. Roberts Chandler Professor of Computer Science cshaw@uttyler.edu

#### **Office Hours**

Wednesday 3-6, Virtual Tuesday 1-2, 24 hours via e-mail, and by appointment. I do not have an office phone. Please use email and CANVAS communication.

#### **Textbook Information**

None

# **Course Objectives**

The course is designed with the following goals:

- Understanding the digital forensics profession
- Effectively using current digital forensics tools
- Understanding how to recover graphic files
- Understanding ethics in digital forensics

## **Computer Account Access**

Students will need a Patriot account and password for computer access. This information can be found at http://www.uttyler.edu/ccs

## **Course Documents and Slides**

This class will use Canvas for course documents, slides and other class-related materials. Students are encouraged to check the website frequently during the course of the semester to keep up to date about class changes.

## **Course Grading**

Course evaluation will be based on the following:

Class Participation	10%
Quizzes/Assignments	35%
Lab Assignments	25%
Final Project	<u>30%</u>
Total Points	100%

# **Grading Scale**

- 90.0 points or more А
- 80.0 to 89.999 points В
- 70.0 to 79.999 points С
- 60.0 to 69.999 points D
- F 59.999 points or less

# *Tentative Course Schedule and Assignments:* Scheduled dates may vary depending on the pace of the class.

Week	Concept	Assignment Due	Due Date
Week 1	Introduction		
Week 2	What is Digital Forensics?	Quiz 1	1/22/20
Week 3	Lab and Office of an Investigator	Quiz 2	1/29/20
Week 4	Data Acquisition	Quiz 3, Assignment 1	2/5/20
Week 5	Crime & Incident Scenes	Quiz 4	2/12/20
Week 6	Current Digital Forensics Tools	Quiz 5, Assignment 2	2/19/20
Week 7	Recovering Files	Quiz 6	2/26/20
Week 8	Email & Social Media Investigations	Quiz 7	3/4/20
SPRING BREAK!!! March 9-14			
Week 9	Writing a Report	Quiz 8	3/18/20
Week 10	Testimony	Quiz 9	3/25/20
Week 11	Ethics in Digital Forensics	Quiz 10	4/1/20
Week 12	Begin Working on Final Project/Labs		4/8/20
Week 13	Continue Working on Final Project	Lab 1, Lab 2	4/15/20
Week 14	Continue Working on Final Project	Lab 3, Lab 4, Lab 5	4/22/20
Week 15	Turn in Final Project	Final Project	5/1/19

This schedule is subject to change!

# **Course Policies**

Quizzes – Quizzes will be administered each week throughout the semester. They are 1. designed to measure the student's mastery of the material as well as their ability to use these skills in an efficient manner. Quizzes questions may come in many different formats. Late or absent students (except excused absences) will not be permitted to take the quiz.

- 2. Lab Assignments Throughout the semester, students will be required to complete various lab assignments, based on the topic being covered.
- 3. Class Participation Class Participation will include participating in discussions, participating in-class activities and completing in-class assignments.
- 4. Final Project The final project will be due the week of finals. Students will have several weeks to complete the final project. A copy of the final exam date/time schedule can be found by doing a search for "UT Tyler Final Exam Schedule."
- 5. Attendance Policy Attendance is a critical factor for student success. Attendance will be taken every week. If you know that you cannot make it to class, please contact your Instructor PRIOR to class.
- 6. Late Assignments Assignments are due by 5:00pm of the date assigned. Assignments that are turned in late will be penalized by 20% for each 24 hour period (5:01pm to 5:00pm the following day) past the deadline and will receive a zero if turned in more than 5 calendar days late. Electronic assignments are encouraged to be sent electronically.
- 7. Missed Work: Business professionals must also take responsibility for attending all scheduled meetings and activities. Attendance is absolutely necessary in order to be successful in this class. Students who miss class are responsible for getting missed materials and lecture information on their <u>own time</u> from their peers.

## **Classroom Lab Rules**

- 1. Please do not surf the Web during class unless instructed to access the Internet.
- 2. Do not access inappropriate Web sites during class. This behavior will lead to dismissal from the class.
- 3. Please do not work on other computer assignments during class.
- 4. Please do not talk to your neighbor during class.
- 5. Please do not bring food or an uncovered drink into the computer classroom lab.
- 6. Do not use your phone during class.

## **UNIVERSITY POLICIES**

## **CLASS POLICIES**

**Academic Dishonesty:** Representation of other's work as your own will not be tolerated. Cheating on examinations, quizzes, and homework and the false representation of work will be interpreted as academic dishonesty. Academic dishonesty will be subject to disciplinary action as outlined by the UT Tyler Student Guide on Conduct and Discipline. Attendance/Late Work Policy: Late work is not accepted for credit unless approved by the instructor.

**University Policies:** The University sets forth policies regarding students' rights and responsibilities in the classroom. These may be revised without notice.

