

Oklahoma State University Institute of Technology
Online Common Syllabus
Fall 2017

ITD 3433 – Digital Forensics

Students are introduced to the procedures and techniques used to identify, extract, validate, document and preserve electronic evidence. Topics include: forensic tools, resources, policies and procedures. Theory/Lab.

Course Purpose:

This course will introduce students to concepts/tools/procedures in the field of digital forensics

Type of course: Theory/Lab.

Credit Hours: 3; Total hours of theory per semester: 35;

Total hours of lab for the semester: 40; Total hours of clinical per semester: 0.

Class length - Online

Prerequisites: ITD1223, ITD2223

Class Format: Fully Online

Class Days and Times: N/A

Instructor Name: Jim Strother

Instructor Phone: (918) 293-4798

Office: EET/IT - Room 15E

Instructor email: james.strother@okstate.edu

Contact: My preferred method of contact is email. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours:

Monday/Wednesday – 8:00 am to 9:20 am, 1:00pm to 3:30pm

Tuesday/Thursday – 8:00am to 11:15 am, 1:00pm to 3:30pm

Or by appointment

School Name: Information Technologies **School's Main Phone:** 918-293-5440

Required Text, References, and Materials

Texts: *Guide to Computer Forensics and Investigations, 5th edition*
 Bill Nelson, Amelia Phillips, Christopher Steuard
 ISBN-10: 1-285-06003-2
 ISBN-13: 978-1-285-06003-3

References: Assorted Subject Videos

Materials: Computer with broadband Internet access and the ability to install software.

Uniform/Tools: None

Estimated Cost for Materials: \$ 216.00

Estimated Cost for Uniform/Tools: \$ 0.00

Upon completion of the course, students should:

Course Objectives

Objective Number	Course Objectives	Assessment of Objectives
B3	B.3 complete assignment scenarios that require the development of solution recommendations based on course content	Labs*
E1	E.1 evaluate and document IT security risks and make recommendations for mitigation	Labs*
F3	F.3 interact socially in a professional manner in both IT technical and non-technical professional and/or social functions	Labs* Professional Development
M3	M.3 utilize tools and procedures to collect, document or analyze digital evidence	Labs*

Aspects of the course objective assessments may be used in the university’s assessment of student learning. If applicable, an asterisk (*) above indicates this assignment is used in the university assessment program.

(Please asterisk the assignment above if utilized for the assessment assignment.)

COURSE ACTIVITIES

In this course students will:

- Participate in class discussions and activities.
- Compile a portfolio of work produced.
- Take examinations.
- Complete reading assignments.
- May be required to do quizzes.

EVALUATION - GRADES WILL BE BASED ON THE QUALITY AND COMPLETION OF THESE TASKS:

Discussion Responses	15%
*Labs	35%
Professional Development	5%
Digital Course Portfolio	5%
Quizzes (min. 4).....	20%
Mid Term Exam.....	10%
Final Exam	10%
TOTAL	100%

OSUIT Grading Scale
A = 90%-100%
B = 80%-89%
C = 70%-79%
D = 60%-69%
F = 59% & below

*The student’s grade for this assignment will be used in the university’s assessment of student learning. A 70% competency or higher receives a Pass rating. This Pass/Fail rating is independent of the student’s course grade.

Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.

Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

RECOMMENDED STUDENT COMPETENCIES/SKILLS

Students should have successfully completed all prerequisite courses

AUTHORIZED TOOLS

Students may use any/all course materials, including books and notes, while participating in classroom activities. All quizzes and written assignments are to be completed independently; no collaboration with classmates is permitted and any instance of such will be considered academic dishonesty.

LATE WORK

Turning in your properly-executed work early is always acceptable. All exams, assignments, papers and projects must be completed and submitted by the specified due date; late work will not be accepted after the due date unless prior authorization is given.

TESTING

Quizzes/Exams may be timed or proctored during this course.

OTHER LAB AND CLASSROOM POLICIES

Interaction with Your Peers

Each week, you will be required to post one original post and two responses to your peers on the discussion board within the Online Classroom.

- You will be required to make your first post by Wednesday
 - If your first post is on Thursday I will deduct 10 points, Friday 20 points, etc.

- These must be solid posts on the subject of the discussion, no “I agree” or “Me too” posts.

