

CS6268

Psychology of Cybersecurity

Syllabus

Logistics:

SPRING/FALL SEMESTER

3 Credits

Class Time: TBD

Class Location: TBD

Prerequisites:

None

Instructor:

Courtney Crooks, PhD

Principal Research Scientist, GTRI-SEAL

Adjunct Faculty, SCP

Office:

Main:

Sensors and Electromagnetic Applications

Laboratory

CCRF B11-3177B

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Alternate:

CODA Building, S1026

756 W Peachtree St NW, Atlanta, GA 30308

Office Hours: Virtual (M-F) or in-person (at CODA T/Th) by appointment

Required Textbook:

Holt, T., Bossler, A., & Seigfried-Spellar, K. (2022). *Cybercrime and digital forensics: An introduction*. Routledge. <https://www.routledge.com/Cybercrime-and-Digital-Forensics-An-Introduction/Holt-Bossler-Seigfried-Spellar/p/book/9780367360078>

Optional Resources:

Attrill-Smith, A., Fullwood, C., Keep, M., & Kuss, D. J. (Eds.). (2019). *The Oxford handbook of cyberpsychology*. Oxford University Press.

Kirwan, G., Connolly, I., Barton, H., & Palmer, M. (Eds.) (2024). *An Introduction to Cyberpsychology, 2nd Ed.* Routledge. <https://www.routledge.com/An-Introduction-to-Cyberpsychology/Kirwan-Connolly-Barton-Palmer/p/book/9780367552299>

Suler, J. R. (1996). *The Psychology of Cyberspace [online version]*.

<https://www.johnsuler.com/pdfs/psycyber.pdf>

Suler, J. R. (2016). *Psychology of the digital age: Humans become electric*. Cambridge University Press.

Overview:

This course will explore the realm of cyberpsychology, with an emphasis on psychological processes and how these pertain to cybersecurity in various forms. The course material will progress through a sample of classic to modern psychologically-oriented scholarly readings that explore concepts such as cognitive security, deception, trust, and social cybersecurity, and apply these concepts into the modern cyber-enabled information environment. Students should take away from the class a familiarity with psychological theory relevant to cybersecurity, an appreciation for

the societal responsibilities and complexities involved in cybersecurity policymaking, and an awareness of the psychological influence of the current cyber-enabled information environment. This class will be taught in seminar style, as a blend of brief orienting lectures, classroom laboratory activities, and discussions about weekly assigned readings related to a progression of course subject matter.

Learning Objectives:

This course will introduce three major domains in psychology—cognitive, social, and psychoanalytic, to provide a foundation for approaching the emerging cyber-enabled information environment from multiple dimensions. Students will be encouraged to critically think about and examine their assumptions about mass media, cyber technology, and relevant cybersecurity policy as they relate to global events and their own cyber experience. Each week we will address different topics in the current social and political landscape, such as the impact of technology and media on societal attitudes, beliefs, and behavior; cyber-enabled information dynamics; and current cyber policy and privacy challenges. We will discuss how different perspectives in psychology provide relevant theoretical and practical anchors to understand the global impact of the cyber-enabled information environment.

- 1) Describe the complex interaction of emerging cyber technology with human behavior and society.
- 2) Describe key ideas in cyber psychology based on scholarly argument and empirical evidence.
- 3) Assess practical points and narrative from scholarly research articles.
- 4) Demonstrate briefing and/or discussion skills and focus on clearly conveying complex concepts and issues in simple ways.
- 5) Demonstrate concise writing in a series of academic summaries and/or reaction papers that will force strategic editing and word economy.
- 6) Demonstrate clear, descriptive academic writing and discussion in a final review paper of a selected and approved topic relevant to the course material.

