

Term Information

Effective Term Spring 2026

General Information

Course Bulletin Listing/Subject Area Cyber Security
Fiscal Unit/Academic Org Engineering Administration - D1400
College/Academic Group Engineering
Level/Career Undergraduate
Course Number/Catalog 2111
Course Title Social Engineering: Spams, Scams, and Saving your Assets
Transcript Abbreviation Social Engineering
Course Description Cyberspace connects people and technology, but humans often misunderstand this ecosystem, leaving them vulnerable to Social Engineering. Students will learn about social engineering tactics, manipulation, and defense strategies and the ethical use of this knowledge. Students will be taught to create their own presentation to train a demographic to detect, avoid, and defend against such attacks.
Semester Credit Hours/Units Fixed: 4

Offering Information

Length Of Course 14 Week
Flexibly Scheduled Course Never
Does any section of this course have a distance education component? No
Grading Basis Letter Grade
Repeatable No
Course Components Lecture
Grade Roster Component Lecture
Credit Available by Exam No
Admission Condition Course No
Off Campus Never
Campus of Offering Columbus

Prerequisites and Exclusions

Prerequisites/Corequisites None
Exclusions None
Electronically Enforced Yes

Cross-Listings

Cross-Listings

Subject/CIP Code

Subject/CIP Code 11.1003
Subsidy Level Baccalaureate Course
Intended Rank Freshman, Sophomore, Junior, Senior

Requirement/Elective Designation

Lived Environments; Service-Learning

Course Details

Course goals or learning objectives/outcomes

- Have an understanding of social engineering in their own lived environment – including the methodology and psychology of it
- Understand the ethical implications of social engineering and learn the legal consequences of some real world examples
- Learn how targeted populations are manipulated and what they can do to protect themselves
- Gain the knowledge to recognize and avoid scams, to protect their digital footprint, and teach others to do the same
- Know how to change their behaviors to mitigate their risks
- Work with their team to develop a persuasive and educational presentation for a specific demographic
- Present to a pre-arranged group of the demographic (approximately 20-30 people)

Content Topic List

- Introduction to the class, basics of information security
 - Social Engineering Introduction
 - Psychology of Deception
 - Demographic Worldview
 - Common Social Engineering Tactics
 - Recognizing and Avoiding Scams
 - Protecting Your Digital Footprint
 - Social Engineering in the workplace
 - Emerging Threats
 - Bringing it all together
 - Finalizing and presenting
- No

Sought Concurrence

Attachments

- NC_CYBRSEC_2111_Syllabus_GE_ELO_SL_High_Impact.pdf: Instructor Syllabus
(Syllabus. Owner: Quinzon-Bonello,Rosario)
- CybrSec 2111 Syllabus.pdf: Syllabus
(Syllabus. Owner: Quinzon-Bonello,Rosario)
- CybrSec 2111 GE - lived environments submission.pdf: Theme Worksheet
(Other Supporting Documentation. Owner: Quinzon-Bonello,Rosario)
- CybrSec2111 Course Schedule.pdf: Course Schedule
(Other Supporting Documentation. Owner: Quinzon-Bonello,Rosario)
- CybrSec2111 service-learning-inventory HIP form.pdf: HIP Form
(Other Supporting Documentation. Owner: Quinzon-Bonello,Rosario)

Comments

- Please remember to upload the GE form, the High Impact Practice form, and the schedule for the course. *(by*

Vankeerbergen,Bernadette Chantal on 04/22/2025 12:52 PM)

Workflow Information

Status	User(s)	Date/Time	Step
Submitted	Quinzon-Bonello,Rosario	04/22/2025 09:40 AM	Submitted for Approval
Approved	Quinzon-Bonello,Rosario	04/22/2025 11:59 AM	Unit Approval
Approved	Quinzon-Bonello,Rosario	04/22/2025 12:00 PM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	04/22/2025 12:52 PM	ASCCAO Approval
Submitted	Quinzon-Bonello,Rosario	05/02/2025 11:27 AM	Submitted for Approval
Approved	Quinzon-Bonello,Rosario	05/02/2025 11:27 AM	Unit Approval
Approved	Quinzon-Bonello,Rosario	05/02/2025 11:27 AM	College Approval
Pending Approval	Jenkins,Mary Ellen Bigler Hanlin,Deborah Kay Hilty,Michael Neff,Jennifer Vankeerbergen,Bernadette Chantal Steele,Rachel Lea	05/02/2025 11:27 AM	ASCCAO Approval

