Georgia Institute of Technology

Syllabus: CS6261/PUBP8803 Security Incident Response

CS6261/PUBP8803 – Security Incident Response
Fall 2026
Delivery: Virtual Classroom
Dates course will run: August 4 – December 17

Instructor Information

Jimmy Lummis	Email: jimmy.lummis@security.gatech.edu

General Course Information

Description

This course provides students with the background information and skillsets necessary to operate as an effective cyber security operations staff member and leader in the midst of a cyber security crisis. It ensures that students understand the world of incident response and are comfortable participating in or even leading a cyber security incident response effort. The course begins by reviewing the foundational elements of cyber security and then introduces the topic of incident response and the various aspects of handling a cyber incident. Throughout the course, students analyze case studies of incidents that have occurred in major organizations and work to understand how the tools and techniques of cyber security and incident response could have or should have been applied. Finally. It introduces the tools involved in defending a digital environment that ultimately aid students in performing project exercises where they will flex their incident response muscles.

Pre-Requisites

No courses are required before taking this class.

Course Technical Skillset Prerequisites

This course is intended to teach cyber security incident response, which is both a technical and non-technical discipline. As we are dealing with the response to attacks on technology, you must be able to perform some technical functions to investigate a cyber security incident. We do expect that each student should have a basic level of technical proficiency or at least be willing to put in the work to overcome any shortcomings in your current technical aptitude.

Basic skillsets needed include:

- Basic system admin capabilities such as working on a command line and being able to identify system logs
- Ability to read and interpret system logs
- Familiarity with log analysis tools such as Splunk
- An understanding of networking and how to interpret network logs

There have been many students that come from non-technical backgrounds that have been successful in the course. Being willing to put in the time and effort to learn these skills while taking the course will go a long way.

Course Objectives and Learning Outcomes
Once completed, the students should have the following capabilities:

- Understand the foundational tools necessary to have a successful incident response program.
- Understand modern incident response methods and apply those methods to create an incident response process.
- Observe suspicious IT behavior and discern malicious activity.
- Apply methods of containing, eradicating, and responding to an emerging cybersecurity threat.
- Evaluate performance of a prior incident in order to improve future processes.

Course Materials

Course Text
There is no textbook for this course. All required and recommended readings will be available in Canvas.

Additional Materials/Resources
Additional assigned readings will be included with each lesson or assignment.

Classroom Management Tools

- Video Lessons: All video lessons are located on Canvas.
- Assignments: are located on Canvas.
- Reading Materials: are located on Canvas.
- Ed Discussion: are located on Canvas.
- Grades: are located on Canvas.

Course Requirements, Assignments & Grading

Assignment Distribution and Grading Scale

Assignment	**Weight**
Current Event Discussions	10%
Case Studies	20%
Projects	40%
Final Project	30%
Total	**100%**

Grading Scale
Your final grade will be assigned as a letter grade according to the following scale:
A 90-100%

B	80-89%
C	70-79%
D	60-69%
F	0-59%

Assignments Due Dates (Time zone)

All assignments are due at 11:59:00pm ET, unless otherwise noted.
All assignments are due relative to the Eastern Time Zone (ET). We will not accept assignments submitted late due to time zone issues. You should update your Canvas to account for ET if you are in a different time zone. There are no exceptions.

Late and Make-up Work Policy

Some assignments will be accepted with a deduction of 10% per 24-hour period starting after the due date submission time. Those assignments that allow for late submission will have an "Available until" date that is later than the submission deadline defined in Canvas. Those assignments that allow for late submission but that are over 3-days late (i.e. three 24-hour periods) will not be accepted. There will be no make-up work provided for missed assignments. Of course, emergencies (illness, family emergencies) will happen. In those instances, please contact the Dean of Students office. The Dean of Students is equipped to verify emergencies and pass confirmation on to all your classes. For consistency, we ask all students to do this in the event of an emergency.

Assignment Re-Grade Policy

The instructional team makes every effort to provide a fair grade when grading course assignments. However, we understand that students may not always like or agree with the grade that is given to a particular assignment. Students are allowed to request that the instructors take another look at the initial grading of their assignment. Students must submit their request for a re-grade within 5 days of the initial grades being published.

