GENERAL INFORMATION

PROFESSOR INFORMATION

Instructor: Alexandria Wong **Phone**: (727) 395-2511x115

Office: National Forensic Science Technology

Center - Largo, FL

Office Hours: By appointment Email: Alexandria.Wong@fiu.edu

Website: https://www.nfstc.org/

COURSE DESCRIPTION AND PURPOSE

This is an undergraduate-level course which covers the basics of mobile device forensics. The course presents a forensic analyst's perspective on how to conduct mobile device examinations. Topics covered include the basics of mobile devices, the underlying technology for wireless networks, how to conduct examinations with mobile forensic tools, forensic methodologies, and evidence handling.

This course will consist of 4 modules that will each include one lab assignment, one quiz, and one discussion board assignments. Module availability is opened on a schedule. Assignments and quizzes will be completed on your own and will be due approximately every 2 weeks depending on the module. Assignments will be evaluated within 1 week of submission. Communication will take place primarily via email and professor announcements. At the end of the course, you would have learned how to use forensic techniques with the tools used to analyze mobile devices.

COURSE OBJECTIVES

Students will be able to:

- 1. Identify different types of mobile devices
- 2. Identify the parts of a mobile device and a cellular network
- 3. Explain where information is stored on or off the mobile device
- 4. Discuss methods for collecting mobile devices and their data
- 5. Differentiate between mobile data extraction techniques
- 6. Examine mobile devices using forensic tools to extract and analyze data
- 7. Analyze databases on a cellphone using advanced techniques
- 8. Identify and discuss forensic challenges and concerns regarding mobile devices

MAJOR & CURRICULUM OBJECTIVES TARGETED

There are no listed Major & Curriculum Objectives targeted by this particular course. Should you have any questions, please contact the professor.

TEACHING METHODOLOGY

This is a fully online course in which all the instructional materials and activities are delivered through Canvas, and/or other internet-based media. Some lab assignments may require the use of a remote machine and zoom for live demonstrations. Should you have any questions, please contact the professor.

IMPORTANT INFORMATION

POLICIES

Please review <u>FIU's Policies webpage</u>. The policies webpage contains essential information regarding guidelines relevant to all courses at FIU, as well as additional information about acceptable netiquette for online courses.

TECHNICAL REQUIREMENTS/SKILLS

One of the greatest barriers to taking an online course is a lack of basic computer literacy. By computer literacy we mean being able to manage and organize computer files efficiently and learning to use your computer's operating system and software quickly and easily. Keep in mind that this is not a computer literacy course; but students enrolled in online courses are expected to have moderate proficiency using a computer. Please go to the **What's Required** page to find out more information on this subject.

This course utilizes the following tools:

- 1. MSAB XRY https://www.msab.com/
- 2. MSAB XAMN https://www.msab.com/
- 3. Magnet Acquire https://www.magnetforensics.com/resources/magnet-acquire/
- 4. Chrome Remote Desktop https://remotedesktop.google.com/access/

Please visit our **Technical Requirements** webpage for additional information.

ACCESSIBILITY AND ACCOMMODATION

Please visit our <u>ADA Compliance</u> webpage for information about accessibility involving the tools used in this course.

For additional assistance please contact FIU's **Disability Resource Center**.

COURSE PREREQUISITES

This course has at least one prerequisite. Review the <u>Course Catalog webpage</u> for prerequisites information. The prerequisite for this course is EEL 4802 – Introduction to Digital Forensics.

PROCTORED EXAM POLICY

This course will not have proctored exams.

Please visit our <u>Proctored Exam Resources</u> webpage for important information concerning proctored exams, proctoring centers, and important forms.

TEXTBOOK

There are no assigned readings for this course.

EXPECTATIONS OF THIS COURSE

This is an online course, which means most (if not all) of the course work will be conducted online. Expectations for performance in an online course are the same for a traditional course. In fact, online courses require a degree of self-motivation, self-discipline, and technology skills which can make these courses more demanding for some students.

Students are expected to:

- Review the how to get started information located in the course content
- **Introduce yourself to the class** during the first week by posting a self-introduction in the appropriate discussion forum
- Take the practice quiz to ensure that your computer is compatible with Canvas
- Interact online with instructor/s and peers
- Review and follow the course calendar
- Log in to the course at least three (3) times per week
- Respond to discussion boards within the assigned time frame.
- Respond to emails or Canvas messages within two (2) days
- Submit assignments by the corresponding deadline (late lab assignments receive no credit)

The instructor will:

- Log in to the course at least **three (3) times** per week
- Respond to discussion boards within the assigned time frame.
- Respond to emails and Canvas messages within two (2) days
- Grade assignments within seven (7) days of the assignment deadline

COURSE DETAILS

COURSE COMMUNICATION

Communication in this course will take place via Canvas Inbox.

Visit our <u>Writing Resources webpage</u> for more information on professional writing and technical communication skills.