CybrSec 2111 – Social Engineering: Spams, Scams, and Saving Your Assets

Course Information

- Course Days: CybrSec 2111
 - 2 80-minute classes
 - 1 55-minute class
 - Credit hours: 4
 - Mode of delivery: In person
- Theme
 - Lived Environments
 - Embedded Literacies: Technology

*“There is no technology today that cannot be defeated by social engineering.”
-Frank Abagnale*

Instructor

- Name: Roland Kreml
- Email: Kreml.1@osu.edu
- Office hours:

Teaching Assistant

- Name: TBD
- Email:
- Office Hours:

Course Description

Cyberspace is a lived environment that unites humans and technologies. Education, entertainment, news, social media, medical and financial information, and more are available in this vast environment where humans sometimes spend more time than their offline lives. Humans often perceive of this cyber ecosystem in naive ways, leaving them vulnerable and easily manipulated by other humans in methods known as “Social Engineering”. This very phrase, “social engineering” suggests the merging of the technical world—engineering—with the human digital ecosystem.

To understand this world, one needs to apply an interdisciplinary framework that can capture the complex relationships of humans to their cyber environments. How do people adapt to this environment and develop good cyber-hygiene to be able to safely exist in this environment?

Humans can respond to and shape their environments through proactive steps, and in this course students will be educated about social engineering attack methods, how people are manipulated, how to protect themselves, and how to communicate this issue to others. Students who know how to identify attacks and to protect themselves will be better netizens of the online world, more capable of understanding how individual behaviors can have systemic consequences. In turn, this makes graduates a lower risk and a better choice for employers.

Students will come away from this class with not only a sound understanding of how to detect, and avoid social engineering in their daily and work lives, but also how to coach others to do the same.

Course Objective

This course explores social engineering and its influence on digital and real-world lived environments. Students will start by learning basic security concepts and the social engineering concept. As social engineering is largely a manipulation, students next will learn about psychology of deception and a demographic expert will teach them the worldview of their demographic to help them frame how cybercriminals manipulate people based on their habits, trusting behavior, and needs. They will next learn about the specific tactics social engineers use and how it is performed in social media and the workplace. The student will round out their knowledge by learning how to protect themselves, recognize, and avoid attacks.

"While we teach, we learn."
-Seneca

Parallel to learning about social engineering, the students will work in groups of 3-4 students to develop a persuasive presentation. Students will first learn how to create a persuasive presentation and use this and their growing knowledge about social engineering to develop their first draft of their presentations which they will record and receive feedback from classmates. The teams will use this feedback to revise their presentations and add more information learned from instruction. They will then present to focus groups to receive feedback from the target focus group.

After this process of crafting, receiving feedback, and refining their presentations the course concludes with students presenting to educate a specific demographic (arranged by the instructor) about the danger of social engineer and how that demographic can protect themselves.

By understanding how digital and real-world environments impact and are impacted by human interactions, trust, and security practices, students will come away from this course with a sound understanding of how to detect and avoid social engineering attacks in their work and daily lives. Additionally, they will be able to teach others to do the same.

Course Goals

After successfully completing this course, a student will:

1. Have an understanding of social engineering in their own lived environment – including the methodology and psychology of it,
2. Learn how targeted populations are manipulated and what they can do to protect themselves,
3. Gain the knowledge to recognize and avoid scams, to protect their digital footprint, and teach others to do the same,
4. Know how to change their behaviors to mitigate their risks,
5. Meet with members of a demographic to understand their experiences and how they are susceptible,
6. Work with their team to develop a persuasive and educational presentation for a specific demographic,
7. Receive and integrate feedback from classmates and a focus group to improve their presentation and delivery, and
8. Present to a pre-arranged group of the demographic (approximately 20-30 people).

Course Prerequisites

There are no prerequisites for this class.

Attendance

Attendance is critical in this class – this is ***not*** an online course. I will post lecture slides on Carmen prior to lectures; however, they do not replace the text nor the lectures.

If you miss a class, you are responsible for getting notes and information missed from your fellow classmates – get to know your classmates – or come to my office hours to answer questions you may have.

