

Note: Schedule / Syllabus is tentative and subject to change.

CIS 303: Cybersecurity and Society

COURSE DELIVERY MODE: ONLINE

PROFESSOR(s): Chad R. Johnson

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OFFICE HOURS: Tuesday and Thursdays 10am to 12pm, or by appointment.

COURSE DESCRIPTION (50-word limit):

This course presents the principles of applied sociology that account for the human factors in security systems. Topics include an examination of the human role in cybersecurity, the role of security in the context of an organization, the mutually influential relationships between technology and society, and a special focus on human-vector attacks and their mitigation strategies.

COURSE CREDITS: 3

COURSE OBJECTIVES:

At the end of this course, students will be able to:

- Understand cybersecurity policies that are effective and ethical.
- Analyze security systems and solutions for weaknesses related to human interaction.
- Develop and implement effective security awareness training programs.
- Recognize the role of information assurance and security in the context of a larger organization.
- Explain the impact and influence of technology on human behavior, with emphasis on privacy and compliance.
- Develop appropriate identity and access managements policies and recognize access control models.

TEXTS/LEARNING RESOURCES

- Social Theory After the Internet: Media, Technology, and Globalization. Ralph Schroeder. ISBN: 9781787351226 (<https://www.uclpress.co.uk/products/95132>) (Open-Access PDF)
- Recommended, not required: Cyberethics: Morality and Law in Cyberspace. ISBN: 9781284081398.

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COURSE GRADING:

Grades will be assessed using a variety of methods to include:

- 2 exams (mid-term and final) – 20% each (40%) – Alternate assignments (papers) will be offered for those that choose them.
- 1 writing assignment (1500-4000 words) – 10% each
- 4 article assessments – 10% each (40%)
- Class participation in discussions – 10%

GRADE SCALE:

A: score \geq 90	A-: 87 \leq score $<$ 90	
B+: 83 \leq score $<$ 87	B: 80 \leq score $<$ 83	B-: 77 \leq score $<$ 80
C+: 73 \leq score $<$ 77	C: 70 \leq score $<$ 73	C-: 65 \leq score $<$ 70
D: 60 \leq score $<$ 65		
F: score $<$ 60		

EXAMS:

- Paper exams taken in class are closed book and no-computers/phones, but open-notes – whatever you can write onto the front and back of a single 3” x 5” standard index card. If you print this, use 14pt Times New Roman font, and be double-spaced. I do not often give paper exams these days, but I might so I leave this here.
- Exams taken on Canvas are open-book, and you are free to use all resources at your disposal to complete the exam. Plagiarism and cheating, however, will not be tolerated. NO collaboration is allowed on exams.
- Final exam is NOT comprehensive.
- In general, any test or exam CANNOT be made up.
- If you miss a test or exam due to unavoidable circumstances (e.g., health), you must inform the instructor as soon as possible. A written explanation along with the supporting documents must be submitted to the instructor upon request.

ASSIGNMENTS AND DEADLINES:

- Each assignment must be submitted by 11:59pm on the day it is due. Late submissions must be submitted to the Late Submissions dropbox. They will be considered in my own time for reduced points.
- You must submit your assignments online through Canvas. I will not take submissions in email, unless the university verifies that Canvas was malfunctioning or unavailable.
- All sources should be parenthetically cited and included in a Works Cited list at the end of each paper. Use APA citation. Uncited sources will reduce your grade. Plagiarism will not be tolerated. Case law citations should be done in italics (i.e. *U.S. v. Lopez*).
- All papers should use 1” margins, 12pt Times New Roman font, and be double-spaced.

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Assignment	Description
Article Assessments	Select one of the articles offered or select your own article on an appropriate topic. If you do select your own article, it should be from a peer-reviewed or official source, relevant to the topic at hand, and of suitable scholarship for university-level work. After reading the article, write an assessment that contains both a contextual and substantive analysis. Your analysis should focus on identifying the ways technology influences human behavior – particularly the role security plays in organizations or society. These are 1-3 pages.
Writing Assignment	This is a short term-paper on topic of your choice related to the course. Suggested topics are technology as it relates to: Inequality, public and social capital, political participation, the economy, cultural participation. You are not limited to these topics. This paper will be between about 2000-3000 words long (five to eight pages.)
Exams	Exams are open book. It will consist of questions randomly selected from a bank. Formats are multiple-choice, multi-select, and true/false. You will get two attempts. All exams are curved.
Alternate Assignments	If you would like to do an assignment instead of taking an exam, you may select the alternate assignment, which will consist of another paper assignment. Details will be posted to Canvas.
Discussions	Simply provide a response to the prompt. After you have completed your post, reply to at least two other student's posts. There is no requirement for sources or anything, and I would appreciate it if you'd respond casually.

WHAT IS A SUBSTANTIVE ANALYSIS?

- You will take stance and provide you own thoughts on the topic. You are not restating or explaining a problem. Each idea presented in the article considered in your analysis and your conclusions in the response are logical.
- Your analysis should show that you can understand what the article is trying to say and why it is worth reading. Be sure that you have not misconstrued the article, nor ignored any potential concerns or biases inherent in the article.
- A substantive analysis will not provide a recount of the contents of the article but demonstrate an understanding of the article's argument.
- The submissions should include analysis from the perspective of technology's influence and interaction with human behaviors, and the role security plays in an organization or society. For example, an article about vehicle safety features like crash avoidance should not contain an analysis from the perspective of the competitive market advantage new features provide a manufacturer. An analysis on how crash avoidance technology might influence the behavior of drivers or how such technology might fit into the risk management strategy of a trucking company would be appropriate.