Here are some additional guidelines/expectations on re-grades:

- When submitting a request to have the instructors review your assignment, please provide a detailed list of why you think your work deserves more points. Do not just send us a request to take another look without justification.
- Re-grade requests must be made either via Canvas message or private Ed Discussion post. Please address all of the instructors and the TAs.
- Requesting a re-grade may result in a lower grade then what you were initially given by the TAs.
- Any request to re-grade needs to be delivered in a respectful manner. If the instructors interpret your request as inappropriate or disrespectful, we will not honor your request.
- Once the instructors have reviewed your assignment and issued an updated grade, we will not entertain any further discussion on the grade we have given for that assignment.
- A re-grade is not the same as a request for accommodation due to hardship. If you have a legitimate hardship, please work with the Dean of Students office to have them provide an email to the instructors and we will happily work with you to allow for additional time etc. so that you can be successful in this course while working through your life challenges.

Office Hours
Office hours will be held once per week. We will alternate between a morning and afternoon session each week to accommodate student schedules. We will meet via Zoom on Fridays from 10:00 – 11:00 AM ET or 4:00 – 5:00 PM ET. Details can be found within the Zoom section of Canvas. One-on-one office hours are available by appointment.

Attendance and/or Participation
Since this is an online and asynchronous course, there is no class attendance requirement. However, students are expected to watch all lecture content and encouraged to attend office hours.

Technology Requirements and Skills

Computer Hardware and Software

- Refer to the Student Computer Ownership site: https://sco.gatech.edu/

Canvas
This class will use Canvas to deliver course materials to online students. All course materials, assessments, and graded discussions will take place on Canvas. General discussion will take place on Ed Discussion. NOTE: Students are responsible for ensuring that assignment submissions have been uploaded and submitted in Canvas and that they have submitted the correct files. Submitting wrong files or failing to ensure that files are submitted are not valid reasons for the instructors to waive late penalties, allow submissions after deadlines, or accept regrade requests.

Course Policies, Expectations & Guidelines

Communication Policy

- Email course questions and personal concerns, including grading questions, to the instructors privately using Canvas. Do NOT submit posts of a personal nature to the Ed Discussion board.
- Email will be checked at least twice per day Monday through Friday; Saturday and Sunday, email is checked once per day. During the week, we will respond to all emails within 24 hours; on weekends and holidays, allow up to 48 hours. If there are special circumstances that will delay our response, we will make an announcement to the class. Please ensure that you include all instructors in your email.
- Discussion boards will be checked twice per day Monday through Friday; Saturday and Sunday, these discussion boards will be checked once per day.

Online Student Conduct and (N)etiquette

Communicating appropriately in the online classroom can be challenging. In order to minimize this challenge, it is important to remember several points of **"internet etiquette"** that will smooth communication for both students and instructors:

1. *Read first, Write later*. Read the ENTIRE set of posts/comments on a discussion board before posting your reply, in order to prevent repeating commentary or asking questions that have already been answered.
2. *Avoid language that may come across as strong or offensive*. Language can be easily misinterpreted in written electronic communication. Review email and discussion board posts BEFORE submitting. Humor and sarcasm may be easily misinterpreted by your reader(s). Try to be as matter-of-fact and professional as possible.
3. *Follow the language rules of the Internet*. Do not write using all capital letters, because it will appear as shouting. Also, the use of emoticons can be helpful when used to convey nonverbal feelings. J
4. *Consider the privacy of others.* Ask permission prior to giving out a classmate's email address or other information.
5. *Keep attachments small*. If it is necessary to send pictures, change the size to an acceptable size.
6. *No inappropriate material*. Do not forward virus warnings, chain letters, jokes, etc. to classmates or instructors. The sharing of pornographic material is forbidden.

NOTE*: The instructor reserves the right to remove posts that are not collegial in nature and/or do not meet the Online Student Conduct and Etiquette guidelines listed above.*

University Use of Electronic Email

A university-assigned student e-mail account is the official university means of communication with all students at Georgia Institute of Technology. Students are responsible for all information sent to them via their university-assigned e-mail account. If a student chooses to forward information in their university e-mail account, he or she is responsible for all information, including attachments, sent to any other e-mail account. To stay current with university information, students are expected to check their official university e-mail account and other electronic communications on a frequent and consistent basis. Recognizing that some communications may be time-critical, the university recommends that electronic communications be checked minimally twice a week.

Plagiarism & Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review Georgia Tech's Honor Code and the student Code of Conduct.

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Students are expected to cite their sources on ALL assignments where they are leveraging the work of others. Citations should be professional and in a generally accepted format such as APA. If you have questions about when to include a citation or the instructional team's expectations on citations, please ask questions.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or http://disabilityservices.gatech.edu/, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. See http://www.catalog.gatech.edu/rules/22/ for an articulation of some basic expectation that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Course Schedule

Refer to the course schedule within the course Canvas site.