DISCUSSION FORUMS

Keep in mind that your discussion forum postings will likely be seen by other members of the course. Care should be taken when determining what to post.

Discussion Forum Expectations:

Each module will have a discussion post assignment.

Original Posts:

- Students are expected to provide an original post for each discussion assignment.
- The original posts should be approximately 200-400 words long or as indicated by the discussion post directions.
- All sources should be cited in such a way that the instructor can verify the information provided (no formal style required).

• Responses with questions:

- o Students will be required to provide responses to two (2) original student posts.
- Responses will be at least 50 words and will include a follow-up question for the original poster.
- o You are encouraged to respond to original posts that have no responses, if possible.
- A pre-designated time period will be permitted for the original posts and follow-up questions.

• Follow-up responses that answer questions:

- Subsequently, additional time will be permitted to allow the original poster to respond to questions.
- o All follow-up responses will be at least 50 words.

Grading

- Grading Rubric 100 points total (please click on the three-dot button on the upper right hand of the discussion question to review again the rubric criteria)
- Original post late (-10 points per day)
- o Feedback and grades will be available within five (5) days of the final posting.

Discussion topics availability

- Discussion topics will remain open for the rest of the semester, but contributions will not be graded
- Other non-graded discussion forums may be opened for assignment help or general questions

ASSESSMENTS

In order to mitigate any issues with your computer and online assessments, it is very important that you take the "Practice Quiz" from each computer you will be using to take your graded quizzes and exams. It is your responsibility to make sure your computer meets the minimum **hardware requirements**.

Assessments in this course are not compatible with mobile devices and should not be taken through a mobile phone or tablet. If you need further assistance, please contact **FIU Online Support Services**.

Quiz Expectations:

- Each Module will conclude with a Module Quiz
- Quizzes will be available from 6:00 PM to 8:30 PM on the day assigned
- If you are unable to take the quiz at the allotted time, the instructor must have 24 hours advance notice to request an alternative time.
- Module Quizzes should take no more than 45 minutes
- You will have only one (1) opportunity to complete the guiz
- Quizzes will be worth 100 points and will consist of the following question types:
 - o 10 Multiple Choice 5 points each (50 total)
 - 5 True/False 4 points each (20 total)
 - o 2 Short Answer 15 points each (30 total)

- Answers to the multiple-choice and true/false will be presented immediately after completing the test.
- Final scores including scores and feedback on short answer questions will be completed within three (3) days of quiz completion.

LAB ASSIGNMENTS

Lab Assignment Expectations:

- There will be five (5) hands-on lab assignments in this course
- The labs will require access to a Windows computer with administrator rights
- Module 2 will require scheduling a time slot to meet with the professor and accessing a remote machine for hands-on extractions.
- Labs will be posted at the beginning of the corresponding Module.
 - The time frames are generous, manage your time well and plan ahead; you can always turn assignments in early.
 - o Late Assignments will result in a zero grade
- All work should be done individually.
- All assignments will be turned in via Canvas.
- Each question in the lab exercise is assigned a certain number of points
 - o Partial credit will be given at the instructor's discretion
- Lab Assignments will be graded within seven (7) days of the due date
- Review the detailed <u>Turnitin instructions</u> on how to submit your assignments and how to review the Grademark comments (feedback) from your professor.

ZOOM MEETINGS

Zoom is an online meeting room where you can interact with your professor and fellow students by sharing screens, sharing files, chatting, broadcasting live audio, and taking part in other interactive online activities. We will be utilizing this tool to conduct.

Additional Instructor help:

If something cannot be resolved by Canvas message/emails, students are encouraged to set an appointment to meet with the professor. These appointments will take place via Zoom meetings.

Module 2 Lab:

Also, module 2 requires a zoom meeting for cell phone extraction. Students are expected to sign up for a time slot. Only five students max per time slot. Once students sign up, there will be a login provided. Please only use login for the time provided.

To sign up for this meeting, email me two time slots (preferred and secondary) that work for you. I will respond back which time slot I was able to schedule you for.

Students must appear on time for their scheduled meeting. The instructor will discuss how extractions work, ask questions on how to get the phones in the proper mode, and help through the practical.

Participation is mandatory and will be part of the grade for the lab in module 2.

GROUP A:

Meetings will be available on the following dates:

GROUP B:

Meetings will be available on the following dates:

If none of these time slots work for you, please let the instructor know at least a week in advance and we will work a solution for you.

GRADING

Course Requirements	Number of Items	Points for Each	Total Points Available	Weight
Quizzes	4	100	400	25%
Discussion Board	4	100	400	25%
Lab Assignments	4	100	400	50%
Total	16	N/A	1600	100%

Letter Grade	Range	Letter Grade	Range	Letter Grade	Range
Α	95 or above	B-	80 - 82	F	59 or less
A-	90 - 94	C+	77 - 79		
B+	87 - 89	С	70 - 76		
В	83 - 86	D	60 - 69		