Class Requirements:

- 1) **Reaction Papers (60% of final grade).** In order to keep students engaged in the weekly readings, four times throughout the semester students will be assigned a classroom laboratory activity to complete during a scheduled laboratory with mandatory attendance, then a 2-4 page reaction paper to write in response to the activity and associated course subjects and assigned readings. The 2-4 page written reaction paper will be submitted for a “quiz” grade. Each reaction paper assignment description and reaction paper rubric, will be provided during the semester. Students will be expected to read assigned readings each week and be ready to discuss in the next class period, even if they are not submitting a reaction paper that week. All weekly readings will be open source and therefore available to students online, with the exception of the required textbook which the student will be required to obtain from an available bookstore resource. **All written assignments must be written in current APA Style (7th).** **(SEE MASTER SCHEDULE FOR DUE DATES.)**
 - a. Written individual summary on 4 assigned topics for review throughout semester (2-4 pages, see weekly schedule for due dates) (60% total, 15% each)
 - b. **Note: Attendance & Participation is built into this grade, so please plan on attending class for each announced laboratory activity to record your**

attendance. Students may not be excused from laboratory attendance unless they have an approved Institute Approved Absence (IAA) on record from the Registrar's office and sent to the instructor within 7 days of the absence, or 5 days before the end-of-term grading deadline, whichever comes first.

- 2) Final Paper (35% of final grade).** A final literature review, case study, and scholarly discussion paper will be assigned as an “final exam” assessment. The paper assignment will require students to summarize, apply, and discuss current scholarly research in a specific cyberpsychological topic that is pre-approved by the instructor, apply it to a relevant cybersecurity case study from government or industry, and discuss the implications for research, practice, and/or policy. A list of pre-approved topics, paper assignment descriptions, and paper rubric, will be provided during the semester. Other relevant topics not on the list that the student is interested in exploring may be approved at the instructor's discretion and should be discussed with the instructor before any paper assignments are due. **The final paper assignment must be written in current APA Style (7th).**
- a. Final written paper (i.e., final exam/assessment) (*10-12 page paper*, **SEE MASTER SCHEDULE FOR DUE DATE**) (30%)
 - b. Final quad chart summary, 5-minute final presentation (quad chart Powerpoint slide and in-class presentation, **SEE MASTER SCHEDULE FOR DUE DATE**) (5%)
- 3) Class Attendance (5% of final grade).** Ten random times throughout the semester, attendance will be recorded in class. Each of the 10 attendance checks is worth 0.5% toward your final grade, for a total of 5%. **Note: Students may not be excused from an attendance check unless they have an approved Institute Approved Absence (IAA) on record from the Registrar's office and sent to the instructor within 7 days of the absence, or 5 days before the end-of-term grading deadline, whichever comes first. Students without an IAA on file for their absence may petition to the instructor for an excused absence pending specific circumstances.**

Assignments:

All assignments will be due electronically through Canvas by **NOON** on the published due date. *Detailed assignment guidance will be distributed separately in class throughout the semester.*

Below is the grading scale for this course (no plus or minus grades will be given). A grade of C or higher is required to PASS (for P/F students).

A	90-100
B	80-89
C	70-79
D	60-69
F	59 AND BELOW

Course Expectations, Attendance & Participation:

This section is offered in an in-person format. We plan to have periodic meaningful virtual lecture experiences spread throughout the semester, with the rest of our meetings held in-person during our

regularly scheduled class period (see weekly schedule). You are expected to attend class every scheduled in-person and virtual session unless you have a compelling reason. There is no in-person scheduled final exam during finals week, but there is a major final paper that will serve as an “open book” final assessment due at the end of the semester, and is worth a significant amount of your total grade. **You are expected to check your email and Canvas daily for announcements and updates. Class announcements and information will be posted to Canvas (which should send you an email notification if I post something in the announcement section).**

Illness/Emergency Expectations & Attendance Issues:

If you have an or other illness related issue such as you are sick or required to quarantine for a period of time, injured, or experiencing an emergency, and this impacts your participation and attendance in this course, please notify me by sending me a private email as soon as possible. We will discuss your general situation and determine the best course of action for you to avoid missing classes or critical deadlines.

