Department of Computer Science

CSEC 4314: Human Behavior and Privacy

Section F01:

Spring 2025

Human Behavior and Privacy (F01)

Modality

This course is offered in person on campus or through Zoom. All course assignments, quizzes, exams will be completed and submitted through Blackboard. There may be times we meet virtually to give you an opportunity to concentrate on labs while maintaining access to your professor.

Instructor Info

Name:
Email:
Office Location:
Office Hours:

Course Description

Credit Hour(s): 3

Description: Covers human interaction in the security of cyber systems, including adversarial threats, understanding the way humans interact with cybersecurity controls and the personal impacts cybersecurity has on humans.

Prerequisites: CSEC 2310 System Security

Course Learning Objectives

Upon successful completion of this course, students will be able to:

- Effective mechanisms for identity access management
- The role of social engineering in cyber attacks
- Privacy theory from psychology and social science
- Approaches to cybersecurity awareness and training

ABET Student Outcomes

- Demonstrate the overall understanding of access control attacks and mitigation measures.
- Demonstrate overall understanding of the types of social engineering attacks, psychology of social engineering attacks, and misleading users.
- Discuss effective approaches to cybersecurity awareness and training
- Define personally identifiable information (PII) and discuss the importance of protecting PII

Course Materials

Title: None

Grading Scale

Your semester grade for this course will be determined based on the following scale:

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = less than 60

A = excellent work; B = above average work; C = average work; D = below average; F = failing

Grading Criteria

Course Component	Percentage of Total Points
Review syllabus, overview and schedule Quiz	1%
Class Participation	15%
Labs	40%
Midterm Exam	22%
Final Presentation	22%

Learning Activities

Topics

- **Identity and Access Management** - Managing the provisioning and maintenance of human users in organizations, authentication mechanisms and logging of human actions

- **Social Engineering** - Types of social engineering attacks, the psychology of why they work and effective mitigation strategies
- **Cybersecurity User Education** - How to effectively train people on their role in cybersecurity
- **Enforcement of Rules and Behavior** - Developing, training and enforcing rules of behavior in cybersecurity
- **Privacy theory** - Defining privacy in the context of an individual rather than an organization and understanding the privacy
- **Identifying Personal Information** - Overview of the types of personally identifiable information, regulations governing collection and use, inference attacks, and various forms of tracking
- **Usable Security** - Designing systems within the context of understanding human behavior

University Policies

Students with Disabilities

- https://ualr.edu/policy/home/admin/non-discrimination/disabilities/

Non-Discrimination Policy

- https://ualr.edu/policy/home/admin/non-discrimination/

Title IX and Harassment

- https://ualr.edu/titleix/titleix/title-ix-the-basics/

Inclement Weather Policy

- https://ualr.edu/policy/home/admin/weather/

Academic Integrity

- https://ualr.edu/deanofstudents/academic-integrity/

Disclosure of Instances of Sexual Misconduct

- https://ualr.edu/policy/home/facstaff/title-ix/

Withdrawal

- https://ualr.edu/policy/home/student/withdrawal-from-ualr/

Add/Drop

- https://ualr.edu/records/2511-2/

Incomplete

- https://ualr.edu/records/grades/

Grade Policies

- https://ualr.edu/policy/home/facstaff/grades-and-grading-systems/

Course Policies

Course Policy on AI Usage

In this course, you are encouraged to explore and utilize AI tools (e.g., ChatGPT, language models, code-generation tools) to enhance your learning, brainstorm ideas, and refine your work. However, the following guidelines must be observed to maintain academic integrity and ensure that you continue to develop your own critical thinking skills:

- Supplement, Don’t Substitute: AI is intended as a supplementary resource, not a replacement for your own effort. You are expected to engage with class materials, readings, and assignments independently before consulting AI tools.

- Transparent Use: Any use of AI in your assignments or projects must be clearly acknowledged. Indicate how and where AI assisted your work (e.g., “AI-generated outline,” “ChatGPT suggested additional sources,” etc.). This transparency upholds academic honesty and demonstrates your critical engagement with the material.
- No AI During Exams: The use of AI tools of any kind is strictly prohibited during all tests and exams. Violations of this policy will be treated as academic misconduct.
- Your Original Voice: When submitting work, ensure that the final output remains authentically yours. Use AI suggestions as a starting point or inspiration, but always incorporate your own analysis, synthesis, and writing.
- Responsibility for Content: You are solely responsible for the accuracy, clarity, and originality of all submitted work. AI-generated content may contain errors or biases; it is your job to verify information and maintain high academic standards.

By adhering to these guidelines, you will both benefit from AI’s capabilities and continue to develop the knowledge, skills, and critical thinking necessary for success in this course and beyond.

Helpful University Resources

Blackboard Student Support

- https://ualr.edu/blackboard/contact/

Bookstore

- https://ualr.bncollege.com/

Care Team

- https://ualr.edu/studentsuccess/care-team/

Career Center

- https://ualr.edu/careers/

Child Care Connections

- https://ualr.edu/studentsuccess/child-care-connections/

Disabilities Resource Center

- https://ualr.edu/disability/

Communication Skill Center (CSC)

- https://ualr.edu/appliedcomm/communication-skill-center-csc/

Counseling

- https://ualr.edu/counseling/

Handshake

- https://ualr.joinhandshake.com/login

Health Services

- https://ualr.edu/health/

Information Technology Services (ITS)

- https://ualr.edu/itservices/welcome/

Mathematics Assistance Center

- https://ualr.edu/mathematics/mathematics-assistance-center/

Military Student Success Center

- https://ualr.edu/military/

Office of Student Retention Initiatives (SRI)

- https://ualr.edu/studentsuccess/academic-resources/coaching-and-student-support/

Student Support Services (SSS)

- https://ualr.edu/studentsupport/

Trojan Tutoring (i.e. introductory-level courses only) via University Learning Commons

- https://ualr.edu/studentsuccess/academic-resources/

UA Little Rock Trojan Food Pantry

- https://ualr.edu/foodpantry/

University Writing Center (UWC)

- https://ualr.edu/writingcenter/

Ottenheimer Library

- https://ualr.edu/library/

Tentative Course Schedule

Subject to change at the discretion of instructor.

Date	Topic
Week 1	Course Overview
Week 2	Foundations of Privacy Theory The Value of Privacy
Week 3	Privacy in the Digital Age Data Collection and Tracking
Week 4	Big Data and Analytics Privacy Policies and Terms of Service

Date	Topic
Week 5	The Role of Government Regulation Introduction to Anonymization and Pseudonymization
Week 6	k-Anonymity Theory and Practice Beyond k-Anonymity
Week 7	The Future of Privacy Biometric Data and Privacy
Week 8	Privacy in Specific Contexts Introduction to Behavioral Cybersecurity
Week 9	Cognitive Biases and Heuristics Social Engineering
Week 10	Spring Break
Week 11	Password Security and Human Behavior Usability and Security
Week 12	Security Awareness Training The Psychology of Trust
Week 13	Risk Perception and Decision-Making Privacy Paradox
Week 14	Nudging and Choice Architecture Insider Threats
Week 15	Cybercrime and the Dark Web Ethics of Behavioral Cybersecurity
Week 16	Final Presentations