These policies can be found on at the end of this document and the UT Tyler's website:

# http://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdfUniversity Policies http://www.uttyler.edu/academicaffairs/files/syllabuspolicy.pdf

# SYLLABUS POLICY

A syllabus is a statement of intent by the course instructor that should clearly explain what a student must do and when they must do it to successfully complete the course and get a grade. A syllabus is intended to protect students from arbitrary or untimely changes in course requirements and due dates. A syllabus must also provide information about departmental and University policies governing conduct of the course.

All UT Tyler teaching faculty are required to distribute a course syllabus to their students on the first class meeting day. Faculty are also required to post their syllabi on the UT Tyler website, in a directory determined by the department or college.

Syllabi for concurrently taught undergraduate/graduate courses (ex: CENG 4314/5314) must clearly describe the additional expectations of graduate students that are substantively and progressively more advanced than those of the undergraduates. This can be done in a separate graduate syllabus or a combined syllabus.

# Each syllabus MUST include the following minimum information:

1. Course number, title, section number (if applicable) and scheduled class time;

2. Instructor's name, office address, phone number and e-mail address, with recommendations on which method of contact the instructor prefers;

3. Office hours-- at least three per week and a provision for arranging office hours to accommodate students whose schedules conflict with regularly scheduled office hours.

4. Course content--should be consistent with the approved course description found in the current UT Tyler catalog;

5. Course learning objectives.

6. Grading policy and criteria to determine final course grade;

7. Date of final examination, scheduled according to the University final exam schedule.

Reminder: any deviation from scheduled times must be approved by the college dean.

8. Date to withdraw without penalty (census date)—please include actual date, which can be found in the current Schedule of Classes.

9. Tentative dates of required assignments, quizzes, and tests, if applicable;

10. Attendance and make-up policy

11. Required textbooks, materials, and supplies;

12. Required field trips, rehearsals, etc., scheduled outside of regularly-scheduled class time, along with any accompanying fees and tickets; and/or course procedures unique to the course that might cause students to reconsider their enrollment in the course; and 13. Required university policies and additional information is provided on the following pages.

The information contained in the course syllabus, other than the grading criteria and absence and make-up policies, may be subject to change with reasonable advance notice as long as the change is without prejudice to the students.

## Instructors should also consider including:

- 1. Course Web site (if applicable);
- 2. Course prerequisites and restrictions, as they appear in the catalog;
- 3. Information about required learning-management software (Canvas)
- 4. Tentative deadlines for all assignments;
- 5. Tentative schedule of course topics

# UNIVERSITY POLICIES AND ADDITIONAL INFORMATION THAT MUST APPEAR IN EACH COURSE SYLLABUS

## **UT Tyler Honor Code**

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

# **Students Rights and Responsibilities**

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <u>http://www.uttyler.edu/wellness/rightsresponsibilities.php</u>

## **Campus Carry**

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <a href="http://www.uttyler.edu/about/campus-carry/index.php">http://www.uttyler.edu/about/campus-carry/index.php</a>

# UT Tyler a Tobacco-Free University

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

## Grade Replacement/Forgiveness and Census Date Policies

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at <u>http://www.uttyler.edu/registrar</u>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract. The Census Date is the deadline for many forms and enrollment actions of which students need to be aware. These include:

• Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.

• Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)

- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
- Being reinstated or re-enrolled in classes after being dropped for non-payment
- Completing the process for tuition exemptions or waivers through Financial Aid

## **State-Mandated Course Drop Policy**

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date).

Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

## **Disability/Accessibility Services**

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit

https://hood.accessiblelearning.com/UTTyler and fill out the New Student application. The Student Accessibility and Resources (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for

services, please visit the SAR webpage at <u>http://www.uttyler.edu/disabilityservices</u>, the SAR office located in the University Center, # 3150 or call 903.566.7079.

## Student Absence due to Religious Observance

Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

## Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

## Social Security and FERPA Statement

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.

## **Emergency Exits and Evacuation**

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

# **Student Standards of Academic Conduct**

Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

- i. "Cheating" includes, but is not limited to:
- copying from another student's test paper;
- using, during a test, materials not authorized by the person giving the test;
- failure to comply with instructions given by the person administering the test;

• possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;

• using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;

• collaborating with or seeking aid from another student during a test or other assignment without authority;

• discussing the contents of an examination with another student who will take the examination;

• divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student; • substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;

• paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;

• falsifying research data, laboratory reports, and/or other academic work offered for credit;

• taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and

• misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

ii. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.

iii. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.

iv. All written work that is submitted will be subject to review by plagiarism software.

# **UT Tyler Resources for Students**

• UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu

• UT Tyler Tutoring Center (903.565.5964), <u>tutoring@uttyler.edu</u>

• The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.

• UT Tyler Counseling Center (903.566.7254)

# Revised 1/18