Technology Requirement:

You are REQUIRED to have and maintain access to **Canvas**, and **Zoom**, via your Georgia Tech sign-on information. Our general course materials and grades will be available on Canvas throughout the semester. We may conduct occasional virtual class sessions using the **Zoom** platform throughout the semester. (PLATFORM USED IS SUBJECT TO CHANGE BASED ON CAMPUS VIRTUAL RESOURCES) If you have problems with registration (due to nonpayment, etc.) you may be dropped from Canvas. It is imperative that you be proactive to avoid this situation. If you are in need of technical support, there are several new online tutorials and live technical Q&A opportunities available through Georgia Tech and Canvas. Please see me if you need additional technical support, so that I can help you find the appropriate resource through Georgia Tech.

(For face-to-face class periods) Reasonable use of electronic devices is allowed in class. Please turn your mobile phones and laptop volumes to silent/vibrate mode while in class, so you do not disturb others or the lecture. Please do not take videos/pictures during lecture (such as pictures of slides), or flagrantly text or be doing other non-class related online activities during lecture. If you have an emergency and need to step out of lecture to use your phone, please just quietly exit your seat and step outside of the room to address your situation.

Academic Integrity:

All students are assumed to have read the Code of Student Conduct and consented to be bound by it. Violations of these rules of conduct are taken extremely seriously, will be reported per applicable Georgia Tech policies, and will result in a failing grade for the course. Specific violations include (but are not limited to):

- Use or provision of prohibited assistance during quizzes or exams
- Sharing of outside assignments such as research reports or papers

- **Plagiarism and Artificial Intelligence - this includes both the use of the words and ideas without attribution (e.g., by presenting online materials as if they were your own work or inappropriate use of artificial intelligence resources)**

For more information on the Honor Code and ethics at Georgia Tech, please visit Office of Student Integrity: <http://osi.gatech.edu/>

For appropriate use of AI, please visit Georgia Tech AI Standards and Guidance:
<https://oit.gatech.edu/ai/guidance>

For general Georgia Tech policy related to students, please visit Georgia Tech Policy Library:
<https://policylibrary.gatech.edu/student-affairs/academic-honor-code>

Special Accommodations:

If you require special learning/testing accommodations, please inform me at the beginning of the semester so that we can discuss and complete any necessary paperwork, and coordinate with Student Disability Services to ensure these accommodations are approved and documented officially. Georgia Tech complies with regulations of the Americans with Disabilities Act of 1990 and offers accommodations to students with disabilities. Students who fall into higher risk groups, as defined by the Georgia Department of Public Health and the Centers for Disease Control and Prevention, may request an accommodation. Institute personnel are available to assist any students, faculty, or staff who are seeking academic or employment accommodations. Students seeking an academic accommodation should start by contacting the Office of Disability Services.

<https://disabilityservices.gatech.edu/>

Student Support Services:

In your time at Georgia Tech, you may find yourself in need of support. Below you will find some resources to support you both as a student and as a person.

- STAMPS Health Services:
<https://health.gatech.edu/stamps/>; 404-894-1420
Primary care, pharmacy, women's health, psychiatry, immunization and allergy, health promotion, and nutrition.
- The Office of the Dean of Students: <https://studentlife.gatech.edu/> ; 404-894-6367;
 Smithgall Student Services Building 2nd floor
Can assist with a variety of Georgia Tech policies and student needs including reviewing approved absence requests.
- Georgia Tech Center for Mental Health Care & Resources: <http://counseling.gatech.edu> ;
 404-894-2575; Smithgall Student Services Building 2nd floor
Services include short-term individual counseling, group counseling, couples counseling, testing and assessment, referral services, and crisis intervention. Their website also includes links to state and national resources.
- Students' Temporary Assistance and Resources (STAR):
<https://studentlife.gatech.edu/content/star-services>
Can assist with interview clothing, food, and housing needs.