Attendance is recorded for all classes. Your attendance is a major factor in my flexibility of your end grade. I do understand situations arise throughout the semester and you are permitted 2 missed classes without any loss in attendance score.

I will perform in-class, non-graded, lessons-learned checks in each class. Along with this is an attendance check. This is done in TopHat, available in Carmen. Make sure TopHat is working on your preferred device.

Discussion Boards and Peer Reviews

Discussion Boards will not be required in this class. Students will perform reviews of 2 other team's online submission.

Grading and assignments

Assignment, quizzes, exams, and presentations will be assigned a letter grade from A to E. Rubrics will be included on all assignments. Any journals, papers, attendance and participation are also considered for the final adjusted grade. The possibility of extra credit or make-up projects will be determined at a later date.

Students will be evaluated as follows:

Topic	% of grade	Points
Attendance	5%	50
4 Quizzes	20%	200
Reflections (30% total)		
• Student's vulnerability to social engineering	10%	100
• Student's implicit bias to the demographic	10%	100
• How the demographic feels targeted	10%	100
Building the Presentation		
• Outline of presentation	5%	250
• Pre-recorded draft demographic presentation	5%	
• Peer review of 2 teams' presentations	5%	
• Focus group presentation	10%	
Final Presentation	20%	200
Total		1000

Grade Disputes

I am happy to revisit grades and to discuss the evaluation of your work with you. Please make grade change requests in-person (during office hours) or send to my Carmen email. Please be ready to outline where you believe you should have received additional points and how many points you should have received.

Course Materials, Fees, and Technologies

Required Books

There is no required textbook. All required materials will be made available on the course website through links and PDFs.

Course technology

- If students do not have computer when they deliver their presentation, a computer will be available.
- Microsoft PowerPoint is the expected presentation application.

Required technical skills this course

- Basic computer and web-browsing skills
- Familiarity with PowerPoint
- Navigating Carmen. For questions about specific functionality, see the [Canvas Student Guide](#). Additional navigation instructions are provided within the course.

Required equipment and software

- Microsoft Office 365, specifically, PowerPoint
 - All Ohio State students are eligible for free Microsoft Office 365 ProPlus through Microsoft's Student Advantage program. Full instructions for downloading and installation can be found at go.osu.edu/office365help.
- Computer or tablet (current Mac (OS X), PC (Windows 7+), iPad) to develop their PowerPoint presentation

Travel

- 2 days of travel are necessary. Both will be within 20 miles. Instructors will make all possible efforts to assist students with close locations and/or travel.

Description of Major Course Assignments

Academic Misconduct

By submitting any materials, you acknowledge your responses are entirely your own work or work of your assigned group for this course. Students will neither seek nor receive any aid, other than from the instructor, during any exam or quiz. The instructor is required to report alleged academic misconduct to the Committee on Academic Misconduct (Faculty Rule 3335-5-487).

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors

shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct <http://studentlife.osu.edu/csc/>.

Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life's Counseling and Consultation Service (CCS) by visiting ccs.osu.edu or calling 614-292-5766. CCS is located on the 4th Floor of the Younkin Success Center and 10th Floor of Lincoln Tower. You can reach an on call counselor when CCS is closed at 614-292-5766 and 24 hour emergency help is also available 24/7 by dialing 988 to reach the Suicide and Crisis Lifeline.

Sexual Misconduct

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu/> or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu.

Campus Free Speech Policy

Our shared values include a commitment to diversity and innovation. Pursuant to these values, the university promotes a culture of welcoming differences, making connections among people and ideas, and encouraging open-minded exploration, risk-taking, and freedom of expression. As a land-grant institution, the university takes seriously its role in promoting and supporting public discourse. To that end, Ohio State is steadfastly committed to protecting the First Amendment right to free speech and academic freedom on its campuses, and to upholding the university's academic motto — "Education for Citizenship."

Title IX

Title IX makes it clear that violence and harassment based on sex and gender are Civil Rights offenses subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories (e.g., race). If you or someone you know has been sexually harassed or assaulted, you may find the appropriate resources at <http://titleix.osu.edu/> or by contacting the Ohio State Title IX Coordinator at titleix@osu.edu

Diversity

The Ohio State University affirms the importance and value of diversity in the student body. Our programs and curricula reflect our multicultural society and global economy and seek to provide opportunities for students to learn more about persons who are different from them. We are committed to maintaining a community that recognizes and values the inherent worth and dignity of

every person; fosters sensitivity, understanding, and mutual respect among each member of our community; and encourages each individual to strive to reach his or her own potential. Discrimination against any individual based upon protected status, which is defined as age, color, disability, gender identity or expression, national origin, race, religion, sex, sexual orientation, or veteran status, is prohibited.

