

Oklahoma State University Institute of Technology

Online Common Syllabus

Summer 2018

ITD 3683 – Mobile Forensics

Students apply advanced digital forensics techniques and technologies to complex information systems. Topics include mobile devices, alternating operation systems, and incident response.

Theory/Lab

Course Purpose

This course teaches the student advanced topics of digital forensics on mobile devices

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 - Fully Online

Prerequisites: ITD2223

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. Make sure to include your class name in the subject line. Please allow 24-48 hours to return your correspondence during the normal work week.

Instructor's Office Hours:

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

Tuesday/Thursday – 8:00am to 9:20am, 1:30pm to 3:30pm

Or by appointment

School Name: Information Technologies

School's Main Phone: 918-293-5440

Required Text, References, and Materials

Texts: *Mobile Forensics Investigation : A Guide to Evidence Collection, Analysis, and Presentation*

ISBN 13: 9780071843638 (978-0-07-184363-8)

ISBN: 0071843639 (0-07-184363-9)

References: Assorted Subject Videos

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

Uniform/Tools: None

Estimated Cost for Materials: \$ 65.00

Estimated Cost for Uniform/Tools: \$ 00.00

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 this course may include Discussion, News, Blackboard Collaborate, and Email. Read the syllabus completely to determine which of these methods you, your classmates and your instructor will use for interaction.

Course Activities

In this course students will:

- Install the Santoku operating system in the virtual environment
- Customize the virtual machines and add different tools to them
- Learn how to use mobile forensic tools
- Learn various mobile forensics procedures
- Analyze images taken from mobile devices
- Make hash and checksums for images

Evaluation - Grades will be based on the quality and completion of these tasks:

Discussion Responses	15%
*Weekly Assignments.....	35%
Professional Development.....	5%
Digital Course Portfolio.....	5%
Research Questions	25%
Course Project.....	15%
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.

Online Course Interaction

This online/hybrid course uses a variety of tools to build a community of learners and strengthen communication between students and their peers, as well as between students and the instructor. Through the use of these tools, you will be able to interact with others in the virtual classroom. Communication tools used in this course include Discussion, News, Blackboard Collaborate, and Email.

Interaction with Your Peers

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

- Your first post must be in by Wednesday. Each day it is late you will lose 10 points
- You must reply to at least two other student posts by Sunday. Each missing post will cost 10 points
- No "I agree" or "Me too" post will count, you must contribute to the conversation
- All posts must be of a respectful nature to other students or the instructor. Failure to abide by this will result in a "0" for the week

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.

Recommended Student Competencies/skills

- Able to use the VMware environment virtual machines via web interface
- Interact in class or online discussion topics
- Provide answers to questions posed using provided templates

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 may be timed or proctored during this course.

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	Introduction – chapter 1	Discussion Posts Learning Assignments	05/06
Module 2	Mobile devices vs. computer devices – chapter 2	Discussion Posts Learning Assignments	05/13
Module 3	Collecting Mobile Devices, USB Devices, etc. – chapter 3	Learning Assignments Discussion Posts	05/20
Module 4	Preparing, protecting and seizing digital device evidence – chapter 4	Discussion Posts Learning Assignments	05/27
Module 5	Toolbox Forensics: Multiple tool approach – chapter 5	Discussion Posts Learning Assignments	06/03
Module 6	Mobile Forensic Tool Overview – chapter 6	Learning Assignments Discussion Posts	06/10
Module 7	Preparing the Environment for your first collection – chapter 7	Discussion Posts Learning Assignments	06/17
Module 8	Conducting a collection of a mobile device – chapter 8	Discussion Posts Learning Assignments	06/24
Module 9	Analyzing SIM cards – chapter 9	Discussion Posts Learning Assignments Professional Development	07/15
Module 10	Analyzing Feature phone, blackberry and windows – chapter 10	Discussion Posts Learning Assignments	07/22
Module 11	Advanced iOS Analysis – chapter 11	Discussion Posts Learning Assignments	07/29
Module 12	Querying SQLite – chapter 12	Discussion Posts Learning Assignments	08/05

Module 13	Advanced Android Analysis – chapter 13	Learning Assignments Discussion Posts	08/12
Module 14	Presenting the data as a mobile forensics expert – chapter 13	Learning Assignments Discussion Posts	08/19
Module 15	Course Portfolio Due Final Exam	Final Project Available through Wednesday	08/22

Schedule is subject to change at instructor discretion.