CORI N. FAKLARIS - TEACHING STATEMENT

My approach to teaching and learning arises from my personal history: as a **daughter of a** successful grade-school teacher in language arts, as a UX researcher and trainer during my long and varied journalism career, and as a **Buddhist dharma teacher** of 10+ years in the Kwan Um School of Zen. My approach is also informed by theories of social cognition and behavior change such as **Cialdini's Social Influence Theory** (which sets forth social proof, liking, and authority - along with scarcity, commitment and consistency, and reciprocity - as significant influences on people's attitudes and behaviors) and **Bandura's Social Cognitive Theory** (which posits that learning occurs in a social context within the dynamic and reciprocal interaction of individual, environment and behavior). My goals:

- **Nurture** a supportive and respectful community of learning, by using introductions to forge connections and teachable moments, building a dataset to help me engage with students, and consciously using techniques to validate students and help them cope with obstacles.
- **Scaffold** active learning opportunities for students, such as by using projected examples and Zoom breakout rooms to spark discussion, creating deliverables with weekly milestones that enable learning-by-doing, and building in reflection and peer feedback.
- **Model** professional excellence, both in my own communications and practices, and through recruiting appropriate guest lecturers who can offer new perspectives.

Since 2018, I have **directly advised more than 20 undergraduate and graduate students** in socio-technical cybersecurity research: understanding people's mental models of security, generating design recommendations, prototyping interfaces and tools, and testing these with real-world end-users. As a teaching assistant for Programming User Interfaces (Spring 2020), I used lectures, lab demos, worksheets and 1:1 mentoring during office hours to **instruct close to 20 undergraduates** in the basics of prototyping a web interface (such as an online storefront, a portfolio website, or an instructional tool) and deploying it online - as well as how to troubleshoot problems. As a teaching assistant for User-Centered Research and Evaluation (Fall 2021), I have gained expertise in helping **more than 90 graduate and undergraduate students** to conduct qualitative research and to work collaboratively in groups.

EXAMPLES OF MY TECHNIQUES

Using introductions to forge connections and teachable moments: I ask students to introduce themselves and tell us why they are in the course. I help students to prepare their thoughts by **posting the directions on a slide or writing on a whiteboard**, and I then allow at least 2-3 minutes to think about what they would like to say. I may also **include a "fun" prompt** such as "Tell us the most recent movie or TV show that you watched, and what you thought of it," which can be an icebreaker for the group and help to anchor student details in memory. If there is time, a more social (and humor-generating) technique is to **pair up students or put them in small groups** so that they can first interview *each other* about who they are and what they hope to achieve, then **report back to the larger group**, from memory, what they learned about each other. This technique introduces the idea that they can work together to accomplish goals and to troubleshoot problems; and it provides an example for course material related to end users' cognitive processing - students will now have experienced how much more difficult it is to recall information with no help than to simply recognize whether information is familiar.

Validating students and helping them cope with obstacles: My efforts to foster a personal connection with and among students continues in my in-class communications, office hours and written feedback on homework. I consciously use **positive and polite language** such as "Great job!" or "That's an insightful point/intriguing website feature/ thought-provoking article you shared, thank you," to reiterate my appreciation for their contribution to the course's success and to their hard work. If key pieces of a class assignment are missing or badly done, I **email the student and give them a chance to correct it** before entering final grades, to help show them that homework is not a "gotcha" game and that we will give allowances for personal setbacks and mental blocks.

Using code examples and Zoom breakout rooms to spark participation: Getting non-CS majors to participate in a programming lab or lecture more fully is a challenge. In my lab section for PUI in Spring 2020, I found some success by projecting code examples from websites such as W3Schools or from interactive editors such as CodePen, and then **asking students to guess the output** when I ran the code. I also used some **fill-in-the-blank examples** from W3Schools as a low-stakes way to encourage students to risk a wrong answer and volunteer ideas (rewarding with a thrown piece of candy as supplies lasted).

Helping students finish deliverables by breaking them into pieces: Human-computer interaction is an applied science - we pull together knowledge from many different disciplines to create computing experiences that people find useful, easy to use and satisfying (or at least not maddening). Class deliverables, thus, should be a product, service or research publication that gives them practice with putting HCI theories and concepts into a usable form and that can be used in future applications and interviews. By breaking deliverables down into weekly assignments or milestones that represent the steps along the human-centered design process (empathize/define/ideate/prototype/evaluate), and coupling this with in-class activities that rehearse the needed skills, I can give students a built-in structure to help them complete the work on time. This also helps me to find out sooner about students' obstacles to completing the deliverable (such as failing to organize their server-hosted files so that the browser renders them successfully) so that I can help coach them through resolving these obstacles.

Modeling excellence: I join in the brief presentations during group research meetings, and I highlight my own research and career experiences, along with laughing at my own foibles and missteps as appropriate, whenever giving a public talk such as a class lecture. This helps students to form a mental picture of what to do (or not to do!) when showing their work and helps them feel comfortable in asking for advice. I also believe in never giving an assignment that I personally wouldn't do or haven't done. I plan to pilot course assessments with as much care as I take in preparing protocols and questionnaires for research. Finally, I do not feel that I should monopolize the lectern. I have scheduled guest speakers for lab meetings to help our assistants to draw connections between their own work and that of other scientists and practitioners. I likewise see the value of recruiting and incorporating guest speakers in the classroom to offer new perspectives and provide different models of work.

COURSES I CAN TEACH

- Introduction to Human-Computer Interaction
- Psychology of Human-Computer Interaction
- Usable Security and Privacy
- Interaction Design
- Persuasive Design
- Service Design
- Quantitative Research Methods
- Qualitative Research Methods
- Human-Centered Research and Evaluation for Computer Science
- Human Factors in Computing Systems
- Programming for Usability
- Statistical Analysis
- Interactive Data Science
- Digital Media Design and Production
- Digital Communication
- Social Media and Online Communities
- Collaborative and Social Computing
- Legal and Ethical Issues in Computing Systems