Religious Accommodations

Ohio State has had a longstanding practice of making reasonable academic accommodations for students' religious beliefs and practices in accordance with applicable law. In 2023, Ohio State updated its practice to align with new state legislation. Under this new provision, students must be in early communication with their instructors regarding any known accommodation requests for religious beliefs and practices, providing notice of specific dates for which they request alternative accommodations within 14 days after the first instructional day of the course. Instructors in turn shall not question the sincerity of a student's religious or spiritual belief system in reviewing such requests and shall keep requests for accommodations confidential.

With sufficient notice, instructors will provide students with reasonable alternative accommodations with regard to examinations and other academic requirements with respect to students' sincerely held religious beliefs and practices by allowing up to three absences each semester for the student to attend or participate in religious activities. Examples of religious accommodations can include, but are not limited to, rescheduling an exam, altering the time of a student's presentation, allowing make-up assignments to substitute for missed class work, or flexibility in due dates or research responsibilities. If concerns arise about a requested accommodation, instructors are to consult their tenure initiating unit head for assistance.

A student's request for time off shall be provided if the student's sincerely held religious belief or practice severely affects the student's ability to take an exam or meet an academic requirement and the student has notified their instructor, in writing during the first 14 days after the course begins, of the date of each absence. Although students are required to provide notice within the first 14 days after a course begins, instructors are strongly encouraged to work with the student to provide a reasonable accommodation if a request is made outside the notice period. A student may not be penalized for an absence approved under this policy.

If students have questions or disputes related to academic accommodations, they should contact their course instructor, and then their department or college office. For questions or to report discrimination or harassment based on religion, individuals should contact the [Office of Institutional Equity](#). (Policy: [Religious Holidays, Holy Days and Observances](#))

Disability Services

The university strives to maintain a healthy and accessible environment to support student learning in and out of the classroom. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with me as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion.

If you are isolating while waiting for a COVID-19 test result, please let me know immediately. Those testing positive for COVID-19 should refer to the Safe and Healthy Buckeyes site for resources. Beyond five days of the required COVID-19 isolation period, I may rely on Student Life Disability Services to

establish further reasonable accommodations. You can connect with them at slds@osu.edu; 614-292-3307; or slds.osu.edu

CybrSec 2111– Social Engineering: Spams, Scams, and Saving Your Assets

Course Schedule

Week 1: Introductions, About the class and assignments, and how to succeed. Basics of Information Security

Preread Syllabus and Carmen Modules
Assignment: Partners for presentations
Assignment due: None

Week 2: Social Engineering Introduction

Preread
<https://www.sciencedirect.com/science/article/pii/S2451958821000749>
Chapters 1, 2, 6 <https://www.mitnicksecurity.com/the-history-of-social-engineering>
Assignment: None
Assignment due: None

Week 3: Psychology of Deception and the Ethics of Social Engineering

Preread
<https://www.mdpi.com/1677374>
<https://www.mitnicksecurity.com/blog/ways-hackers-use-social-engineering-to-trick-your-employees>
<https://www.social-engineer.org/social-engineering/amygdala-hijacking-and-social-engineering/>
<https://ojs.victoria.ac.nz/wfeess/article/view/7671/6807>
Assignment: Team outline of presentation: Social Engineering – What is it and How Can I Protect Myself? (Demographic audience)
Assignment due: Partners for presentations (otherwise randomly assigned)
Quiz #1

Week 4: Demographic Worldview

Preread
<https://www.ncbi.nlm.nih.gov/books/NBK589697/>
<https://kirwaninstitute.osu.edu/implicit-bias-module-series>
<https://www.pagon.ai/blog/how-to-present-visual-presentations-to-older-adults>
Assignments: Reflection #1: Your Implicit Bias results.
Assignment due: none

Week 5: Common Social Engineering Tactics

Preread Chapter 3: <https://www.mitnicksecurity.com/the-history-of-social-engineering>
Assignment: None
Assignment due: Reflection #1: Your Implicit Bias results
Quiz #2