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WHAT IS A CONTEXTUAL ANALYSIS?

- You place the article within context, demonstrating an understanding of the topic as a whole or reflecting additional research outside of the article.
- Your contextual analysis should include temporal qualities of the topic:
 - Your contextual analysis includes acknowledgement of the historical trends in the discipline that led to the article's creation. For example, an article about cryptocurrency would have to include some mention of the reason cryptocurrency was created to begin with.
 - You should identify why the article exists and where it fits within the current discourse on the subject. Someone took the time to write the article. What is the message and why was it created? For example, an analysis of *Miranda v. Arizona* that identifies the legacy of Miranda warnings issued by police without demonstrating understanding of the purpose of such warnings.
 - Your analysis should also include some discussion of the apparent future of the topic should trends hold. For example, if you are analyzing an article written about AI, you should include mention of the ways that technology could influence society.
- The key here is to demonstrate that you understand the topic, not to restate the article itself. The articles only serve as a tool to help you begin to explore the topic not a definitive beginning and end of your analysis

CANVAS:

The Canvas URL is <https://canvas.uwsp.edu>. Use your UWSP NetID and password to login. We use Canvas for announcements, assignments, and exams. You will need to use it.

REGRADES:

Scores of Assignments, Forensic Challenge, and Exams will be posted in Canvas, and announcements will be made in Canvas. After the scores are announced, you have 7 days to request for regrading by contacting the instructor (office hours or email). Your grade will be final after 7 days.

OFFICE HOURS POLICY:

- I prefer that you contact me via email.
- However, you are still welcome to my office to ask me any questions at any other times.
- I fear the phone.
- For online courses, standing Zoom meetings will be held. You can join them anytime to speak with me. I essentially sit there in the meeting during these times just to be available to students. If I do not let you into the meeting right away, be patient – that means I'm with another student. I will let you into the meeting as soon as I'm free.

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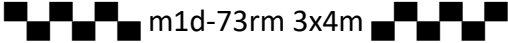

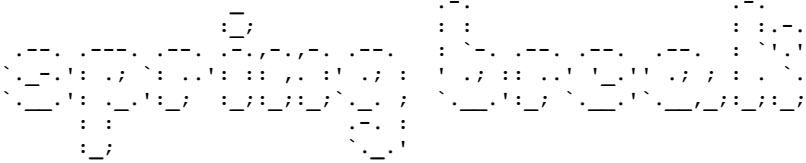
ACADEMIC HONESTY:

The university cannot and will not tolerate any form of academic dishonesty by its students. This includes, but is not limited to cheating on examinations, plagiarism, or collusion. **Any form of academic dishonesty may lead to F grade for this course. I assure you I take this extremely seriously.**

STUDENTS IN NEED OF ACCOMODATIONS:

If you require accommodation based on disability, please let me know. I am willing to provide any reasonable accommodations you require. The sooner you inform me the better.

COURSE OUTLINE:

Week	Lecture Topics	Assignment (Due Sunday)
1	Syllabus The Role Technology Plays in Society	Discussions (weekly)
2	The Role of Information Assurance and Security	
3	Introduction to Social Theory	
4	Data Quality, Value, and the CIA Triad	Article Assessment 1
5	Social Engineering – Hacking Humans	
6	'Murica and the Internet – Constitutional Law	Article Assessment 2
7	Digital Citizenship in the Information Age	
8	Civil Transgressions in a Digital Medium  m1d-73rm 3x4m 	
		
9	Data, Information, Knowledge, and Wisdom	
10	What is Big Data?	
11	How Big Data Shapes Everyday Life	Article Assessment 3
12	Privacy as a Right in the Big Data Era	
13	The Role of Compliance	Article Assessment 4
14	Compliance in the Context of Assurance	
15	The Future of Cybersecurity	Term-Paper Due
16	Final Exam (Due Friday of finals week)	

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Resources

- Examples of acceptable peer-reviewed or official sources:
 - NIST publications
 - CERT Alerts or CVE information
 - PCI DSS
 - Computer and Information Security Journal
 - ACM Transactions on Computer Systems
 - Journal of Applied Security Research
 - The textbooks for this course
- Examples of acceptable non-peer-reviewed or unofficial sources:
 - Krebs on Security
 - SC Magazine
 - Dark Reading
 - CISO Magazine
 - Threatpost
 - KnowBe4
- Examples of questionable sources (Can be included, but should not be the foundation of an argument):
 - YouTube
 - r/netsec
 - Mainstream news sources that cater to a wide audience, rather than targeted to security researchers or IT professionals. ([Example.](#))
- Examples of unacceptable sources
 - Hackers (1995), Swordfish (2001), Mr. Robot (2015-2019), or any other media, film, or television created purely for *entertainment* value
 - Anecdotes from your professional/personal life are an acceptable inclusion, but remember:
 - Anecdote ≠ evidence (Just because something happened to you or your uncle Bob does not mean it is an appropriate foundation of an argument. Your experience is not universal. Seek out *why* it is true.)
 - Evidence ≠ plural of anecdote (“Everyone knows”, “We have often seen”, or “It has been my experience” are bad starts to an argument. An argument like, “Having ‘1234’ as a password has led to many breaches in my experience” might be true, but it’s not a sound argument because it can be easily rebuffed – “My entire organization uses that as a password for all systems, and we have never had a data breach thanks to our SureSecure3k10 system.” Now the argument is about proving your experience against the experience of your audience – subjective vs subjective reasoning. A better argument is to seek out the *root* of that experience. “Having ‘1234’ as a password is weak security because it can be instantly broken via dictionary attack or simply guessed by an attacker.”)