Interaction with Your Instructor

In addition to online office hours (as indicated on the first page of this syllabus), you can also expect me to provide:

- communication about student course performance during the scheduled Faculty contact sessions
- additional information and updates about the course as needed through e-mails and the News feature in the Online Classroom (D2L)
- detailed analysis, feedback and explanation of grades according to the following schedule
 - Daily and/or weekly quizzes, small weekly assignments and similar type projects: Normal return time to student by next class meeting or no later than one (1) week.
 - Extensive assignments, large lab projects, extensive quizzes, exams and similar type projects: Normal return time to students in one (1) to two (2) weeks.

You may contact me by email at any time with questions or concerns about your course; however, please allow 24-48 hours to receive a reply to your correspondence on weekdays. I may not be available to respond to your correspondence on the weekend, so please do not leave your coursework until the last possible moment in case you need assistance.

ONLINE COURSE INTERACTION

OSUIT requires all online courses to include interaction between students, peers and instructors. Our online courses use a variety of tools to build a community of learners and strengthen engagement between students and their peers, as well as between students and the instructor. Communication tools used in courses may include Discussion, News, and Email. Read the syllabus completely to determine which of these methods you, your classmates and your instructor will use for interaction.

General guidelines for student conduct while interacting within an online course include: (1) Use proper language in all communications; (2) Harassment of any type will not be tolerated; (3) No jokes, insults or threats of an offensive nature.

For more information, go to: <http://osuit.edu/center/netiquette>

SYLLABUS ATTACHMENT

View the Syllabus Attachment, which contains other important information, by visiting http://osuit.edu/center/student_syllabus_information

Course Schedule			
Schedule	Topics	Assignment	Due Date
Module 1	Understanding the Digital Forensics Profession and Investigations – Chapter 1	Quiz 1 – Chapter 1 Discussion Posts Learning Assignments	9/10/2017
Module 2	The Investigator’s Office and Laboratory – Chapter 2	Quiz 2 – Chapter 2 Discussion Posts Learning Assignments	9/17/2017
Module 3	Data Acquisition – Chapter 3	Quiz 3 – Chapter 3 Discussion Posts Learning Assignments	9/24/2017
Module 4	Processing Crime and Incident Scenes – Chapter 4	Quiz 4 – Chapter 4 Discussion Posts Learning Assignments	10/1/2017
Module 5	Working with Windows and CLI Systems – Chapter 5	Quiz 5 – Chapter 5 Discussion Posts Learning Assignments	10/8/2017
Module 6	Current Computer Forensics Tools – Chapter 6	Quiz 6 – Chapter 6 Learning Assignments Discussion Posts	10/15/2017
Module 7	Macintosh and Linux Boot Processes and File Systems – Chapter 7	Quiz 7 – Chapter 7 Discussion Posts Learning Assignments	10/22/2017
Module 8	Recovering Graphics Files – Chapter 8	Mid-Term Exam Chapters 1–7 Quiz 8 – Chapter 8 Discussion Posts Learning Assignments	10/29/2017
Module 9	Computer Forensics Analysis and Validation – Chapter 9	Quiz 9 – Chapter 9 Discussion Posts Learning Assignments	11/5/2017
Module 10	Virtual Machine and Cloud Forensics – Chapter 10	Quiz 10 – Chapter 10 Discussion Posts Learning Assignments	11/12/2017
Module 11	Live Acquisitions and Network Forensics – Chapter 11	Quiz 11 – Chapter 11 Discussion Posts Learning Assignments	11/19/2017
Module 12	Email Investigations – Chapter 12 Cell Phone and Mobile Device Forensics – Chapter 13	Quiz 12 – Chapters 12 and 13 Discussion Posts Learning Assignments	11/26/2017
Module 13	Report Writing for High Tech Investigations – Chapter 14	Quiz 13 – Chapters 14 and 15	12/3/2017

	Expert Testimony in High Tech Investigations – Chapter 15	Learning Assignments Discussion Posts	
Module 14	Ethics for the Investigator and Expert Witness – Chapter 16	Quiz 14 – Chapter 16 Learning Assignments	12/10/2017
Module 15	Course Portfolio Due Final Exam	Final Exam – Chapters 8 - 16 Available through Wednesday	12/15/2017

Schedule is subject to change at instructor discretion.