Week 6: Recognizing and Avoiding Scams

Preread Chapter 4: <https://www.mitnicksecurity.com/the-history-of-social-engineering>
Assignment: Reflection #2: Student vulnerability to Social Engineering
Assignments due: Team outline of their presentation

Week 7: Protecting Your Digital Footprint

Preread <https://www.identityguard.com/news/how-to-protect-your-digital-footprint>
Assignment: Reflection #3: Visit assigned demographic location for discussion and
Assignments due: Reflection #2: Student Vulnerability to Social Engineering

Quiz #3

Week 8: Major social engineering events what could have been done

Assignment: 15 minute recorded video: Team presentations Social Engineering – What is it and How Can I Protect Myself? (demographic as planned audience)

Assignment due: None

Week 9: Social Engineering in Social Media and the workplace

Preread Chapter 5 and 7: <https://www.mitnicksecurity.com/the-history-of-social-engineering>

Assignment: None

Assignment due: Reflection #3: How is the demographic targeted and what can they do to protect themselves

Week 10: Emerging Threats

Guest Speaker: Cybersecurity Expert

Preread <https://abnormalsecurity.com/blog/soc-expert-perspectives-social-engineering-threats>

Assignment: Peer review of 2 teams' videos

Assignment Due: 15 minute recorded video

Quiz #4

Week 11: Bringing it all together

Preread: Designing an effective presentation -

<https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1009554>

How they felt about their first pass at the presentation

The rules of engagement for the focus group

Assignment: Prepare for the demographic focus group

Assignment Due: Peer review of 2 team's presentations

Week 12: Tuning the Presentation

Preread: comments from peer reviews and instructor

Recap how to build an effective presentation for the demographic

In-class work on their presentation.

Assignment: Update presentation.

Assignment Due: None

Week 13: Refining the Presentation

In class work on their presentation.

Assignments:

Updates to Presentation

Assignments Due: Presenting to the demographic focus group

Week 14-15: Finalizing the Presentation

Assignment: Finalizing the Presentation based on discussion and focus group feedback

Assignments Due: Demographic Presentation at faculty arranged location

GE Theme course submission worksheet: Lived Environments

Overview

Courses in the GE Themes aim to provide students with opportunities to explore big picture ideas and problems within the specific practice and expertise of a discipline or department. Although many Theme courses serve within disciplinary majors or minors, by requesting inclusion in the General Education, programs are committing to the incorporation of the goals of the focal theme and the success and participation of students from outside of their program.

Each category of the GE has specific learning goals and Expected Learning Outcomes (ELOs) that connect to the big picture goals of the program. ELOs describe the knowledge or skills students should have by the end of the course. Courses in the GE Themes must meet the ELOs common for **all** GE Themes and those specific to the Theme, in addition to any ELOs the instructor has developed specific to that course. All courses in the GE must indicate that they are part of the GE and include the Goals and ELOs of their GE category on their syllabus.

The prompts in this form elicit information about how this course meets the expectations of the GE Themes. The form will be reviewed by a group of content experts (the Theme Advisory) and by a group of curriculum experts (the Theme Panel), with the latter having responsibility for the ELOs and Goals common to all themes (those things that make a course appropriate for the GE Themes) and the former having responsibility for the ELOs and Goals specific to the topic of **this** Theme.

Briefly describe how this course connects to or exemplifies the concept of this Theme (Lived Environments)

In a sentence or two, explain how this class “fits” within the focal Theme. This will help reviewers understand the intended frame of reference for the course-specific activities described below.

Cyberspace is a lived environment that unites humans and technologies. This course, Social Engineering: Spams, Scams, and Saving Your Assets, teaches students about the tactics and techniques hackers use to manipulate people in their on-line world to make errors which result in significant losses and stressors.

Connect this course to the Goals and ELOs shared by *all* Themes

Below are the Goals and ELOs common to all Themes. In the accompanying table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The specifics of the activities matter—listing “readings” without a reference to the topic of those readings will not allow the reviewers to understand how the ELO will be met. However, the panel evaluating the fit of the course to the Theme will review this form in conjunction with the syllabus, so if readings, lecture/discussion topics, or other specifics are provided on the syllabus, it is not necessary to reiterate them within this form. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

	Course activities and assignments to meet these ELOs
ELO 1.1 Engage in critical and logical thinking.	<p>Today's student reside as much in the online environment as they do in their physical environment. They are subject to many threats and this course will provide the students the understanding of social engineering, and the methodology and psychology of it. Students will hear from cybersecurity, psychology, and demographic experts to help them understand the threat for themselves and for others. They will learn how targeted populations are manipulated and what they can do. Through this education, they will develop critical and logical thinking of how to discern social engineering attacks and protect themselves. By the end of this course they will be able to recognize tactics of social engineers, and not only how they should respond to these attacks to protect themselves, but also how they can teach others to do the same.</p>
ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or ideas within this theme.	<p>Through the reading, exercises, and instruction, students will have a good understanding of the threat of social engineers and will be able to apply this understanding of how they and others are manipulated within their online environment. Through reflection assignments, students will identify their own susceptibility to being manipulated and their vulnerability to social engineering and will examine the consequences on their information.</p> <p>The exploration continues for students to understand the viewpoint of demographics and interview a member of the demographic and write a reflection of the interviewee's thoughts and concerns about safety in the online world. They will use what they have learned in class and from the interview to work in a 3-4 person team of students develop a persuasive presentation which they will finish the semester by presenting this to the pre-arranged target population.</p>
ELO 2.1 Identify, describe, and synthesize approaches or experiences.	<p><u>Lecture</u> Course materials support the learning of basic cybersecurity and psychology concepts relevant to social engineering and their online presence, including:</p> <ul style="list-style-type: none"> • Tactics of a social engineer • How to recognize and avoid scams. • How to protect their digital footprint. • Social Engineering in social media, the workplace, and other sources. • How to coach others about identifying potential threats. <p><u>Reading</u> All material used for this class is freely available. Each module provides important reading material to expose students to concepts prior to the instruction and set the basis of learning of the topic.</p> <p><u>Reflections</u> Students will reflect upon:</p> <ul style="list-style-type: none"> • Their implicit bias: Students will learn about the psychology of social engineering and how about their own implicit bias toward the specific demographic and how those biases can be used in

	<p>social engineering attacks. Students will reflect how this made them understand their implicit bias and what they can do about it.</p> <ul style="list-style-type: none"> • Vulnerabilities to social engineering: Students will learn methods of social engineering attacks and will identify their own vulnerabilities to social engineering. • After interviewing a member of the demographic about their concerns and experiences in their own online lived environments, students will reflect upon their interviewees concerns, misconceptions, and what education would help the demographic. <p><u>Knowledge checks and assessments</u></p> <p>At the end of each class TopHat will be used for knowledge checks. These knowledge checks are not graded, but will identify where students may not understand the content and to encourage additional conversation. Each module builds upon understanding of prior course topics, so quizzes are used to enforce review and understanding of material and evaluate comprehension.</p>
ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.	<p>Students will have multiple activities to develop their sense of self through this course. They will examine their own biases through an implicit bias reflection and another reflection of their own vulnerability to social engineering. As students work in a team to build their persuasive presentation, they will receive feedback from other students, a focus group of the demographic, as well as the instructor to learn how to create an effective presentation.</p>

Goals and ELOs unique to Lived Environments

Below are the Goals and ELOs specific to this Theme. As above, in the accompanying Table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

GOAL 3: Successful students will explore a range of perspectives on the interactions and impacts between humans and one or more types of environment (e.g. agricultural, built, cultural, economic, intellectual, natural) in which humans live.

GOAL 4: Successful students will analyze a variety of perceptions, representations and/or discourses about environments and humans within them.

	Course activities and assignments to meet these ELOs
ELO 3.1 Engage with the complexity and uncertainty of human- environment interactions.	<p>The topic of social engineering is fraught with complexity and uncertainty of human-environment interaction. Social Engineering is the soft-underbelly of the hardened shell of cybersecurity.</p> <p>Throughout this course, students will hear from experts in psychology, demographics, and cybersecurity who will expose the students to the mindset of hackers and how people are manipulated in the cyber lived environment. Students will hear from members of a demographic and speakers and that additional information will be used with the course to develop and deliver a persuasive presentation to a specific demographic</p>

<p>ELO 3.2 Describe examples of human interaction with and impact on environmental change and transformation over time and across space.</p>	<p>Students will learn about how humans interact with the cyber environment by hearing examples of social engineering attacks. They will hear the history of social engineering attack in the early days of individual, less sophisticated attacks to the complicated and enterprise-developed turn-key social engineering attacks available for hire. They will learn the importance of education and how it can change the outcome to protect this soft under-belly. Through this course students will not only impact others as the focus of this course, but they will also be less risk to their future employers as they will have better security awareness.</p>
<p>ELO 4.1 Analyze how humans' interactions with their environments shape or have shaped attitudes, beliefs, values and behaviors.</p>	<p>As attacks have become more sophisticated and services for hire are more prevalent there and many more stories of people losing their nest egg and/or identity - creating fear, uncertainty, and doubt in not only the online environment but in our daily analog lives. Due to this ever-present threat, people now find it hard to believe anything they hear or even see. It is important to educate to help people know how to identify threats and know how to handle them.</p>
<p>ELO 4.2 Describe how humans perceive and represent the environments with which they interact.</p>	<p>The perception of the online world varies across the demographics, but there is a recurring theme: People are skeptical to believe many sources in today's world. Hackers know a well-crafted phish which targets their income, life, or family and people are willing to believe anything. The more educated people become the more likely they will be able to recognize and avoid the attack.</p>
<p>ELO 4.3 Analyze and critique conventions, theories, and ideologies that influence discourses around environments.</p>	<p>In this course students will learn more about their own lived environment and how their own actions may make them more and others vulnerable. Students will hear about tactics, information, and disinformation which contribute to fear, uncertainty, and doubt. These result in reactive and possibly detrimental actions. Education is the solution and by completing this course students will be better equipped to identify and protect themselves against attacks and will be able to educate others to do the same.</p>

Service-Learning Course Inventory

Overview

The GE allows students to take a single, 4+ credit course to satisfy a particular GE Theme requirement if that course includes key practices that are recognized as integrative and high impact. Courses seeking one of these designations need to provide a completed Integrative Practices Inventory at the time of course submission. This will be evaluated with the rest of the course materials (syllabus, Theme Course submission document, etc). Approved Integrative Practices courses will need to participate in assessment both for their Theme category and for their integrative practice.

Please enter text in the boxes below to describe how your class will meet the expectations of Service-Learning Courses. It may be helpful to consult the Description & Expectations document for this pedagogical practice or to consult the OSU Office of Service Learning as you develop your course and complete this inventory. You may also want to consult the Director of Undergraduate Studies or appropriate support staff person as you complete this Inventory and submit your course.

Please use language that is clear and concise and that colleagues outside of your discipline will be able to follow. You are encouraged to refer specifically to the syllabus submitted for the course, since the reviewers will also have that document. Because this document will be used in the course review and approval process, you should be as specific as possible, listing concrete activities, specific theories, names of scholars, titles of textbooks etc.

Accessibility

If you have a disability and have trouble accessing this document or need to receive it in another format, please reach out to Meg Daly at daly.66@osu.edu or call 614-247-8412.

Pedagogical Practices for Service-Learning

Course subject & number

Performance expectations set at appropriately high levels (e.g. Students engage in appropriately linked academic and experiential exploration of the community setting in which they study). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Service-Learning Course Inventory

Significant investment of time and effort by students over an extended period of time (e.g. develop an increasing appreciation of the issues, resources, assets, and cultures of the community in which they are working). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Interactions with faculty, peers, and community partners about substantive matters including regular, meaningful faculty mentoring, peer support, and community partner interaction. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Service-Learning Course Inventory

Students will get frequent, timely, and constructive feedback on their work from all appropriate sources, especially on their community awareness and engagement, and their experience with difficult differences. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Periodic, structured opportunities to reflect and integrate learning (e. g. reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Service-Learning Course Inventory

Opportunities to discover relevance of learning through real-world applications (e.g., intentional connection between academic content and the community work in which they engage). Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Public Demonstration of competence in academic settings and, if possible, in the community engagement site. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Service-Learning Course Inventory

Experiences with diversity wherein students demonstrate intercultural competence and empathy with people and worldview frameworks that may differ from their own. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Explicit and intentional efforts to promote inclusivity and a sense of belonging and safety for students, e.g. universal design principles, culturally responsible pedagogy. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)

Service-Learning Course Inventory

Clear plan to promote this course to get a wider enrollment of typically underserved populations. Please link this expectation to the course goals, topics and activities and indicate *specific* activities/assignments through which it will be met. (50-500 words)